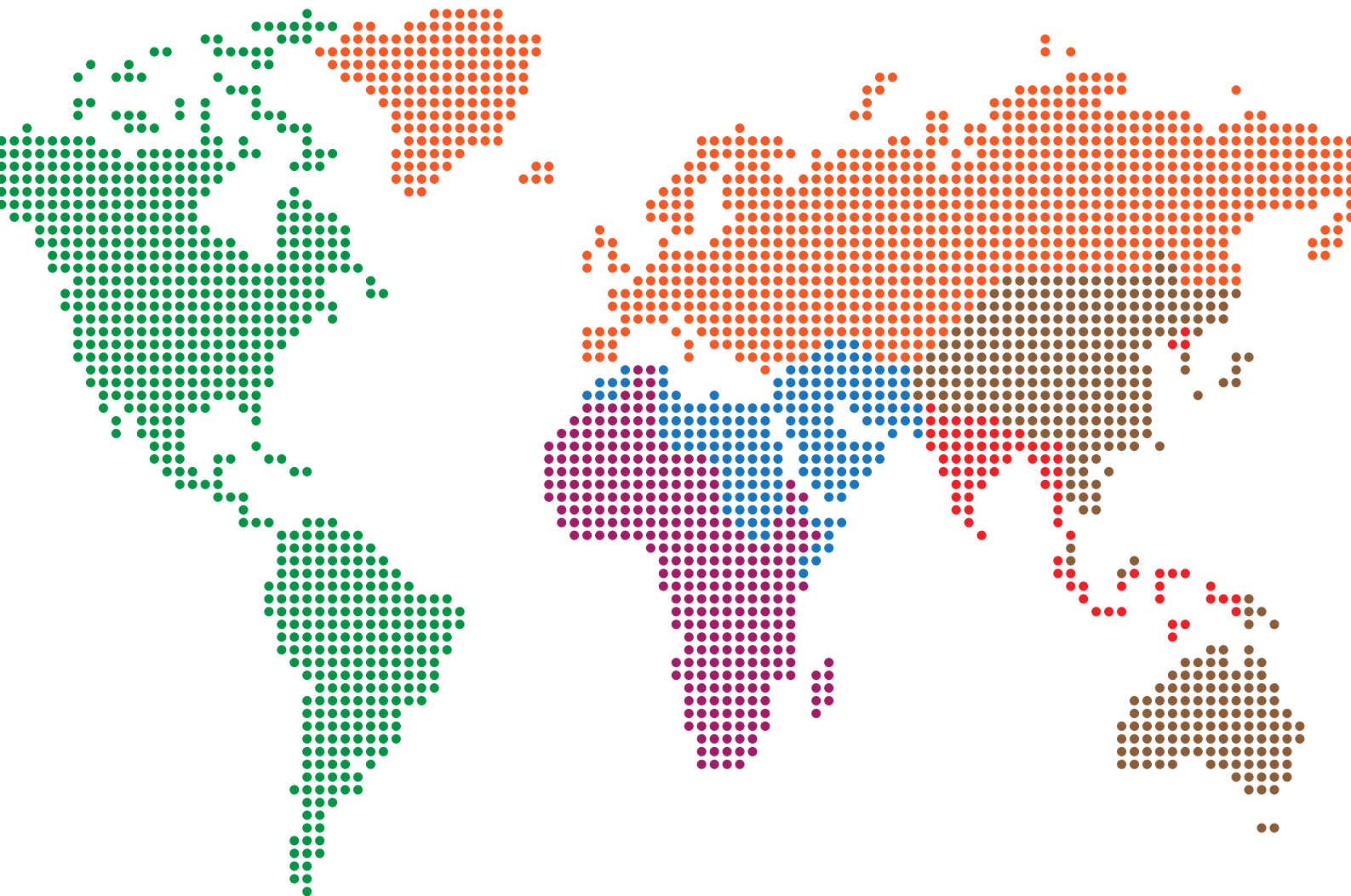


# Global policy report on the prevention and control of viral hepatitis

IN WHO MEMBER STATES



World Health  
Organization

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# Global policy report on the prevention and control of viral hepatitis

IN WHO MEMBER STATES



World Health  
Organization

# FOREWORD

The five viruses that cause infections of the liver are responsible for a widely prevalent and growing disease burden. No country, rich or poor, is spared. These viruses are important as they cause infectious diseases in their own right. Hepatitis A and E viruses are major foodborne and waterborne infections, which cause millions of cases of acute illness every year, with several months sometimes needed for full recovery. But viral hepatitis also makes a substantial contribution to the burden of chronic diseases and the premature mortality they cause. Worldwide, infections with hepatitis B and C viruses cause an estimated 57% of cases of liver cirrhosis and 78% of cases of primary liver cancer. The availability of a vaccine that confers lifelong protection against infection with the hepatitis B virus gives public health a rare opportunity to prevent a leading cause of cancer, especially in low- and middle-income countries.

The significance of these challenges and opportunities was formally acknowledged in 2010, when the World Health Assembly adopted its first resolution on viral hepatitis. That resolution, which called for a comprehensive approach to prevention and control, opened a new era of awareness about the magnitude of disease caused by viral hepatitis and the need for urgent action on several fronts.

As attention to viral hepatitis continues to build, so has recognition of the many strategies available for prevention and control in all resource settings. Control measures for viral hepatitis fit well with the current drive to strengthen health systems, especially as many measures touch on the fundamental capacities of a well-functioning health system. These include reaching every child with immunization programmes that include hepatitis B vaccine, protecting against mother-to-child transmission of the virus, and ensuring the safety of blood, transfusion services, organ donation, and injection practices. The broad social and environmental determinants of viral hepatitis further call for improvements in housing, sanitation, and food and water safety. The fact that many infections are silent, causing no symptoms until there is irreversible damage to the liver, points to the urgent need for universal access to immunization, screening, diagnosis, and antiviral therapy.

As hepatitis viruses show great diversity in their prevalence and modes of transmission in different parts of the world, policies and strategies for prevention and control need to be tailored to the specific national or sub-national context. The 2010 World Health Assembly resolution urged Member States to generate reliable information as a foundation for building prevention and control measures that match the local epidemiological profile and health system capacities.

This report is a contribution to that objective. It sets out the results of a survey conducted in mid-2012 by the World Health Organization and the World Hepatitis Alliance. The survey aimed to gather country-specific baseline data on hepatitis policies in WHO Member States in all six regions. Survey data also offer insight into conditions in specific countries that may have hindered past efforts to achieve hepatitis policy objectives. Gaps that need to be filled are identified, as are specific areas of policy development where WHO assistance is needed. Such baseline data will serve as a solid benchmark as countries, supported by WHO and its partners, seek to make the “silent” epidemic of viral hepatitis more visible – and more manageable.



A handwritten signature in black ink that reads "M. Chan".

**Dr Margaret Chan**  
Director-General  
World Health Organization

# ACKNOWLEDGEMENTS

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We would like to sincerely thank the many respondents to this survey from the participating WHO Member States.

This document was written by Jeffrey V. Lazarus, Kelly Safreed-Harmon and Ida Sperle from the University of Copenhagen in coordination with the World Health Organization's Global Hepatitis Programme and the World Hepatitis Alliance.<sup>a</sup>

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The questionnaire was reviewed by members of the WHO Viral Hepatitis Action Group: Diana Chang-Blanc, Jesus Maria Garcia-Calleja, Ana Maria Henao-Restrepo, Selma Khamassi, Neelam Dhingra-Kumar, Ana Maria Padilla-Marroquin, Anita Sands, Andreas Ullrich, Annette Verster, Marco Vitoria and Krisantha Weerasuriya.

The survey was disseminated to Member States by WHO staff from the regional offices: in AFRO by Frank John Lule, in AMRO/PAHO by Luis G. Castellanos and Nuria Diez Padrisa, in EMRO by Mamunur Malik, in EURO by Martin Donoghoe and Irina Eramova, in SEARO by Vason Pinyowiwat, in WPRO by Karen Hennessey, Chin-Kei Lee, Ying-Ru Jacqueline Lo, Tamano Matsui and Tomoe Shimada.

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<sup>a</sup>The World Hepatitis Alliance is an umbrella nongovernmental organization with 166 patient group members in 67 countries. It was admitted into Official Relations at EB130 and is partnering with WHO in the delivery of materials for World Hepatitis Day.

# ABBREVIATIONS AND ACRONYMS

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<b>AFRO</b>	World Health Organization Regional Office for Africa
<b>AIDS</b>	acquired immune deficiency syndrome
<b>AMRO</b>	World Health Organization Regional Office for the Americas
<b>EMRO</b>	World Health Organization Regional Office for the Eastern Mediterranean
<b>EURO</b>	World Health Organization Regional Office for Europe
<b>GDP</b>	gross domestic product
<b>HBsAg</b>	hepatitis B surface antigen
<b>HCV</b>	hepatitis C virus
<b>HIV</b>	human immunodeficiency virus
<b>IDU</b>	injecting drug user
<b>NGO</b>	nongovernmental organization
<b>PAHO</b>	Pan American Health Organization
<b>PPP int \$</b>	purchasing power parity in international dollars
<b>SEARO</b>	World Health Organization Regional Office for South-East Asia
<b>STD</b>	sexually transmitted disease
<b>STI</b>	sexually transmitted infection
<b>WHO</b>	World Health Organization
<b>WPRO</b>	World Health Organization Regional Office for the Western Pacific

# TABLE OF CONTENTS

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<b>Foreword</b>	ii
<b>Acknowledgements</b>	iii
<b>Abbreviations and Acronyms</b>	iv
<b>Executive summary</b>	vi
<b>Chapter 1</b>	
Introduction	1
<b>Chapter 2</b>	
Global findings	3
<b>Chapter 3</b>	
WHO African Region	10
Country summaries	16
<b>Chapter 4</b>	
WHO Region of the Americas	30
Country summaries	38
<b>Chapter 5</b>	
WHO Eastern Mediterranean Region	66
Country summaries	73
<b>Chapter 6</b>	
WHO European Region	92
Country summaries	101
<b>Chapter 7</b>	
WHO South-East Asia Region	146
Country summaries	153
<b>Chapter 8</b>	
WHO Western Pacific Region	166
Country summaries	173
<b>Annexes</b>	189

# Executive summary

Viral hepatitis is a group of infectious diseases that affects hundreds of millions of people worldwide, causing serious illness and death from acute hepatitis infection, liver cancer and liver cirrhosis. Although there are effective tools and strategies for the prevention and treatment of hepatitis, low awareness of hepatitis has limited their impact. Given the variation in how the five main types of hepatitis (A, B, C, D and E) manifest across and within countries, global prevention and control efforts need to be transformed into national and sub-national prevention and control strategies.

In 2010, the World Health Assembly adopted resolution WHA 63.18 in recognition of viral hepatitis as a global public health problem. The World Health Organization (WHO) followed up on the resolution by crafting a strategy that addresses four axes: awareness-raising, partnerships and resource mobilization; evidence-based policy and data for action; prevention of transmission; and screening, care and treatment.

The periodic evaluation of implementation of the WHO strategy requires an initial baseline survey of all Member States. In mid-2012, WHO, in collaboration with the World Hepatitis Alliance, conducted such a survey, asking Member States to provide information relating to the aforementioned four axes of the WHO strategy. In particular, Member States were asked whether key prevention and control activities are being conducted. This report presents the results. The first chapter provides an introduction to viral hepatitis and to the global response to this group of diseases. The second chapter provides a global overview of the survey findings. Chapters three through eight present findings from the six WHO regions, including summaries of data from all responding countries. Additional survey data, study methodology information and the survey instrument can be found in Annexes A–E.

One hundred and twenty-six Member States submitted the survey for a response rate of 64.9%. The regional response rate varied from 26.1% for the African Region to 100% for the South-East Asia Region. Across income groups, the response rate ranged from 47.4% for low-income countries to 80.0% for high-income countries.

Implementing a national response to comprehensively address viral hepatitis is a challenge for many governments. Because of the high burden of hepatitis-related diseases and the different routes of transmission and health outcomes, they need to simultaneously implement a variety of prevention and care interventions. Additionally, government officials should focus on monitoring hepatitis outbreaks and disease trends while collaborating with civil society to raise awareness about hepatitis. The results of the survey indicate that some Member States are addressing some aspects of this response but that much more needs to be done.

An important step that can help Member States to identify priorities and marshal resources is to develop a written national strategy or plan that focuses exclusively or primarily on viral hepatitis. This plan could either stand alone or function as part

of a broader health-planning document. Only 37.3% of responding Member States reported the existence of such a plan. Even fewer (28.6%) had a governmental unit dedicated to addressing hepatitis prevention and control. Furthermore, the number of government staff working full-time on hepatitis-related activities is small; more than half of the countries reported having no more than two employees.

Almost three fourths of responding Member States reported that they had a viral hepatitis prevention and control programme that included activities targeting specific populations. The populations most commonly targeted were health-care workers, including health-care waste handlers (86.0% of responding Member States within this subset), and people who inject drugs (54.8% of responding Member States within this subset).

National governments can play an important role in making their citizens aware of the importance of viral hepatitis, how to avoid getting infected and how to seek care. World Hepatitis Day (28 July), which was established in 2010 as part of the World Health Assembly resolution 63.18, is an important means of raising awareness about hepatitis. Two years after the passage of the resolution, almost 40% of responding Member States reported that they had engaged in activities to mark World Hepatitis Day. However, it is important for the remaining Member States, particularly where the burden of viral hepatitis is high, to organize World Hepatitis Day activities. Civil society organizations can play a significant role in further publicizing health messages for World Hepatitis Day and throughout the year. However, less than half of responding Member States reported that they collaborated with civil society groups within their countries to develop and implement the governmental viral hepatitis prevention and control programme.

Obtaining reliable data is important for planning and monitoring the implementation of hepatitis control activities. Most Member States (82.5%) reported having a national surveillance programme that regularly collected data and reported results regarding hepatitis incidence. In only approximately half of these Member States did the surveillance system include a method for monitoring chronic hepatitis B and C, which are responsible for most hepatitis-related morbidity and deaths. To properly assess the scope of chronic hepatitis requires conducting regular prevalence serosurveys in both the general and most-at-risk populations; however, only about two thirds of Member States reported conducting such surveys.

There have been significant advances in the prevention of viral hepatitis. The most important is the wide-scale implementation of universal childhood vaccination for hepatitis B. As of 2011, 180 countries included hepatitis B vaccination in their routine vaccine schedules and the coverage is approaching 80%. The survey results provide additional data concerning national hepatitis B vaccination policies. Slightly more than three fourths of Member States reported having a specific policy for the prevention of mother-to-child transmission which includes vaccination. This is important as infection transmitted from mothers



to their children is the principal route of transmission in many countries, particularly in Asia. Health-care workers are another group requiring special attention for vaccination in view of their high risk of infection through needle-stick injuries. Almost two thirds of Member States reported having a vaccination policy for health-care workers.

In many countries, transmission of hepatitis to patients through unsafe injection practices in health-care settings is still a problem. The majority of the responding Member States reported addressing this through a national policy on injection safety and recommending the use of single-use syringes.

With the development of reliable tests to identify hepatitis infections, transmission of hepatitis through transfusions is preventable; 94.4% and 91.3% of Member States reported screening all donated blood units for hepatitis B and C, respectively. The survey was not able to assess other recommended practices, such as the promotion of blood donations from voluntary non-remunerated blood donors or the utilization of quality control measures for laboratory testing.

Hepatitis treatment is undergoing a revolution. New medications are being developed and introduced, which will improve control and provide higher cure rates for hepatitis B and C. It is important for countries to be prepared for the anticipated scale up of treatment by training health-care providers, establishing national treatment guidelines, and including hepatitis medications in their essential medicines lists. The survey results indicate that much progress must be made in these key areas. Only half of reporting Member States indicated that they have clinical guidelines for the treatment of hepatitis, and less than half reported including key medications for the treatment of hepatitis B such as tenofovir or entecavir in their essential medicines list. Only 54.8% reported including pegylated interferon, which is the current mainstay of hepatitis C treatment. Encouragingly, approximately 60% of Member States reported having publicly funded treatment programmes. The survey was not able to assess the geographical coverage of these treatment services or their success in reaching most-at-risk populations.

One of WHO's core functions is to help Member States in their efforts to improve the health of their populations. In the survey, Member States were asked to indicate areas in which they might want assistance from WHO for the prevention and control of viral hepatitis. Respondents most commonly selected the following: developing a national plan for viral hepatitis prevention and control (58.1%), estimating the national burden of viral hepatitis (54.8%) and developing education/training programmes for health professionals (54.0%). In order to provide this assistance, it will be important to identify adequate resources and coordinate activities at WHO Headquarters and the regional levels.

The survey has limitations that constrain the ability to interpret the results, including a low response rate from the African Region. In addition, it was not possible to collect information concerning the quality of the programmes or their geographical scope. Nevertheless, the survey does document notable

achievements, particularly in the area of prevention of hepatitis transmission. National governments still need to do much more to comprehensively address this global killer. Furthermore, in view of limited resources, it will be vital for all relevant organizations at the international, national and local levels to work together to maximize the impact of hepatitis control activities.



# Chapter 1: Introduction

Viral hepatitis is a group of infectious diseases that affects hundreds of millions of people worldwide. Five distinct hepatitis viruses have been identified: A, B, C, D and E. Hepatitis B and C, which can lead to chronic hepatitis, are particularly prevalent; 240 million people are thought to be chronically infected with hepatitis B and 184 million people have antibodies to hepatitis C.<sup>1,2</sup>

The five hepatitis viruses have different epidemiological profiles and also vary in terms of their impact and duration. The transmission route depends on the type of virus. Transmission routes that contribute greatly to the spread of hepatitis are exposure to infected blood via blood transfusion or unsafe injection practices, consumption of contaminated food and drinking water, and transmission from mother to child during pregnancy and delivery. Unsafe injection practices, including the use of unsterile needles and syringes, serve as a major pathway for the spread of hepatitis B and C, and reducing transmission of both diseases means changing these practices.

Due to its largely asymptomatic nature, viral hepatitis is a silent epidemic; most people are unaware of their infection. Untreated chronic hepatitis B and C infection can result in liver cirrhosis and liver cancer. According to the Global Burden of Disease estimates, hepatitis B and hepatitis C together caused 1.4 million deaths in 2010, including deaths from acute infection, liver cancer and cirrhosis.<sup>3</sup> To put these figures in the context of other major infectious diseases, it is estimated that malaria caused 660 000 deaths in 2010,<sup>4</sup> and tuberculosis and HIV 1.4 and 1.7 million deaths, respectively, in 2011.<sup>5,6</sup> Prevention and control of hepatitis can therefore make a significant contribution to saving lives by preventing cancer and thereby reducing the burden of noncommunicable diseases.

The global public health response to viral hepatitis recognizes that surveillance and control are vital to ensure that testing, care and treatment are available to all people who need these services in every country of the world. As there is an effective vaccine for hepatitis B, immunization has been a central strategy for most countries to reduce the burden of hepatitis B. There is no vaccine available to prevent the spread of hepatitis C, but the screening of blood products and the use of sterile needles and syringes have contributed to lowering hepatitis C transmission in many countries.

However, as with other major public health challenges, the mere existence of effective tools and strategies for prevention and treatment is not enough to halt viral hepatitis. A major stumbling block has been the low awareness of viral hepatitis, both in the general population and among key populations. Since knowledge about the various risks and transmission routes is central to preventing the spread of hepatitis, increasing awareness is an important component of the global public health response.

Increasing awareness is also key to making hepatitis a larger part of the local, national and regional health agenda. Gaps can be seen between policy and practice, as even in countries with evidence-informed hepatitis policies, there is inadequate implementation of protocols for prevention, treatment and control. This situation indicates a need for improvement in the response to viral hepatitis at all levels.

## A global problem with a global response

Viral hepatitis is a global health problem from which no country, rich or poor, is spared. This problem takes a multitude of different forms, with factors such as the type of hepatitis, the most common transmission pathways, and the most effective strategies for diagnosis and treatment all varying across and within countries. Thus, global efforts to make hepatitis a public health priority need to be transformed into prevention and control strategies that are tailored to specific conditions at the national and sub-national levels.

<sup>1</sup> *Prevention and control of viral hepatitis infection: framework for global action*. Geneva, WHO, 2012.

<sup>2</sup> Mohd Hanafiah K, Groeger J, Flaxman AD, Wiersma ST. Global epidemiology of hepatitis C virus infection: new estimates of age-specific antibody to HCV seroprevalence. *Hepatology*, 2013, 57(4):1333–1342.

<sup>3</sup> Lozano R et al. Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet*, 2012, 380(9859):2095–2128.

<sup>4</sup> *World malaria report 2012*. Geneva, WHO, 2012. Available at: [http://www.who.int/malaria/publications/world\\_malaria\\_report\\_2012/wmr2012\\_no\\_profiles.pdf](http://www.who.int/malaria/publications/world_malaria_report_2012/wmr2012_no_profiles.pdf) (accessed on 03 May 2013).

<sup>5</sup> *Global tuberculosis report 2012*. Geneva, WHO, 2012. Available at: [http://www.who.int/tb/publications/global\\_report/gtbr12\\_main.pdf](http://www.who.int/tb/publications/global_report/gtbr12_main.pdf) (accessed on 03 May 2013).

<sup>6</sup> *UNAIDS Report on the global AIDS epidemic 2012*. Geneva, 2012. Available at: <http://www.unaids.org/en/resources/publications/2012/name,76121,en.asp> (accessed on 03 May 2013).

In 2010, the World Health Assembly adopted resolution WHA 63.18 in recognition of viral hepatitis as a global public health problem.<sup>7</sup> The resolution emphasized the need for governments and populations to take action to prevent, diagnose and treat viral hepatitis, and called upon the World Health Organization (WHO) to develop and implement a comprehensive global strategy to support these efforts. WHO has crafted guidance for the World Health Assembly's 194 Member States within a health systems approach, as described in *Prevention and control of viral hepatitis infection: framework for global action*.<sup>1</sup> The WHO strategy addresses the following axes:

1. Awareness-raising, Partnerships and Resource Mobilization
2. Evidence-based Policy and Data for Action
3. Prevention of Transmission
4. Screening, Care and Treatment.

The 2010 resolution adopted by the World Health Assembly furthermore designated 28 July as World Hepatitis Day, envisioning this as an opportunity for Member States to promote awareness about viral hepatitis.<sup>7</sup> The first official World Hepatitis Day was in 2011. WHO encourages governments, international organizations and civil society groups around the world to observe World Hepatitis Day with activities that call attention to the disease burden imposed by viral hepatitis, and to the prevention and control measures that need to be implemented.

### Monitoring the response: the 2012 survey

The periodic evaluation of implementation of the WHO strategy requires an initial baseline survey of how all Member States are responding to viral hepatitis. In mid-2012, WHO and the World Hepatitis Alliance conducted such a survey, asking Member States to provide information relating to the four axes of the WHO strategy.

This report presents the survey results. It describes the major dimensions of prevention and control policies and programmes for viral hepatitis in WHO Member States. Furthermore, survey data provide insight into how conditions in specific countries may have hindered previous efforts to achieve hepatitis policy objectives. Findings also highlight gaps that must be addressed in order to improve hepatitis policies and programmes at the national and global levels.

The second chapter of this report provides an overview of the global findings. Chapters three through eight present findings from the six WHO regions, including summaries of data from all responding countries. Additional data for selected survey questions appear in Annexes A–C. Annex D describes the study methodology, and Annex E the survey instrument.

It is anticipated that follow-up surveys, some utilizing the same questionnaire and others addressing specific issues in greater detail, will be carried out every one to two years to monitor overall progress in implementation of the WHO hepatitis prevention and control strategy.

<sup>7</sup> World Health Organization. Sixty-third World Health Assembly. *Viral hepatitis: WHA 63.18*. Geneva, Switzerland, 21 May 2010.

# Chapter 2: Global findings

One hundred and twenty-six Member States submitted the World Health Organization/World Hepatitis Alliance survey ("WHO/Alliance survey") (Figure 1), a response rate of 64.9%. Respondents and non-respondents are listed by WHO region in Box 1.

Response levels by region are presented in Table 1, along with response levels by income group according to the World Bank classification. The regional response rate varied from 26.1% for the African Region to 100% for the South-East Asia Region. Across income groups, the response rate ranged from 80.0% for high-income countries to 47.4% for low-income countries.

**Box 1.** Responses to the 2012 Global Hepatitis Survey from each WHO region

## WHO African Region

### Member States that submitted surveys:

Cameroon, Chad, Comoros, Côte d'Ivoire, Mali, Mauritania, Nigeria, Rwanda, Sierra Leone, South Africa, United Republic of Tanzania and Zimbabwe

### Member States that did not submit surveys:

Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cape Verde, Central African Republic, Congo, Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Niger, Sao Tome and Principe, Senegal, Seychelles, Swaziland, Togo, Uganda and Zambia

## WHO Region of the Americas

### Member States that submitted surveys:

Antigua and Barbuda, Argentina, Bahamas, Barbados, Brazil, Canada, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Suriname, United States of America and Uruguay

### Member States that did not submit surveys:

Belize, Bolivia (Plurinational State of), Chile, Dominica, Haiti, Saint Vincent and the Grenadines, Trinidad and Tobago, and Venezuela (Bolivarian Republic of)

## WHO Eastern Mediterranean Region

### Member States that submitted surveys:

Afghanistan, Bahrain, Djibouti, Egypt, Iran (Islamic Republic of), Iraq, Jordan, Kuwait, Lebanon, Oman, Pakistan, Qatar, Somalia, South Sudan, Sudan, Syrian Arab Republic and Yemen

### Member States that did not submit surveys:

Libya, Morocco, Saudi Arabia, Tunisia and United Arab Emirates

## WHO European Region

### Member States that submitted surveys:

Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Ireland, Israel, Italy, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Netherlands, Poland, Republic of Moldova, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, The former Yugoslav Republic of Macedonia, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, and Uzbekistan

### Member States that did not submit surveys:

Bosnia and Herzegovina, Greece, Iceland, Kazakhstan, Monaco, Norway, Portugal, Romania and Turkmenistan

## WHO South-East Asia Region

### Member States that submitted surveys:

Bangladesh, Bhutan, Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, Thailand and Timor-Leste

### Member States that did not submit surveys:

no country

## WHO Western Pacific Region

### Member States that submitted surveys:

Australia, Brunei Darussalam, Cambodia, China, Japan, Kiribati, Lao People's Democratic Republic, Malaysia, Mongolia, New Zealand, Papua New Guinea, Singapore, Solomon Islands, Tonga and Viet Nam

### Member States that did not submit surveys:

Cook Islands, Fiji, Marshall Islands, Micronesia (Federated States of), Nauru, Niue, Palau, Philippines, Republic of Korea, Samoa, Tuvalu and Vanuatu

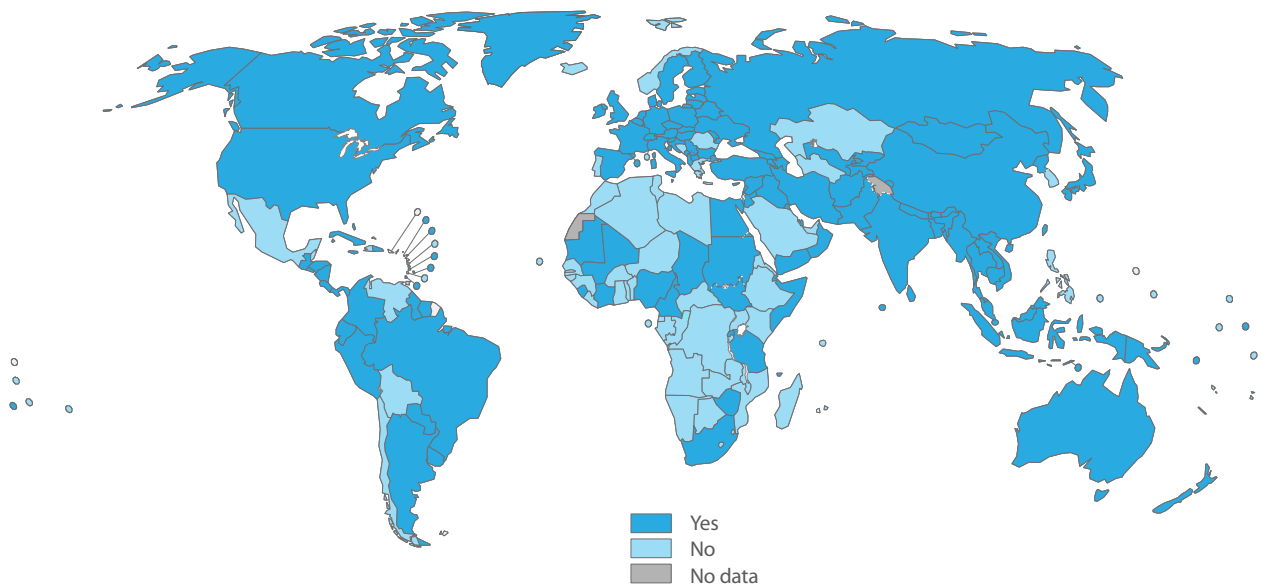
**Table 1.** Responses received by WHO region and income group<sup>a</sup>

	High income (N=50)	Upper-middle income (N=53)	Lower-middle income (N=50)	Low income (N=38)	Other (N=3) <sup>b</sup>
Africa (N=46)	0 (0%)	1 (12.5%)	3 (27.3%)	8 (26.9%)	n/a
Americas (N=35)	5 (83.3%)	16 (80.0%)	6 (85.7%)	0 (0%)	n/a
Eastern Mediterranean (N=22)	4 (66.7%)	3 (60.0%)	8 (88.9%)	2 (100%)	n/a
Europe (N=53)	26 (83.9%)	10 (71.4%)	5 (100%)	3 (100%)	n/a
South-East Asia (N=11)	n/a	2 (100%)	5 (100%)	4 (100%)	n/a
Western Pacific (N=27)	5 (83.3%)	2 (50.0%)	7 (53.8%)	1 (25.0%)	0 (0%)
<b>Total: Income group</b>	<b>40 (80.0%)</b>	<b>34 (64.2%)</b>	<b>34 (68.0%)</b>	<b>18 (47.4%)</b>	<b>0 (0%)</b>

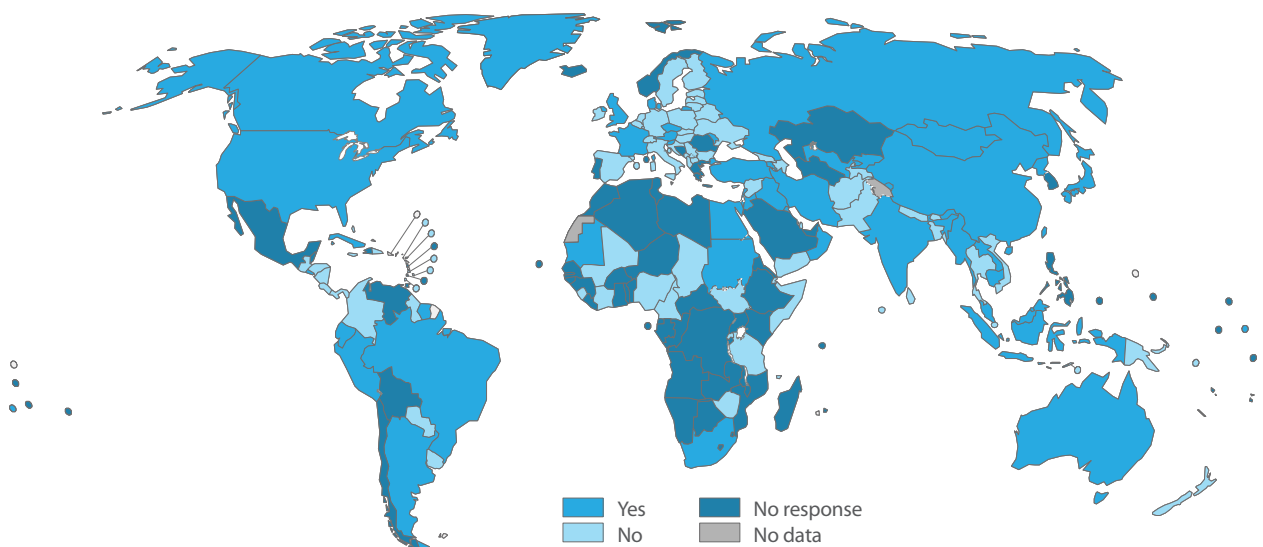
<sup>a</sup> Source for income group classifications: World Bank 2012 data (<http://data.worldbank.org/about/country-classifications/country-and-lending-groups>).

<sup>b</sup> Income group classifications were not available for three Western Pacific countries that did not submit surveys: Cook Islands, Nauru and Niue.  
n/a = not available

**Figure 1.** Map of global responses



**Figure 2.** Responses to the question, "Is there a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis?"



### National coordination

Forty-seven responding Member States (37.3%) reported the existence of a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis (Figure 2).

Eighteen of the 47 Member States with a strategy or plan reported that it focuses exclusively on viral hepatitis, and 20 reported that it addresses other diseases as well. Five countries reported that the strategy or plan addresses only hepatitis B and one reported that it addresses only hepatitis C. Three countries reported that the strategy or plan addresses both hepatitis B and hepatitis C.

The 47 Member States that reported the existence of a strategy or plan were asked about its specific components. Forty-six reported the inclusion of a component for vaccination. Forty-three reported the inclusion of a component for prevention of transmission in health-care settings, and the same number for general prevention and surveillance. Thirty-seven reported the inclusion of a component for treatment and care. Thirty-six reported the inclusion of a component for raising awareness. Thirty-five reported the inclusion of a component for the prevention of transmission via injecting drug use.

Thirty-six responding Member States (28.6%) reported that they had a governmental unit or department responsible solely for viral hepatitis-related activities. Member States that did so were asked to indicate the number of staff members in the unit or department. Responses ( $N=30$ ) ranged from 0.1 (New Zealand) to 250 (Brazil) (median, 5).

Member States were asked to report the number of people working full-time on hepatitis-related activities in all government agencies or bodies. Among the 47 Member States that provided data for this question, the number ranged from 0 to 213 (median, 2), with Armenia reporting the highest number.

Ninety-three responding Member States (73.8%) reported that they had a viral hepatitis prevention and control programme that included activities targeting specific populations. The populations most commonly targeted were health-care workers, including health-care waste handlers (86.0% of responding Member States within this subset) and people who inject drugs (54.8% of responding Member States within this subset). Forty-four responding Member States (47.3%) reported the inclusion of activities targeting people living with HIV and 36 responding Member States (38.7%) reported the inclusion of activities targeting prisoners. Groups identified less frequently included migrants, indigenous populations, low-income populations, those who are uninsured and those who are homeless.

### Awareness-raising and partnerships

Forty-eight responding Member States (38.1%) reported that they had held events for World Hepatitis Day 2012 (28 July). Since January 2011, 36 responding Member States (28.6%) had funded some type of viral hepatitis public awareness campaign other than World Hepatitis Day (Annex A).

Sixty responding Member States (47.6%) reported that they collaborated with civil society groups within their countries to develop and implement the governmental viral hepatitis prevention and control programme.

### Evidence-based policy and data for action

One hundred and four responding Member States (82.5%) reported that they have routine surveillance for viral hepatitis; details are given in Table 2.

**Table 2.** Types of surveillance in Member States reporting the existence of routine surveillance for viral hepatitis ( $N=104$ )

	Yes (%)	No (%)	Do not know (%)	No response (%)
There is a national surveillance system for <b>acute</b> hepatitis infection for the following forms of hepatitis:				
hepatitis A	86.5	5.8	0	7.7
hepatitis B	96.2	2.9	0	1.0
hepatitis C	85.6	9.6	0	4.8
hepatitis D	38.5	41.3	1.0	19.2
hepatitis E	45.2	35.6	1.0	18.3
There is a national surveillance system for <b>chronic</b> hepatitis infection for the following forms of hepatitis:				
hepatitis B	52.9	43.3	0	3.8
hepatitis C	49.0	46.2	0	4.8
hepatitis D	23.1	64.4	0	12.5

One hundred and seven responding Member States (84.9%) indicated that their countries have standard case definitions for hepatitis infection and 100 (79.4%) indicated that their countries have a central registry for the reporting of deaths, including hepatitis deaths.

Fifty-seven Member States reported on the proportion of hepatitis cases and deaths registered as “undifferentiated” or “unclassified” hepatitis. The reported proportion ranged from 0% to 100% (median, 1.0%).<sup>a</sup> Additional survey findings on surveillance are presented in Table 3.

Member States were asked how often hepatitis disease reports were published. Of the responding Member States, 40.5% reported that they publish hepatitis disease reports annually;

<sup>a</sup> These figures represent data from 55 of the 57 Member States. Data from the Russian Federation and Mali are not included here because those Member States reported the information in a different way. See the Russian Federation and Mali country findings elsewhere in the report for information about undifferentiated/unclassified hepatitis in those Member States.



**Table 3.** Data registration and surveillance (N=126)

	Yes (%)	No (%)	Do not know (%)	No response (%)
Liver cancer cases are registered nationally	69.8	22.2	5.6	2.4
Cases with HIV/hepatitis coinfection are registered nationally	47.6	45.2	5.6	1.6
Hepatitis outbreaks are reported	91.3	5.6	3.2	0
If YES – Hepatitis outbreaks are further investigated (N=115)	94.8	4.3	0.9	0

21.4%, monthly; and 12.7%, weekly. No hepatitis disease report is published by 23.8% of responding Member States.

Thirty-two responding Member States (25.4%) reported the existence of a national public health research agenda for viral hepatitis.

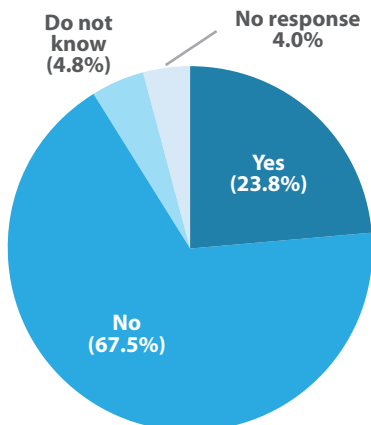
Forty-one responding Member States (32.5%) reported that viral hepatitis serosurveys are conducted regularly. Among this subset, 17.1% indicated that serosurveys take place at least once per year and, of the same subset, 43.9% reported that the most recent viral hepatitis serosurvey was carried out in either 2011 or 2012.

#### Prevention of transmission

Fifty-one responding Member States (40.5%) reported that they have a national hepatitis A vaccination policy.

Thirty responding Member States (23.8%) reported that

**Figure 3.** Responses to the question, “Has your government established the goal of eliminating hepatitis B?” (N=12)<sup>a</sup>



<sup>a</sup> Four Member States that answered “yes” to this question (Australia, Latvia, Republic of Moldova and Sweden) added comments indicating that their goals relate to reducing rather than eliminating hepatitis B.

they have established the goal of eliminating or reducing hepatitis B (Figure 3).

Member States were asked to report, for a given recent year, the percentage of newborn infants who had received the first dose of hepatitis B vaccine within 24 hours of birth. Among the 86 Member States that provided this information, responses ranged from 0% to 100% (median, 58.0%). Member States were also asked to report, for a given recent year, the percentage of one-year-olds (ages 12–23 months) who had received three doses of hepatitis B vaccine. Among the 101 Member States that provided this information, responses ranged from 0% to 100% (median, 92.0%).

Ninety-six responding Member States (76.2%) reported the existence of a national policy that specifically targets mother-to-child transmission of hepatitis B; details are presented in Annex B. Of the Member States with such a policy, 65.6% indicated that one component of the policy calls for screening of all pregnant women for hepatitis B.

Eighty-eight responding Member States (69.8%) reported the existence of a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

Eighty responding Member States (63.5%) reported that health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

One hundred and nine responding Member States (86.5%) reported the existence of a national policy on injection safety in health-care settings. These Member States were asked which types of syringes the policy recommends for therapeutic injections. Single-use syringes are recommended in 77.1% of policies, and auto-disable syringes in 30.3% (Figure 4).

One hundred and ten responding Member States (87.3%) reported that single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Member States were asked for official estimates of the number and percentage of unnecessary injections administered annually in health-care settings (e.g. injections that are given when an equivalent oral medication is available). One hundred and thirteen Member States reported that the figures are not known and six did not reply. Among the seven responding Member States providing this information, responses ranged from 0% to 68.0% (median, 14.0%), with Denmark and Tonga reporting 0% and Mongolia reporting 68.0%.

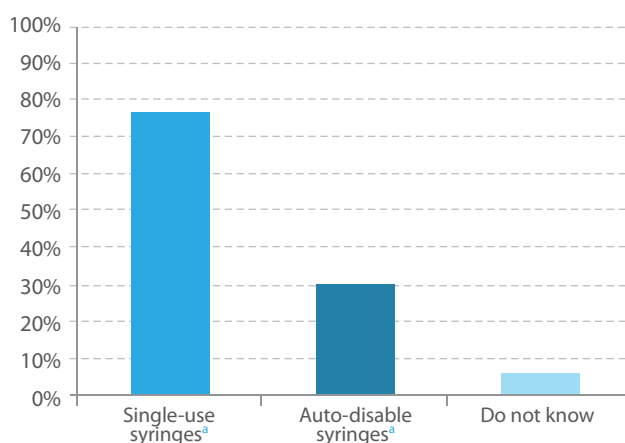
Additional findings relating to the prevention of hepatitis transmission are presented in Table 4.

#### Screening, care and treatment

Member States were asked how health professionals in their countries obtain the skills and competencies required to effectively care for people with viral hepatitis. Responding Member States most frequently indicated that these are acquired in schools for health professionals (pre-service education,



**Figure 4.** Proportion of responding Member States with national policies on injection safety in health-care settings which recommend single-use syringes and auto-disable syringes for therapeutic injections (N=109)



<sup>a</sup> Respondents could select both "single-use syringes" and "auto-disable syringes".

77.0%). Additionally, on-the-job training was identified in 73.0% of responses and postgraduate training in 61.6%.

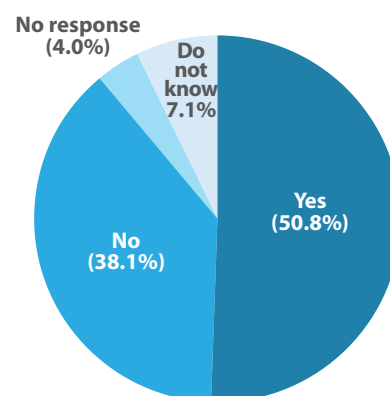
Sixty-four responding Member States (50.8%) reported the existence of national clinical guidelines for the management of viral hepatitis (Figure 5). Thirty-five of these 64 Member States indicated that the guidelines include recommendations for cases with HIV coinfection. Forty-four of 74 responding Member

States indicated that there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

Fifty-nine responding Member States (46.8%) indicated that they have a national policy relating to screening and referral to care for hepatitis B. Forty-eight (38.1%) reported that they have such a policy for hepatitis C.

Regarding hepatitis B testing, 116 responding Member States

**Figure 5.** Responses to the question, "Are there national clinical guidelines for the management of viral hepatitis?" (N=126)



(92.1%) indicated that people register by name for testing. One hundred and one members of that subset (87.1%) indicated that the names are kept confidential. Fifty-two responding Member States (41.3%) reported that the hepatitis B test is free of charge for all individuals. Among the 70 other Member States that answered the question, 43 (61.4%) reported that the hepatitis B test is free of charge for members of specific groups. Groups identified included blood donors, health-care workers, pregnant women, people living with HIV, patients on haemodialysis, prisoners and people who inject drugs. Sixty-one responding Member States (48.4%) reported that the hepatitis B test is compulsory for members of specific groups. Groups identified included blood donors, health-care workers, pregnant women, people living with HIV, patients on haemodialysis and prisoners.

Regarding hepatitis C testing, 109 responding Member States (86.5%) indicated that people register by name for testing. Ninety-five members of that subset (87.2%) indicated that the names are kept confidential. Forty-eight responding Member States (38.1%) reported that the hepatitis C test is free of charge for all individuals. Among the 69 other Member States that answered the question, 39 (56.5%) reported that the hepatitis C test is free of charge for members of specific groups. Groups identified included blood donors, health-care workers, pregnant women, people living with HIV, patients on haemodialysis, prisoners and people who inject drugs. Fifty-seven responding

**Table 4.** Hepatitis prevention: policies, practices and guidelines (N=126)

	Yes (%)	No (%)	Do not know (%)	No response (%)
There is a national infection control policy for blood banks	88.9	5.6	4.0	1.6
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B	94.4	3.2	0	2.4
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis C	91.3	3.2	4.0	1.6
There is a national policy relating to the prevention of viral hepatitis among people who inject drugs	34.1	51.6	11.1	3.2
The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety	50.0	39.7	7.9	2.4

Member States (45.2%) reported that the hepatitis C test is compulsory for members of specific groups. Groups identified included blood donors, health-care workers, pregnant women, people living with HIV, patients on haemodialysis and prisoners.

Seventy-nine responding Member States (62.7%) reported that publicly funded treatment is available for hepatitis B. Seventy-five responding Member States (59.5%) reported that publicly funded treatment is available for hepatitis C. Fourteen responding Member States reported the amount spent on publicly funded treatment for hepatitis B and hepatitis C. Details can be found in the summaries of country findings later in this report (see Argentina, Armenia, Bahrain, Croatia, Egypt, Lithuania, Myanmar, New Zealand, Pakistan, Poland, San Marino, Spain, Syrian Arab Republic and Turkey).

One hundred and three responding Member States (81.7%) reported that at least one available drug for treating for hepatitis B is on the national essential medicines list or is subsidized by the government (Table 5). The drugs most commonly reported were lamivudine, interferon alpha and pegylated interferon.

Eighty-three responding Member States (65.9%) reported that at least one available drug for treating for hepatitis C is on the national essential medicines list or is subsidized by the government. The drugs most commonly reported were ribavirin, pegylated interferon and interferon alpha.

#### World Health Organization assistance

Member States were asked to indicate areas in which they might want assistance from WHO for the prevention and control of viral hepatitis. Respondents most commonly selected the following: developing the national plan for viral hepatitis prevention and control (58.1%), estimating the national burden of viral hepatitis

(54.8%) and developing education/training programmes for health professionals (54.0%) (Tables 6 and 7). Responses from individual Member States appear in Annex C.

**Table 5.** Drugs for treating hepatitis B and C on national essential medicines lists or subsidized by governments

Drugs for treating hepatitis B	% of Member States reporting its inclusion (N=126)
Lamivudine	66.7
Interferon alpha	54.0
Pegylated interferon	50.8
Tenofovir	48.4
Entecavir	34.9
Adefovir dipivoxil	34.1
Telbivudine	23.8

Drugs for treating hepatitis C	% of Member States reporting its inclusion (N=126)
Ribavirin	57.9
Pegylated interferon	54.8
Interferon alpha	45.2
Telaprevir	19.8
Boceprevir	18.3

**Table 6.** Viral hepatitis control and prevention: areas in which Member States indicated interest in receiving WHO assistance (N=126)

<b>Awareness-raising, partnerships and resource mobilization (first WHO strategic axis)</b>	
Developing the national plan for viral hepatitis prevention and control	58.7%
Integrating viral hepatitis programmes into other health services	48.4%
Awareness-raising	50.8%
<b>Evidence-based policy and data for action (second WHO strategic axis)</b>	
Viral hepatitis surveillance	52.4%
Estimating the national burden of viral hepatitis	54.8%
Developing tools to assess the effectiveness of interventions	43.7%
Assessing the economic impact of viral hepatitis	49.2%
<b>Prevention of transmission (third WHO strategic axis)</b>	
Increasing coverage of the birth dose of the hepatitis B vaccine	31.7%
<b>Screening, care and treatment (fourth WHO strategic axis)</b>	
Increasing access to treatment	46.0%
Increasing access to diagnostics	49.2%
Improving laboratory quality	44.6% <sup>a</sup>
Developing education/training programmes for health professionals	54.0%

<sup>a</sup> N = 113 (This response option was not included in the survey completed by Belarus, Colombia and countries in the South-East Asia Region.)

**Table 7.** Viral hepatitis control and prevention: areas in which Member States indicated interest in receiving WHO assistance by income group (N=126)

	High income (N=50)	Upper-middle income (N=53)	Lower-middle income (N=50)	Low income (N=38)
<i>Awareness-raising, partnerships and resource mobilization (first WHO strategic axis)</i>				
Developing the national plan for viral hepatitis prevention and control	27.5%	58.8%	73.5%	100%
Integrating viral hepatitis programmes into other health services	20.0%	58.8%	64.7%	61.1%
Awareness-raising	17.5%	50.0%	73.5%	83.3%
<i>Evidence-based policy and data for action (second WHO strategic axis)</i>				
Viral hepatitis surveillance	12.5%	55.9%	79.4%	83.3%
Estimating the national burden of viral hepatitis	25.0%	61.8%	67.6%	83.3%
Developing tools to assess the effectiveness of interventions	20.0%	52.9%	58.8%	50.0%
Assessing the economic impact of viral hepatitis	25.0%	55.9%	70.6%	50.0%
<i>Prevention of transmission (third WHO strategic axis)</i>				
Increasing coverage of the birth dose of the hepatitis B vaccine	5.0%	29.4%	47.1%	66.7%
<i>Screening, care and treatment (fourth WHO strategic axis)</i>				
Increasing access to treatment	10.0%	41.2%	76.5%	77.8%
Increasing access to diagnostics	10.0%	44.1%	76.5%	94.4%
Improving laboratory quality	5.0%	43.3% <sup>a</sup>	75.9% <sup>b</sup>	92.9% <sup>c</sup>
Developing education/training programmes for health professionals	22.5%	55.9%	76.5%	83.3%

<sup>a</sup> N = 30 (This response option was not included in the survey completed by Belarus, Colombia, Maldives and Thailand.)<sup>b</sup> N = 29 (This response option was not included in the survey completed by Bhutan, India, Indonesia, Sri Lanka and Timor-Leste.)<sup>c</sup> N = 14 (This response option was not included in the survey completed by Bangladesh, Democratic People's Republic of Korea, Myanmar and Nepal.)





# Chapter 3: WHO African Region

Forty-six Member States make up the World Health Organization (WHO) African Region, which has a total population of 857 million.<sup>1</sup> The African Region ranks behind the other five WHO regions on key measures of overall population health. It has the lowest life expectancy at birth (54 years in 2009) and the highest infant and under-five mortality rates.<sup>2</sup> It has the highest level of unmet need for family planning and one of the lowest immunization coverage levels among one-year-olds.<sup>2</sup> The African Region furthermore has severe shortages in its health workforce.<sup>3</sup>

Like the rest of the world, the African Region has seen noncommunicable diseases become a greater public health challenge in recent years. Deaths from noncommunicable diseases are expected to increase by more than 20% in the Region by 2020.<sup>4</sup> Currently, however, it is the only region where mortality from communicable, maternal, perinatal and nutritional conditions still exceeds mortality from noncommunicable diseases.<sup>5</sup>

All of the African Region's Member States except for Algeria are in sub-Saharan Africa, which has two thirds of all of the world's cases of HIV. Researchers who analysed data on HIV and hepatitis from 20 sub-Saharan African countries found a weighted mean prevalence rate of hepatitis B surface antigen (HBsAg) of 15% among people living with HIV, while that of antibodies to hepatitis C virus (HCV) was 7% among people living with HIV.<sup>6</sup>

Responses to the WHO/Alliance survey were received from 12 of the 46 Member States in the Region (26.1%) (Box 1).

**Box 1.** Responses to the 2012 Global Hepatitis Survey: WHO African Region

## Member States that submitted surveys:

- Cameroon
- Chad
- Comoros
- Côte d'Ivoire
- Mali
- Mauritania
- Nigeria
- Rwanda
- Sierra Leone
- South Africa
- United Republic of Tanzania
- Zimbabwe

## Member States that did not submit surveys:

- Algeria
- Angola
- Benin
- Botswana
- Burkina Faso
- Burundi
- Cape Verde
- Central African Republic
- Congo
- Democratic Republic of the Congo
- Equatorial Guinea
- Eritrea
- Ethiopia
- Gabon
- Gambia
- Ghana
- Guinea
- Guinea-Bissau
- Kenya
- Lesotho
- Liberia
- Madagascar
- Malawi
- Mauritius
- Mozambique
- Namibia
- Niger
- Sao Tome and Principe
- Senegal
- Seychelles
- Swaziland
- Togo
- Uganda
- Zambia

## Viral hepatitis in the WHO African Region

The African Region is estimated to have some of the highest prevalence rates for hepatitis A globally, with ≥90% of children in sub-Saharan Africa exposed to infection by the age of 10 years.<sup>a</sup> The prevalence of hepatitis E in the Region varies from <2% in several countries to >20% in Central Africa.<sup>b</sup>

The prevalence of hepatitis B is estimated at 8% in West Africa and 5%–7% in central, eastern and southern Africa.<sup>c</sup> The prevalence of hepatitis C is even higher in some areas, reaching levels of up to 10%.<sup>d</sup>

<sup>a</sup> Jacobsen KH, Wiersma ST. Hepatitis A virus seroprevalence by age and world region, 1990 and 2005. *Vaccine*, 2010, 28:6653–6657.

<sup>b</sup> Aggarwal R. *The global prevalence of hepatitis E virus infection and susceptibility: a systematic review*. Geneva, World Health Organization, 2010.

<sup>c</sup> Ott JJ, Stevens GA, Groeger J, Wiersma ST. Global epidemiology of hepatitis B virus infection: new estimates of age-specific HBsAg seroprevalence and endemicity. *Vaccine*, 2012, 30:2212–2219.

<sup>d</sup> Mohd Hanafiah K, Groeger J, Flaxman AD, Wiersma ST. Global epidemiology of hepatitis C virus infection: new estimates of age-specific antibody to HCV seroprevalence. *Hepatology*, 2013, 57:1333–1342.

## National coordination

Two responding Member States (16.7%) reported the existence of a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis (Figure 1). Both these Member States (South Africa and Mauritania) reported that it focuses exclusively on viral hepatitis.

Member States that reported the existence of a strategy or plan were asked about its specific components. South Africa reported the inclusion of components for vaccination, general prevention, prevention of transmission via injecting drug use,

<sup>1</sup> *World population prospects: the 2010 revision*. New York, United Nations, Department of Economic and Social Affairs, Population Division, 2011.

<sup>2</sup> *World Health Statistics 2012*. Geneva, WHO, 2012. Available at: [http://www.who.int/gho/publications/world\\_health\\_statistics/2012/en/](http://www.who.int/gho/publications/world_health_statistics/2012/en/) (accessed on 03 May 2013).

<sup>3</sup> *The African Health Monitor*, April–June 2010; (12):22–29. Available at: <http://ahm.afro.who.int/issue12/pdf/AHM%2012Complete.pdf> (accessed on 03 May 2013).

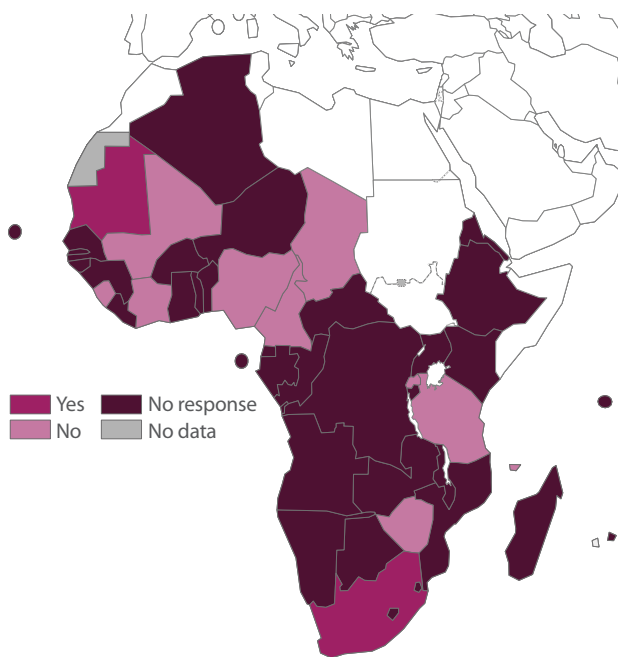
<sup>4</sup> *Global status report on noncommunicable diseases 2010*. Geneva, WHO, 2011. Available at: [http://whqlibdoc.who.int/publications/2011/9789240686458\\_eng.pdf](http://whqlibdoc.who.int/publications/2011/9789240686458_eng.pdf) (accessed on 03 May 2013).

<sup>5</sup> *UNAIDS report on the global AIDS epidemic 2012*. Geneva, 2012. Available at: [http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/gr2012/20121120\\_UNAIDS\\_Global\\_Report\\_2012\\_en.pdf](http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/gr2012/20121120_UNAIDS_Global_Report_2012_en.pdf) (accessed on 03 May 2013).

<sup>6</sup> Barth RE, Huijgen Q, Taljaard J, Hoepelman AI. Hepatitis B/C and HIV in sub-Saharan Africa: an association between highly prevalent infectious diseases. A systematic review and meta-analysis. *International Journal of Infectious Diseases*, 2010, 14(12):e1024–e1031.



**Figure 1.** Responses to the question, “Is there a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis?”



prevention of transmission in health-care settings, treatment and care, and coinfection with HIV. Mauritania reported the inclusion of components for raising awareness, surveillance, vaccination, general prevention, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

Four responding Member States (33.3%) reported that they have a governmental unit or department responsible solely for viral hepatitis-related activities. Member States that did so were asked to indicate the number of staff members in the unit or department. Responses ( $N=4$ ) ranged from 2 to 10 (median, 4.5), with Côte d'Ivoire reporting the largest number.

Member States were asked to report the number of people working full-time on hepatitis-related activities in all government agencies or bodies. Among the five Member States that provided data for this question, the number ranged from 0 to 7 (median, 3.0), with South Africa reporting the largest number.

Seven responding Member States (58.3%) reported that they have a viral hepatitis prevention and control programme that included activities targeting specific populations. The populations most commonly targeted were young children (57.1% of responding Member States within this subset) and health-care workers, including health-care waste handlers (57.1% of responding Member States within this subset).

**Awareness-raising and partnerships**

Four responding Member States (33.3%) reported that they held events for World Hepatitis Day 2012 (28 July). Since January 2011, one responding Member State (8.3%) had funded some type of viral hepatitis public awareness campaign other than World Hepatitis Day. This Member State (Chad) reported that it addressed the following topics: general information about hepatitis and its transmission, vaccination for hepatitis A and hepatitis B, the importance of knowing one's hepatitis B and hepatitis C status, and safer sex practices.

Six responding Member States (50.0%) reported that they collaborated with civil society groups within their countries to develop and implement the governmental viral hepatitis prevention and control programme. For example, Mali reported collaborating with SOS Hepatitis and Cameroon reported collaborating with Réseau Camerounais contre Hépatites Virales and Société Camerounaise de Gastro-Enterologie. (Further examples can be found in the summaries of country findings later in this chapter.)

**Evidence-based policy and data for action**

Four responding Member States (33.3%) reported that they have routine surveillance for viral hepatitis; details appear in Table 1.

Nine responding Member States (75.0%) indicated that their countries have standard case definitions for hepatitis infection and three (25.0%) indicated that their countries have a central registry for reporting deaths, including hepatitis deaths.

**Table 1.** Types of surveillance in Member States reporting the existence of routine surveillance for viral hepatitis ( $N=4$ )

	Yes (%)	No (%)	Do not know (%)	No response (%)
There is a national surveillance system for <b>acute</b> hepatitis infection for the following forms of hepatitis:				
hepatitis A	75.0	0	0	25.0
hepatitis B	75.0	0	0	25.0
hepatitis C	50.0	25.0	0	25.0
hepatitis D	0	50.0	25.0	25.0
hepatitis E	0	50.0	25.0	25.0
There is a national surveillance system for <b>chronic</b> hepatitis infection for the following forms of hepatitis:				
hepatitis B	0	75.0	0	25.0
hepatitis C	25.0	50.0	0	25.0
hepatitis D	0	50.0	0	50.0

Two Member States reported on the proportion of hepatitis cases and deaths registered as “undifferentiated” or “unclassified” hepatitis. One Member State (Mali) reported this to be 15%–20% for hepatitis B and 4.98% for hepatitis C. The other Member State (Mauritania) reported this to be 10%–20%. Additional survey findings about surveillance are presented in Table 2.

**Table 2.** Data registration and surveillance (N=126)

	Yes (%)	No (%)	Do not know (%)	No response (%)
Liver cancer cases are registered nationally	50.0	33.3	16.7	0
Cases with HIV/hepatitis coinfection are registered nationally	25.0	50.0	8.3	16.7
Hepatitis outbreaks are reported	66.7	16.7	16.7	0
If YES – Hepatitis outbreaks are further investigated (N=115)	75.0	25.0	0	0

Member States were asked how often hepatitis disease reports were published. Of the responding Member States, 16.7% reported that hepatitis disease reports are published annually, and 8.3% monthly. No hepatitis disease report is published by 41.7% of responding Member States.

Two responding Member States (16.7%, Mauritania and Rwanda) reported the existence of a national public health research agenda for viral hepatitis.

Two responding Member States (16.7%, Côte d'Ivoire and Rwanda) reported that viral hepatitis serosurveys are conducted regularly. One of the two (Rwanda) indicated that serosurveys take place every two years. Both Member States with regular serosurveys reported that the most recent viral hepatitis serosurvey was carried out in either 2011 or 2012.

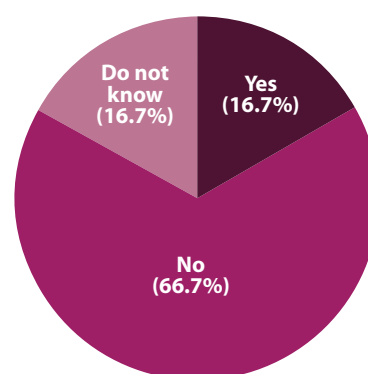
### Prevention of transmission

Three responding Member States (25.0%) reported that they have a national policy for hepatitis A vaccination.

Two responding Member States (16.7%, Cameroon and Rwanda) reported that they have established the goal of eliminating hepatitis B (Figure 2). Member States with this goal were asked to specify the timeframe in which they seek to eliminate hepatitis B. Both Member States said that the timeframe was not specified.

Member States were asked to report, for a given recent year, the percentage of newborn infants who had received the first dose of hepatitis B vaccine within 24 hours of birth. Among the seven Member States that provided this information, all responses were 0%. Member States were also asked to report, for a given recent year, the percentage of one-year-olds (ages 12–23 months) who had received three doses of hepatitis B vaccine.

**Figure 2.** Responses to the question, “Has your government established the goal of eliminating hepatitis B?” (N=12)



Among the eight Member States that provided this information, responses ranged from 50.0% to 97.0% (median, 83.0%).

Three responding Member States (25.0%) reported the existence of a national policy that specifically targets mother-to-child transmission of hepatitis B. One Member State (Cameroon) indicated that the policy calls for health-care providers to follow up with all pregnant women found to have hepatitis B during pregnancy for the purpose of encouraging them to give birth at health-care facilities. The second Member State (Mauritania) indicated that the policy calls for counselling of all pregnant women found to have hepatitis B, and for delivery of the first dose of hepatitis B vaccine to all infants within 24 hours of birth. The third Member State (Comoros) indicated that the policy calls for screening of all pregnant women for hepatitis B.

Four responding Member States (33.3%) reported the existence of a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

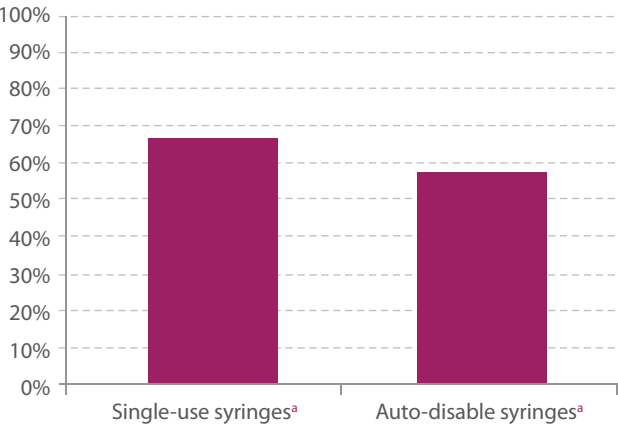
One responding Member State (8.3%, South Africa) reported that health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

Twelve responding Member States (100.0%) reported the existence of a national policy on injection safety in health-care settings. These Member States were asked which types of syringes the policy recommends for therapeutic injections. Single-use syringes are recommended in 66.7% of policies, and auto-disable syringes in 58.3% (Figure 3).

Seven responding Member States (58.3%) reported that single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Member States were asked for official estimates of the number and percentage of unnecessary injections administered annually in health-care settings (e.g. injections that are given

**Figure 3.** Proportion of responding Member States with national policies on injection safety in health-care settings which recommend single-use syringes and auto-disable syringes for therapeutic injections (N=12)



<sup>a</sup> Respondents could select both “single-use syringes” and “auto-disable syringes”.

when an equivalent oral medication is available). Eleven Member States reported that the figures are not known and one did not reply. Additional findings relating to the prevention of hepatitis transmission are presented in Table 3.

#### Screening, care and treatment

Member States were asked how health professionals in their countries obtain the skills and competencies required to effectively care for people with viral hepatitis. Responding Member States most frequently indicated that these are acquired in schools for health professionals (pre-service education, 58.3%). In addition, on-the-job training was identified in 50.0% of responses, and postgraduate training in 50.0%.

Four responding Member States (33.3%) reported the existence of national clinical guidelines for the management of viral hepatitis (Figure 4). Two of these four Member States (South Africa and the United Republic of Tanzania) indicated that the guidelines include recommendations for cases with HIV coinfection. Six of nine responding Member States (66.7%) indicated that there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

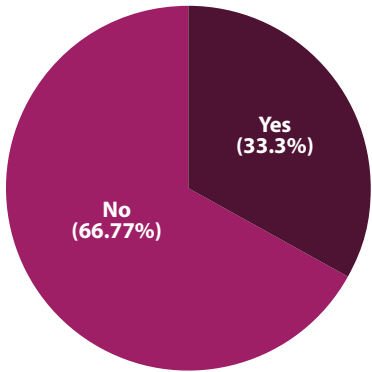
Two responding Member States (16.7%, Côte d’Ivoire and Rwanda) indicated that they have national policies relating to screening and referral to care for hepatitis B and hepatitis C.

Regarding hepatitis B testing, 12 responding Member States (100.0%) indicated that people register by name for testing. Eleven members of this subset (91.7%) indicated that the names are kept confidential. No responding Member State (0%) reported that the hepatitis B test is free of charge for all individuals. Six responding Member States (50.0%) reported

**Table 3.** Hepatitis prevention: policies, practices and guidelines (N=12)

	Yes (%)	No (%)	Do not know (%)
There is a national infection control policy for blood banks	100	0	0
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B	100	0	0
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis C	83.3	8.3	8.3
There is a national policy relating to the prevention of viral hepatitis among people who inject drugs	25.0	66.7	8.3
The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety	25.0	58.3	16.7

**Figure 4.** Responses to the question, “Are there national clinical guidelines for the management of viral hepatitis?” (N=12)



that the hepatitis B test is free of charge for members of specific groups. Groups identified included blood donors, people living with HIV and pregnant women. Six responding Member States (50.0%) reported that the hepatitis B test is compulsory for members of specific groups. Groups identified included blood donors, people living with HIV and pregnant women.

Regarding hepatitis C testing, eleven responding Member States (91.7%) indicated that people register by name for testing. All members of that subset (100%) indicated that the names are kept confidential. No responding Member State (0%) reported that the hepatitis C test is free of charge for all individuals. Six responding Member States (50.0%) reported that the hepatitis C test is free of charge for members of specific groups. Groups identified included blood donors. Six responding Member



States (50.0%) reported that the hepatitis C test is compulsory for members of specific groups. Groups identified included blood donors.

Two responding Member States (16.7%) reported that publicly funded treatment is available for hepatitis B and three (25.0%) that it is available for hepatitis C. Information was not provided by any Member State regarding the amount spent on publicly funded treatment for hepatitis B and hepatitis C.

Nine responding Member States (75.0%) reported that at least one available drug for treating hepatitis B is on the national essential medicines list or subsidized by the government (Table 4). The drugs most commonly reported were lamivudine, interferon alpha and tenofovir.

Five responding Member States (41.7%) reported that at least one available drug for treating hepatitis C is on the national essential medicines list or subsidized by the government. The drugs most commonly reported were ribavirin, pegylated interferon and interferon alpha.

#### World Health Organization assistance

Member States were asked to indicate areas in which they might want assistance from WHO for the prevention and control of viral hepatitis. Respondents most commonly selected the following: increasing access to treatment (91.7%), developing the national plan for viral hepatitis prevention and control (91.7%), surveillance for viral hepatitis (91.7%) and increasing access to diagnostics (91.7%, Table 5). Responses from individual Member States appear in Annex C.

**Table 4.** Proportion of Member States reporting drugs for treating hepatitis B and C on national essential medicines lists or subsidized by governments

Drugs for treating hepatitis B	% of Member States reporting its inclusion (N=12)
Lamivudine	33.3
Interferon alpha	16.7
Tenofovir	16.7
Pegylated interferon	8.3
Entecavir	0.0
Adefovir dipivoxil	0.0
Telbivudine	0.0
Drugs for treating hepatitis C	% of Member States reporting its inclusion (N=12)
Ribavirin	25.0
Pegylated interferon	25.0
Interferon alpha	16.7
Telaprevir	0.0
Boceprevir	0.0

**Table 5.** Viral hepatitis control and prevention: areas in which Member States indicated interest in receiving WHO assistance (N=12)

<b>Awareness-raising, partnerships and resource mobilization (first WHO strategic axis)</b>	
Developing the national plan for viral hepatitis prevention and control	91.7%
Integrating viral hepatitis programmes into other health services	66.7%
Awareness-raising	83.3%
<b>Evidence-based policy and data for action (second WHO strategic axis)</b>	
Viral hepatitis surveillance	91.7%
Estimating the national burden of viral hepatitis	75.0%
Developing tools to assess the effectiveness of interventions	66.7%
Assessing the economic impact of viral hepatitis	58.3%
<b>Prevention of transmission (third WHO strategic axis)</b>	
Increasing coverage of the birth dose of the hepatitis B vaccine	66.7%
<b>Screening, care and treatment (fourth WHO strategic axis)</b>	
Increasing access to treatment	91.7%
Increasing access to diagnostics	91.7%
Improving laboratory quality	83.3%
Developing education/training programmes for health professionals	75.0%

# WHO African Region: COUNTRY SUMMARIES

# Cameroon

The Government of Cameroon reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. Information was not provided regarding how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: newborns.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded any other public awareness campaign on viral hepatitis since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Réseau Camerounais contre Hépatites Virales and Société Camerounaise de Gastro-Entérologie.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. Information was not provided regarding the percentage of hepatitis cases reported as “undifferentiated” or “unknown” hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

The government publishes hepatitis disease reports irregularly.

Hepatitis outbreaks are not required to be reported to the government. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	20
Country classification (2012)	Lower-middle-income
Gross national income per capita (PPP int \$) (2011)	\$2330
Total health expenditure as % of GDP (2010)	5.13%
Per capita total health expenditure (PPP int \$) (2010)	\$121.55
Per capita government health expenditure (PPP int \$) (2010)	\$36.01
Life expectancy at birth (in years) (2009)	51
Human Development Index (2011)	0.482
Median age (in years) (2010)	19
Total fertility rate per woman (2010)	4.5

## Prevention of transmission

There is a national policy for hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but the timeframe is not specified.

Information was not provided regarding the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth or the percentage of one-year-olds nationally (ages 12–23 months) in a given recent year who received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

It is not known how health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis.

There are national clinical guidelines for the management of viral hepatitis. Information was not provided on whether these guidelines include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not provided free of charge, and are not compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B but is available for hepatitis C. It is not known who is eligible for publicly funded treatment for hepatitis C. Information was not provided regarding the amount spent by the government on such treatment for hepatitis C.

No drug for treating hepatitis B is on the national essential medicines list or subsidized by the government. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon and lamivudine.

The Government of Cameroon welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Chad

Population (in millions) (2011)	<b>11.5</b>
Country classification (2012)	<b>Low-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$1360</b>
Total health expenditure as % of GDP (2010)	<b>4.53%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$61.67</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$15.40</b>
Life expectancy at birth (in years) (2009)	<b>48</b>
Human Development Index (2011)	<b>0.328</b>
Median age (in years) (2010)	<b>17</b>
Total fertility rate per woman (2010)	<b>6</b>

The Government of Chad reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It has six staff members. There are no people working full-time on hepatitis-related activities in any government agency/body.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Association SOS Hepatite Chad and Association Soleil Levant.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy for hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth or what percentage of one-year-olds (ages 12–23 months) nationally in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is a national policy on injection safety in health-care settings, which recommends single-use and auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and

cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge and are not compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: lamivudine. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Chad welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Comoros

The Government of Comoros reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: children under the age of one year.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry.

It is not known whether liver cancer cases are registered nationally. Cases with HIV/hepatitis coinfection are not registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government but are not further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

Population (in millions) (2011)	<b>0.7</b>
Country classification (2012)	<b>Low-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$1110</b>
Total health expenditure as % of GDP (2010)	<b>4.51%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$49.11</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$33.01</b>
Life expectancy at birth (in years) (2009)	<b>60</b>
Human Development Index (2011)	<b>0.433</b>
Median age (in years) (2010)	<b>19</b>
Total fertility rate per woman (2010)	<b>4.9</b>

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy for hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 86% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is a national policy on injection safety in health-care settings, which recommends single-use and auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B, but not for hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

It is not known how health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis.

There are no national clinical guidelines for the management of viral hepatitis, or for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for blood donors and people living with HIV. Hepatitis B and hepatitis C tests are compulsory for blood donors, people living with HIV and pregnant women.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: lamivudine. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Comoros welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Côte d'Ivoire

Population (in millions) (2011)	<b>20.2</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$1710</b>
Total health expenditure as % of GDP (2010)	<b>5.30%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$97.58</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$21.07</b>
Life expectancy at birth (in years) (2009)	<b>50</b>
Human Development Index (2011)	<b>0.400</b>
Median age (in years) (2010)	<b>19</b>
Total fertility rate per woman (2010)	<b>4.4</b>

The Government of Côte d'Ivoire reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Programme National de Lutte contre les Hépatites Virales. It has 10 staff members. There are five full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Réseau Ivoirien de Lutte contre les Hépatites Virales and Rotaract Côte d'Ivoire.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. Information was not provided regarding the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are not required to be reported to the government. There is inadequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are children under the age of five years, the general population, firefighters and the military. The last sero-survey was carried out in March 2012.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Information was not provided regarding the percentage of newborn infants nationally in a given recent year who had received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 62% of one-year-olds (ages 12–23 months) had received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is a national policy on injection safety in health-care settings, which recommends auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are not always available in all health-care facilities.

Information was not provided regarding official government estimates of the

number and percentage of unnecessary injections administered annually in health-care settings.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through training workshops on the management of viral hepatitis.

There are no national clinical guidelines for the management of viral hepatitis. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge and are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. The following people are eligible: uninsured patients in Hospital Consultant Abidjan. Information was not provided regarding the amount spent by the government on such treatment for hepatitis B and hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: pegylated interferon. The following drug for treating hepatitis C is on the national essential medicines list or subsidized by the government: pegylated interferon.

The Government of Côte d'Ivoire welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Mali

The Government of Mali reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: SOS Hepatitis.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are no standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. Of the hepatitis B and hepatitis C cases, 15%–20% and 4.98%, respectively, are reported as “undifferentiated” or “unclassified” hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

It is not known whether hepatitis outbreaks are required to be reported to the government. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

It is not known whether there is a national public health research agenda for viral hepatitis, or whether viral hepatitis serosurveys are conducted regularly.

Population (in millions) (2011)	15.8
Country classification (2012)	Low-income
Gross national income per capita (PPP int \$) (2011)	\$1040
Total health expenditure as % of GDP (2010)	4.98%
Per capita total health expenditure (PPP int \$) (2010)	\$55.58
Per capita government health expenditure (PPP int \$) (2010)	\$25.89
Life expectancy at birth (in years) (2009)	53
Human Development Index (2011)	0.359
Median age (in years) (2010)	16
Total fertility rate per woman (2010)	6.3

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

It is not known whether the government has established the goal of eliminating hepatitis B.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth or what percentage of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

It is not known whether the government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

It is not known how health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis.

There are no national clinical guidelines for the management of viral hepatitis. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for blood donors. Hepatitis B and hepatitis C tests are compulsory for blood donors.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: interferon alpha. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha and ribavirin.

The Government of Mali welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Mauritania

Population (in millions) (2011)	<b>3.5</b>
Country classification (2012)	<b>Low-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$2400</b>
Total health expenditure as % of GDP (2010)	<b>4.41%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$79.01</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$41.96</b>
Life expectancy at birth (in years) (2009)	<b>58</b>
Human Development Index (2011)	<b>0.453</b>
Median age (in years) (2010)	<b>20</b>
Total fertility rate per woman (2010)	<b>4.5</b>

The Government of Mauritania reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Programme National de Lutte contre les Hépatites. It has three staff members. There are three full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), prisoners, people living with HIV and indigenous people.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: Association Mauritanienne de Lutte contre les Infections Virales.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are no standard case definitions for hepatitis. It is not known whether deaths,

including from hepatitis, are reported to a central registry. Of all hepatitis cases, 10%–20% are reported as “undifferentiated” or “unclassified” hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports.

It is not known whether hepatitis outbreaks are required to be reported to the government. There is inadequate laboratory capacity nationally to support the investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy for hepatitis A vaccination.

It is not known whether the government has established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 73% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recom-

mends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

Information was not provided on whether the government has national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Information was not provided on whether hepatitis B or hepatitis C tests are free of charge for all individuals or compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

No drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Mauritania welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Nigeria

The Government of Nigeria reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: health-care workers (including health-care waste handlers).

## Awareness-raising and partnerships

Information was not provided on whether the government held events for World Hepatitis Day 2012 or funded other viral hepatitis public awareness campaigns since January 2011.

Information was not provided on whether the government collaborates with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. Information was not provided about which specific types of acute and chronic hepatitis are monitored by surveillance systems.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases are registered nationally. Information was not provided on whether cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is inadequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

Population (in millions) (2011)	<b>162.5</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$2290</b>
Total health expenditure as % of GDP (2010)	<b>5.07%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$121.36</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$45.98</b>
Life expectancy at birth (in years) (2009)	<b>54</b>
Human Development Index (2011)	<b>0.459</b>
Median age (in years) (2010)	<b>18</b>
Total fertility rate per woman (2010)	<b>5.5</b>

Information was not provided on whether there is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy for hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Information was not provided regarding the percentage of newborn infants nationally in a given recent year who had received the first dose of hepatitis B vaccine within 24 hours of birth or the percentage of one-year-olds nationally (ages 12–23 months) in a given recent year who had received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. It is not known whether health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends auto-disable syringes for therapeutic injections. It is not known whether single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B. It is not known whether all donated blood units (including family donations) and blood products nationwide are screened for hepatitis C.

It is not known whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

It is not known whether the government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, but information was not provided on whether these guidelines include recommendations for cases with HIV coinfection. Information was not provided on whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

It is not known whether the government has national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge. Information was not provided on whether hepatitis B or hepatitis C tests are compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

No drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Nigeria welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Rwanda

Population (in millions) (2011)	<b>10.9</b>
Country classification (2012)	<b>Low-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$1270</b>
Total health expenditure as % of GDP (2010)	<b>10.48%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$121.01</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$60.59</b>
Life expectancy at birth (in years) (2009)	<b>59</b>
Human Development Index (2011)	<b>0.429</b>
Median age (in years) (2010)	<b>19</b>
Total fertility rate per woman (2010)	<b>5.4</b>

The Government of Rwanda reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It has two staff members. There are two full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people living with HIV, children under the age of one year and soldiers.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are standard case definitions for hepatitis B. It is not known whether deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

It is not known whether liver cancer cases are registered nationally. Cases with HIV/hepatitis coinfection are not registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis B and hepatitis C, but it is not known whether this is the case for hepatitis A and hepatitis E.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target population is pregnant women. The last serosurvey was carried out in 2011.

## Prevention of transmission

There is no national policy for hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but did not provide information about a specific time-frame for this.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 97% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends the following types of syringes for therapeutic injections: single-use and auto-disable syringes. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training, postgraduate training and international conferences/workshops.

There are no national clinical guidelines for the management of viral hepatitis. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with hepatitis B.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge and compulsory for blood donors.

Publicly funded treatment is available for hepatitis B. The following group is eligible: people coinfecting with HIV and hepatitis B. Publicly funded treatment is not available for hepatitis C. The amount spent by the government on publicly funded treatment for hepatitis B is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: lamivudine and tenofovir. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Rwanda welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Sierra Leone

The Government of Sierra Leone reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: children under the age of one year.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. Information was not provided regarding the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	6.0
Country classification (2012)	Low-income
Gross national income per capita (PPP int \$) (2011)	\$840
Total health expenditure as % of GDP (2010)	13.07%
Per capita total health expenditure (PPP int \$) (2010)	\$107.25
Per capita government health expenditure (PPP int \$) (2010)	\$12.15
Life expectancy at birth (in years) (2009)	49
Human Development Index (2011)	0.336
Median age (in years) (2010)	18
Total fertility rate per woman (2010)	5.0

## Prevention of transmission

There is no national policy for hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 0% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 91% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is a national policy on injection safety in health-care settings, which recommends auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are not always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis. It is not known whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for children under the age of five years, pregnant women and breastfeeding mothers. Hepatitis B and hepatitis C tests are compulsory for blood donors.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: lamivudine. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Sierra Leone welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# South Africa

Population (in millions) (2011)	<b>50.5</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$10 710</b>
Total health expenditure as % of GDP (2010)	<b>8.94%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$934.95</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$412.34</b>
Life expectancy at birth (in years) (2009)	<b>54</b>
Human Development Index (2011)	<b>0.619</b>
Median age (in years) (2010)	<b>25</b>
Total fertility rate per woman (2010)	<b>2.5</b>

The Government of South Africa reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. There are seven full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: health-care workers (including health-care waste handlers).

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: the South African National Blood Service.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for chronic hepatitis C.

There are standard case definitions for hepatitis. It is not known whether deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

It is not known whether liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

It is not known whether the government publishes hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

It is not known whether there is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy for hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 50%–80% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. It is not known whether single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge at public health-care facilities for people who do not have medical aid. Hepatitis B and hepatitis C tests are compulsory for health-care workers and sources of exposure following incidents of occupational exposure.

Publicly funded treatment is not available for hepatitis B, but is available for hepatitis C. Information was not provided on who is eligible for such treatment for hepatitis C. The amount spent by the government on publicly funded treatment for hepatitis C is not known.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: hepatitis B immune globulin. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of South Africa welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# United Republic of Tanzania

The Government of the United Republic of Tanzania reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. Information was not provided regarding how many people work full-time on hepatitis-related activities in all government agencies/bodies.

Information was not provided on whether the government has a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

Information was not provided on whether the government collaborates with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

Information was not provided on whether there is routine surveillance for viral hepatitis.

There are no standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided regarding the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases are registered nationally. Information was not provided on whether cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government but are not further investigated.

There is inadequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

Population (in millions) (2011)	46.2
Country classification (2012)	Low-income
Gross national income per capita (PPP int \$) (2011)	\$1500
Total health expenditure as % of GDP (2010)	6.01%
Per capita total health expenditure (PPP int \$) (2010)	\$83.43
Per capita government health expenditure (PPP int \$) (2010)	\$56.17
Life expectancy at birth (in years) (2009)	55
Human Development Index (2011)	0.466
Median age (in years) (2010)	18
Total fertility rate per woman (2010)	5.5

It is not known whether there is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy for hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and more than 90% of one-year-olds (ages 12–23 months) in a given recent year received three doses of the hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

It is not known whether there is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through on-the-job training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for hepatitis B register by name and there is open access to their names. Information was not provided on whether people testing for hepatitis C register by name. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for blood donors and for people with HIV and other chronic illnesses. Hepatitis B and hepatitis C tests are compulsory for blood donors.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: tenofovir. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of the United Republic of Tanzania welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Zimbabwe

Population (in millions) (2011)	<b>12.8</b>
Country classification (2012)	<b>Low-income</b>
Gross national income per capita (PPP int \$) (2011)	--
Total health expenditure as % of GDP (2010)	--
Per capita total health expenditure (PPP int \$) (2010)	--
Per capita government health expenditure (PPP int \$) (2010)	--
Life expectancy at birth (in years) (2009)	<b>49</b>
Human Development Index (2011)	<b>0.376</b>
Median age (in years) (2010)	<b>19</b>
Total fertility rate per woman (2010)	<b>3.3</b>

The Government of Zimbabwe reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A and B, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is inadequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy for hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and more than 80% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are not always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are no national clinical guidelines for the management of viral hepatitis. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge or compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: interferon alpha. The following drug for treating hepatitis C is on the national essential medicines list or subsidized by the government: interferon alpha.

The Government of Zimbabwe welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).







# Chapter 4:

## WHO Region of the Americas

Thirty-five Member States make up the World Health Organization (WHO) Region of the Americas, which has a total population of 939 million.<sup>1</sup> Most of the Region's countries are low- and middle-income countries, but it also encompasses the high-income countries of Canada and the United States of America.<sup>2</sup> The average life expectancy in the Region of the Americas in 2010 was 76.2 years, which represented a four-year increase from 2005.<sup>3</sup> By 2020, the Region will be home to almost 200 million people above the age of 60 years.<sup>3</sup> Longer life expectancy and lifestyle changes have driven increases in noncommunicable diseases, and these diseases now cause more than three fourths of the deaths in the Region annually.<sup>4</sup> The Region of the Americas and the WHO European Region have the highest incidence rates of all types of cancer.<sup>5</sup> Other notable public health issues in the Region of the Americas include road traffic accidents and violence. One quarter of the world's 600 000 annual homicides occur there.<sup>3</sup>

The Region of the Americas stands out for its progress against vaccine-preventable diseases, and the high level of childhood vaccination coverage.<sup>3</sup> Although communicable diseases cause only about 13% of deaths in the Region of the Americas, they impose a high burden of disease in some populations.<sup>3</sup> A 2008 literature review focusing on neglected tropical diseases in Latin America and the Caribbean concluded that the subregion may have a higher burden of disease from neglected tropical diseases such as hookworm infestation and Chagas disease than from malaria, tuberculosis or HIV.<sup>6</sup> The Region of the Americas saw a decline in the rate of new HIV infections between 2001 and 2009.<sup>3</sup>

<sup>1</sup> *World population prospects: the 2010 revision*. New York, United Nations, Department of Economic and Social Affairs, Population Division, 2011.

<sup>2</sup> *Country and lending groups* [web site]. The World Bank. Available at: [http://data.worldbank.org/about/country-classifications/country-and-lending-groups#Low\\_income](http://data.worldbank.org/about/country-classifications/country-and-lending-groups#Low_income) (accessed on 26 February 2013).

<sup>3</sup> *Health in the Americas: 2012 edition. Regional outlook and country profiles*. Washington, DC, WHO Regional Office for the Americas, 2012. Available at: <http://www.paho.org/saludenlasamericas/docs/hia-2012-summary.pdf> (accessed on 05 May 2013).

<sup>4</sup> *Non-communicable diseases in the Americas: building a healthier future*. Washington, DC, WHO Regional Office for the Americas, 2011. Available at: [http://new.paho.org/hq/index.php?option=com\\_docman&task=doc\\_view&gid=14832&Itemid=](http://new.paho.org/hq/index.php?option=com_docman&task=doc_view&gid=14832&Itemid=) (accessed on 05 May 2013).

<sup>5</sup> *Global status report on noncommunicable diseases 2010*. Geneva, WHO, 2011. Available at: [http://whqlibdoc.who.int/publications/2011/9789240686458\\_eng.pdf](http://whqlibdoc.who.int/publications/2011/9789240686458_eng.pdf) (accessed on 05 May 2013).

<sup>6</sup> Hotez PJ et al. The neglected tropical diseases of Latin America and the Caribbean: a review of disease burden and distribution and a roadmap for control and elimination. *PLoS Neglected Tropical Diseases*, 2008, 2(9):e300. doi: 10.1371/journal.pntd.0000300.

### Viral hepatitis in the WHO Region of the Americas

Most countries in Latin America and the Caribbean (LAC) show intermediate endemicity for hepatitis A. However, the prevalence varies from region to region. For instance, the seroprevalence of anti-hepatitis A in persons between the ages of 15 and 19 years in the Caribbean and Andean regions (Peru, Ecuador, Bolivia) is 57% and 96%, respectively.<sup>a</sup>

A low prevalence and outbreaks of hepatitis E have been reported in some LAC countries. Although higher prevalence has been reported elsewhere, little is known about the epidemiology of this infection in the Region. For instance, studies in the Brazilian population show prevalence rates of around 3% in adults, while in Bolivia, the rates ranged from 1.7% to 16.2%.<sup>b</sup>

Recent data indicate that from 1990 to 2005, the prevalence of hepatitis B infection fell on average to below 2% in the central and tropical Latin American regions, while it remained between 2% and 4% in the Caribbean, Andean and southern Latin American regions.<sup>c</sup>

In Andean, central, southern and tropical Latin American countries, approximately seven million adults are estimated to be anti-hepatitis C positive, meaning that they have been exposed to hepatitis C and could contract chronic infection.<sup>d</sup>

With respect to hepatitis D, a high prevalence of coinfection among hepatitis B cases has been observed in the Amazonian region.<sup>e</sup> For example, a study from Colombia showed that among hepatitis B-positive inhabitants, 5.2% were hepatitis D-positive and all except one were from the Amazonian region.<sup>f</sup>

<sup>a</sup> Jacobsen KH, Wiersma ST. Hepatitis A virus seroprevalence by age and world region, 1990 and 2005. *Vaccine*, 2010, 28:6653–6657.

<sup>b</sup> Aggarwal R. *The global prevalence of hepatitis E virus infection and susceptibility: a systematic review*. Geneva, World Health Organization, 2010.

<sup>c</sup> Ott JJ, Stevens GA, Groeger J, Wiersma ST. Global epidemiology of hepatitis B virus infection: new estimates of age-specific HBsAg seroprevalence and endemicity. *Vaccine*, 2012, 30:2212–2219.

<sup>d</sup> Mohd Hanafiah K, Groeger J, Flaxman AD, Wiersma ST. Global epidemiology of hepatitis C virus infection: new estimates of age-specific antibody to HCV seroprevalence. *Hepatology*, 2013, 57:1333–1342.

<sup>e</sup> Pascarella S, Negro F. Hepatitis D virus: an update. *Liver International*, 2011, 31:7–21.

<sup>f</sup> Alvarado-Mora MV et al. Hepatitis B (HBV), hepatitis C (HCV) and hepatitis delta (HDV) viruses in the Colombian population – how is the epidemiological situation? *PLoS One*, 2011, 6 (4):e18888.

Responses to the WHO/Alliance survey were received from 27 of the 35 Member States in the Region (77.1%).

**Box 1.** Responses to the 2012 Global Hepatitis Survey: WHO Region of the Americas

*Member States that submitted surveys:*

- |                       |                      |                            |
|-----------------------|----------------------|----------------------------|
| • Antigua and Barbuda | • Dominican Republic | • Nicaragua                |
| • Argentina           | • Ecuador            | • Panama                   |
| • Bahamas             | • El Salvador        | • Paraguay                 |
| • Barbados            | • Grenada            | • Peru                     |
| • Brazil              | • Guatemala          | • Saint Kitts and Nevis    |
| • Canada              | • Guyana             | • Saint Lucia              |
| • Colombia            | • Honduras           | • Suriname                 |
| • Costa Rica          | • Jamaica            | • United States of America |
| • Cuba                | • Mexico             | • Uruguay                  |

*Member States that did not submit surveys:*

- |                                    |                                    |                                      |
|------------------------------------|------------------------------------|--------------------------------------|
| • Belize                           | • Dominica                         | • Trinidad and Tobago                |
| • Bolivia (Plurinational state of) | • Haiti                            | • Venezuela (Bolivarian Republic of) |
| • Chile                            | • Saint Vincent and the Grenadines |                                      |

### National coordination

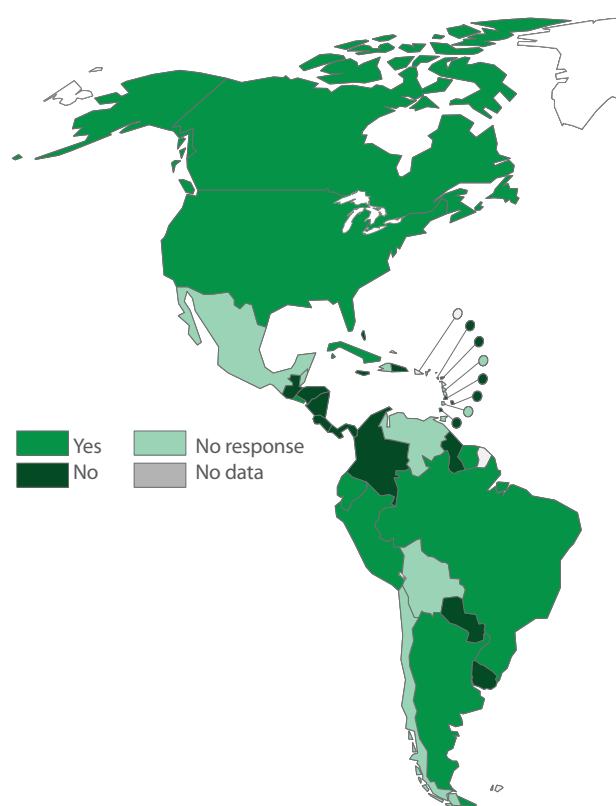
Nine responding Member States (33.3%) reported the existence of a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis (Figure 1). Two of the nine Member States with a strategy or plan (Argentina and the United States of America) reported that it focuses exclusively on viral hepatitis, and five (Brazil, Canada, Cuba, Peru and Suriname) reported that it addresses other diseases as well. Two countries (Ecuador and El Salvador) reported that the strategy or plan only addresses hepatitis B.

The nine Member States that reported the existence of a strategy or plan were asked about its specific components. All nine reported the inclusion of a component for vaccination. Eight reported the inclusion of components for surveillance and prevention of transmission in health-care settings. Seven reported the inclusion of components for general prevention, treatment and care, and coinfection with HIV. Six reported the inclusion of a component for raising awareness. Four reported the inclusion of a component for the prevention of transmission via injecting drug use.

Seven responding Member States (25.9%) reported that they have a governmental unit or department responsible solely for viral hepatitis-related activities. Member States that did so were asked to indicate the number of staff members in the unit or department. Responses ( $N=4$ ) ranged from 1 (Cuba) to 250 (Brazil) (median, 54).

Member States were asked to report the number of people working full-time on hepatitis-related activities in all government agencies or bodies. Among the 13 Member States that provided data for this question, the numbers ranged from 0 to 150 (median, 0), with the United States of America reporting the largest number.

**Figure 1.** Responses to the question, “Is there a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis?”



Twenty responding Member States (74.1%) reported that they have a viral hepatitis prevention and control programme that includes activities targeting specific populations. The populations most commonly targeted were health-care workers, including health-care waste handlers (100% of responding Member States within this subset) and people living with HIV (60.0% of responding Member States within this subset). Six responding Member States reported the inclusion of activities targeting prisoners, and five, the inclusion of activities targeting people who inject drugs. Groups identified less frequently included migrants, indigenous populations, low-income populations, those who are uninsured and those who are homeless.

### Awareness-raising and partnerships

Twelve responding Member States (44.4%) reported that they had held events for World Hepatitis Day 2012 (28 July). Since January 2011, six responding Member States (22.2%) had funded some type of viral hepatitis public awareness campaign other than World Hepatitis Day (Table 1).

**Table 1.** Topics of public awareness campaigns on viral hepatitis held in Member States since January 2011 (N=6)

	Argen- tina	Brazil	Cuba	Guate- mala	Suri- name	United States of America
General information about hepatitis and its transmission	X	X	X		X	X
Vaccination for hepatitis A and hepatitis B	X	X	X		X	X
Importance of knowing one's hepatitis B and hepatitis C status	X	X	X			X
Safe water and good sanitation						
Safer sex practices	X	X	X			X
Harm reduction for people who inject drugs			X			X
Safe workplace practices			X			X
Other <sup>a</sup>		X	X	X		

<sup>a</sup> Details can be found in the summaries of country findings later in this chapter.

Eight responding Member States (29.6%) reported that they collaborated with civil society groups within their countries to develop and implement the governmental viral hepatitis prevention and control programme. For example, Canada reported collaborating with the Canadian Society for International Health, Canadian AIDS Treatment Information Exchange and University of British Columbia. Peru reported that it collaborated with Asociación Ciudadana de Lucha contra la Hepatitis. (Further examples can be found in the summaries of country findings later in this chapter.)

### Evidence-based policy and data for action

Twenty-four responding Member States (88.9%) reported that they have routine surveillance for viral hepatitis; details appear in Table 2.

Twenty-one responding Member States (77.8%) indicated that their countries have standard case definitions for hepatitis infection and 25 (92.6%) indicated that their countries have a central registry for the reporting of deaths, including hepatitis deaths.

Eight Member States reported on the proportion of hepatitis cases and deaths registered as “undifferentiated” or “unclassified” hepatitis. The reported proportion ranged from 0% to 60.0% (median, 27.5%). Additional survey findings about surveillance are presented in Table 3.

**Table 2.** Types of surveillance in Member States that reported the existence of routine surveillance for viral hepatitis (N=24)

	Yes (%)	No (%)	Do not know (%)	No response (%)
There is a national surveillance system for <b>acute</b> hepatitis infection for the following forms of hepatitis:				
hepatitis A	70.8	20.8	0	8.3
hepatitis B	100	0	0	0
hepatitis C	79.2	12.5	0	8.3
hepatitis D	37.5	45.8	0	16.7
hepatitis E	29.2	54.2	0	16.7
There is a national surveillance system for <b>chronic</b> hepatitis infection for the following forms of hepatitis:				
hepatitis B	45.8	50.0	0	4.2
hepatitis C	37.5	54.2	0	8.3
hepatitis D	16.7	70.8	0	12.5

**Table 3.** Data registration and surveillance (N=27)

	Yes (%)	No (%)	Do not know (%)	No response (%)
Liver cancer cases are registered nationally	63.0	18.5	7.4	11.1
Cases with HIV/hepatitis coinfection are registered nationally	40.7	51.9	7.4	0
Hepatitis outbreaks are reported	92.6	3.7	3.7	0
If YES – Hepatitis outbreaks are further investigated (N=115)	88.0	8.0	0	4.0

Member States were asked how often hepatitis disease reports are published. Of the responding Member States, 48.1% reported that hepatitis disease reports are published annually; 11.1%, monthly; and 7.4%, weekly. No hepatitis disease report is published by 25.9% of responding Member States.

Five responding Member States (18.5%) (Argentina, Canada, Cuba, Guyana and Peru) reported the existence of a national public health research agenda for viral hepatitis.

Seven responding Member States (25.9%) reported that viral hepatitis serosurveys are conducted regularly. Among this subset, two (Canada and the United States of America) indicated that serosurveys take place every two years and one (Argentina) indicated that serosurveys take place twice annually. Of the

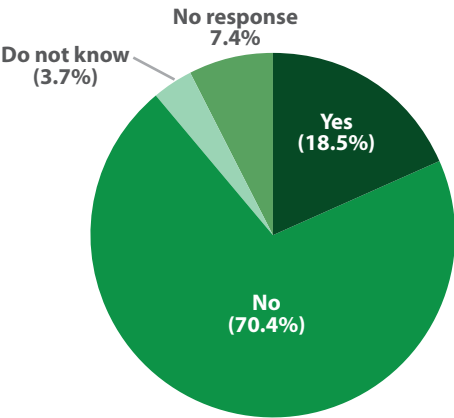
same subset, 57.1% reported that the most recent viral hepatitis serosurvey was carried out in either 2011 or 2012.

Prevention of transmission

Nine responding Member States (33.3%) reported that they have a national policy on hepatitis A vaccination.

Five responding Member States (18.5%) reported that they have established the goal of eliminating hepatitis B (Figure 2). Member States with this goal were asked to specify the timeframe in which they seek to eliminate hepatitis B. Of the three Member States that answered this question, two (Costa Rica and Suriname) said that the timeframe was not specified while the third (Cuba) said 2013 for the paediatric population and 2015 for the rest of the population.

Figure 2. Responses to the question, “Has your government established the goal of eliminating hepatitis B?” (N=27)



Member States were asked to report, for a given recent year, the percentage of newborn infants who had received the first dose of hepatitis B vaccine within 24 hours of birth. Among the 18 Member States that provided this information, responses ranged from 0% to 100% (median, 33.5%). Member States were also asked to report, for a given recent year, the percentage of one-year-olds (ages 12–23 months) who had received three doses of hepatitis B vaccine. Among the 18 Member States that provided this information, responses ranged from 79.7% to 100% (median, 94.0%).

Nineteen responding Member States (70.4%) reported the existence of a national policy that specifically targets mother-to-child transmission of hepatitis B; details are presented in Table 4. More than two thirds of Member States with such a policy indicated that one component of the policy calls for screening of all pregnant women for hepatitis B.

Twenty responding Member States (74.1%) reported the existence of a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

Table 4. Activities called for in national policy targeting mother-to-child transmission of hepatitis B (N=19)

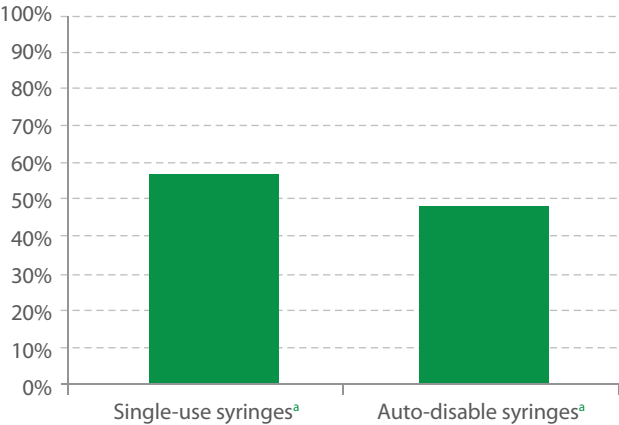
	All pregnant women are screened for hepatitis B	All pregnant women found to have hepatitis B are counselled	Health-care providers follow up with all pregnant women found to have hepatitis B during pregnancy for the purpose of encouraging them to give birth at health-care facilities	Upon delivery, all infants born to women with hepatitis B receive hepatitis B immunoglobulin	All infants receive the first dose of hepatitis B vaccine within 24 hours of birth
Antigua and Barbuda	X	X	X	X	X
Argentina	X	X	X	X	X
Bahamas	X	X	X	X	
Brazil				X	X
Canada	X	X		X	X
Colombia	X	X	X	X	X
Costa Rica	X	X	X	X	X
Cuba	X	X	X	X	X
Ecuador	X			X	X
Grenada	X	X	X	X	X
Guatemala					X
Guyana	X	X	X		
Honduras		X	X	X	X
Jamaica		X	X	X	X
Panama					X
Peru					X
Suriname	X	X	X	X	X
United States of America	X	X		X	X
Uruguay	X	X	X	X	X
TOTAL	13	14	12	15	17

Nineteen responding Member States (70.4%) reported that health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

Twenty-three responding Member States (85.2%) reported the existence of a national policy on injection safety in health-care settings. These Member States were asked which types of syringes the policy recommends for therapeutic injections. Single-use syringes are recommended in 56.5% of policies, and auto-disable syringes in 47.8% (Figure 3).

Twenty-six responding Member States (96.3%) reported that single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

**Figure 3.** Proportion of responding Member States with national policies on injection safety in health-care settings which recommend single-use syringes and auto-disable syringes for therapeutic injections (N=23)



<sup>a</sup> Respondents could select both “single-use syringes” and “auto-disable syringes”.

**Table 5.** Hepatitis prevention: policies, practices and guidelines (N=27)

	Yes (%)	No (%)	Do not know (%)	No response (%)
There is a national infection control policy for blood banks	77.8	7.4	11.1	3.7
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B	96.3	0	0	3.7
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis C	88.9	0	7.4	3.7
There is a national policy relating to the prevention of viral hepatitis among people who inject drugs	14.8	63.0	14.8	7.4
The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety	59.3	25.9	7.4	7.4

Member States were asked for official estimates of the number and percentage of unnecessary injections administered annually in health-care settings (e.g. injections that are given when an equivalent oral medication is available). Twenty-one Member States reported that the figures are not known and four did not reply. Cuba reported that less than 5.0% of the total injections that are administered annually in health-care settings are unnecessary and Guyana reported that less than 14.0% are unnecessary.

**Screening, care and treatment**

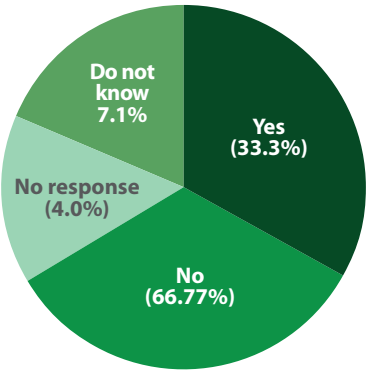
Member States were asked how health professionals in their countries obtain the skills and competencies required to effectively care for people with viral hepatitis. Responding Member States most frequently indicated that these are acquired in schools for health professionals (pre-service education, 74.1%). Additionally, on-the-job training was identified in 70.4% of responses, and postgraduate training in 46.2%.<sup>a</sup>

Nine responding Member States (33.3%) reported the existence of national clinical guidelines for the management of viral hepatitis (Figure 4). Eight of these nine Member States indicated that the guidelines include recommendations for cases with HIV coinfection. Eight of 13 responding Member States (61.5%) indicated that there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

Fourteen responding Member States (51.9%) indicated that they have a national policy relating to screening and referral to care for hepatitis B. Ten (37.0%) reported having such a policy for hepatitis C.

Regarding hepatitis B testing, 25 responding Member States (92.6%) indicated that people register by name for testing. Twenty-one members of that subset (84.0%) indicated that the names are kept confidential. Fourteen responding Member States (51.9%) reported that the hepatitis B test is free of charge for all individuals. Among the nine other Member States that answered the question, eight (88.9%) reported that the hepatitis B test is free of charge for members of specific groups. Groups identified included blood donors, pregnant women and people living with HIV. Nine responding Member States (33.3%) reported that the hepatitis B test is compulsory for members of specific groups. Groups identified included blood donors and pregnant women.

**Figure 4.** Responses to the question, “Are there national clinical guidelines for the management of viral hepatitis?” (N=27)



<sup>a</sup> N=26 (This response option was not included in the survey completed by Colombia.)

Regarding hepatitis C testing, 22 responding Member States (81.5%) indicated that people register by name for testing. Eighteen members of that subset (81.8%) indicated that names are kept confidential. Twelve responding Member States (44.4%) reported that the hepatitis C test is free of charge for all individuals. Among the nine other Member States that answered the question, five (55.6%) reported that the hepatitis C test is free of charge for members of specific groups. Groups identified included blood donors, pregnant women and people living with HIV. Seven responding Member States (25.9%) reported that the hepatitis C test is compulsory for members of specific groups. Groups identified included blood donors and pregnant women.

Sixteen responding Member States (59.3%) reported that publicly funded treatment is available for hepatitis B and 13 (48.1%) that it is available for hepatitis C. One responding Member State reported the amount spent on publicly funded treatment for hepatitis B and hepatitis C. Details can be found in the summaries of country findings later in this chapter (see Argentina).

Twenty-two responding Member States (81.5%) reported that at least one available drug for treating hepatitis B is on the national essential medicines list or subsidized by the government (Table 6). The drugs most commonly reported were tenofovir, lamivudine and interferon alpha.

**Table 6.** Proportion of Member States reporting drugs for treating hepatitis B and C on national essential medicines lists or subsidized by governments

Drugs for treating hepatitis B	% of Member States reporting its inclusion (N=12)
Lamivudine	59.3
Interferon alpha	59.3
Tenofovir	40.7
Pegylated interferon	33.3
Entecavir	22.2
Adefovir dipivoxil	18.5
Telbivudine	11.1
Drugs for treating hepatitis C	% of Member States reporting its inclusion (N=12)
Ribavirin	37.0
Pegylated interferon	37.0
Interferon alpha	25.9
Telaprevir	11.1
Boceprevir	7.4

Twelve responding Member States (44.4%) reported that at least one available drug for treating hepatitis C is on the national essential medicines list or subsidized by the government. The drugs most commonly reported were interferon alpha, pegylated interferon and ribavirin.

**World Health Organization assistance**

Member States were asked to indicate areas in which they might want assistance from WHO for the prevention and control of viral hepatitis. Respondents most commonly selected the following: surveillance for viral hepatitis (74.1%) and estimating the national burden of viral hepatitis (70.4%) (Table 7). Responses from individual Member States appear in Annex C.



**Table 7.** Viral hepatitis control and prevention: areas in which Member States indicated interest in receiving WHO assistance (N=27)

<b><i>Awareness-raising, partnerships and resource mobilization (first WHO strategic axis)</i></b>	
Developing the national plan for viral hepatitis prevention and control	63.0%
Integrating viral hepatitis programmes into other health services	59.3%
Awareness-raising	59.3%
<b><i>Evidence-based policy and data for action (second WHO strategic axis)</i></b>	
Viral hepatitis surveillance	74.1%
Estimating the national burden of viral hepatitis	70.4%
Developing tools to assess the effectiveness of interventions	51.9%
Assessing the economic impact of viral hepatitis	55.6%
<b><i>Prevention of transmission (third WHO strategic axis)</i></b>	
Increasing coverage of the birth dose of the hepatitis B vaccine	33.3%
<b><i>Screening, care and treatment (fourth WHO strategic axis)</i></b>	
Increasing access to treatment	37.0%
Increasing access to diagnostics	55.6%
Improving laboratory quality	46.2% <sup>a</sup>
Developing education/training programmes for health professionals	63.0%

<sup>a</sup> N=26 (This response option was not included in the survey completed by Colombia.)

# WHO Region of the Americas:

## COUNTRY SUMMARIES

# Antigua and Barbuda

The Government of Antigua and Barbuda reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. There are no people working full-time on hepatitis-related activities in any government agency/body.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis B and hepatitis C, but not for hepatitis A and hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	<b>0.09</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$17 900</b>
Total health expenditure as % of GDP (2010)	<b>6.03%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$990.55</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$702.97</b>
Life expectancy at birth (in years) (2009)	<b>74</b>
Human Development Index (2011)	<b>0.764</b>
Median age (in years) (2010)	<b>—</b>
Total fertility rate per woman (2010)	<b>2.1</b>

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 8% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. It is not known what percentage of one-year-olds (ages 12–23 months) nationally in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is no national policy on injection safety in health-care settings. Single-use or auto-disable syringes, needles and canulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is no national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can

be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis and for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B, but not for hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for blood donors. Information was not provided on whether hepatitis B or hepatitis C tests are compulsory for members of any specific group.

Publicly funded treatment for hepatitis B and hepatitis C is available to all public hospital patients who contribute to the medical benefits scheme. The amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C is not known.

The following drug for treating hepatitis B is on the national essential medicines list or is subsidized by the government: tenofovir. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Antigua and Barbuda did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Argentina

Population (in millions) (2011)	<b>40.8</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$17 130</b>
Total health expenditure as % of GDP (2010)	<b>8.10%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1286.68</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$702.56</b>
Life expectancy at birth (in years) (2009)	<b>75</b>
Human Development Index (2011)	<b>0.797</b>
Median age (in years) (2010)	<b>30</b>
Total fertility rate per woman (2010)	<b>2.2</b>

The Government of Argentina reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. This programme is part of the AIDS and STD Directorate. Information was not provided regarding how many staff members this office has. There are eight full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people living with HIV and the uninsured.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: Fundación HCV Sin Fronteras.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided regarding the

percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target population is children. Information was not provided regarding when the last serosurvey was carried out.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 94.4% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 92.5% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. The following groups are eligible: all people without social coverage. The government spends 40 million pesos (US\$ 8.8 million) annually on publicly funded treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: pegylated interferon, lamivudine, entecavir and tenofovir. The following drugs for treating hepatitis C are included on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of Argentina welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Bahamas

The Government of the Bahamas reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. There are no people working full-time on hepatitis-related activities in any government agency/body.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B and C.

It is not known whether there are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Information was not provided on whether liver cancer cases are registered nationally. Cases with HIV/hepatitis coinfection are not registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but it is not known if this is the case for hepatitis D and hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	<b>0.3</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	—
Total health expenditure as % of GDP (2010)	<b>7.98%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1988.45</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$906.66</b>
Life expectancy at birth (in years) (2009)	<b>76</b>
Human Development Index (2011)	<b>0.771</b>
Median age (in years) (2010)	<b>31</b>
Total fertility rate per woman (2010)	<b>1.6</b>

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, less than 1% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 97% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is a national policy on injection safety in health-care settings, which recommends auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through

schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for children, indigent people, senior citizens and civil servants. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment for hepatitis B and hepatitis C is available to all residents. The amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, lamivudine, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, ribavirin and telaprevir.

The Government of the Bahamas welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Barbados

Population (in millions) (2011)	<b>0.3</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>--</b>
Total health expenditure as % of GDP (2010)	<b>7.97%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1523.45</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$990.36</b>
Life expectancy at birth (in years) (2009)	<b>76</b>
Human Development Index (2011)	<b>0.793</b>
Median age (in years) (2010)	<b>37</b>
Total fertility rate per woman (2010)	<b>1.6</b>

The Government of Barbados reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. There are no people working full-time on hepatitis-related activities in any government agency/body.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), soldiers, police officers, sanitary workers, infants and adolescents.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: B and C, but not for any type of chronic hepatitis.

There are no standard case definitions for hepatitis. It is not known whether deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

It is not known whether liver cancer cases are registered nationally. Cases with HIV/

hepatitis coinfection are not registered nationally.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are not required to be reported to the government. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis B and hepatitis C, but this is not the case for hepatitis A and hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 95% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is no national policy on injection safety in health-care settings. Single-use or auto-disable syringes, needles and canulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

It is not known whether there is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

It is not known how health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis.

There are no national clinical guidelines for the management of viral hepatitis or for HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; there is open access to their names. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. The following groups are eligible for such treatment for hepatitis B: nationals and residents; and for hepatitis C: nationals. The amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha and pegylated interferon.

The Government of Barbados welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Brazil

The Government of Brazil reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: National Department of STD, AIDS and Viral Hepatitis. It has 250 staff members. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, prisoners, sex workers, people living with HIV, the uninsured, indigenous people, pregnant women and men who have sex with men.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as “undifferentiated” or “unknown” hepatitis.

Liver cancer cases are not registered nationally, but cases with HIV/hepatitis coinfection are.

The government publishes hepatitis disease reports annually and in the case of outbreaks.

Population (in millions) (2011)	<b>196.7</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$11 420</b>
Total health expenditure as % of GDP (2010)	<b>9.01%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1028.29</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$483.49</b>
Life expectancy at birth (in years) (2009)	<b>73</b>
Human Development Index (2011)	<b>0.718</b>
Median age (in years) (2010)	<b>29</b>
Total fertility rate per woman (2010)	<b>1.8</b>

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; target populations include the general population, adolescents, health professionals, pregnant women and tattooists. The last serosurvey was carried out in July 2012.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth or what percentage of one-year-olds (ages 12–23 months) nationally in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood

products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through on-the-job training, postgraduate training and training for multidisciplinary teams.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

Publicly funded treatment for hepatitis B and hepatitis C is available to the entire population. Information was not provided regarding the amount spent by the government on such treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Brazil welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Canada

Population (in millions) (2011)	<b>34.3</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$39 660</b>
Total health expenditure as % of GDP (2010)	<b>11.29%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$4403.62</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$3104.41</b>
Life expectancy at birth (in years) (2009)	<b>81</b>
Human Development Index (2011)	<b>0.908</b>
Median age (in years) (2010)	<b>40</b>
Total fertility rate per woman (2010)	<b>1.7</b>

The Government of Canada reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. The name of this office was not provided. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants, prisoners, the homeless, people living with HIV, low-income populations, indigenous people, ethnocultural populations and youth.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Canadian Society for International Health, Canadian AIDS Treatment Information Exchange and University of British Columbia Hepatitis Services.

## Evidence-based policy and data for action

There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are re-

ported to a central registry. Of hepatitis cases, 0%–10.0% is reported as “undifferentiated” or “unclassified” hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are reported to local public health authorities and are further investigated only at the local level. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target population is the general population. The last serosurvey was carried out from 2009 to 2011.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but information was not provided about a specific timeframe for this goal.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth or the percentage of one-year-olds nationally (ages 12–23 months) in a given recent year who received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends

single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals, and are compulsory for blood donors and for some health-care workers in certain jurisdictions.

Publicly funded treatment is available for hepatitis B and hepatitis C. All Canadian residents are eligible for this. The amount spent by the government on such treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir and telbivudine. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Canada welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Colombia

The Government of Colombia reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. There are three full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people living with HIV and indigenous people.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A and B, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Sixty per cent of hepatitis cases are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports weekly and monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

Population (in millions) (2011)	<b>46.9</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$9560</b>
Total health expenditure as % of GDP (2010)	<b>7.59%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$712.59</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$518.04</b>
Life expectancy at birth (in years) (2009)	<b>76</b>
Human Development Index (2011)	<b>0.710</b>
Median age (in years) (2010)	<b>27</b>
Total fertility rate per woman (2010)	<b>2.4</b>

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 82.7% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 85.4% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are national clinical guidelines for the management of viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Information was not provided on whether hepatitis B or hepatitis C tests are free of charge for all individuals or compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. Information was not provided regarding who is eligible for this or the amount spent by the government on such treatment.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Colombia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Costa Rica

Population (in millions) (2011)	<b>4.7</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$11 860</b>
Total health expenditure as % of GDP (2010)	<b>10.94%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1241.53</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$845.50</b>
Life expectancy at birth (in years) (2009)	<b>79</b>
Human Development Index (2011)	<b>0.744</b>
Median age (in years) (2010)	<b>28</b>
Total fertility rate per woman (2010)	<b>1.8</b>

The Government of Costa Rica reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. There are no people working full-time on hepatitis-related activities in any government agency/body.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E but not for any type of chronic hepatitis.

There are no standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 51% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities for hepatitis A, hepatitis B and hepatitis C. Information was not provided on whether this is the case for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but has not defined a timeframe for this goal.

Nationally, 91% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 84% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings. The policy recommends auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis or for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals. Information was not provided on whether hepatitis B or hepatitis C tests are compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. All people diagnosed with hepatitis B and hepatitis C in the health services are eligible. The amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine and tenofovir. The following drugs for treating hepatitis C are included on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of Costa Rica welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



## Cuba

The Government of Cuba reports as follows.

### National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It has one staff member. The name of this office was not provided. There are 22 full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants, prisoners, people living with HIV and chronically ill patients.

### Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

### Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as “undifferentiated” or “unclassified” hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually, bi-annually and quarterly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory

Population (in millions) (2011)	11.3
Country classification (2012)	Upper-middle-income
Gross national income per capita (PPP int \$) (2011)	—
Total health expenditure as % of GDP (2010)	10.63%
Per capita total health expenditure (PPP int \$) (2010)	\$431.23
Per capita government health expenditure (PPP int \$) (2010)	\$394.46
Life expectancy at birth (in years) (2009)	78
Human Development Index (2011)	0.776
Median age (in years) (2010)	38
Total fertility rate per woman (2010)	1.5

capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

### Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B by 2013 for the paediatric population and by 2015 for the rest of the population.

Nationally, 100% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 100% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use and auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Less than 5% of injections administered annually in health-care settings are unnecessary, according to official government estimates.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the

prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

### Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals. Hepatitis B tests are compulsory for pregnant women and organ and tissue donors, and hepatitis C tests for organ and tissue donors.

Publicly funded treatment is available for hepatitis B and hepatitis C. All people with medical prescriptions are eligible. Information was not provided regarding the amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Cuba welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Dominican Republic (the)

Population (in millions) (2011)	<b>10.1</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$9420</b>
Total health expenditure as % of GDP (2010)	<b>6.22%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$577.57</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$250.39</b>
Life expectancy at birth (in years) (2009)	<b>71</b>
Human Development Index (2011)	<b>0.689</b>
Median age (in years) (2010)	<b>25</b>
Total fertility rate per woman (2010)	<b>2.6</b>

The Government of the Dominican Republic reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers) and newborns.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

Information was not provided on whether the government publishes hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government. Information was not provided on whether they are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities for hepatitis A, hepatitis B and hepatitis C. Information was not provided on whether this is the case for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 82.1% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 79.7% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends auto-disable syringes for therapeutic injections. Single-use or auto-disable

syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

It is not known whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education).

Information was not provided on whether there are national clinical guidelines for the management of viral hepatitis.

Information was not provided on whether the government has national policies relating to screening and referral to care for hepatitis B or hepatitis C.

Information was not provided on whether people testing for hepatitis B or hepatitis C register by name, or whether the tests are free of charge for all individuals or compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. Information was not provided regarding who is eligible for this, or on the amount spent by the government on such treatment for hepatitis B and hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: interferon alpha. The following drug for treating hepatitis C is on the national essential medicines list or subsidized by the government: interferon alpha.

The Government of the Dominican Republic welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Ecuador

The Government of Ecuador reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of hepatitis B. It includes components for vaccination and treatment and care.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers) and sex workers.

## Awareness-raising and partnerships

Information was not provided on whether the government held events for World Hepatitis Day 2012. It has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases are registered nationally. It is not known whether cases with HIV/hepatitis coinfection are registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government but are not further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A and hepatitis

Population (in millions) (2011)	14.7
Country classification (2012)	Upper-middle-income
Gross national income per capita (PPP int \$) (2011)	\$8510
Total health expenditure as % of GDP (2010)	8.06%
Per capita total health expenditure (PPP int \$) (2010)	\$653.17
Per capita government health expenditure (PPP int \$) (2010)	\$243.08
Life expectancy at birth (in years) (2009)	75
Human Development Index (2011)	0.720
Median age (in years) (2010)	26
Total fertility rate per woman (2010)	2.5

B. Information was not provided regarding whether this is the case for hepatitis C and hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 16.3% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 100% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

It is not known whether there is a national infection control policy for blood banks. All donated blood units and blood products nationwide are screened for hepatitis B. It is not known whether all donated blood units (including family donations) and blood products nationwide are screened for hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

It is not known whether the government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education).

It is not known whether there are national clinical guidelines for the management of viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B tests are free of charge for all individuals, but not hepatitis C tests. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment for hepatitis B is available to some segments of the population, but information was not provided on who is eligible and the amount spent by the government on such treatment. Publicly funded treatment is not available for hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: lamivudine. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Ecuador welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# El Salvador

Population (in millions) (2011)	<b>6.2</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$6630</b>
Total health expenditure as % of GDP (2010)	<b>6.91%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$450.25</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$277.82</b>
Life expectancy at birth (in years) (2009)	<b>72</b>
Human Development Index (2011)	<b>0.674</b>
Median age (in years) (2010)	<b>23</b>
Total fertility rate per woman (2010)	<b>2.3</b>

The Government of El Salvador reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of hepatitis B. It includes components for surveillance, vaccination, prevention in general and prevention of transmission in health-care settings.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: health-care workers (including health-care waste handlers).

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Fifty per cent of hepatitis cases are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally. It is not known whether cases with HIV/hepatitis coinfection are registered nationally.

The government does not publish hepatitis disease reports.

It is not known whether hepatitis outbreaks are required to be reported to the government, or whether there is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

It is not known whether the government has established the goal of eliminating hepatitis B.

Nationally, 5% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 95% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

It is not known whether there is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Information was not provided on whether health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings. Information was

not provided regarding the type of syringes the policy recommends for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B, but it is not known whether these are screened for hepatitis C.

It is not known whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

It is not known whether the government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education).

It is not known whether there are national clinical guidelines for the management of viral hepatitis or for HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

It is not known whether publicly funded treatment is available for hepatitis B or hepatitis C.

No drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of El Salvador welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Grenada

The Government of Grenada reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people living with HIV and pregnant women.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: B and C, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided regarding the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government but are not further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis B and hepatitis C, but not for hepatitis A and hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	0.1
Country classification (2012)	Upper-middle-income
Gross national income per capita (PPP int \$) (2011)	\$10 350
Total health expenditure as % of GDP (2010)	5.86%
Per capita total health expenditure (PPP int \$) (2010)	\$594.09
Per capita government health expenditure (PPP int \$) (2010)	\$267.16
Life expectancy at birth (in years) (2009)	73
Human Development Index (2011)	0.748
Median age (in years) (2010)	25
Total fertility rate per woman (2010)	2.2

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 100% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 95% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Information was not provided on whether health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through on-the-job training.

There are no national clinical guidelines for the management of viral hepatitis. Information was not provided on whether there are national clinical guidelines for the management of HIV and whether they include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B, but not for hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; there is open access to the names. Hepatitis B tests are not free of charge for all individuals, but they are free of charge for antenatal women, health-care workers and people living with HIV. Information was not provided on whether hepatitis C tests are free of charge for all individuals. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B. The following groups are eligible: pregnant women, health-care workers and people living with HIV. The amount spent by the government on such treatment for hepatitis B is not known. Publicly funded treatment is not available for hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: lamivudine and tenofovir. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Grenada welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Guatemala

Population (in millions) (2011)	<b>14.8</b>
Country classification (2012)	--
Gross national income per capita (PPP int \$) (2011)	<b>\$4760</b>
Total health expenditure as % of GDP (2010)	<b>6.85%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$324.92</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$116.39</b>
Life expectancy at birth (in years) (2009)	<b>69</b>
Human Development Index (2011)	<b>0.574</b>
Median age (in years) (2010)	<b>19</b>
Total fertility rate per woman (2010)	<b>4</b>

The Government of Guatemala reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers) and newborns.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: Asociación Guatemalteca del Hígado.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C. Information was not provided on whether this is the case for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 31% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 87% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unneces-

sary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name, but information was not provided on whether their names are kept confidential within the system or whether there is open access to their names. Hepatitis B and hepatitis C tests are free of charge for all individuals. Information was not provided on whether hepatitis B or hepatitis C tests are compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

No drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Guatemala welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Guyana

The Government of Guyana reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers) and people living with HIV.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: groups for health-care workers and people living with HIV.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for acute as well as chronic hepatitis B.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis was not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	<b>0.8</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$3460</b>
Total health expenditure as % of GDP (2010)	<b>5.38%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$166.69</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$142.35</b>
Life expectancy at birth (in years) (2009)	<b>67</b>
Human Development Index (2011)	<b>0.633</b>
Median age (in years) (2010)	<b>24</b>
Total fertility rate per woman (2010)	

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 92% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Less than 14% of injections administered annually in health-care settings are unnecessary, according to official government estimates.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are national clinical guidelines for the management of viral hepatitis. Information was not provided on whether they include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B but not for hepatitis C.

People testing for hepatitis B register by name; the names are kept confidential within the system. Hepatitis B tests are free of charge for all individuals and are compulsory for certain groups but information was not provided regarding which groups.

Information was not provided on whether people testing for hepatitis C register by name, whether the tests are free of charge for all individuals or compulsory for members of any specific group.

Publicly funded treatment for hepatitis B is available to the entire population, but not for hepatitis C. The amount spent by the government on such treatment for hepatitis B is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, adefovir dipivoxil and tenofovir. It is not known which drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government.

The Government of Guyana welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Honduras

Population (in millions) (2011)	<b>7.8</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$3820</b>
Total health expenditure as % of GDP (2010)	<b>6.75%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$262.79</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$171.36</b>
Life expectancy at birth (in years) (2009)	<b>69</b>
Human Development Index (2011)	<b>0.625</b>
Median age (in years) (2010)	<b>21</b>
Total fertility rate per woman (2010)	<b>3.1</b>

The Government of Honduras reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out hepatitis B-related activities. The name of this office was not provided. Information was not provided on how many staff members this office has. There are no people working full-time on hepatitis-related activities in any government agency/body.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers) and prisoners.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for acute hepatitis B but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

It is not known whether liver cancer cases are registered nationally. Cases with HIV/hepatitis coinfection are not registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target population is blood donors. Information was not provided regarding when the last serosurvey was carried out.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 98% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 100% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recom-

mends auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through on-the-job training.

It is not known whether there are national clinical guidelines for the management of viral hepatitis. Information was not provided on whether there are national clinical guidelines for the management of HIV and whether they include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals, and are not compulsory for members of any specific group.

It is not known whether publicly funded treatment is available for hepatitis B or hepatitis C.

No drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Honduras welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Jamaica

The Government of Jamaica reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. There are no people working full-time on hepatitis-related activities in any government agency/body.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as “undifferentiated” or “unclassified” hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is inadequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	2.8
Country classification (2012)	Upper-middle-income
Gross national income per capita (PPP int \$) (2011)	—
Total health expenditure as % of GDP (2010)	4.81%
Per capita total health expenditure (PPP int \$) (2010)	\$371.64
Per capita government health expenditure (PPP int \$) (2010)	\$198.85
Life expectancy at birth (in years) (2009)	71
Human Development Index (2011)	0.727
Median age (in years) (2010)	27
Total fertility rate per woman (2010)	2.3

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 92% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

It is not known whether there are national clinical guidelines for the management of viral hepatitis or for the management of HIV, and whether the latter include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are compulsory for blood donors and patients on dialysis.

Publicly funded treatment is available for hepatitis B and hepatitis C. People who seek care in the public health-care system are eligible for publicly funded treatment for hepatitis B but information on this for hepatitis C was not provided. The amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C is not known.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: lamivudine. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Jamaica welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Mexico

Population (in millions) (2011)	<b>114.8</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$15 390</b>
Total health expenditure as % of GDP (2010)	<b>6.32%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$959.32</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$469.19</b>
Life expectancy at birth (in years) (2009)	<b>76</b>
Human Development Index (2011)	<b>0.770</b>
Median age (in years) (2010)	<b>27</b>
Total fertility rate per woman (2010)	<b>2.3</b>

The Government of Mexico reports as follows.

## National coordination

Information was not provided on whether there is a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

Information was not provided on whether there is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities, or how many people work full-time on hepatitis-related activities in all government agencies/bodies.

Information was not provided on whether the government has a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

Information was not provided on whether the government held events for World Hepatitis Day 2012 or funded other viral hepatitis public awareness campaigns since January 2011.

Information was not provided on whether the government collaborates with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C and D, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of the hepatitis cases, 10.2% are reported as "undifferentiated" or "unclassified" hepatitis.

Information was not provided on whether liver cancer cases are registered nationally.

Cases with HIV/hepatitis coinfection are not registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. Information was not provided on whether there is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

Information was not provided on whether there is a national policy on hepatitis A vaccination or whether the government has established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth or the percentage of one-year-olds nationally (ages 12–23 months) in a given recent year who received three doses of hepatitis B vaccine.

Information was not provided on whether there is a national policy that specifically targets mother-to-child transmission of hepatitis B.

Information was not provided on whether there is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings, or whether health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

Information was not provided on whether there is a national policy on injection safety in health-care settings, or whether single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

dles and cannulas are always available in all health-care facilities.

Information was not provided on official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings.

Information was not provided on whether there is a national infection control policy for blood banks and whether all donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

Information was not provided on whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

Information was not provided on whether the government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Information was not provided on how health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis.

Information was not provided on whether there are national clinical guidelines for the management of viral hepatitis and for the management of HIV, and whether the latter include recommendations for coinfection with viral hepatitis.

Information was not provided on whether the government has national policies relating to screening and referral to care for hepatitis B or hepatitis C.

Information was not provided on whether people testing for hepatitis B or hepatitis C register by name, and whether hepatitis B or hepatitis C tests are free of charge for all individuals or compulsory for members of any specific group.

Information was not provided on whether publicly funded treatment is available for hepatitis B or hepatitis C and, if so, who is eligible for this.

Information was not provided on whether any drug for treating hepatitis B and hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Mexico did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Nicaragua

The Government of Nicaragua reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers) and people living with HIV.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012. It is not known whether the government has funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme, but the identity of these partners was not provided.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports as warranted.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C. Information was not provided on whether this is the case for hepatitis E.

There is no national public health research agenda for viral hepatitis. It is not known

Population (in millions) (2011)	5.9
Country classification (2012)	Lower-middle-income
Gross national income per capita (PPP int \$) (2011)	\$3730
Total health expenditure as % of GDP (2010)	9.14%
Per capita total health expenditure (PPP int \$) (2010)	\$252.73
Per capita government health expenditure (PPP int \$) (2010)	\$134.65
Life expectancy at birth (in years) (2009)	74
Human Development Index (2011)	0.589
Median age (in years) (2010)	22
Total fertility rate per woman (2010)	2.6

whether viral hepatitis serosurveys are conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth or the percentage of one-year-olds nationally (ages 12–23 months) in a given recent year who received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

It is not known whether there is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use and auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Information was not provided regarding official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

Information was not provided on whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

Information was not provided on whether the government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

Information was not provided on whether there are national clinical guidelines for the management of viral hepatitis or for the management of HIV, and whether the latter include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are compulsory for donors.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: interferon alpha. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Nicaragua welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Panama

Population (in millions) (2011)	<b>3.6</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$14 510</b>
Total health expenditure as % of GDP (2010)	<b>8.10</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1123.43</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$843.72</b>
Life expectancy at birth (in years) (2009)	<b>77</b>
Human Development Index (2011)	<b>0.768</b>
Median age (in years) (2010)	<b>27</b>
Total fertility rate per woman (2010)	<b>2.5</b>

The Government of Panama reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

It is not known whether the government held events for World Hepatitis Day 2012 or funded other viral hepatitis public awareness campaigns since January 2011.

Information was not provided on whether the government collaborates with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E. Information was not provided on whether there is a national surveillance system for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Information was not provided on whether liver cancer cases are registered nationally. Cases with HIV/hepatitis coinfection are not registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. Information was not provided on whether there is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

Information was not provided on whether there is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 89% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 94% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends auto-disable syringes for therapeutic injections. Single-use or auto-disable

syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

It is not known whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

Information was not provided on whether there are national clinical guidelines for the management of viral hepatitis. There are no national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

Information was not provided on whether the government has national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Information was not provided on whether hepatitis B or hepatitis C tests are free of charge for all individuals, but they are compulsory for blood donors.

Information was not provided on whether publicly funded treatment is available for hepatitis B or C.

No drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Panama welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Paraguay

The Government of Paraguay reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people living with HIV and patients on haemodialysis.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are no standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the

Population (in millions) (2011)	<b>6.6</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$5390</b>
Total health expenditure as % of GDP (2010)	<b>5.87%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$302.35</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$110.07</b>
Life expectancy at birth (in years) (2009)	<b>74</b>
Human Development Index (2011)	<b>0.665</b>
Median age (in years) (2010)	<b>23</b>
Total fertility rate per woman (2010)	<b>3.0</b>

target populations are people who inject drugs, sex workers and men who have sex with men. Information was not provided on when the last serosurvey was carried out.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Information was not provided regarding the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth or the percentage of one-year-olds nationally (ages 12–23 months) in a given recent year who received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Information was not provided on official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are no national clinical guidelines for the management of viral hepatitis. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name, and there is open access to their names. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: lamivudine and tenofovir. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Paraguay welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Peru

Population (in millions) (2011)	<b>29.4</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$9440</b>
Total health expenditure as % of GDP (2010)	<b>5.08%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$481.03</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$259.87</b>
Life expectancy at birth (in years) (2009)	<b>76</b>
Human Development Index (2011)	<b>0.725</b>
Median age (in years) (2010)	<b>26</b>
Total fertility rate per woman (2010)	<b>2.5</b>

The Government of Peru reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Estrategia Sanitaria Nacional de Prevención y Control de ITS, VIH/SIDA y Hepatitis B. It has eight staff members. There are eight full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers) and indigenous people.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: Asociación Ciudadana de Lucha contra la Hepatitis.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for acute and chronic hepatitis B.

There are standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports as warranted.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C. Information was not provided regarding whether this is the case for hepatitis E.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are the general population, the Amazonian indigenous population and men who have sex with men. The last serosurvey was carried out in 2011.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 36% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 90% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education).

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. Information was not provided on whether there are national clinical guidelines for the management of HIV and whether they include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B, but information was not provided on whether this is the case for hepatitis C.

People testing for hepatitis B register by name; the names are kept confidential within the system. Hepatitis B tests are not free of charge for all individuals, but they are free of charge for indigenous populations. Hepatitis B tests are not compulsory for members of any specific group. Information was not provided on whether people testing for hepatitis C register by name, whether the tests are free of charge for all individuals, or are compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B but not for hepatitis C. Information was not provided on the amount spent by the government on publicly funded treatment for hepatitis B.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, entecavir and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of Peru welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Saint Kitts and Nevis

The Government of Saint Kitts and Nevis reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities and there are no people working full-time on hepatitis-related activities in any government agency/body.

The government has a viral hepatitis prevention and control programme that includes activities relating to hepatitis B vaccination for health-care workers.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute and chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	<b>0.05</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$16 470</b>
Total health expenditure as % of GDP (2010)	<b>6.66%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$867.54</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$525.48</b>
Life expectancy at birth (in years) (2009)	<b>74</b>
Human Development Index (2011)	<b>0.735</b>
Median age (in years) (2010)	<b>—</b>
Total fertility rate per woman (2010)	<b>1.8</b>

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth or the percentage of one-year-olds nationally (ages 12–23 months) in a given recent year who received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

It is not known whether there is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education).

It is not known whether there are national clinical guidelines for the management of viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but hepatitis B tests are free of charge for antenatal women in the public system and blood donors. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drugs for treating hepatitis B drugs are on the national essential medicines list or subsidized by the government: lamivudine and tenofovir. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Saint Kitts and Nevis welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Saint Lucia

Population (in millions) (2011)	<b>0.2</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$11 220</b>
Total health expenditure as % of GDP (2010)	<b>8.70%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$803.94</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$486.37</b>
Life expectancy at birth (in years) (2009)	<b>74</b>
Human Development Index (2011)	<b>0.723</b>
Median age (in years) (2010)	<b>27</b>
Total fertility rate per woman (2010)	<b>2.0</b>

The Government of Saint Lucia reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are no standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis A outbreaks are required to be reported to the government and are further investigated. There is inadequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth or what percentage of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is no national policy on injection safety in health-care settings. Single-use or auto-disable syringes, needles and canulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is no national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

It is not known how health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis.

There are no national clinical guidelines for the management of viral hepatitis. It is not known whether there are national clinical guidelines for the management of HIV and whether they include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for hepatitis B register by name; the names are kept confidential within the system. Hepatitis B tests are not free of charge for all individuals, but they are free of charge for blood donors and pregnant women. Hepatitis B tests are compulsory for pregnant women. Information was not provided on whether people testing for hepatitis C register by name, whether the test is free of charge for all individuals or whether it is compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: lamivudine and tenofovir. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Saint Lucia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Suriname

The Government of Suriname reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for surveillance, vaccination, prevention of transmission in health-care settings and coinfection with HIV.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. There are no people working full-time on hepatitis-related activities in any government agency/body.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people living with HIV and pregnant women.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine hospital-based surveillance for viral hepatitis. The surveillance system registers all patients who have a diagnosis of hepatitis (either acute or chronic).

It is not known whether there are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided regarding the percentage of hepatitis cases reported as “undifferentiated” or “unknown” hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports regularly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

Population (in millions) (2011)	<b>0.5</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$7710</b>
Total health expenditure as % of GDP (2010)	<b>7.02%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$523.36</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$250.17</b>
Life expectancy at birth (in years) (2009)	<b>72</b>
Human Development Index (2011)	<b>0.680</b>
Median age (in years) (2010)	<b>28</b>
Total fertility rate per woman (2010)	<b>2.3</b>

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but information was not provided about a specific timeframe for this goal.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 86% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

It is not known whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis and for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C for pregnant women.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge and compulsory for blood donors.

Publicly funded treatment is available for hepatitis B and hepatitis C, but information was not provided on who is eligible for this. The amount spent by the government on such treatment for hepatitis B and hepatitis C is not known.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: tenofovir. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Suriname welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# United States of America

Population (in millions) (2011)	<b>313.1</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$48 820</b>
Total health expenditure as % of GDP (2010)	<b>17.89%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$8361.73</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$4436.61</b>
Life expectancy at birth (in years) (2009)	<b>79</b>
Human Development Index (2011)	<b>0.910</b>
Median age (in years) (2010)	<b>37</b>
Total fertility rate per woman (2010)	<b>2.1</b>

The Government of the United States of America reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: the Division of Viral Hepatitis within the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (US Centers for Disease Control and Prevention). It has 100 staff members. There are 150 full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants, prisoners, the homeless, people living with HIV, low-income populations, the uninsured, immigrants and refugees, people born between 1945 and 1965, Asian-Americans, military veterans, and people who have chronic hepatitis C and live in areas underserved by treatment specialists.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Viral Hepatitis Action Coalition, National Viral Hepatitis Roundtable, and Asia and Pacific Alliance to Eliminate Viral Hepatitis.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for

the following types of acute hepatitis: A, B, C and D and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are children over the age of six years and the general population. The last serosurvey was carried out in 2011.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but information was not provided about a specific timeframe for this goal.

Nationally, 58% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 90% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends

single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training, postgraduate training and continuing medical education.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge and are not compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of the United States of America did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Uruguay

The Government of Uruguay reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. Information was not provided regarding how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, prisoners and people living with HIV.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 0.03% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C. Information was not provided on whether this is the case for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	<b>3.4</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$14 640</b>
Total health expenditure as % of GDP (2010)	<b>8.35%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1188.09</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$796.71</b>
Life expectancy at birth (in years) (2009)	<b>76</b>
Human Development Index (2011)	<b>0.783</b>
Median age (in years) (2010)	<b>34</b>
Total fertility rate per woman (2010)	<b>2.1</b>

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth or the percentage of one-year-olds nationally (ages 12–23 months) in a given recent year who received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for donors, people who have been in accidents and pregnant women. Hepatitis B and hepatitis C tests are compulsory for patients with kidney disease, donors and pregnant women.

Publicly funded treatment is not available for hepatitis B, but is available for hepatitis C. Eligibility for publicly funded treatment for hepatitis C is extended to everyone through the national resources fund. Information was not provided on the amount spent by the government on such treatment for hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: pegylated interferon and lamivudine. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of Uruguay welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).







# Chapter 5: WHO Eastern Mediterranean Region

Twenty-two Member States make up the World Health Organization (WHO) Eastern Mediterranean Region, which has a total population of 605 million.<sup>1</sup> More than two thirds of the Region's age-standardized mortality in 2008 was attributable to noncommunicable diseases,<sup>2</sup> and deaths from noncommunicable diseases are expected to increase by more than 20% by 2020.<sup>3</sup> Although the overall HIV prevalence in the Region is only an estimated 0.2%, the estimated annual number of new HIV infections increased from 2001 to 2010, and almost 90 000 children and adults were newly infected in 2010.<sup>4,5</sup> Almost half of the population of the Eastern Mediterranean Region lives in malaria risk areas; health system capacity for

responding to malaria is limited.<sup>5</sup> Tuberculosis caused 17% of all deaths from infectious and parasitic diseases in 2008.<sup>6</sup> Five of the Region's countries are among the ten countries in the world that host the largest proportions of internally displaced persons per population, which places an additional strain on their health systems.<sup>7</sup>

Responses to the WHO/Alliance survey were received from 17 of the 22 Member States in the region (77.3%).

**Box 1.** Responses to the 2012 Global Hepatitis Survey: WHO Eastern Mediterranean Region

## Member States that submitted surveys:

- Afghanistan
- Bahrain
- Djibouti
- Egypt
- Iran (Islamic Republic of)
- Iraq
- Jordan
- Kuwait
- Lebanon
- Oman
- Pakistan
- Qatar
- Somalia
- South Sudan
- Sudan
- Syrian Arab Republic
- Yemen

## Member States that did not submit surveys:

- Libya
- Morocco
- Saudi Arabia
- Tunisia
- United Arab Emirates

## Viral hepatitis in the WHO Eastern Mediterranean Region

The prevalence of hepatitis A in the Region has decreased in recent decades; where studies from the 1980s reported 100% exposure rate by the age of 10 years, more recent studies indicate a modest decrease to 50% of children exposed by the age of 15 years.<sup>a</sup>

The prevalence of hepatitis E infection is high (>15%) in Sudan, South Sudan, Pakistan and Somalia; however, the burden is highly uncertain.<sup>b</sup>

It is estimated that approximately 4.3 million people are infected with hepatitis B and 800 000 people are infected with hepatitis C annually in the Region.<sup>c</sup> In North Africa and the Middle Eastern region, low–intermediate (2%–4%) prevalence of hepatitis B was reported across all age groups in 2005.<sup>d</sup>

The prevalence of hepatitis C is estimated to be 1%–4.6%, with levels as high as 15% and higher than 20% in parts of Egypt and Pakistan, respectively. Overall, an estimated 17 million people in the Region suffer from chronic hepatitis C infection.<sup>c</sup>

<sup>a</sup> Jacobsen KH, Wiersma ST. Hepatitis A virus seroprevalence by age and world region, 1990 and 2005. *Vaccine*, 2010, 28:6653–6657.

<sup>b</sup> Rein DB et al. The global burden of hepatitis E virus genotypes 1 and 2 in 2005. *Hepatology*, 2012, 55:988–997.

<sup>c</sup> WHO Regional Office for the Eastern Mediterranean. *The growing threats of hepatitis B and hepatitis C in the Eastern Mediterranean Region: a call for action*. Presented at the Fifty-sixth session of the WHO Regional Committee for the Eastern Mediterranean. Fez, Morocco, 5–8 October 2009 [Document no: EM/RC/56/3]. Available at: [http://applications.emro.who.int/docs/EM\\_RC56\\_3\\_en.pdf](http://applications.emro.who.int/docs/EM_RC56_3_en.pdf) (accessed on 07 June 2013).

<sup>d</sup> Ott JJ, Stevens GA, Groeger J, Wiersma ST. Global epidemiology of hepatitis B virus infection: new estimates of age-specific HBsAg seroprevalence and endemicity. *Vaccine*, 2012, 30:2212–2219.

<sup>1</sup> *World population prospects: the 2010 revision*. New York, United Nations, Department of Economic and Social Affairs, Population Division, 2011.

<sup>2</sup> *World health statistics 2012*. Geneva, WHO, 2012. Available at: [http://apps.who.int/iris/bitstream/10665/44844/1/9789241564441\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/44844/1/9789241564441_eng.pdf) (accessed on 11 May 2013).

<sup>3</sup> *Global status report on noncommunicable diseases 2010*. Geneva, WHO, 2011. Available at: [http://whqlibdoc.who.int/publications/2011/9789240686458\\_eng.pdf](http://whqlibdoc.who.int/publications/2011/9789240686458_eng.pdf) (accessed on 11 May 2013).

<sup>4</sup> *UNAIDS report on the global AIDS epidemic 2012*. Geneva, UNAIDS, 2012. Available at: [http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/gr2012/20121120\\_UNAIDS\\_Global\\_Report\\_2012\\_en.pdf](http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/gr2012/20121120_UNAIDS_Global_Report_2012_en.pdf) (accessed on 11 May 2013).

<sup>5</sup> *The work of WHO in the Eastern Mediterranean Region: annual report of the Regional Director, 1 January–31 December 2011*. Cairo, WHO Regional Office for the Eastern Mediterranean, 2012. Available at: [http://applications.emro.who.int/docs/RD\\_Annual\\_Report\\_2012\\_en\\_14587.pdf](http://applications.emro.who.int/docs/RD_Annual_Report_2012_en_14587.pdf) (accessed on 11 May 2013).

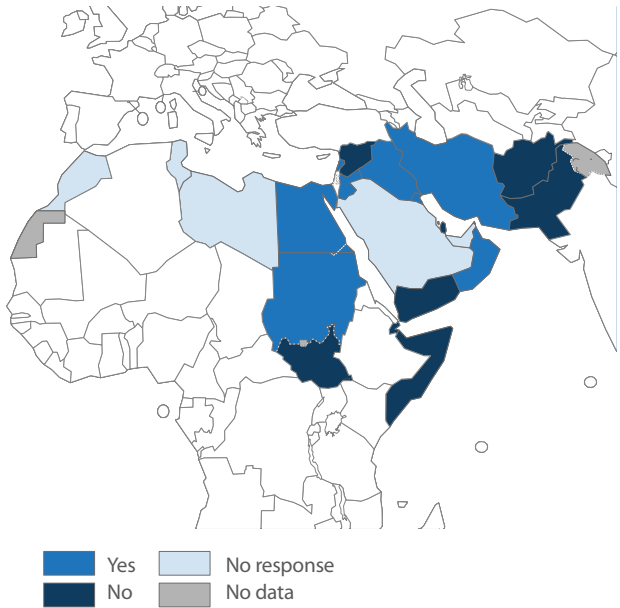
<sup>6</sup> *Causes of death 2008 summary tables*. Geneva, Health Statistics and Informatics Department, World Health Organization, May 2011. Available at: [http://www.who.int/entity/gho/mortality\\_burden\\_disease/global\\_burden\\_disease\\_DTH6\\_2008.xls](http://www.who.int/entity/gho/mortality_burden_disease/global_burden_disease_DTH6_2008.xls) (accessed on 11 May 2013).

<sup>7</sup> *Global overview 2011: people internally displaced by conflict and violence*. Geneva, Internal Displacement Monitoring Centre, April 2012. Available at: <http://www.internal-displacement.org/publications/global-overview-2011.pdf> (accessed on 11 May 2013).

National coordination

Nine responding Member States (52.9%) reported the existence of a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis (Figure 1). Six of the nine Member States with a strategy or plan (Bahrain, Egypt, Iraq, Jordan, Kuwait and Lebanon) reported that it focuses exclusively on viral hepatitis, and two (Oman and Sudan) reported that it addresses other diseases as well. One country (Iran) reported that the strategy or plan addresses only hepatitis B and hepatitis C.

Figure 1. Responses to the question, “Is there a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis?”



The nine Member States that reported the existence of a strategy or plan were asked about its specific components. All nine reported the inclusion of components for surveillance and general prevention. Eight reported the inclusion of components for vaccination, prevention of transmission in health-care settings and prevention of transmission via injecting drug use. Seven reported the inclusion of a component for raising awareness, six reported the inclusion of a component for treatment and care, and three reported the inclusion of a component for coinfection with HIV.

Ten responding Member States (58.8%) reported that they have a governmental unit or department responsible solely for viral hepatitis-related activities. Member States that did so were asked to indicate the number of staff members in the unit or department. Responses (N=9) ranged from 2 to 44 (median, 4), with Iraq reporting the largest number.

Member States were asked to report the number of people working full-time on hepatitis-related activities in all government agencies or bodies. Among the six Member States that provided data for this question, the number ranged from 0 to 47 (median, 3), with Iran reporting the largest number.

Ten responding Member States (58.8%) reported that they have a viral hepatitis prevention and control programme that includes activities targeting specific populations. The populations most commonly targeted are health-care workers, including health-care waste handlers (100% of responding Member States within this subset) and prisoners (80.0% of responding Member States within this subset). Six responding Member States reported the inclusion of activities targeting people who inject drugs and five reported the inclusion of activities targeting people living with HIV. Groups identified less frequently included migrants, indigenous populations, low-income populations, those who are uninsured and those who are homeless.

Awareness-raising and partnerships

Eight responding Member States (47.1%) reported that they had held events for World Hepatitis Day 2012 (28 July). Since January 2011, seven responding Member States (41.2%) had funded some type of viral hepatitis public awareness campaign other than World Hepatitis Day (Table 1).

Table 1. Topics of public awareness campaigns on viral hepatitis held in Member States since January 2011 (N=7)

	Egypt	Iran	Iraq	Jordan	Oman	Paki- stan	Qatar
General information about hepatitis and its transmission	X	X	X	X		X	X
Vaccination for hepatitis A and hepatitis B	X		X	X		X	X
Importance of knowing one's hepatitis B and hepatitis C status	X			X		X	X
Safe water and good sanitation			X	X			
Safer sex practices				X			
Harm reduction for people who inject drugs				X			
Safe workplace practices	X	X	X	X		X	X
Other <sup>a</sup>					X		X

<sup>a</sup> Details can be found in the summaries of country findings later in this chapter.



Five responding Member States (29.4%) reported that they collaborated with civil society groups within their countries to develop and implement the governmental viral hepatitis prevention and control programme. For example, Lebanon reported collaborating with the Lebanese Red Cross and Lebanese Scouts, while Qatar reported collaborating with the Qatar Red Crescent Society. (Further examples can be found in the summaries of country findings later in this chapter.)

#### Evidence-based policy and data for action

Fifteen responding Member States (88.2%) reported that they have routine surveillance for viral hepatitis; details appear in Table 2.

**Table 2.** Types of surveillance in Member States that reported the existence of routine surveillance for viral hepatitis (N=15)

	Yes (%)	No (%)	Do not know (%)	No response (%)
There is a national surveillance system for <b>acute</b> hepatitis infection for the following forms of hepatitis:				
hepatitis A	86.7	0	0	13.3
hepatitis B	86.3	13.3	0	0
hepatitis C	86.3	13.7	0	0
hepatitis D	40.0	33.3	0	26.7
hepatitis E	53.3	26.7	0	20.0
There is a national surveillance system for <b>chronic</b> hepatitis infection for the following forms of hepatitis:				
hepatitis B	46.7	53.3	0	0
hepatitis C	46.7	53.3	0	0
hepatitis D	26.7	60.0	0	13.3

Sixteen responding Member States (94.1%) indicated that their countries have standard case definitions for hepatitis infection and 11 (64.7%) indicated that their countries have a central registry for the reporting of deaths, including hepatitis deaths.

Nine Member States reported on the proportion of hepatitis cases and deaths registered as “undifferentiated” or “unclassified” hepatitis. The reported proportions ranged from 0% to 100% (median, 7.0%). Additional survey findings about surveillance are presented in Table 3.

Member States were asked how often hepatitis disease reports are published. Of the responding Member States, 35.3% reported that they publish hepatitis disease reports annually; 17.6%, monthly; and 23.5%, weekly. No hepatitis disease report is published by 17.6% of responding Member States.

**Table 3.** Data registration and surveillance (N=17)

	Yes (%)	No (%)	Do not know (%)	No response (%)
Liver cancer cases are registered nationally	70.6	23.5	5.9	0
Cases with HIV/hepatitis coinfection are registered nationally	47.1	47.1	5.9	0
Hepatitis outbreaks are reported	100	0	0	0
If YES – Hepatitis outbreaks are further investigated (N=115)	94.1	5.9	0	0

Nine responding Member States (52.9%) reported the existence of a national public health research agenda for viral hepatitis.

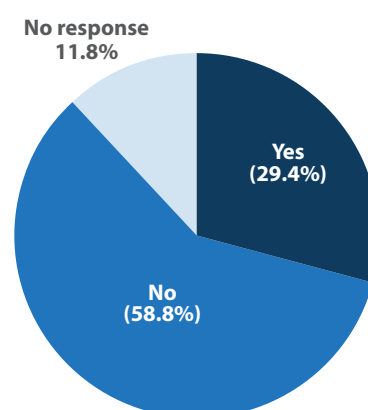
Four responding Member States (23.5%) reported that viral hepatitis serosurveys are conducted regularly. Among this subset of responding Member States, one (Kuwait) indicated that serosurveys take place every year. The same Member State reported that the most recent viral hepatitis serosurvey was carried out in 2011.

#### Prevention of transmission

Four responding Member States (23.5%) reported that they have a national policy on hepatitis A vaccination.

Five responding Member States (29.4%) reported that they have established the goal of eliminating hepatitis B (Figure 2). Member States with this goal were asked to specify the timeframe in which they seek to eliminate hepatitis B. Of the two Member States that answered this question, one (Bahrain) said 2015 and one (Lebanon) said 2020.

**Figure 2.** Responses to the question, “Has your government established the goal of eliminating hepatitis B?” (N=17)



Member States were asked to report, for a given recent year, the percentage of newborn infants who had received the first dose of hepatitis B vaccine within 24 hours of birth. Among the 13 Member States that provided this information, responses ranged from 0% to 100% (median, 90.0%). Member States were also asked to report, for a given recent year, the percentage of one-year-olds (ages 12–23 months) who had received three doses of hepatitis B vaccine. Among the 14 Member States that provided this information, responses ranged from 0% to 100% (median, 91.0%).

Eleven responding Member States (64.7%) reported the existence of a national policy that specifically targets mother-to-child transmission of hepatitis B; details are presented in Table 4. Slightly less than half of the Member States with such a policy indicated that one component of the policy calls for screening of all pregnant women for hepatitis B.

Eleven responding Member States (64.7%) reported the existence of a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

Nine responding Member States (52.9%) reported that health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

Thirteen responding Member States (76.5%) reported the existence of a national policy on injection safety in health-care settings. These Member States were asked which types of syringes the policy recommends for therapeutic injections. Single-use syringes are recommended in 84.6% of policies, and auto-disable syringes in 23.1% (Figure 3).

Fourteen responding Member States (82.4%) reported that single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Member States were asked for official estimates of the number and percentage of unnecessary injections administered annually in health-care settings (e.g. injections that are given when an equivalent oral medication is available). Sixteen Member States reported that the figures are not known and one (Pakistan) reported that 20.0% of the total injections administered annually in health-care settings are unnecessary.

Additional findings relating to the prevention of hepatitis transmission are presented in Table 5.

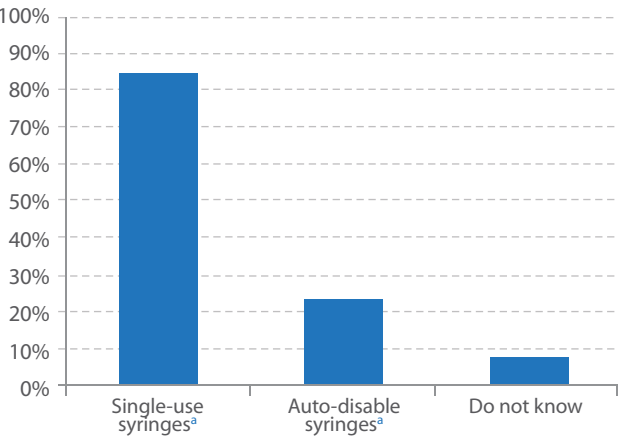
Screening, care and treatment

Member States were asked how health professionals in their countries obtain the skills and competencies required to effectively care for people with viral hepatitis. Responding Member States most frequently indicated that these are obtained in schools for health professionals (pre-service education, 82.4%). Additionally, on-the-job training was identified in 70.6% of responses, and postgraduate training in 52.9%.

Table 4. Activities called for in national policy targeting mother-to-child transmission of hepatitis B (N=11)

	All pregnant women are screened for hepatitis B	All pregnant women found to have hepatitis B are counselled	Health-care providers follow up with all pregnant women found to have hepatitis B during pregnancy for the purpose of encouraging them to give birth at health-care facilities	Upon delivery, all infants born to women with hepatitis B receive hepatitis B immunoglobulin	All infants receive the first dose of hepatitis B vaccine within 24 hours of birth
Bahrain	X	X		X	X
Djibouti					X
Egypt			X		
Iran					X
Iraq	X	X	X	X	X
Jordan		X	X	X	X
Kuwait	X	X	X	X	X
Lebanon				X	X
Oman					X
Pakistan	X				X
Qatar	X	X	X	X	X
TOTAL	5	5	5	6	10

Figure 3. Proportion of responding Member States with national policies on injection safety in health-care settings which recommend single-use syringes and auto-disable syringes for therapeutic injections (N=13)



<sup>a</sup> Respondents could select both "single-use syringes" and "auto-disable syringes".

**Table 5.** Hepatitis prevention: policies, practices and guidelines (N=17)

	Yes (%)	No (%)	Do not know (%)	No response (%)
There is a national infection control policy for blood banks	76.5	17.6	5.9	0
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B	82.4	11.8	0	5.9
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis C	100	0	0	0
There is a national policy relating to the prevention of viral hepatitis among people who inject drugs	23.5	76.5	0	0
The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety	41.2	58.8	0	0

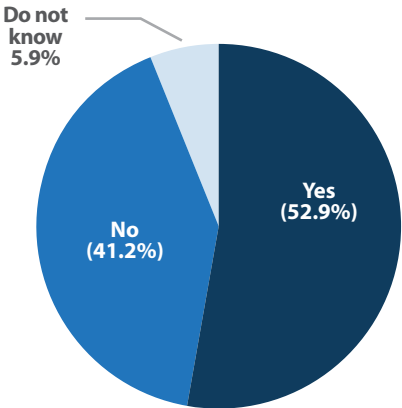
Nine responding Member States (52.9%) reported the existence of national clinical guidelines for the management of viral hepatitis (Figure 4). Five of these nine Member States indicated that the guidelines include recommendations for cases with HIV coinfection. Six of 12 responding Member States (50.0%) indicated that there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

Eight responding Member States (47.1%) indicated that they have a national policy relating to screening and referral to care for hepatitis B. Eight (47.1%) reported having such a policy for hepatitis C.

Regarding hepatitis B testing, 16 responding Member States (94.1%) indicated that people register by name for testing. Twelve members of that subset (75.0%) indicated that the names are kept confidential. Seven responding Member States (41.2%) reported that the hepatitis B test is free of charge for all individuals. Among the ten other Member States, five (50.0%) reported that the test is free of charge for members of specific groups. Groups identified included blood donors, health-care workers and patients on haemodialysis. Nine responding Member States (52.9%) reported that the hepatitis B test is compulsory for members of specific groups. Groups identified included blood donors, health-care workers, patients on haemodialysis and prisoners.

Regarding hepatitis C testing, 16 responding Member States (94.1%) indicated that people register by name for testing. Twelve members of that subset (75.0%) indicated that the names are kept confidential. Seven responding Member States (41.2%) reported that the hepatitis C test is free of charge for all

**Figure 4.** Responses to the question, “Are there national clinical guidelines for the management of viral hepatitis?” (N=17)



individuals. Among the ten other Member States, five (50.0%) reported that the test is free of charge for members of specific groups. Groups identified included blood donors, health-care workers and patients on haemodialysis. Nine responding Member States (52.9%) reported that the hepatitis C test is compulsory for members of specific groups. Groups identified included blood donors, health-care workers, patients on haemodialysis and prisoners.

**Table 6.** Proportion of Member States reporting drugs for treating hepatitis B and C on national essential medicines lists or subsidized by governments

Drugs for treating hepatitis B	% of Member States reporting its inclusion (N=12)
Lamivudine	64.7
Interferon alpha	64.7
Tenofovir	52.9
Pegylated interferon	41.2
Entecavir	35.3
Adefovir dipivoxil	23.5
Telbivudine	17.6
Drugs for treating hepatitis C	% of Member States reporting its inclusion (N=12)
Ribavirin	64.7
Pegylated interferon	64.7
Interferon alpha	47.1
Telaprevir	11.8
Boceprevir	11.8

Eleven responding Member States (64.7%) reported that publicly funded treatment is available for hepatitis B and 11 (64.7%) that publicly funded treatment is available for hepatitis C. Four responding Member States reported the amount spent on publicly funded treatment for hepatitis B and hepatitis C. Details can be found in the summaries of country findings later in this chapter (see Bahrain, Egypt, Pakistan and Syrian Arab Republic).

Thirteen responding Member States (76.5%) reported that at least one available drug for treating hepatitis B is on the national essential medicines list or subsidized by the government (Table 6). The drugs most commonly reported were interferon alpha, pegylated interferon and lamivudine.

Twelve responding Member States (70.6%) reported that at least one available drug for treating hepatitis C is on the national essential medicines list or subsidized by the government. The drugs most commonly reported were ribavirin, pegylated interferon and interferon alpha.

### World Health Organization assistance

Member States were asked to indicate areas in which they might want assistance from WHO for the prevention and control of viral hepatitis. Respondents most commonly selected the following: developing the national plan for viral hepatitis prevention and control (82.4%), developing tools to assess the effectiveness of interventions (82.4%) and assessing the economic impact of viral hepatitis (82.4%) (Table 7). Responses from individual Member States appear in Annex C.

**Table 7.** Viral hepatitis control and prevention: areas in which Member States indicated interest in receiving WHO assistance (N=17)

<b><i>Awareness-raising, partnerships and resource mobilization (first WHO strategic axis)</i></b>	
Developing the national plan for viral hepatitis prevention and control	82.4%
Integrating viral hepatitis programmes into other health services	64.7%
Awareness-raising	76.5%
<b><i>Evidence-based policy and data for action (second WHO strategic axis)</i></b>	
Viral hepatitis surveillance	64.7%
Estimating the national burden of viral hepatitis	76.5%
Developing tools to assess the effectiveness of interventions	82.4%
Assessing the economic impact of viral hepatitis	82.4%
<b><i>Prevention of transmission (third WHO strategic axis)</i></b>	
Increasing coverage of the birth dose of the hepatitis B vaccine	41.2%
<b><i>Screening, care and treatment (fourth WHO strategic axis)</i></b>	
Increasing access to treatment	76.5%
Increasing access to diagnostics	70.6%
Improving laboratory quality	70.6%
Developing education/training programmes for health professionals	76.5%

# WHO

# Eastern Mediterranean Region:

## COUNTRY SUMMARIES



# Afghanistan

Population (in millions) (2011)	<b>32.4</b>
Country classification (2012)	<b>Low-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$1140</b>
Total health expenditure as % of GDP (2010)	<b>7.58%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$44.47</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$5.18</b>
Life expectancy at birth (in years) (2009)	<b>48</b>
Human Development Index (2011)	<b>0.398</b>
Median age (in years) (2010)	<b>17</b>
Total fertility rate per woman (2010)	<b>6.3</b>

The Government of Afghanistan reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C and D, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. All hepatitis cases (100%) are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is inadequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 82% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is a national policy on injection safety in health-care settings, but information was not provided on the type of syringes it recommends for therapeutic injections. It is not known whether single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national HIV policy that includes a policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis or for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

Information was not provided on whether people testing for hepatitis B register by name. People testing for hepatitis C do not register by name. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for blood donors and injecting drug users. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha and pegylated interferon. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha and pegylated interferon.

The Government of Afghanistan welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Bahrain

The Government of Bahrain reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, and treatment and care.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, prisoners and people living with HIV.

## Awareness-raising and partnerships

It is not known whether the government held events for World Hepatitis Day 2012 or funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports every three months.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

Population (in millions) (2011)	1.3
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	--
Total health expenditure as % of GDP (2010)	4.97%
Per capita total health expenditure (PPP int \$) (2010)	\$1083.06
Per capita government health expenditure (PPP int \$) (2010)	\$794.15
Life expectancy at birth (in years) (2009)	74
Human Development Index (2011)	0.806
Median age (in years) (2010)	30
Total fertility rate per woman (2010)	2.5

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B by 2015.

Nationally in 2011, all newborn children of hepatitis B-infected mothers and mothers of unknown status received the first dose of hepatitis B vaccine within 24 hours of birth, and 99.8% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, but these do not include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

Publicly funded treatment for hepatitis B and hepatitis C is available to all Bahraini citizens. The government spends BD 273 377 (US\$ 725 332) annually on hepatitis B and hepatitis C drugs. Other treatment costs are publicly funded as well, but the total amount spent on hepatitis is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: pegylated interferon, lamivudine, entecavir and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of Bahrain welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Djibouti

Population (in millions) (2011)	<b>0.9</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$2450</b>
Total health expenditure as % of GDP (2010)	<b>7.24%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$170.01</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$110.99</b>
Life expectancy at birth (in years) (2009)	<b>60</b>
Human Development Index (2011)	<b>0.430</b>
Median age (in years) (2010)	<b>21</b>
Total fertility rate per woman (2010)	<b>3.8</b>

The Government of Djibouti reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. There are three full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 7% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

Information was not provided on whether the government has established the goal of eliminating hepatitis B.

Nationally, 90% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 75% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is no national policy on injection safety in health-care settings. Single-use or auto-disable syringes, needles and canulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary

injections administered annually in health-care settings are not known.

There is no national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis C, but not for hepatitis B.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education).

There are no national clinical guidelines for the management of viral hepatitis. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name, and there is open access to their names. Hepatitis B and hepatitis C tests are not free of charge for all individuals but are free for certain groups; information was not provided regarding which groups. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

No drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Djibouti welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Egypt

The Government of Egypt reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, and treatment and care.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Hepatitis Unit, Preventive Sector, Ministry of Health. It has three staff members. There are three full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers) and patients on dialysis.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012, but has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Terros, Misr-elkheir and the Sawiris Foundation.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 69% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities

Population (in millions) (2011)	82.5
Country classification (2012)	Lower-middle-income
Gross national income per capita (PPP int \$) (2011)	\$6120
Total health expenditure as % of GDP (2010)	4.66%
Per capita total health expenditure (PPP int \$) (2010)	\$288.57
Per capita government health expenditure (PPP int \$) (2010)	\$107.94
Life expectancy at birth (in years) (2009)	71
Human Development Index (2011)	0.644
Median age (in years) (2010)	24
Total fertility rate per woman (2010)	2.7

ties for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target population is people aged 15–59 years. The last serosurvey was carried out in 2008.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B in children under five years of age, but did not provide information about a specific timeframe for this.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 95% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis but it is not known whether they include recommendations for cases with HIV coinfection.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are compulsory for patients on dialysis, visa applicants and blood donors.

Publicly funded treatment for hepatitis B and hepatitis C is available to all people with health insurance and for those supported by the governmental treatment programme.

The government spends about LE 800 million (US\$ 131.8 million) annually on publicly funded treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: pegylated interferon and lamivudine. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of Egypt welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Iran (Islamic Republic of)

Population (in millions) (2011)	<b>74.8</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$11 420</b>
Total health expenditure as % of GDP (2010)	<b>5.60%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$836.28</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$335.61</b>
Life expectancy at birth (in years) (2009)	<b>73</b>
Human Development Index (2011)	<b>0.707</b>
Median age (in years) (2010)	<b>27</b>
Total fertility rate per woman (2010)	<b>1.7</b>

The Government of Iran reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of hepatitis B and hepatitis C. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, and treatment and care.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: the Viral Hepatitis Unit. It has five staff members. There are 47 full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, prisoners and people living with HIV.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

Information was not provided on whether the government collaborates with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: B and C, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C. Information was not provided on whether this is the case for hepatitis E.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations include the general population and people who inject drugs. Information was not provided on when the last serosurvey was carried out.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but did not provide information about a specific time-frame for this.

Nationally, 98% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. Information was not provided on the percentage of one-year-olds nationally (ages 12–23 months) in a given recent year who received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use and auto-disable syringes for therapeutic injections. Single-

use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are national clinical guidelines for the management of viral hepatitis but they do not include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge and are not compulsory for members of any specific group.

Publicly funded treatment for hepatitis B and hepatitis C is available to insurance companies.

Information was not provided on the amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C.

Information was not provided on whether any drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

Information was not provided on whether the Government of Iran has a need for assistance from WHO in relation to viral hepatitis prevention and control.



## Iraq

The Government of Iraq reports as follows.

### National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, and prevention of transmission in health-care settings.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Viral Hepatitis Section, Communicable Disease Control Center, Ministry of Health. It has 44 staff members. There are 44 full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), migrants, prisoners, low-income populations, indigenous people, pregnant women, patients on haemodialysis and those with thalassaemia, and preoperative patients.

### Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

### Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as “undifferentiated” or “unknown” hepatitis.

It is not known whether liver cancer cases are registered nationally. Cases with HIV/hepatitis coinfection are not registered nationally.

The government publishes hepatitis disease reports weekly, monthly and annually.

Population (in millions) (2011)	32.7
Country classification (2012)	Lower-middle-income
Gross national income per capita (PPP int \$) (2011)	\$3750
Total health expenditure as % of GDP (2010)	8.42%
Per capita total health expenditure (PPP int \$) (2010)	\$340.13
Per capita government health expenditure (PPP int \$) (2010)	\$118.35
Life expectancy at birth (in years) (2009)	66
Human Development Index (2011)	0.573
Median age (in years) (2010)	18
Total fertility rate per woman (2010)	4.7

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis B and hepatitis C, but not for hepatitis A and hepatitis E.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target population is the general population. The last serosurvey was carried out in 2005–2006.

### Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 88% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 89% of one-year-olds (ages 12–23 months) in a given recent year received three doses of the hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use and auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units

(including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

### Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

It is not known whether there are national clinical guidelines for the management of viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name, and there is open access to their names. Hepatitis B and hepatitis C tests are free of charge for all individuals and compulsory for blood donors.

Publicly funded treatment for hepatitis B and hepatitis C is available to all patients who need it. The amount spent by the government on such treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine and adefovir dipivoxil. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Iraq welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Jordan

Population (in millions) (2011)	<b>6.3</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$5930</b>
Total health expenditure as % of GDP (2010)	<b>8.04%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$448.45</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$303.41</b>
Life expectancy at birth (in years) (2009)	<b>71</b>
Human Development Index (2011)	<b>0.698</b>
Median age (in years) (2010)	<b>21</b>
Total fertility rate per woman (2010)	<b>3.1</b>

The Government of Jordan reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), prisoners, people living with HIV and close contacts of people who are positive for hepatitis B or hepatitis C.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme, but information was not provided on the identity of these.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but it is not known whether cases with HIV/hepatitis coinfection are.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 97% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for health-care workers and close contacts of people who are positive for hepatitis B or hepatitis C. Hepatitis B and hepatitis C tests are compulsory for health-care workers.

Publicly funded treatment for hepatitis B and hepatitis C is available to Jordanians who seek treatment but have no insurance. Information was not provided on the amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil and entecavir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Jordan welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

## Kuwait

The Government of Kuwait reports as follows.

### National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Fighting Epidemics Unit, Preventive Medicine Department. It has eight staff members. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants, prisoners, people living with HIV, indigenous people, new army and police recruits, pregnant women and new employees.

### Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012. Information was not provided on whether the government has funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

### Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, but not for chronic hepatitis B or hepatitis C. Information was not provided on whether there is a national surveillance system for chronic hepatitis D.

There are standard case definitions for hepatitis. It is not known whether deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further

Population (in millions) (2011)	2.8
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	\$53 720
Total health expenditure as % of GDP (2010)	2.63%
Per capita total health expenditure (PPP int \$) (2010)	\$1132.54
Per capita government health expenditure (PPP int \$) (2010)	\$910.20
Life expectancy at birth (in years) (2009)	78
Human Development Index (2011)	0.760
Median age (in years) (2010)	28
Total fertility rate per woman (2010)	2.3

investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are children, the general population and people who inject drugs. The last serosurvey was carried out in 2011.

### Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but did not provide information about a specific timeframe for this.

Nationally, 95% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 95% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

### Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals, and are compulsory for health-care workers, immigrants, pregnant women, prisoners, new recruits in the army and police, and new employees.

Publicly funded treatment for hepatitis B and hepatitis C is available to the entire population. The amount spent by the government on such treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, entecavir and telbivudine. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Kuwait welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Lebanon

Population (in millions) (2011)	<b>4.3</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$14 470</b>
Total health expenditure as % of GDP (2010)	<b>7.03%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$980.43</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$383.95</b>
Life expectancy at birth (in years) (2009)	<b>74</b>
Human Development Index (2011)	<b>0.739</b>
Median age (in years) (2010)	<b>29</b>
Total fertility rate per woman (2010)	<b>1.8</b>

The Government of Lebanon reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: the National Program for Prevention of Viral Hepatitis. It has three staff members. There are three full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs and prisoners.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: the Lebanese Red Cross, SIDC, Hep B and Lebanese Scouts.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "un-

differentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B by 2020.

Nationally, 90% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 80% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings. It is not known what types of syringes the policy recommends for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary

injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

It is not known how health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge and not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. The following people are eligible for publicly funded treatment for hepatitis B: patients with no social security coverage. Information was not provided on who is eligible for such treatment for hepatitis C. Information was not provided on the amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: pegylated interferon, lamivudine, entecavir and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of Lebanon welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



## Oman

The Government of Oman reports as follows.

#### National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, but also integrates other diseases. It includes components for surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, and prevention of transmission in health-care settings.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. There are no people working full-time on hepatitis-related activities in any government agency/body.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: health-care workers (including health-care waste handlers).

#### Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012, but has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

#### Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. Of hepatitis cases, 21.1% are reported as “undifferentiated” or “unclassified” hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports weekly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

Population (in millions) (2011)	2.8
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	\$25 720
Total health expenditure as % of GDP (2010)	2.77%
Per capita total health expenditure (PPP int \$) (2010)	\$597.59
Per capita government health expenditure (PPP int \$) (2010)	\$478.87
Life expectancy at birth (in years) (2009)	74
Human Development Index (2011)	0.705
Median age (in years) (2010)	25
Total fertility rate per woman (2010)	2.3

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

#### Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 98% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 99% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

#### Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education).

There are no national clinical guidelines for the management of viral hepatitis or for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name, and there is open access to their names. Hepatitis B and hepatitis C tests are free of charge for all individuals and are compulsory for donors, patients on dialysis, prisoners, expatriate workers and health-care workers.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and lamivudine. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Oman welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Pakistan

Population (in millions) (2011)	<b>176.7</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$2870</b>
Total health expenditure as % of GDP (2010)	<b>2.20%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$58.72</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$22.59</b>
Life expectancy at birth (in years) (2009)	<b>63</b>
Human Development Index (2011)	<b>0.504</b>
Median age (in years) (2010)	<b>22</b>
Total fertility rate per woman (2010)	<b>3.4</b>

The Government of Pakistan reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Provincial Hepatitis Control Programs. It is not known how many staff members this office has, or how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, prisoners and people living with HIV.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for acute hepatitis A, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. Information was not provided regarding the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases are not registered nationally, but cases with HIV/hepatitis coinfection are.

The government has published one hepatitis disease report that described a national hepatitis prevalence study conducted in 2008.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 56% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is no national policy on injection safety in health-care settings. Single-use or auto-disable syringes, needles and canulas are not always available in all health-care facilities.

Twenty per cent of injections administered annually in health-care settings are unnecessary, according to official government estimates.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis C, but not for hepatitis B.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name, and there is open access to their names. Hepatitis B and hepatitis C tests are not free of charge and not compulsory for members of any specific group.

Publicly funded treatment for hepatitis B and hepatitis C is available to patients who cannot pay for treatment. The government spends PRs 200–300 million (US\$ 2.1–3.2 million) per province annually on publicly funded treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine and entecavir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Pakistan welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Qatar

The Government of Qatar reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities, but its name was not provided. It has three staff members. There are 15 full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants, prisoners and expatriates.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: the Qatar Red Crescent Society.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C and E, and for the following types of chronic hepatitis: B and C. Information was not provided on whether there is a national surveillance system for chronic hepatitis D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 0.38% is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually and also internally every six months.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

Population (in millions) (2011)	1.9
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	\$86 440
Total health expenditure as % of GDP (2010)	1.81%
Per capita total health expenditure (PPP int \$) (2010)	\$1622.47
Per capita government health expenditure (PPP int \$) (2010)	\$1256.65
Life expectancy at birth (in years) (2009)	78
Human Development Index (2011)	0.831
Median age (in years) (2010)	32
Total fertility rate per woman (2010)	2.3

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 100% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 95% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis

E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and compulsory for pregnant women, couples planning to marry, prisoners and expatriates. Hepatitis C tests are compulsory for certain groups but information was not provided regarding which groups.

Publicly funded treatment for hepatitis B and hepatitis C is available to the entire population. The amount spent by the government on such treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Qatar welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Somalia

Population (in millions) (2011)	<b>9.6</b>
Country classification (2012)	<b>Low-income</b>
Gross national income per capita (PPP int \$) (2011)	--
Total health expenditure as % of GDP (2010)	--
Per capita total health expenditure (PPP int \$) (2010)	--
Per capita government health expenditure (PPP int \$) (2010)	--
Life expectancy at birth (in years) (2009)	<b>51</b>
Human Development Index (2011)	--
Median age (in years) (2010)	<b>18</b>
Total fertility rate per woman (2010)	<b>6.3</b>

The Government of Somalia reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012, but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government but are not further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and no one-year-old (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is no national policy on injection safety in health-care settings. Single-use

or auto-disable syringes, needles and canulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is no national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B, but information was not provided on whether this is the case for hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

It was not known how health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis.

There are no national clinical guidelines for the management of viral hepatitis, but there are for the management of HIV, which include recommendations for coinfection with viral hepatitis.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge and not compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

No drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Somalia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# South Sudan

The Government of South Sudan reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Emergency Preparedness and Response Department. It has five staff members. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: B, C and E, but not for any type of chronic hepatitis.

There are no standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is inadequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

Population (in millions) (2011)	--
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	--
Total health expenditure as % of GDP (2010)	--
Per capita total health expenditure (PPP int \$) (2010)	--
Per capita government health expenditure (PPP int \$) (2010)	--
Life expectancy at birth (in years) (2009)	--
Human Development Index (2011)	--
Median age (in years) (2010)	--
Total fertility rate per woman (2010)	--

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth or what percentage of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is no national policy on injection safety in health-care settings. Single-use or auto-disable syringes, needles and canulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is no national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are no national clinical guidelines for the management of viral hepatitis, but there are for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge and compulsory for blood donors.

Publicly funded treatment for hepatitis B and hepatitis C is available to the entire population. The amount spent by the government on such treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: lamivudine and tenofovir. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of South Sudan welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Sudan

Population (in millions) (2011)	<b>44.6</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$2120</b>
Total health expenditure as % of GDP (2010)	<b>6.32%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$141.39</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$42.16</b>
Life expectancy at birth (in years) (2009)	<b>59</b>
Human Development Index (2011)	<b>0.408</b>
Median age (in years) (2010)	<b>20</b>
Total fertility rate per woman (2010)	<b>4.4</b>

The Government of Sudan reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance and prevention in general.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. Information was not provided regarding how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012, but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for acute hepatitis A, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 90% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

The government publishes hepatitis disease reports weekly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is inadequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 93% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are no national clinical guidelines for the management of viral hepatitis, or for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and compulsory for blood donors.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: ribavirin.

The Government of Sudan welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Syrian Arab Republic

The Government of the Syrian Arab Republic reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: the Viral Hepatitis Control Unit. It has four staff members. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

Information was not provided on whether the government has a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

Information was not provided on whether the government held events for World Hepatitis Day 2012 or has funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Syrian Red Crescent Society and Syrian Family Planning Association.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports quarterly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. Information was not provided on whether there is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Information was

Population (in millions) (2011)	<b>20.8</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$5080</b>
Total health expenditure as % of GDP (2010)	<b>3.41%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$174.20</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$80.13</b>
Life expectancy at birth (in years) (2009)	<b>74</b>
Human Development Index (2011)	<b>0.632</b>
Median age (in years) (2010)	<b>21</b>
Total fertility rate per woman (2010)	<b>2.9</b>

not provided on whether viral hepatitis serosurveys are conducted regularly.

## Prevention of transmission

Information was not provided on whether there is a national policy for hepatitis A vaccination or whether the government has established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth or the percentage of one-year-olds nationally (ages 12–23 months) in a given recent year who received three doses of hepatitis B vaccine.

Information was not provided on whether there is a national policy that specifically targets mother-to-child transmission of hepatitis B.

Information was not provided on whether there is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, but they do not include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for blood donors. Hepatitis B and hepatitis C tests are compulsory for blood donors, couples planning to marry, patients on haemodialysis and those who undergo frequent haemotransfusion.

Publicly funded treatment for hepatitis B and hepatitis C is available to Syrian citizens and refugees. The government spends LS 700 000 (US\$ 11 112) per patient annually on publicly funded treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of the Syrian Arab Republic welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Yemen

Population (in millions) (2011)	<b>24.8</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$2170</b>
Total health expenditure as % of GDP (2010)	<b>5.18%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$122.18</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$29.52</b>
Life expectancy at birth (in years) (2009)	<b>65</b>
Human Development Index (2011)	<b>0.462</b>
Median age (in years) (2010)	<b>4</b>
Total fertility rate per woman (2010)	<b>5.2</b>

The Government of Yemen reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Disease Control and Surveillance, General Directorate. It has two staff members. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C. Information was not provided on whether there is a national surveillance system for acute hepatitis D or hepatitis E. There is no national surveillance system for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

The government publishes hepatitis disease reports weekly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

It is not known whether there is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 81% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use and auto-disable syringes for therapeutic injections. Single-

use or auto-disable syringes, needles and cannulas are not always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

It is not known whether there is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education).

There are no national clinical guidelines for the management of viral hepatitis. Information was not provided on whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge or compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

No drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Yemen welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).







# Chapter 6:

## WHO European Region

The 53 Member States of the World Health Organization (WHO) European Region together have a population of 899 million, with the Russian Federation accounting for approximately one sixth of this total.<sup>1</sup> The European Region, which includes 45 high-income and upper-middle-income countries,<sup>2</sup> is characterized by increasing life expectancy and a health profile shaped more by noncommunicable than by communicable diseases. At the same time, the widely varying social, political and economic circumstances of different countries translate into markedly different health needs and health outcomes at the national and subnational levels.

While the European Region's under-five mortality rate of 7.9 per 1000 live births is the lowest in the world, some countries in the Region have considerably higher and lower rates.<sup>3</sup> Average life expectancy for the Region reached 76 years in 2010, with a 13-year difference between the lowest and highest national averages (69 and 82 years, respectively).<sup>3</sup> By 2050, more than one fourth of the Region's population will be aged 65 years or older.<sup>3</sup> This trend is one factor driving the increase in noncommunicable disease rates in the European Region, but lifestyle factors are also thought to play a major role in shaping the health of the population. The European Region has the highest prevalence of tobacco use among all WHO regions, as well as the highest alcohol consumption.<sup>3</sup>

Noncommunicable diseases account for some 80% of deaths in the European Region, with circulatory diseases causing almost half of all mortality.<sup>3</sup> In 28 countries of the European Region, cancer is the leading cause of premature death. Among men, the forms of cancer resulting in the highest mortality are lung, colon, stomach and prostate cancer; among women, they are breast, lung, stomach, colon, cervical and ovarian cancer.<sup>3</sup>

Communicable diseases that contribute notably to the disease burden include viral hepatitis, tuberculosis, HIV infection and sexually transmitted infections.<sup>3</sup> Tuberculosis causes more than 40% of all deaths from communicable diseases,<sup>3</sup> and some countries in central and eastern Europe have an especially high burden of multidrug-resistant tuberculosis.<sup>4</sup> Although new HIV infections are decreasing globally, the eastern part of the European Region has the fastest-growing HIV epidemic in the world,<sup>4</sup> a trend driven largely by injecting drug use.<sup>5</sup>

### Viral hepatitis in the WHO European Region

The seroprevalence and incidence of hepatitis A vary geographically, increasing from west (<50% exposed by the age of 30 years) to east (≥50% exposed by the age of 30 years).<sup>a</sup> Although the total number of cases is decreasing, hepatitis A infection is still an important public health threat in the Region, with a potential for outbreaks.<sup>b</sup>

Hepatitis E is responsible for fewer than 5% of cases of acute hepatitis in western Europe and, in most studies, antibodies against hepatitis E have been found in a small proportion (0%–10%) of healthy persons; for other parts of Europe, the prevalence is higher, reaching up to 27.8%.<sup>c</sup>

In the WHO European Region, over 13 million adults are living with hepatitis B and 15 million with hepatitis C.<sup>d</sup> This data suggest that almost one in fifty adults is infected with hepatitis B and a similar proportion of people have chronic hepatitis C. Most of those infected in the WHO European Region live in eastern European and central Asian countries: 66% of those with hepatitis B and 64% of those with hepatitis C.<sup>d</sup>

People who inject drugs are the most affected (15% for hepatitis B and 44% for hepatitis C), but infection is also common in other vulnerable population groups such as men who have sex with men (8.7% and 4.2%, respectively), and sex workers (3.3% and 11%, respectively).<sup>d</sup> By comparison, rates in the general population of countries in the European Region outside the European Union and European Free Trade Association are 3.8% for hepatitis B and 2.3 % for hepatitis C.<sup>d</sup>

<sup>1</sup> *World population prospects: the 2010 revision*. New York, United Nations, Department of Economic and Social Affairs, Population Division, 2011.

<sup>2</sup> The World Bank. *Country and lending groups* [web site]. Available at: [http://data.worldbank.org/about/country-classifications/country-and-lending-groups#Europe\\_and\\_Central\\_Asia](http://data.worldbank.org/about/country-classifications/country-and-lending-groups#Europe_and_Central_Asia) (accessed on 11 May 2013).

<sup>3</sup> *The European health report 2012: charting the way to well-being*. Geneva, World Health Organization Regional Office for Europe, 2013.

<sup>4</sup> *Global tuberculosis report 2012*. Geneva, World Health Organization, 2012. Available at: [http://www.who.int/tb/publications/global\\_report/gtbr12\\_main.pdf](http://www.who.int/tb/publications/global_report/gtbr12_main.pdf) (accessed on 11 May 2013).

<sup>5</sup> UNAIDS. *Regional fact sheet 2012: eastern Europe and central Asia*. Available at: [http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/gr2012/2012\\_FS\\_regional\\_ecca\\_en.pdf](http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/gr2012/2012_FS_regional_ecca_en.pdf) (accessed on 11 May 2013).

<sup>a</sup> Jacobsen K. *The global prevalence of hepatitis A virus infection and susceptibility: a systematic review*. Geneva, Department of Immunization, Vaccines and Biologicals, World Health Organization, 2010 [WHO/IVB 10.01].

<sup>b</sup> Payne L. Hepatitis A in the European Union: responding to challenges related to new epidemiological patterns. *Eurosurveillance*, 2009, 14:3.

<sup>c</sup> Aggarwal R. *The global prevalence of hepatitis E virus infection and susceptibility: a systematic review*. Geneva, World Health Organization, 2010.

<sup>d</sup> Hope VD, Eramova I, Capurro D, Donoghoe MC. Prevalence and estimation of hepatitis B and C infections in the WHO European Region: a review of data focusing on the countries outside the European Union and the European Free Trade Association. *Epidemiology and Infection*, 2013, 29:1–17.



Responses to the WHO/Alliance survey were received from 44 of the 53 Member States in the European Region (83.0%).

**Box 1.** Responses to the 2012 Global Hepatitis Survey: WHO European Region

*Member States that submitted surveys:*

- |                  |                      |                       |
|------------------|----------------------|-----------------------|
| • Albania        | • Hungary            | • Slovakia            |
| • Andorra        | • Ireland            | • Slovenia            |
| • Armenia        | • Israel             | • Spain               |
| • Austria        | • Italy              | • Sweden              |
| • Azerbaijan     | • Kyrgyzstan         | • Switzerland         |
| • Belarus        | • Latvia             | • Tajikistan          |
| • Belgium        | • Lithuania          | • The former Yugoslav |
| • Bulgaria       | • Luxembourg         | • Republic of Mac-    |
| • Croatia        | • Malta              | • edonia              |
| • Cyprus         | • Montenegro         | • Turkey              |
| • Czech Republic | • Netherlands        | • Ukraine             |
| • Denmark        | • Poland             | • United Kingdom of   |
| • Estonia        | • Republic of        | Great Britain and     |
| • Finland        | Moldova              | Northern Ireland      |
| • France         | • Russian Federation | • Uzbekistan          |
| • Georgia        | • San Marino         |                       |
| • Germany        | • Serbia             |                       |

*Member States that did not submit surveys:*

- |              |              |                |
|--------------|--------------|----------------|
| • Bosnia and | • Kazakhstan | • Romania      |
| Herzegovina  | • Monaco     | • Turkmenistan |
| • Greece     | • Norway     |                |
| • Iceland    | • Portugal   |                |

**National coordination**

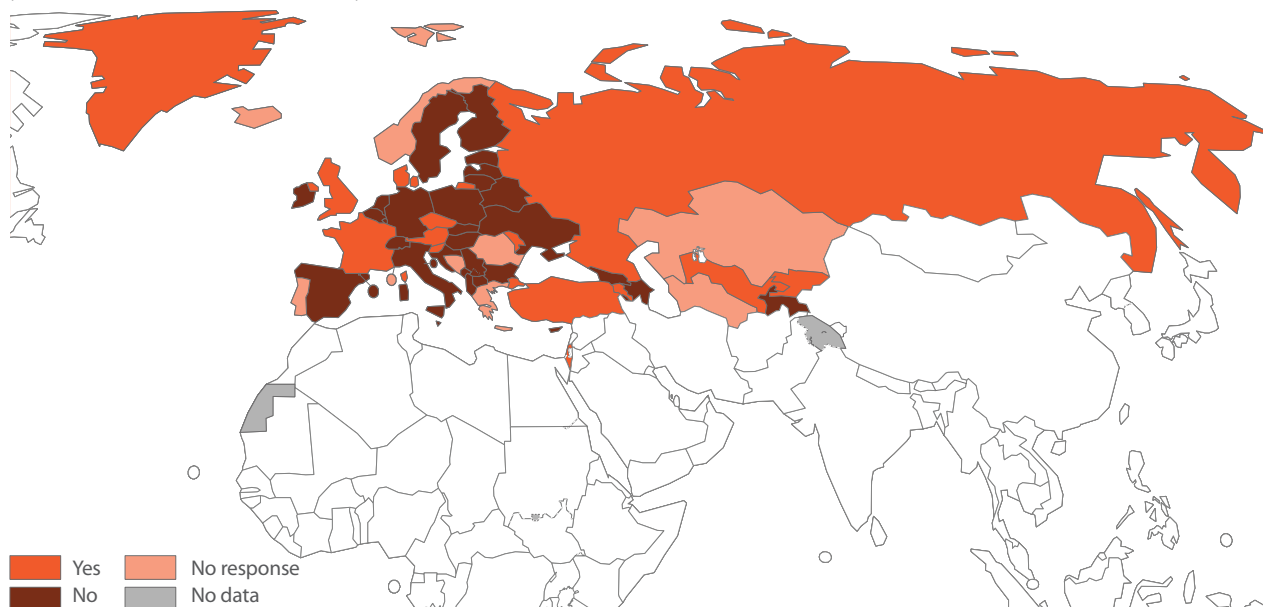
Thirteen responding Member States (29.5%) reported the existence of a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis (Figure 1). Four of the 13 Member States with a strategy or plan (the Czech Republic, France, Kyrgyzstan and the Republic of Moldova) reported that it focuses exclusively on viral hepatitis, and seven (Armenia, Austria, Denmark, Israel, Russian Federation, Slovenia and Uzbekistan) reported that it addresses other diseases as well. One country (Turkey) reported that the strategy or plan addresses only hepatitis B, and one (the United Kingdom of Great Britain and Northern Ireland) reported that it addresses only hepatitis C.

The 13 Member States that reported the existence of a strategy or plan were asked about its specific components. All 13 reported the inclusion of a component for prevention of transmission in health-care settings. Twelve reported the inclusion of components for surveillance, vaccination and prevention of transmission via injecting drug use. Eleven reported the inclusion of components for general prevention, and treatment and care. Eight reported the inclusion of components for raising awareness and coinfection with HIV.

Seven responding Member States (15.9%) reported that they have a governmental unit or department responsible solely for viral hepatitis-related activities.<sup>a</sup> Member States that did so were

<sup>a</sup> One Member State responded that there is no governmental unit but a special national multidisciplinary expert team responsible for hepatitis-related activities.

**Figure 1.** Responses to the question, "Is there a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis?"



asked to indicate the number of staff members in the unit or department. Responses ( $N=5$ ) ranged from 2 to 7 (median, 3), with the Republic of Moldova reporting the largest number.

Member States were asked to report the number of people working full-time on hepatitis-related activities in all government agencies or bodies. Among the 13 Member States that provided data for this question, the number ranged from 0 to 213 (median, 1.5), with Armenia reporting the largest number.

Thirty-four responding Member States (77.3%) reported that they have a viral hepatitis prevention and control programme that includes activities targeting specific populations. The populations most commonly targeted are people who inject drugs (91.2% of responding Member States within this subset) and health-care workers, including health-care waste handlers (94.1% of responding Member States within this subset). Twenty-one responding Member States reported the inclusion of activities targeting people living with HIV, and 17 reported the inclusion of activities targeting prisoners. Groups identified less frequently included migrants, indigenous populations, low-income populations, those who are uninsured and those who are homeless.

**Table 1.** Topics of public awareness campaigns on viral hepatitis held in Member States since January 2011 ( $N=10$ )

	Armenia	Belarus	Croatia	Netherlands	Republic of Moldova	Slovenia	Sweden	Turkey	United Kingdom of Great Britain and Northern Ireland	Russian Federation
General information about hepatitis and its transmission	X	X	X	X	X	X	X	X	X	X
Vaccination for hepatitis A and hepatitis B	X	X	X		X	X	X			X
Importance of knowing one's hepatitis B and hepatitis C status	X		X	X	X	X	X	X		X
Safe water and good sanitation	X				X					X
Safer sex practices	X	X	X	X	X	X	X	X		X
Harm reduction for people who inject drugs	X	X	X	X	X	X	X	X	X	X
Safe workplace practices	X	X	X	X	X			X		X

### Awareness-raising and partnerships

Seventeen responding Member States (38.6%) reported that they had held events for World Hepatitis Day 2012 (28 July). Since January 2011, ten responding Member States (22.7%) had funded some type of viral hepatitis public awareness campaign other than World Hepatitis Day (Table 1).

Twenty-nine responding Member States (65.9%) reported that they collaborated with civil society groups within their countries to develop and implement the governmental viral hepatitis prevention and control programme. For example, Armenia reported collaborating with the Armenian Hepatitis Forum and the Netherlands reported collaborating with the National Hepatitis Centrum. (Further examples can be found in the summaries of country findings later in this chapter.)

### Evidence-based policy and data for action

Forty-three responding Member States (97.7%) reported that they have routine surveillance for viral hepatitis; details appear in Table 2.

Forty-two responding Member States (95.5%) indicated that their countries have standard case definitions for hepatitis infection and 42 (95.5%) indicated that their countries have a central registry for the reporting of deaths, including hepatitis deaths.

**Table 2.** Types of surveillance in Member States that reported the existence of routine surveillance for viral hepatitis ( $N=43$ )

	Yes (%)	No (%)	Do not know (%)	No response (%)
There is a national surveillance system for <b>acute</b> hepatitis infection for the following forms of hepatitis:				
hepatitis A	100	0	0	0
hepatitis B	100	0	0	0
hepatitis C	95.3	4.7	0	0
hepatitis D	46.5	41.9	0	11.6
hepatitis E	55.8	30.2	0	14.0
There is a national surveillance system for <b>chronic</b> hepatitis infection for the following forms of hepatitis:				
hepatitis B	65.1	32.6	0	2.3
hepatitis C	62.8	34.9	0	2.3
hepatitis D	30.2	62.8	0	7.0

Twenty-nine Member States reported on the proportion of hepatitis cases and deaths registered as “undifferentiated” or “unclassified” hepatitis. The reported proportions ranged from 0% to 21.0% (median, 1.0%).<sup>a</sup> Additional survey findings about surveillance are presented in Table 3.

**Table 3.** Data registration and surveillance (N=44)

	Yes (%)	No (%)	Do not know (%)	No response (%)
Liver cancer cases are registered nationally	79.5	18.2	2.3	0
Cases with HIV/hepatitis coinfection are registered nationally	65.9	34.1	0	0
Hepatitis outbreaks are reported	95.5	4.5	0	0
If YES – Hepatitis outbreaks are further investigated (N=115)	100	0	0	0

Member States were asked how often hepatitis disease reports are published. Of the responding Member States, 47.7% reported that they publish hepatitis disease reports annually; 36.4%, monthly; and 13.6%, weekly. No hepatitis disease report is published by 11.4% of responding Member States.

Eight responding Member States (18.2%) reported the existence of a national public health research agenda for viral hepatitis.

Twenty responding Member States (45.5%) reported that besides routine surveillance of viral hepatitis, serosurveys are conducted regularly. The majority of the surveys targeted the general population, pregnant women, men who have sex with men, and people who inject drugs. Among this subset of responding Member States, 20.0% indicated that serosurveys take place at least once per year and, of the same subset, 40.0% reported that the most recent viral hepatitis serosurvey was carried out in either 2011 or 2012.

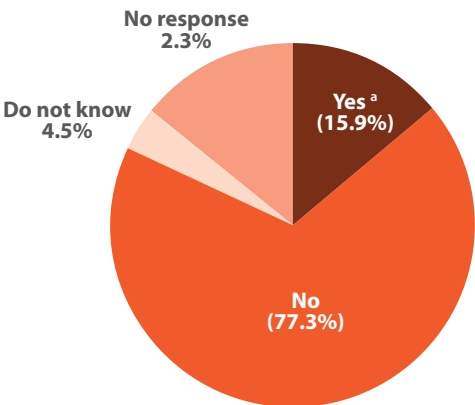
<sup>a</sup> These figures represent data from 29 of the 30 Member States. Data from the Russian Federation are not included here because they were reported in a different way. See the Russian Federation country findings later in this chapter for information about undifferentiated/unclassified hepatitis in that Member State.

**Prevention of transmission**

Thirty responding Member States (68.2%) reported that they have a national policy on hepatitis A vaccination.

Seven responding Member States (15.9%) reported that they have established the goal of eliminating or reducing hepatitis B (Figure 2). Member States with this goal were asked to specify the timeframe in which they seek to eliminate or reduce hepatitis B. Among the three Member States that answered this question, Latvia reported a target of reducing the proportion of acute hepatitis B cases among children by 2011–2012, and the Republic of Moldova and Sweden reported targets of reducing hepatitis B by 2016.

**Figure 2.** Responses to the question, “Has your government established the goal of eliminating hepatitis B?” (N=44)



<sup>a</sup> Three Member States (Latvia, Republic of Moldova and Sweden) that answered “yes” to this question added comments indicating that their goals relate to reducing rather than eliminating hepatitis B.

Member States were asked to report, for a given recent year, the percentage of newborn infants who had received the first dose of hepatitis B vaccine within 24 hours of birth. Among the 28 Member States that provided this information, responses ranged from 0% to 100% (median, 93.5%). Member States were also asked to report, for a given recent year, the percentage of one-year-olds (ages 12–23 months) who had received three

**Table 4.** Activities called for in national policy targeting mother-to-child transmission of hepatitis B (N=41)

	All pregnant women are screened for hepatitis B	All pregnant women found to have hepatitis B are counselled	Health-care providers follow up with all pregnant women found to have hepatitis B during pregnancy for the purpose of encouraging them to give birth at health-care facilities	Upon delivery, all infants born to women with hepatitis B receive hepatitis B immunoglobulin	All infants receive the first dose of hepatitis B vaccine within 24 hours of birth
Albania		X	X	X	X
Andorra	X	X	X	X	X
Armenia	X	X	X	X	X
Austria	X	X	X		
Azerbaijan	X	X	X		X
Belarus	X	X	X	X	X
Belgium	X				
Belarus					X
Croatia	X	X	X	X	X
Cyprus	X	X	X	X	X
Czech Republic		X		X	X
Denmark	X	X	X	X	X
Estonia	X	X			X
Finland	X	X	X	X	X
France	X	X		X	X
Georgia	X			X	X
Germany	X	X	X	X	
Hungary	X	X	X	X	X
Ireland	X			X	X
Israel		X		X	X
Italy	X	X	X	X	
Kyrgyzstan					X
Latvia	X	X	X		X
Lithuania					X
Luxembourg	X	X	X	X	X
Malta		X			X
Montenegro	X		X	X	
Netherlands	X	X		X	X
Poland	X	X		X	X
Republic of Moldova	X	X	X		X
Russian Federation	X	X	X		X
San Marino	X	X	X	X	
Serbia	X	X	X		X
Slovakia	X	X	X	X	X
Slovenia	X	X	X	X	
Spain	X	X	X	X	
Sweden	X	X	X	X	X
The former Yugoslav Republic of Macedonia	X	X	X	X	X
Turkey	X	X	X	X	X
Ukraine	X	X	X	X	X
United Kingdom of Great Britain and Northern Ireland	X	X	X	X	X
<b>TOTAL</b>	<b>32</b>	<b>32</b>	<b>26</b>	<b>26</b>	<b>33</b>



doses of hepatitis B vaccine. Among the 38 Member States that provided this information, responses ranged from 30.0% to 99.3% (median, 95.0%).

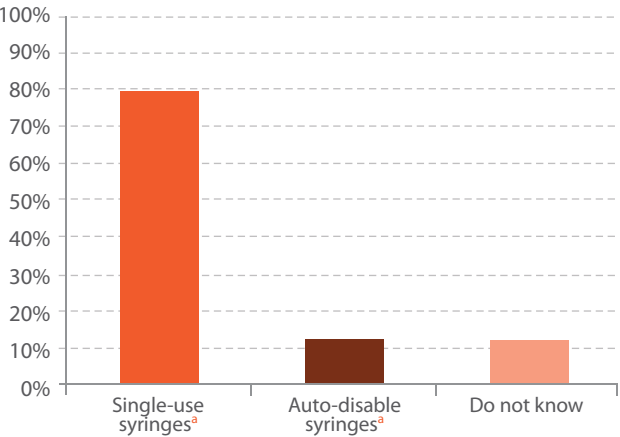
Forty-one responding Member States (93.2%) reported the existence of a national policy that specifically targets mother-to-child transmission of hepatitis B; details are presented in Table 4. Three fourths of Member States with such a policy indicated that one component of the policy calls for screening of all pregnant women for hepatitis B.

Thirty-seven responding Member States (84.1%) reported the existence of a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

Thirty-seven responding Member States (84.1%) reported that health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

Thirty-nine responding Member States (88.6%) reported the existence of a national policy on injection safety in health-care settings. These Member States were asked which types of syringes the policy recommends for therapeutic injections. Single-use syringes are recommended in 79.5% of policies, and auto-disable syringes in 12.8% (Figure 3).

**Figure 3.** Proportion of responding Member States with national policies on injection safety in health-care settings which recommend single-use syringes and auto-disable syringes for therapeutic injections (N=39)



<sup>a</sup> Respondents could select both "single-use syringes" and "auto-disable syringes".

Forty-one responding Member States (93.2%) reported that single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Member States were asked for official estimates of the number and percentage of unnecessary injections administered annually in health-care settings (e.g. injections that are given when an equivalent oral medication is available). Forty-three Member States reported that the figures are not known and one (Denmark) reported that no unnecessary injection is administered annually in health-care settings.

Additional findings relating to the prevention of hepatitis transmission are presented in Table 5.

**Table 5.** Hepatitis prevention: policies, practices and guidelines (N=44)

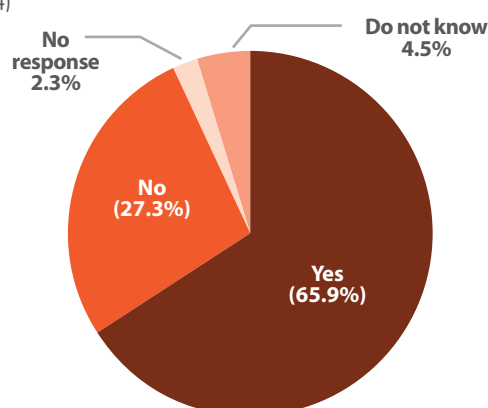
	Yes (%)	No (%)	Do not know (%)	No response (%)
There is a national infection control policy for blood banks	95.5	2.3	0	2.3
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B	95.5	2.3	0	2.3
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis C	97.7	0	0	2.3
There is a national policy relating to the prevention of viral hepatitis among people who inject drugs	56.8	27.3	11.4	4.5
The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety	56.8	31.8	9.1	2.3

### Screening, care and treatment

Member States were asked how health professionals in their countries obtain the skills and competencies required to effectively care for people with viral hepatitis. Responding Member States most frequently indicated that these are obtained in schools for health professionals (pre-service education, 81.8%). Additionally, on-the-job training was identified in 79.5% of responses, and postgraduate training in 75.0%.

Twenty-nine responding Member States (65.9%) reported the existence of national clinical guidelines for the management of viral hepatitis (Figure 4). Sixteen of these 29 Member States indicated that the guidelines include recommendations for cases with HIV coinfection. Nineteen of 29 responding Member States (65.5%) indicated that there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

**Figure 4.** Responses to the question, “Are there national clinical guidelines for the management of viral hepatitis?” (N=44)



Twenty-two responding Member States (50.0%) indicated that they have a national policy relating to screening and referral to care for hepatitis B. Twenty-one (47.7%) reported that they have such a policy for hepatitis C.

Regarding hepatitis B testing, 40 responding Member States (90.9%) indicated that people register by name for testing. Thirty-six members of that subset (90.0%) indicated that the names are kept confidential. Nineteen responding Member States (43.2%) reported that the hepatitis B test is free of charge for all individuals. Among the 25 other Member States, 19 (76.0%) reported that the hepatitis B test is free of charge for members of specific groups. Groups identified included blood donors, health-care workers, prisoners, pregnant women, people who inject drugs and people living with HIV. Twenty-four responding Member States (54.5%) reported that the hepatitis B test is compulsory for members of specific groups. Groups identified included blood donors, health-care workers, pregnant women and patients on haemodialysis.

Regarding hepatitis C testing, 40 responding Member States (90.9%) indicated that people register by name for testing. Thirty-six members of that subset (90.0%) indicated that the names are kept confidential. Twenty responding Member States (45.5%) reported that the hepatitis C test is free of charge for all individuals. Among the 24 other Member States, 18 (75.0%) reported that the hepatitis C test is free of charge for members of specific groups. Groups identified included blood donors, health-care workers, prisoners, pregnant women, people who

inject drugs and people living with HIV. Twenty-two responding Member States (50.0%) reported that the hepatitis C test is compulsory for members of specific groups. Groups identified included blood donors, health-care workers, pregnant women and patients on haemodialysis.

Thirty-six responding Member States (81.8%) reported that publicly funded treatment is available for hepatitis B and 34 (77.3%) that it is available for hepatitis C. Eight responding Member States reported the amount spent on publicly funded treatment for hepatitis B and hepatitis C. Details can be found in the summaries of country findings later in this chapter (see Armenia, Croatia, Germany, Lithuania, Poland, San Marino, Spain and Turkey).

Thirty-eight responding Member States (86.4%) reported that at least one available drug for treating hepatitis B is on the national essential medicines list or subsidized by the government. The drugs most commonly reported were lamivudine, interferon alpha, tenofovir and pegylated interferon (Table 6).

**Table 6.** Proportion of Member States reporting drugs for treating hepatitis B and C on national essential medicines lists or subsidized by governments

Drugs for treating hepatitis B	% of Member States reporting its inclusion (N=12)
Lamivudine	84.1
Interferon alpha	77.3
Tenofovir	75.0
Pegylated interferon	61.4
Entecavir	54.5
Adefovir dipivoxil	50.0
Telbivudine	38.6
Drugs for treating hepatitis C	% of Member States reporting its inclusion (N=12)
Ribavirin	86.4
Pegylated interferon	79.5
Interferon alpha	68.2
Telaprevir	38.6
Boceprevir	38.6

Thirty-nine responding Member States (88.6%) reported that at least one available drug for treating hepatitis C is on the national essential medicines list or subsidized by the government. The drugs most commonly reported were interferon alpha, pegylated interferon and ribavirin.

#### World Health Organization assistance

Member States were asked to indicate areas in which they might want assistance from WHO for the prevention and control of viral hepatitis. Respondents most commonly selected the following: developing the national plan for viral hepatitis prevention and control (39.5%), and assessing the economic impact of viral hepatitis (39.5%) (Table 7). Responses from individual Member States appear in Annex C.

**Table 7.** Viral hepatitis control and prevention: areas in which governments indicated interest in receiving WHO assistance (N=44)

<b><i>Awareness-raising, partnerships and resource mobilization (first WHO strategic axis)</i></b>	
Developing the national plan for viral hepatitis prevention and control	38.6%
Integrating viral hepatitis programmes into other health services	29.5%
Awareness-raising	27.3%
<b><i>Evidence-based policy and data for action (second WHO strategic axis)</i></b>	
Viral hepatitis surveillance	22.7%
Estimating the national burden of viral hepatitis	34.1%
Developing tools to assess the effectiveness of interventions	22.7%
Assessing the economic impact of viral hepatitis	38.6%
<b><i>Prevention of transmission (third WHO strategic axis)</i></b>	
Increasing coverage of the birth dose of the hepatitis B vaccine	9.1%
<b><i>Screening, care and treatment (fourth WHO strategic axis)</i></b>	
Increasing access to treatment	25.0%
Increasing access to diagnostics	22.7%
Improving laboratory quality	20.9% <sup>a</sup>
Developing education/training programmes for health professionals	34.1%

<sup>a</sup> N=43 (This response option was not included in the survey completed by Belarus.)

# WHO European Region:

## COUNTRY SUMMARIES

# Albania

Population (in millions) (2011)	<b>3.2</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$8820</b>
Total health expenditure as % of GDP (2010)	<b>5.66%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$577.28</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$225.38</b>
Life expectancy at birth (in years) (2009)	<b>73</b>
Human Development Index (2011)	<b>0.739</b>
Median age (in years) (2010)	<b>30</b>
Total fertility rate per woman (2010)	<b>1.5</b>

The Government of Albania reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Department of Infection and Disease Control. It has five staff members. There are two full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people living with HIV, students and pregnant women.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 21% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are not registered nationally, but cases with HIV/hepatitis coinfection are.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are the general population, men who have sex with men, pregnant women and health-care workers. The last serosurvey was carried out in 2003.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 97.4% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 99.1% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable

syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

It is not known whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

It is not known whether there are national clinical guidelines for the management of viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals. Information was not provided on whether hepatitis B or hepatitis C tests are compulsory for members of any specific group.

It is not known whether publicly funded treatment is available for hepatitis B or hepatitis C and, if so, the amount spent by the government on such treatment.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: interferon alpha. The following drug for treating hepatitis C is on the national essential medicines list or subsidized by the government: interferon alpha.

The Government of Albania welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Andorra

The Government of Andorra reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. There are no people working full-time on hepatitis-related activities in any government agency/body.

Information was not provided on whether the government has a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

Population (in millions) (2011)	<b>0.8</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	--
Total health expenditure as % of GDP (2010)	<b>7.52%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$3254.52</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$2281.10</b>
Life expectancy at birth (in years) (2009)	<b>82</b>
Human Development Index (2011)	<b>0.836</b>
Median age (in years) (2010)	--
Total fertility rate per woman (2010)	<b>1.3</b>

The government has not established the goal of eliminating hepatitis B.

Nationally, 93% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 99% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use and auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

In response to questions about screening of blood, the respondent stated, "In Andorra there are no blood banks. We work in collaboration with Spain and France, following their rules." No further information was provided on whether there is a national infection control policy for blood banks, or whether all donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

Information was not provided on whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education).

Information was not provided on whether there are national clinical guidelines for the management of viral hepatitis. There are no national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge and are not compulsory for members of any specific group.

Publicly funded treatment for hepatitis B and hepatitis C is available to the entire population. The amount spent by the government on such treatment is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Andorra did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Armenia

Population (in millions) (2011)	<b>3.1</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$6100</b>
Total health expenditure as % of GDP (2010)	<b>4.40%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$238.52</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$96.92</b>
Life expectancy at birth (in years) (2009)	<b>70</b>
Human Development Index (2011)	<b>0.806</b>
Median age (in years) (2010)	<b>32</b>
Total fertility rate per woman (2010)	<b>1.7</b>

The Government of Armenia reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. There are 213 full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs and people living with HIV.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: the Armenian Hepatitis Forum.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 2.8% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly. The target populations are health-care workers at risk of parenterally transmitted hepatitis, donors and pregnant women. Information was not provided on when the last serosurvey was carried out.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 96% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 95% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use and auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training, postgraduate training and thematic workshops.

There are no national clinical guidelines for the management of viral hepatitis, but there are for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for patients with acute hepatitis, blood donors and pregnant women in the city of Yerevan. Hepatitis B and hepatitis C tests are compulsory for patients with hepatitis, people living with HIV, health-care workers at risk of parenterally transmitted hepatitis and pregnant women in Yerevan.

Publicly funded treatment is available for acute hepatitis B and hepatitis C.

The government spends dram 120 000–150 000 (US\$ 298–373) per patient in sum on publicly funded treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and lamivudine. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Armenia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Austria

The Government of Austria reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs and people living with HIV.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme. Information was not provided about the identity of civil society partners.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory

Population (in millions) (2011)	8.4
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	\$42 050
Total health expenditure as % of GDP (2010)	10.97%
Per capita total health expenditure (PPP int \$) (2010)	\$4387.92
Per capita government health expenditure (PPP int \$) (2010)	\$3401.20
Life expectancy at birth (in years) (2009)	80
Human Development Index (2011)	0.908
Median age (in years) (2010)	42
Total fertility rate per woman (2010)	1.4

capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, less than 1% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 95% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use and auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

Information was not provided on whether the government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education).

There are national clinical guidelines for the management of viral hepatitis, but they do not include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. Information was not provided on who is eligible for this. The amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, lamivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha and ribavirin.

The Government of Austria did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Azerbaijan

Population (in millions) (2011)	<b>9.3</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$8960</b>
Total health expenditure as % of GDP (2010)	<b>5.88%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$579.07</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$117.49</b>
Life expectancy at birth (in years) (2009)	<b>68</b>
Human Development Index (2011)	<b>0.733</b>
Median age (in years) (2010)	<b>30</b>
Total fertility rate per woman (2010)	<b>2.2</b>

The Government of Azerbaijan reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Republican Centre of Hygiene and Epidemiology, Department of Intestinal Infections. It has three staff members. There is one full-time equivalent staff member who works on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: pregnant women.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: Vishnevskaya-Rostropovich Foundation.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are pregnant women, blood donors and medical staff. Information was not provided on when the last serosurvey was carried out.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 99% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 96% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis. Information was not provided on whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals, and are compulsory for pregnant women, blood donors and medical staff.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: lamivudine and tenofovir. The following drug for treating hepatitis C is on the national essential medicines list or subsidized by the government: ribavirin.

The Government of Azerbaijan welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Belarus

The Government of Belarus reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. There are 20–25 full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: people who inject drugs, prisoners, people living with HIV, sex workers and men who have sex with men.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: NGO "Positive Movement" and Belarusian Red Cross.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided regarding the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly and annually.

Hepatitis outbreaks are reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of outbreaks and other surveillance activities.

Information was not provided on whether there is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the

Population (in millions) (2011)	9.6
Country classification (2012)	Upper-middle-income
Gross national income per capita (PPP int \$) (2011)	\$14 460
Total health expenditure as % of GDP (2010)	5.61%
Per capita total health expenditure (PPP int \$) (2010)	\$786.12
Per capita government health expenditure (PPP int \$) (2010)	\$610.70
Life expectancy at birth (in years) (2009)	70
Human Development Index (2011)	0.785
Median age (in years) (2010)	38
Total fertility rate per woman (2010)	1.4

target populations are people who inject drugs, men who have sex with men, pregnant women, people living with HIV, health-care workers, members of the military and prisoners. Information was not provided on when the last serosurvey was carried out.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 100% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 98%–100% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are compulsory for members of some specific groups but these groups were not identified.

Publicly funded treatment is available for hepatitis B and C. Information was not provided on who is eligible for publicly funded treatment for hepatitis B. Publicly funded treatment for hepatitis C is available only to people with acute infection (not those with chronic infection). Information was not provided on the amount spent by the government on such treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list: interferon alpha, pegylated interferon, lamivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list: interferon alpha, pegylated interferon and ribavirin.

The Government of Belarus welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Belgium

Population (in millions) (2011)	<b>10.8</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$39 190</b>
Total health expenditure as % of GDP (2010)	<b>10.71%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$4025.11</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$3008.52</b>
Life expectancy at birth (in years) (2009)	<b>80</b>
Human Development Index (2011)	<b>0.886</b>
Median age (in years) (2010)	<b>41</b>
Total fertility rate per woman (2010)	<b>1.8</b>

The Government of Belgium reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), newborns and unvaccinated adolescents.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement the vaccination component of its viral hepatitis prevention and control programme: well baby clinics, school health services, and organizations for health-care providers who are involved in vaccination, such as paediatricians and other physicians.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target population is the general population. The last serosurvey was carried out in 2006.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 91% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

It is not known whether the government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

Publicly funded treatment for hepatitis B and hepatitis C is available to the entire population. Information was not provided on the amount spent by the government on such treatment.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Belgium welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Bulgaria

The Government of Bulgaria reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: health-care workers (including health-care waste handlers).

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Hepasist National Association to Fight Hepatitis and Hepactive Association to Fight Hepatitis.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Less than 5% of hepatitis cases are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports weekly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B, and hepatitis C, but not for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the

Population (in millions) (2011)	7.4
Country classification (2012)	Upper-middle-income
Gross national income per capita (PPP int \$) (2011)	\$14 160
Total health expenditure as % of GDP (2010)	6.87%
Per capita total health expenditure (PPP int \$) (2010)	\$434.89
Per capita government health expenditure (PPP int \$) (2010)	\$236.97
Life expectancy at birth (in years) (2009)	74
Human Development Index (2011)	0.771
Median age (in years) (2010)	42
Total fertility rate per woman (2010)	1.5

target population is the general population. The last serosurvey was carried out in 2011.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but does not have a specific timeframe for this.

Nationally, 98.6% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 96.0% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can

be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, but they do not include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but are free of charge for injecting drug users, men who have sex with men, prisoners and sex workers. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment for hepatitis B and hepatitis C is available to all people with health insurance. Information was not provided on the amount spent by the government on such treatment.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir and telbivudine. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Bulgaria welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Croatia

Population (in millions) (2011)	<b>4.3</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$18 760</b>
Total health expenditure as % of GDP (2010)	<b>7.76%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1066.72</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$1284.54</b>
Life expectancy at birth (in years) (2009)	<b>76</b>
Human Development Index (2011)	<b>0.834</b>
Median age (in years) (2010)	<b>42</b>
Total fertility rate per woman (2010)	<b>1.5</b>

The Government of Croatia reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, prisoners and people living with HIV.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: HULOH Hepatos, HUHIV.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 1%–5% is reported as “undifferentiated” or “unclassified” hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly and annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 96% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 96% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary

injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

Whether or not people who test for hepatitis B or hepatitis C register by name depends on the setting. If they do register by name, these are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and compulsory for blood and organ donors.

Publicly funded treatment for hepatitis B is available to the entire population, while for hepatitis C it is available to all people who have public health insurance. The government spends approximately HRK 20 million (US\$ 3.4 million) annually on such treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: pegylated interferon, lamivudine, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of Croatia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Cyprus

The Government of Cyprus reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. There are no people working full-time on hepatitis-related activities in any government agency/body.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. It is not known whether viral hepatitis serosurveys are conducted regularly.

Population (in millions) (2011)	1.1
Country classification (2012)	--
Gross national income per capita (PPP int \$) (2011)	\$30 970
Total health expenditure as % of GDP (2010)	5.97%
Per capita total health expenditure (PPP int \$) (2010)	\$1841.64
Per capita government health expenditure (PPP int \$) (2010)	\$764.40
Life expectancy at birth (in years) (2009)	81
Human Development Index (2011)	0.866
Median age (in years) (2010)	34
Total fertility rate per woman (2010)	1.5

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 0.4% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 96% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through on-the-job training.

There are national clinical guidelines for the management of viral hepatitis. It is not known whether they include recommendations for cases with HIV coinfection.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name, and there is open access to their names. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for people living with HIV, pregnant women, blood donors and people infected with either hepatitis B or hepatitis C. Information was not provided on whether hepatitis B or hepatitis C tests are compulsory for members of any specific group.

Publicly funded treatment for hepatitis B and hepatitis C is available to the entire population. The amount spent by the government on such treatment is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of Cyprus welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Czech Republic

Population (in millions) (2011)	<b>10.5</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$24 370</b>
Total health expenditure as % of GDP (2010)	<b>7.88%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$2050.95</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$1716.16</b>
Life expectancy at birth (in years) (2009)	<b>77</b>
Human Development Index (2011)	<b>0.917</b>
Median age (in years) (2010)	<b>39</b>
Total fertility rate per woman (2010)	<b>1.5</b>

The Government of the Czech Republic reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, and treatment and care.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, workers at centres for people who inject drugs, newborns, adolescents, medical students, nurses and workers in selected social services, prison workers, emergency services workers, patients on regular dialysis, new clients in residences for people with poor health, and contacts of hepatitis B-infected patients and hepatitis B surface antigen (HBsAg)-positive carriers.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: patient associations.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C and E, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Less than 1% of hepatitis cases are reported as “undifferentiated” or “unclassified” hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports weekly, monthly and annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly. The most recent serosurvey was conducted in 2001 and targeted the general population.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, less than 1% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 99% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

It is not known whether there is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. It is not known whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, though they are for certain groups, but information was not provided regarding which groups. Hepatitis B and hepatitis C tests are compulsory for members of some specific groups but these groups were not identified.

Publicly funded treatment for hepatitis B and hepatitis C is available to all people with national health insurance. Information was not provided on the amount spent by the government on such treatment.

Information was not provided on whether any drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of the Czech Republic did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.



# Denmark

The Government of Denmark reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. One third of one full-time staff position in all government agencies/bodies is allocated to work on hepatitis-related activities.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs and pregnant women.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Gadejuristen and AIDS-Fondet.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

Population (in millions) (2011)	5.6
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	\$41 900
Total health expenditure as % of GDP (2010)	11.42%
Per capita total health expenditure (PPP int \$) (2010)	\$4537.07
Per capita government health expenditure (PPP int \$) (2010)	\$3861.32
Life expectancy at birth (in years) (2009)	79
Human Development Index (2011)	0.926
Median age (in years) (2010)	41
Total fertility rate per woman (2010)	1.9

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are people who inject drugs, pregnant women and children of infected mothers. Information was not provided on when the last serosurvey was carried out.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 90% of newborn children of hepatitis B-infected mothers in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 64% of one-year-old children (ages 12–23 months) of hepatitis B-infected mothers in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, but it is not known what type of syringes it recommends for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

No injection administered annually in health-care settings is unnecessary, according to official government estimates.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and not compulsory for members of any specific group.

Publicly funded treatment for hepatitis B and hepatitis C is available to the entire population. Information was not provided on the amount spent by the government on such treatment.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Denmark did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Estonia

Population (in millions) (2011)	<b>1.3</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$20 850</b>
Total health expenditure as % of GDP (2010)	<b>6.03%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1226.28</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$964.80</b>
Life expectancy at birth (in years) (2009)	<b>75</b>
Human Development Index (2011)	<b>0.890</b>
Median age (in years) (2010)	<b>40</b>
Total fertility rate per woman (2010)	<b>1.7</b>

The Government of Estonia reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. There are no people working full-time on hepatitis-related activities in any government agency/body.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Less than 1% of hepatitis cases are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are not registered nationally, but cases with HIV/hepatitis coinfection are.

The government publishes hepatitis disease reports monthly and annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 88% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 94% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education).

There are national clinical guidelines for the management of viral hepatitis, but it is not known whether they include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are for pregnant women, prisoners, donors and people with medical insurance. Hepatitis B and hepatitis C tests are compulsory for blood donors.

Publicly funded treatment for hepatitis B and hepatitis C is available to people covered by the Estonian Health Insurance Fund. Information was not provided on the amount spent by the government on such treatment.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha and pegylated interferon. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Estonia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Finland

The Government of Finland reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants and prisoners.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: A-Clinic Foundation and Helsinki Deaconess Institute.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A and B, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are people who inject

Population (in millions) (2011)	5.4
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	\$36 670
Total health expenditure as % of GDP (2010)	8.95%
Per capita total health expenditure (PPP int \$) (2010)	\$3280.90
Per capita government health expenditure (PPP int \$) (2010)	\$2462.46
Life expectancy at birth (in years) (2009)	80
Human Development Index (2011)	0.911
Median age (in years) (2010)	42
Total fertility rate per woman (2010)	1.9

drugs, men who have sex with men, sex workers and pregnant women. The last serosurvey was carried out in 2010.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth or what percentage of one-year-olds (ages 12–23 months) nationally in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, but they do not include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

Publicly funded treatment for hepatitis B is available to the entire population. All legal residents are eligible for publicly funded treatment for hepatitis C, but there is pre-screening according to clinically set criteria, and being an active IDU is among the contraindications for starting treatment. The amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine and adefovir dipivoxil. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Finland welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# France

Population (in millions) (2011)	<b>63.1</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$35 910</b>
Total health expenditure as % of GDP (2010)	<b>11.88%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$4020.73</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$3130.10</b>
Life expectancy at birth (in years) (2009)	<b>81</b>
Human Development Index (2011)	<b>0.919</b>
Median age (in years) (2010)	<b>40</b>
Total fertility rate per woman (2010)	<b>2</b>

The Government of France reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, and treatment and care.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Bureau Infections par le VIH, IST et Hépatites (DGS-RI2). Information was not provided on how many staff members this office has. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants, prisoners and people living with HIV.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Federation SOS-Hépatites, Hépatites Infos Services and Collectif Hépatites Virales.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A and B, and for chronic hepatitis B.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases are not registered nationally, but cases with HIV/hepatitis coinfection are.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are the general population, prisoners, people who inject drugs and men who have sex with men. The last serosurvey was carried out in 2011.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 53% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, but they do not include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B tests are not free of charge for all individuals, but they are free of charge in specific preventive centres. Hepatitis C tests are free of charge for all individuals. Hepatitis B tests are compulsory for people who begin health professional studies and for pregnant women. Hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment for hepatitis B and hepatitis C is available to all participants in the national health insurance programme ("Sécurité Sociale").

In 2009, the national health insurance programme spent approximately €450 million (US\$ 578.7 million) for the treatment of chronic hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of France welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Georgia

The Government of Georgia reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It has three staff members. It is part of the Surveillance Division of the Communicable Diseases Department within the National Center for Disease Control and Public Health. There are 65 full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Bemoni Public Union, Center for Information and Counseling on Reproductive Health Tanadgoma, and Curatio International Foundation.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C and E, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases are not registered nationally, but cases with HIV/hepatitis coinfection are.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further

Population (in millions) (2011)	4.3
Country classification (2012)	Lower-middle-income
Gross national income per capita (PPP int \$) (2011)	\$5350
Total health expenditure as % of GDP (2010)	10.13%
Per capita total health expenditure (PPP int \$) (2010)	\$522.03
Per capita government health expenditure (PPP int \$) (2010)	\$123.38
Life expectancy at birth (in years) (2009)	71
Human Development Index (2011)	0.843
Median age (in years) (2010)	37
Total fertility rate per woman (2010)	1.6

investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 93% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 89% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for pregnant women and blood donors. Hepatitis B and hepatitis C tests are compulsory for blood donors.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Georgia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Germany

Population (in millions) (2011)	<b>82.2</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$40 230</b>
Total health expenditure as % of GDP (2010)	<b>11.64%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$4332.34</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$3339.32</b>
Life expectancy at birth (in years) (2009)	<b>80</b>
Human Development Index (2011)	<b>0.940</b>
Median age (in years) (2010)	<b>44</b>
Total fertility rate per woman (2010)	<b>1.4</b>

The Government of Germany reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. There is one full-time equivalent staff member who works on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations. However, hepatitis B vaccination is recommended for people who inject drugs, prisoners and people living with HIV.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for chronic hepatitis C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are children aged 3–17 years and the general population. The last serosurvey was carried out in 2009–2011.

## Prevention of transmission

There is a national policy on hepatitis A vaccination, which recommends vaccination for health-care workers (including health-care waste handlers).

The government has not established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 90%–91% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood. Hepatitis B vaccination is also recommended for health-care waste handlers.

There is a national policy on injection safety in health-care settings but it is not known what type of syringes it recommends for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary

injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B, but not for hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

Publicly funded treatment for hepatitis B and hepatitis C is available to all people with national health insurance. In 2010, the government spent €7.8 million (US\$ 10 million) on outpatient care for hepatitis B and €1.8 million (US\$ 2.3 million) on outpatient care for hepatitis C, not including drug costs.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Germany did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Hungary

The Government of Hungary reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

It is not known whether the government held events for World Hepatitis Day 2012 or has funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: Májmoly Foundation.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E. Information was not provided on whether there is a national surveillance system for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports weekly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

Population (in millions) (2011)	<b>10.0</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$20 310</b>
Total health expenditure as % of GDP (2010)	<b>7.33%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1468.59</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$1018.85</b>
Life expectancy at birth (in years) (2009)	<b>74</b>
Human Development Index (2011)	<b>0.862</b>
Median age (in years) (2010)	<b>40</b>
Total fertility rate per woman (2010)	<b>1.4</b>

It is not known whether there is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth or what percentage of one-year-olds (ages 12–23 months) nationally in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, but it is not known what type of syringes it recommends for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

It is not known whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

It is not known whether the government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis. It is not known whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

It is not known whether the government has national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge, and are compulsory for certain health-care professionals.

Publicly funded treatment is available for hepatitis B and hepatitis C, but information was not provided on who is eligible for such treatment. The amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C is not known.

It is not known whether any drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

It is not known whether the Government of Hungary has a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Ireland

Population (in millions) (2011)	<b>4.5</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$34 180</b>
Total health expenditure as % of GDP (2010)	<b>9.19%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$3703.96</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$2561.56</b>
Life expectancy at birth (in years) (2009)	<b>80</b>
Human Development Index (2011)	<b>0.959</b>
Median age (in years) (2010)	<b>35</b>
Total fertility rate per woman (2010)	<b>2.1</b>

The Government of Ireland reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants and prisoners.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Positive Action, Transfusion Positive and Irish Haemophilia Society.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, and C, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports quarterly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but it is not known whether this is the case for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. Nationally, 90% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

It is not known whether there is a national policy on injection safety in health-care settings, and what type of syringes it recommends for therapeutic injections. It is not known whether single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood

products nationwide are screened for hepatitis B and hepatitis C.

Information was not provided on whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis. It is not known whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for people attending public clinics for drug users, women in antenatal care, people with sexually transmitted infections, and people seeking asylum. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. The following group is eligible for such treatment for hepatitis B: people with a medical card. The following group is eligible for such treatment for hepatitis C: people with a medical card or a Health Amendment Act card. Information was not provided on the amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil and entecavir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Ireland did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Israel

The Government of Israel reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for surveillance, vaccination, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, people living with HIV and travellers.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 1% is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports weekly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

Population (in millions) (2011)	7.6
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	\$27 110
Total health expenditure as % of GDP (2010)	7.63%
Per capita total health expenditure (PPP int \$) (2010)	\$2186.43
Per capita government health expenditure (PPP int \$) (2010)	\$1318.92
Life expectancy at birth (in years) (2009)	82
Human Development Index (2011)	0.888
Median age (in years) (2010)	30
Total fertility rate per woman (2010)	2.9

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 98% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 98% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, but information was not provided on whether they include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals, and are compulsory for blood donors and health-care workers.

Publicly funded treatment is available for hepatitis B and hepatitis C. Information was not provided regarding who is eligible for this. The amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Israel did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.



# Italy

Population (in millions) (2011)	<b>60.8</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$32 400</b>
Total health expenditure as % of GDP (2010)	<b>9.53%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$3021.72</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$2345.36</b>
Life expectancy at birth (in years) (2009)	<b>82</b>
Human Development Index (2011)	<b>0.914</b>
Median age (in years) (2010)	<b>43</b>
Total fertility rate per woman (2010)	<b>1.4</b>

The Government of Italy reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, prisoners, partners of carriers of HBsAg and hepatitis C virus, people cohabiting with carriers of HBsAg or hepatitis C virus, people undergoing multiple blood transfusions, people with haemophilia, people undergoing haemodialysis, people with chronic skin lesions of the hands (eczema, psoriasis), travellers to hepatitis B-endemic areas, police officers, firefighters, public officials and garbage disposal workers.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. In response to a question asking what percentage

of hepatitis cases are reported as “undifferentiated” or “unclassified”, the following information was provided: incidence rate/100 000 of unclassified hepatitis: 0.1.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, all newborn children of hepatitis B-infected mothers in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth, and 95% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary

injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis. Information was not provided on whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for hepatitis B and hepatitis C do not register by name. Hepatitis B and hepatitis C tests are free of charge for all individuals. Information was not provided on whether hepatitis B or hepatitis C tests are compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. Information was not provided regarding who is eligible for this. Information was not provided on the amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Italy did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.



# Kyrgyzstan

The Government of Kyrgyzstan reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for surveillance, vaccination, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, and treatment and care.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: people who inject drugs and people living with HIV.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: non-governmental organizations that work with sex workers, prisoners and people who inject drugs.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C and D, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 20% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are not registered nationally, but cases with HIV/hepatitis coinfection are.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak in-

Population (in millions) (2011)	5.4
Country classification (2012)	Low-income
Gross national income per capita (PPP int \$) (2011)	\$2180
Total health expenditure as % of GDP (2010)	6.18%
Per capita total health expenditure (PPP int \$) (2010)	\$140.26
Per capita government health expenditure (PPP int \$) (2010)	\$78.80
Life expectancy at birth (in years) (2009)	66
Human Development Index (2011)	0.734
Median age (in years) (2010)	24
Total fertility rate per woman (2010)	2.7

vestigations and other surveillance activities for hepatitis A, hepatitis B, hepatitis C and hepatitis D, but not for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 93%–95% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 98% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Information was not provided on whether health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is no national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis C, but not for hepatitis B.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge and are not compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of Kyrgyzstan welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Latvia

Population (in millions) (2011)	<b>2.2</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$17 700</b>
Total health expenditure as % of GDP (2010)	<b>6.68%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1092.52</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$667.99</b>
Life expectancy at birth (in years) (2009)	<b>72</b>
Human Development Index (2011)	<b>0.857</b>
Median age (in years) (2010)	<b>40</b>
Total fertility rate per woman (2010)	<b>1.5</b>

The Government of Latvia reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, infants, adolescents, patients on dialysis and blood donors.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012, but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Association HIV Latvia and the Hepatitis Association.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C and E, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 3% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly and annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

It is not known whether there is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly. The most recent serosurvey was conducted in 2000 and targeted pregnant women, boarding school students and new members of the military.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of reducing hepatitis B among children by 2011–2012.

Information was not provided on the percentage of newborn infants in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth. Nationally, 91% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units

(including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. Information was not provided on whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge at syringe exchange points for people who inject drugs. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment is available for people chronically infected with hepatitis B and hepatitis C. For people with chronic hepatitis B, public funding covers inpatient hospital treatment. For people with chronic hepatitis C, public funding covers 75% of all treatment costs. The amount spent by the government on such treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha and lamivudine. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Latvia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Lithuania

The Government of Lithuania reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012, but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme. Information was not provided about the identity of the civil society partners.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 7% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are not required to be reported to the government. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	3.3
Country classification (2012)	Upper-middle-income
Gross national income per capita (PPP int \$) (2011)	\$19 640
Total health expenditure as % of GDP (2010)	7.04%
Per capita total health expenditure (PPP int \$) (2010)	\$1299.46
Per capita government health expenditure (PPP int \$) (2010)	\$954.93
Life expectancy at birth (in years) (2009)	73
Human Development Index (2011)	0.853
Median age (in years) (2010)	39
Total fertility rate per woman (2010)	1.5

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 96% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 95% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings. Information was not provided on the type of syringes it recommends for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. Information was not provided on whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge and are not compulsory for members of any specific group.

All people with health insurance are eligible for publicly funded treatment for hepatitis B and hepatitis C. The government spends LTL 14.6 million (€4.3 million; US\$ 5.6 million) annually on hepatitis B and hepatitis C medications, and LTL 2.1 million (€624 000; US\$ 800 000) annually on hepatitis B and hepatitis C outpatient and inpatient services.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Lithuania welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Luxembourg

Population (in millions) (2011)	<b>0.5</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$64 260</b>
Total health expenditure as % of GDP (2010)	<b>7.77%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$6743.02</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$5691.67</b>
Life expectancy at birth (in years) (2009)	<b>81</b>
Human Development Index (2011)	<b>0.854</b>
Median age (in years) (2010)	<b>39</b>
Total fertility rate per woman (2010)	<b>1.6</b>

The Government of Luxembourg reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs and prisoners.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

It is not known whether the government has established the goal of eliminating hepatitis B.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. Nationally, 94% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

It is not known whether the government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis or for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge. Hepatitis B tests are compulsory for health-care workers, who should subsequently be vaccinated. Hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. People insured by the national health insurance system are eligible. The amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Luxembourg did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.



# Malta

The Government of Malta reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, prisoners and people living with HIV.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012, but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

Population (in millions) (2011)	0.4
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	\$24 480
Total health expenditure as % of GDP (2010)	8.65%
Per capita total health expenditure (PPP int \$) (2010)	\$2261.40
Per capita government health expenditure (PPP int \$) (2010)	\$1480.73
Life expectancy at birth (in years) (2009)	80
Human Development Index (2011)	0.866
Median age (in years) (2010)	39
Total fertility rate per woman (2010)	1.3

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but does not have a specific timeframe for this.

Nationally, 15% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 82% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education).

There are no national clinical guidelines for the management of viral hepatitis, but physicians have adopted the European clinical guidelines for the management of viral hepatitis. Information was not provided on whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. Information was not provided on who is eligible for this and the amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha and lamivudine. The following drug for treating hepatitis C is on the national essential medicines list or subsidized by the government: interferon alpha.

The Government of Malta did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Montenegro

Population (in millions) (2011)	<b>0.6</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$13 700</b>
Total health expenditure as % of GDP (2010)	<b>9.11%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1155.27</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$776.01</b>
Life expectancy at birth (in years) (2009)	<b>75</b>
Human Development Index (2011)	<b>0.831</b>
Median age (in years) (2010)	<b>36</b>
Total fertility rate per woman (2010)	<b>1.7</b>

The Government of Montenegro reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs and children.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: NGO Juventas and NGO Cazas.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 18% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are not registered nationally, but cases with HIV/hepatitis coinfection are.

The government publishes hepatitis disease reports in the annual report on communicable diseases in Montenegro.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are people who inject drugs, men who have sex with men, sex workers and prisoners. The last serosurvey was carried out in 2011.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 91% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

It is not known whether the government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are no national clinical guidelines for the management of viral hepatitis. It is not known whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals covered by national health insurance, and are compulsory for blood, organ and tissue donors.

Publicly funded treatment is available for hepatitis B and hepatitis C. The following people are eligible: individuals covered by national health insurance. The amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: pegylated interferon and lamivudine. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of Montenegro welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Netherlands (the)

The Government of the Netherlands reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. There are two to three full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants, prisoners, sex workers, people living with HIV and men who have sex with men.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: National Hepatitis Centrum.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for chronic hepatitis B.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 2% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis

Population (in millions) (2011)	16.7
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	\$43 140
Total health expenditure as % of GDP (2010)	11.92%
Per capita total health expenditure (PPP int \$) (2010)	\$5037.83
Per capita government health expenditure (PPP int \$) (2010)	\$3991.24
Life expectancy at birth (in years) (2009)	81
Human Development Index (2011)	0.944
Median age (in years) (2010)	41
Total fertility rate per woman (2010)	1.8

serosurveys are conducted regularly; the target populations are the general population and prisoners. The last serosurvey was carried out in 2010.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 99% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. It is not known what percentage of one-year-olds (ages 12–23 months) nationally in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is no national policy on injection safety in health-care settings, although there is a policy on needle-stick injuries. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for hepatitis B and hepatitis C do not register by name. Hepatitis B and hepatitis C tests are not free of charge for all individuals. Hepatitis B tests are free of charge for patients attending sexually transmitted infection (STI) clinics who meet specific criteria. Hepatitis C tests are free of charge for people living with HIV and men who have sex with men. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment for hepatitis B and hepatitis C is available to all people with social health insurance. The amount spent by the government on such treatment for hepatitis B and hepatitis C is not known.

It is not known whether any drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of the Netherlands did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Poland

Population (in millions) (2011)	<b>38.3</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$20 430</b>
Total health expenditure as % of GDP (2010)	<b>7.46%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1476.06</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$1071.94</b>
Life expectancy at birth (in years) (2009)	<b>76</b>
Human Development Index (2011)	<b>0.853</b>
Median age (in years) (2010)	<b>38</b>
Total fertility rate per woman (2010)	<b>1.4</b>

The Government of Poland reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers); people who inject drugs; people living with HIV; household contacts and other contacts of hepatitis B-infected persons; pre-surgical patients; and people at risk due to lifestyle, occupation, age and chronic diseases.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 2% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports. Information was not provided on how often these are published.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 98% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings. It is not known what type of syringes it recommends for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units

(including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, but they do not include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for blood and organ donors, pregnant women, and everyone who has public health insurance and is referred by a doctor. Hepatitis B and hepatitis C tests are compulsory for blood and organ donors.

Publicly funded treatment is available for hepatitis B and hepatitis C. Publicly insured patients are eligible for this based on medical indications. The government spent Zł 65.5 million (US\$ 20.1 million) on publicly funded treatment for hepatitis B in 2011. The amount spent by the government on such treatment for hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir and tenofovir. The following drugs for treating hepatitis C are included on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Poland welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Republic of Moldova (the)

The Government of the Republic of Moldova reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is a designated governmental unit/departments responsible solely for coordinating and/or carrying out viral hepatitis-related activities: the National Center for Public Health Laboratory for Epidemiology of Viral Hepatitis. It has seven staff members. There are 29 full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants, prisoners, people living with HIV, contacts of people with acute and chronic viral hepatitis, and medical students.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: Politics and Analytics in Health.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 7.6% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports monthly and annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory

Population (in millions) (2011)	3.5
Country classification (2012)	Lower-middle-income
Gross national income per capita (PPP int \$) (2011)	\$3640
Total health expenditure as % of GDP (2010)	11.68%
Per capita total health expenditure (PPP int \$) (2010)	\$360.40
Per capita government health expenditure (PPP int \$) (2010)	\$165.05
Life expectancy at birth (in years) (2009)	69
Human Development Index (2011)	0.746
Median age (in years) (2010)	35
Total fertility rate per woman (2010)	1.5

capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are children under the age of 17 years, the general population, people who inject drugs, patients on haemodialysis, blood donors and family members of those with hepatitis B and hepatitis C. The last serosurvey was carried out in 2012.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of reducing hepatitis B to a level that achieves parity with the European Union average by 2016.

Nationally, 99.5% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 99.3% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is no national policy on injection safety in health-care settings. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training, postgraduate training, and at conferences and seminars.

There are national clinical guidelines for the management of viral hepatitis, but they do not include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name, and there is open access to their names. Hepatitis B and hepatitis C tests are free of charge for all individuals, and are compulsory for health-care workers, patients on haemodialysis, donors and those in regular contact with people infected with hepatitis B or hepatitis C.

Publicly funded treatment for hepatitis B and hepatitis C is available to all people with national health insurance. The amount spent by the government on such treatment is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: pegylated interferon and lamivudine. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of the Republic of Moldova welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Russian Federation (the)

Population (in millions) (2011)	<b>142.8</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$20 560</b>
Total health expenditure as % of GDP (2010)	<b>5.07%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$998.36</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$619.73</b>
Life expectancy at birth (in years) (2009)	<b>68</b>
Human Development Index (2011)	<b>0.777</b>
Median age (in years) (2010)	<b>38</b>
Total fertility rate per woman (2010)	<b>1.5</b>

The Government of the Russian Federation reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

The following designated governmental units/departments are responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Central Research Institute of Epidemiology Reference Center for Viral Hepatitis and Expert Group on Viral Hepatitis of the Ministry of Health. Information was not provided regarding the number of staff members. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, people living with HIV, food industry workers, and sewage and sanitation workers.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: Together against Hepatitis.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of acute and chronic hepatitis cases, 5.7% and 1.3%,

respectively, are reported as “undifferentiated” or “unclassified” hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly and annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C but not for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly. Target populations include children, the general population, people who inject drugs and select populations such as health-care workers and patients who are thought to be at increased risk for viral hepatitis. The last serosurvey was carried out in 2012.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but the timeframe has not yet been set.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 97.3% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

It is not known whether there are national clinical guidelines for the management of viral hepatitis, but there are for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for donors, pregnant women, recipients of blood and blood components, and newborns of women with acute and chronic hepatitis B. Hepatitis B and hepatitis C tests are compulsory for selected populations, including health-care workers and patients who are thought to be at increased risk for viral hepatitis.

Publicly funded treatment is available for hepatitis B and hepatitis C. The amount spent by the government on such treatment is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, entecavir and telbivudine. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of the Russian Federation welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# San Marino

The Government of San Marino reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: health-care workers (including health-care waste handlers).

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are no standard case definitions for hepatitis. Information was not provided on whether deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	<b>0.03</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	--
Total health expenditure as % of GDP (2010)	<b>7.13%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$2853.17</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$2435.42</b>
Life expectancy at birth (in years) (2009)	<b>83</b>
Human Development Index (2011)	--
Median age (in years) (2010)	--
Total fertility rate per woman (2010)	<b>1.5</b>

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, less than 1% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 89% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis

E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through on-the-job training.

There are no national clinical guidelines for the management of viral hepatitis. Information was not provided on whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are compulsory for blood donors.

Publicly funded treatment is available for hepatitis B and hepatitis C. Information was not provided on who is eligible for this or on the amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil and entecavir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of San Marino welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Serbia

Population (in millions) (2011)	<b>9.9</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$11 540</b>
Total health expenditure as % of GDP (2010)	<b>10.36%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1169.07</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$723.31</b>
Life expectancy at birth (in years) (2009)	<b>74</b>
Human Development Index (2011)	<b>0.824</b>
Median age (in years) (2010)	<b>38</b>
Total fertility rate per woman (2010)	<b>1.6</b>

The Government of Serbia reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs and people living with HIV.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: NGO HRONOS.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C and E, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Less than 1% of hepatitis cases are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are men who have sex with men, sex workers and Roma youth. The last serosurvey was carried out in 2010.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 96% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units

(including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

It is not known whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate specialization.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for pregnant women, people living with HIV, patients who are referred and patients on haemodialysis. Hepatitis B and hepatitis C tests are compulsory for blood donors, voluntary donors of tissues and organs, pregnant women and patients on haemodialysis.

Publicly funded treatment for hepatitis B and hepatitis C is available to all people with health insurance. Information was not provided on the amount spent by the government on such treatment.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, lamivudine, adefovir dipivoxil and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of Serbia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Slovakia

The Government of Slovakia reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs and people living with HIV.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

It is not known whether there is a national public health research agenda for viral hepatitis or whether viral hepatitis sero-surveys are conducted regularly.

Population (in millions) (2011)	5.5
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	\$22 130
Total health expenditure as % of GDP (2010)	8.79%
Per capita total health expenditure (PPP int \$) (2010)	\$2060.24
Per capita government health expenditure (PPP int \$) (2010)	\$1356.77
Life expectancy at birth (in years) (2009)	75
Human Development Index (2011)	0.875
Median age (in years) (2010)	37
Total fertility rate per woman (2010)	1.3

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

It is not known whether the government has established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth or the percentage of one-year-olds nationally (ages 12–23 months) in a given recent year who received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Information was not provided on whether health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

It is not known whether there is a national policy on injection safety in health-care settings. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

It is not known whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through postgraduate training.

There are national clinical guidelines for the management of viral hepatitis. It is not known whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B, but information was not provided on who is eligible for this. Information was not provided on whether publicly funded treatment is available for hepatitis C, or on the amount spent by the government on such treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Slovakia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Slovenia

Population (in millions) (2011)	<b>2.0</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$26 510</b>
Total health expenditure as % of GDP (2010)	<b>9.41%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$2551.56</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$1879.49</b>
Life expectancy at birth (in years) (2009)	<b>79</b>
Human Development Index (2011)	<b>0.935</b>
Median age (in years) (2010)	<b>42</b>
Total fertility rate per woman (2010)	<b>1.4</b>

The Government of Slovenia reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is a special national multidisciplinary expert team. However, there are no people working full-time on hepatitis-related activities in any government agency/body.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, prisoners, people living with HIV and people undergoing immunosuppressive therapy.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011. However, an expert team sanctioned by the government has prepared events for World Hepatitis Day since 2008. These have included mass media awareness campaigns on prevention and control, as well as anonymous free testing for hepatitis B and hepatitis C.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Stigma and Legebitra.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted every six to 12 months; the target populations are the general population, people who inject drugs, blood donors, health-care workers and pregnant women. Information was not provided on when the last serosurvey was carried out.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth or the percentage of one-year-olds nationally (ages 12–23 months) in a given recent year who received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles

and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training, postgraduate training and viral hepatitis conferences.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name, and there is open access to their names. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for pregnant women, prisoners, people who inject drugs and family members of hepatitis B carriers. Hepatitis B and hepatitis C tests are compulsory for health-care workers.

Publicly funded treatment is available for hepatitis B and hepatitis C. Everyone with national health insurance is eligible for this. Information was not provided on the amount spent by the government on such treatment.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin and boceprevir.

The Government of Slovenia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Spain

The Government of Spain reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health workers (including health-care waste handlers), people who inject drugs and people living with HIV.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 27% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, B and C, but it is not known whether this is the case for hepatitis E.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	46.5
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	\$31 400
Total health expenditure as % of GDP (2010)	9.54%
Per capita total health expenditure (PPP int \$) (2010)	\$3027.24
Per capita government health expenditure (PPP int \$) (2010)	\$2204.28
Life expectancy at birth (in years) (2009)	82
Human Development Index (2011)	0.878
Median age (in years) (2010)	40
Total fertility rate per woman (2010)	1.5

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

Information was not provided on whether the government has established the goal of eliminating hepatitis B.

Nationally, 96.6% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 96.6% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for hepatitis B and hepatitis C do not register by name. Hepatitis B and hepatitis C tests are free of charge for all individuals and are compulsory for blood donors.

Publicly funded treatment for hepatitis B and hepatitis C is available to all people with health insurance. The government spends €13 329 (US\$ 17 140) on such treatment for hepatitis B per patient per year, and €39 940 (US\$ 51 359) for hepatitis C per patient per year.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Spain did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Sweden

Population (in millions) (2011)	<b>9.4</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$42 200</b>
Total health expenditure as % of GDP (2010)	<b>9.63%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$3756.86</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$3046.78</b>
Life expectancy at birth (in years) (2009)	<b>81</b>
Human Development Index (2011)	<b>0.936</b>
Median age (in years) (2010)	<b>41</b>
Total fertility rate per woman (2010)	<b>1.9</b>

The Government of Sweden reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Swedish Institute for Communicable Disease Control, Coordination of HIV and STI Prevention Unit. It has two staff members. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants, prisoners, people living with HIV, men who have sex with men, and partners and children of hepatitis B-infected people.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Convictus; the Swedish Drug Users Union; and the Swedish Federation for Rights, Independence, Health and Equality.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports annually and, if needed, during outbreaks.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target population is children aged 14–16 years. The last serosurvey was carried out in 2007.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of reducing hepatitis B by 2016.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth, or what percentage of one-year-olds (ages 12–23 months) nationally in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. Information was not provided on whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are compulsory for blood donors.

Publicly funded treatment for hepatitis B and hepatitis C is available to the entire population. The amount spent by the government on such treatment is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Sweden did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.



# Switzerland

The Government of Switzerland reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: people who inject drugs.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: Swiss Experts in Viral Hepatitis (SEVHep).

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

The government publishes hepatitis disease reports weekly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	7.7
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	\$52 570
Total health expenditure as % of GDP (2010)	11.52%
Per capita total health expenditure (PPP int \$) (2010)	\$5394.04
Per capita government health expenditure (PPP int \$) (2010)	\$3183.56
Life expectancy at birth (in years) (2009)	82
Human Development Index (2011)	0.926
Median age (in years) (2010)	41
Total fertility rate per woman (2010)	1.5

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 30% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B, but there are recommendations about this issue.

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is no national policy on injection safety in health-care settings. Single-use or auto-disable syringes, needles and canulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, but they do not include recommendations for cases with HIV coinfection. There are no national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for health-care workers, and organ and blood donors. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Switzerland did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Tajikistan

Population (in millions) (2011)	<b>7.0</b>
Country classification (2012)	<b>Low-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$1937</b>
Total health expenditure as % of GDP (2010)	<b>5.98%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$128.43</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$34.24</b>
Life expectancy at birth (in years) (2009)	<b>68</b>
Human Development Index (2011)	<b>0.726</b>
Median age (in years) (2010)	<b>20</b>
Total fertility rate per woman (2010)	<b>3.3</b>

The Government of Tajikistan reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are people who inject drugs, men who have sex with men, sex workers, prisoners, pregnant women and people living with HIV. The last serosurvey was carried out in 2011.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 98% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 96% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are not always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

It is not known whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis, but there are for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for people living with HIV and blood donors. Hepatitis B and hepatitis C tests are compulsory for blood donors and medical staff.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

No drug for treating hepatitis B is on the national essential medicines list or subsidized by the government. The following drug for treating hepatitis C is on the national essential medicines list or subsidized by the government: ribavirin.

The Government of Tajikistan welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# The former Yugoslav Republic of Macedonia

The Government of the former Yugoslav Republic of Macedonia reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs and people living with HIV.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Hep-ta and HOPS.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 9% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports weekly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	2.1
Country classification (2012)	Upper-middle-income
Gross national income per capita (PPP int \$) (2011)	\$11 090
Total health expenditure as % of GDP (2010)	7.09%
Per capita total health expenditure (PPP int \$) (2010)	\$790.97
Per capita government health expenditure (PPP int \$) (2010)	\$504.26
Life expectancy at birth (in years) (2009)	74
Human Development Index (2011)	0.776
Median age (in years) (2010)	36
Total fertility rate per woman (2010)	1.4

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but did not provide information about a specific time-frame for this.

Nationally, 98% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 96% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, but they do not include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for people who inject drugs, blood donors and people living with HIV. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C, but information was not provided on who is eligible for this, or on the amount spent by the government on such treatment.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and lamivudine. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of the former Yugoslav Republic of Macedonia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Turkey

Population (in millions) (2011)	<b>73.6</b>
Country classification (2012)	<b>Upper-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$16 940</b>
Total health expenditure as % of GDP (2010)	<b>6.74%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$1029.14</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$773.95</b>
Life expectancy at birth (in years) (2009)	<b>75</b>
Human Development Index (2011)	<b>0.704</b>
Median age (in years) (2010)	<b>28</b>
Total fertility rate per woman (2010)	<b>2.1</b>

The Government of Turkey reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of hepatitis B. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, and prevention of transmission in health-care settings.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs and prisoners.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012, but has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: Viral Hepatitle Savaşım Derneği.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 97% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 96% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis or for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name, and there is open access to their names. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for all of the defined risk groups. Hepatitis B and hepatitis C tests are compulsory for blood donors, transplant providers and preoperative patients.

Publicly funded treatment for hepatitis B and hepatitis C is available to everyone under the age of 18 years and to those 18 years or older if they have health insurance. (In Turkey, 99% of people have health insurance.) The government spends €85 million (US\$ 109.3 million) annually on drugs for publicly funded treatment for hepatitis B and hepatitis C. It is not known how much the government spends on other components of publicly funded treatment.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine and adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Turkey did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.



# Ukraine

The Government of Ukraine reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

It is not known whether the government held events for World Hepatitis Day 2012. It has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: NGO "Stop Hepatitis" and Office IRF in Ukraine.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B and C.

There are no standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but information was not provided on whether this is the case for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis

Population (in millions) (2011)	45.2
Country classification (2012)	Lower-middle-income
Gross national income per capita (PPP int \$) (2011)	\$7040
Total health expenditure as % of GDP (2010)	7.72%
Per capita total health expenditure (PPP int \$) (2010)	\$518.90
Per capita government health expenditure (PPP int \$) (2010)	\$293.84
Life expectancy at birth (in years) (2009)	68
Human Development Index (2011)	0.810
Median age (in years) (2010)	39
Total fertility rate per woman (2010)	1.4

serosurveys are conducted regularly; the target population is people who inject drugs. The last serosurvey was carried out in 2011.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 70% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. Among children who had received the first dose within 24 hours of birth, 70%–80% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis, but there are for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free of charge for pregnant women, blood donors and military conscripts. Hepatitis B and hepatitis C tests are compulsory for pregnant women, blood donors and military conscripts.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: pegylated interferon and ribavirin.

The Government of Ukraine welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# United Kingdom of Great Britain and Northern Ireland (the)

Population (in millions) (2011)	<b>62.4</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$36 010</b>
Total health expenditure as % of GDP (2010)	<b>9.64%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$3479.56</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$2918.89</b>
Life expectancy at birth (in years) (2009)	<b>80</b>
Human Development Index (2011)	<b>0.879</b>
Median age (in years) (2010)	<b>40</b>
Total fertility rate per woman (2010)	<b>1.9</b>

The Government of the United Kingdom of Great Britain and Northern Ireland reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of hepatitis C. It includes components for raising awareness, surveillance, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants, prisoners, the homeless, people living with HIV, people at risk for STI and pregnant women (antenatal screening).

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012, but has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Hepatitis C Trust, Addaction, British Liver Trust, Exchange Supplies, Needle Exchange Forum and Injecting Advice.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C and E, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis,

are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports quarterly and annually.

Hepatitis outbreaks are not required to be reported to the government. There is adequate laboratory capacity nationally to support investigation of outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are people who inject drugs, female sex workers and men who have sex with men. The last serosurvey was carried out in 2011.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth or the percentage of one-year-olds nationally (ages 12–23 months) in a given recent year who received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, but it is not known what type of syringes it recommends for therapeutic injections. It is not known whether single-use or auto-disable

syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis, but there are for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals, and are compulsory for health-care workers who wish to do exposure-prone procedures.

Publicly funded treatment for hepatitis B and hepatitis C is available to the entire population. The amount spent by the government on such treatment is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of the United Kingdom of Great Britain and Northern Ireland did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Uzbekistan

The Government of Uzbekistan reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for vaccination, prevention in general and prevention of transmission in health-care settings.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

It is not known whether liver cancer cases are registered nationally. Cases with HIV/hepatitis coinfection are not registered nationally.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of outbreaks and other surveillance activities.

Population (in millions) (2011)	27.8
Country classification (2012)	Lower-middle-income
Gross national income per capita (PPP int \$) (2011)	\$3420
Total health expenditure as % of GDP (2010)	5.31%
Per capita total health expenditure (PPP int \$) (2010)	\$168.36
Per capita government health expenditure (PPP int \$) (2010)	\$87.39
Life expectancy at birth (in years) (2009)	69
Human Development Index (2011)	0.736
Median age (in years) (2010)	24
Total fertility rate per woman (2010)	2.4

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, approximately 90% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and approximately 90% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Information was not provided on whether health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name, and there is open access to their names. Hepatitis B and hepatitis C tests are not free of charge. Information was not provided on whether hepatitis B or hepatitis C tests are free of charge for any specific group. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

No drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Uzbekistan welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).







# Chapter 7:

## WHO South-East Asia Region

Eleven Member States make up the World Health Organization (WHO) South-East Asia Region, which has a total population of 1.83 billion.<sup>1</sup> India, with a population of 1.24 billion, accounts for approximately two thirds of the Region's population.<sup>1</sup> The South-East Asia Region hosts one fourth of the world's population and carries about 30% of the world's total disease burden.<sup>2</sup> In 2009, life expectancy at birth for the South-East Asia Region was 65 years.<sup>3</sup>

The greatest contributors to morbidity and mortality are noncommunicable diseases: cardiovascular diseases and cancer account for about 30% and 9% of deaths, respectively.<sup>4</sup> Age-standardized mortality rates (2008) indicate that communicable diseases account for about 30% of deaths.<sup>1</sup> The South-East Asia Region has high child mortality, with three fourths of these deaths resulting from diarrhoeal diseases, pneumonia and neonatal conditions.<sup>5</sup> The Region is home to more than two thirds of the world's malnourished children.<sup>5</sup> Unsafe water and inadequate sanitation and hygiene pose major health risks to both children and adults; the Region has the highest incidence of diarrhoeal disease in the world.<sup>5</sup>

Responses to the WHO/Alliance survey were received from all 11 Member States in the South-East Asia Region (100%).

**Box 1.** Responses to the 2012 Global Hepatitis Survey: WHO South-East Asia Region

### Member States that submitted surveys:

- |   |             |               |
|---|-------------|---------------|
| • Bangladesh                            | • India     | • Nepal       |
| • Bhutan                                | • Indonesia | • Sri Lanka   |
| • Democratic People's Republic of Korea | • Maldives  | • Thailand    |
|   | • Myanmar   | • Timor-Leste |

<sup>1</sup> *World population prospects: the 2010 Revision*. New York, United Nations, Department of Economic and Social Affairs, Population Division, 2011.

<sup>2</sup> *11 questions about the 11 SEAR countries*. New Delhi, Department of Health Systems Development, WHO Regional Office for South-East Asia, 2007. Available at: [http://www.searo.who.int/entity/health\\_situation\\_trends/documents/11\\_health\\_questions\\_about\\_11\\_SEAR\\_countries.pdf](http://www.searo.who.int/entity/health_situation_trends/documents/11_health_questions_about_11_SEAR_countries.pdf) (accessed on 13 May 2013).

<sup>3</sup> *World health statistics 2012*. Geneva, WHO, 2012. Available at: [http://www.who.int/gho/publications/world\\_health\\_statistics/2012/en/](http://www.who.int/gho/publications/world_health_statistics/2012/en/) (accessed on 13 May 2013).

<sup>4</sup> *Health situation in the South-East Asia Region 2001–2007*. New Delhi, WHO Regional Office for South-East Asia, 2008. Available at: [http://203.90.70.117/PDS\\_DOCS/B3226.pdf](http://203.90.70.117/PDS_DOCS/B3226.pdf) (accessed on 13 May 2013).

<sup>5</sup> Dhillon PK et al. Status of epidemiology in the WHO South-East Asia region: burden of disease, determinants of health and epidemiological research, workforce and training capacity. *International Journal of Epidemiology*, 2012, 41(3):847–860.

### Viral hepatitis in the WHO South-East Asia Region

The endemicity of hepatitis A in the Region ranges from low (<50% exposed by the age of 30 years) in the eastern areas to high (>90% exposed by the age of 10 years) in the southern areas.<sup>a</sup>

Approximately 14 million cases of hepatitis E infection occur annually in the Region, which accounts for more than half the global burden. Indeed, the prevalence of hepatitis E is estimated to be above 25% in those >50 years of age.<sup>b</sup>

The seroprevalence of hepatitis B in the young age groups of 0–14 years is 1.2%–1.4%. However, in adults, the seroprevalence is higher, at above 5%.<sup>c</sup>

There are up to 50 million people with chronic hepatitis C infection in the South Asia.<sup>d</sup> Because of the asymptomatic nature of chronic hepatitis B and hepatitis C, most people infected with these are not aware of their status until they have symptoms of cirrhosis or liver cancer many years later.<sup>c,d</sup>

<sup>a</sup> Jacobsen K. *The global prevalence of hepatitis A virus infection and susceptibility: a systematic review*. Geneva, Department of Immunization, Vaccines and Biologicals, World Health Organization, 2010 [WHO/IVB 10.01].

<sup>b</sup> Rein DB et al. The global burden of hepatitis E virus genotypes 1 and 2 in 2005. *Hepatology*, 2012, 55:988–997.

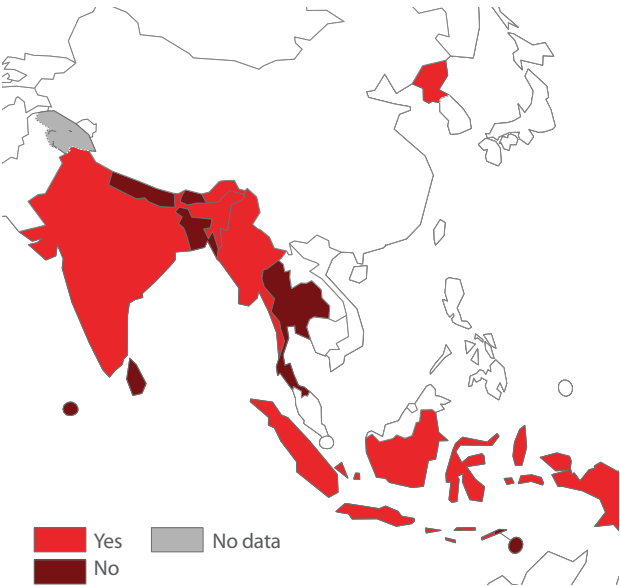
<sup>c</sup> Ott JJ, Stevens GA, Groeger J, Wiersma ST. Global epidemiology of hepatitis B virus infection: new estimates of age-specific HBsAg seroprevalence and endemicity. *Vaccine*, 2012, 30:2212–2219.

<sup>d</sup> Mohd Hanafiah K, Groeger J, Flaxman AD, Wiersma ST. Global epidemiology of hepatitis C virus infection: new estimates of age-specific antibody to HCV seroprevalence. *Hepatology*, 2013, 57:1333–1342.

National coordination

Four responding Member States (36.4%) reported the existence of a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis (Figure 1). Three of the four Member States with a strategy or plan (Democratic People's Republic of Korea, India and Indonesia) reported that it focuses exclusively on viral hepatitis, and one (Myanmar) reported that it addresses other diseases as well.

Figure 1. Responses to the question, "Is there a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis?"



The four Member States that reported the existence of a strategy or plan were asked about its specific components. All four reported the inclusion of components for raising awareness, surveillance, vaccination, general prevention, prevention of transmission in health-care settings, and treatment and care. Three reported the inclusion of a component for the prevention of transmission via injecting drug use.

Three responding Member States (27.3%) reported that they have a governmental unit or department responsible solely for viral hepatitis-related activities. Member States that did so were asked to indicate the number of staff members in the unit or department. Responses ranged from 4 to 20 (median, 4), with Myanmar reporting the largest number.

Member States were asked to report the number of people working full-time on hepatitis-related activities in all government agencies or bodies. Among the three Member

States that provided data for this question, the number ranged from 0 to 49 (median, 30.5), with Myanmar reporting the largest number.

Nine responding Member States (81.8%) reported that they have a viral hepatitis prevention and control programme that includes activities targeting specific populations. The populations most commonly targeted were health-care workers, including health-care waste handlers (77.8% of responding Member States within this subset) and people who inject drugs (44.4% of responding Member States within this subset). The following populations were each targeted by one third of responding Member States within this subset: migrants, prisoners and people living with HIV. Groups identified less frequently included indigenous populations, low-income populations, those who are uninsured and those who are homeless.

Awareness-raising and partnerships

One responding Member State (9.1%) reported that it had held events for World Hepatitis Day 2012 (28 July). Since January 2011, three responding Member States (27.3%) had funded some type of viral hepatitis public awareness campaign other than World Hepatitis Day (Table 1).

Four responding Member States (36.4%) reported that they collaborated with civil society groups within their countries to develop and implement the governmental viral hepatitis prevention and control programme. For example, Bangladesh reported collaborating with the Liver Foundation of Bangladesh, and Myanmar reported collaborating with health-care provider associations and with the Myanmar Red Cross Association. (Further examples can be found in the summaries of country findings later in this chapter.)

Table 1. Topics of public awareness campaigns on viral hepatitis held in Member States since January 2011 (N=3)

	Democratic People's Republic of Korea	Indonesia	Myanmar
General information about hepatitis and its transmission	X	X	X
Vaccination for hepatitis A and hepatitis B	X		X
Importance of knowing one's hepatitis B and hepatitis C status	X	X	
Safe water and good sanitation	X	X	
Safer sex practices			X
Harm reduction for people who inject drugs			X
Safe workplace practices	X	X	X

### Evidence-based policy and data for action

Six responding Member States (54.5%) reported that they have routine surveillance for viral hepatitis; details appear in [Table 2](#).

Seven responding Member States (63.6%) indicated that their countries have standard case definitions for hepatitis infection and seven (63.6%) indicated that their countries have a central registry for the reporting of deaths, including hepatitis deaths.

Two Member States reported on the proportion of hepatitis cases and deaths registered as “undifferentiated” or “unclassified” hepatitis. One reported this to be 25.1% and the other less than 5.0%. Additional survey findings about surveillance are presented in [Table 3](#).

**Table 2.** Types of surveillance in Member States that reported the existence of routine surveillance for viral hepatitis (N=6)

	Yes (%)	No (%)	Do not know (%)	No response (%)
There is a national surveillance system for <b>acute</b> hepatitis infection for the following forms of hepatitis:				
hepatitis A	83.3	0	0	16.7
hepatitis B	100	0	0	0
hepatitis C	83.3	0	0	16.7
hepatitis D	33.3	33.3	0	33.3
hepatitis E	33.3	33.3	0	33.3
There is a national surveillance system for <b>chronic</b> hepatitis infection for the following forms of hepatitis:				
hepatitis B	33.3	66.7	0	0
hepatitis C	33.3	66.7	0	0
hepatitis D	0	83.3	0	16.7

**Table 3.** Data registration and surveillance (N=11)

	Yes (%)	No (%)	Do not know (%)	No response (%)
Liver cancer cases are registered nationally	63.6	36.4	0	0
Cases with HIV/hepatitis coinfection are registered nationally	45.5	36.4	18.2	0
Hepatitis outbreaks are reported	81.8	18.2	0	0
If YES – Hepatitis outbreaks are further investigated (N=115)	100	0	0	0

Member States were asked how often hepatitis disease reports are published. Of the responding Member States, 45.5% said that reports are not published. Among the six Member States with published reports, one said reports are published weekly, one weekly and annually, two monthly and annually, and one annually. The sixth said reports are published in journal articles.

Three responding Member States (27.3%, Democratic People's Republic of Korea, Indonesia and Myanmar) reported the existence of a national public health research agenda for viral hepatitis.

Two responding Member States (18.2%, the Democratic People's Republic of Korea and Myanmar) reported that viral hepatitis serosurveys are conducted regularly. Myanmar indicated that serosurveys take place at least once per year. The Democratic People's Republic of Korea said that its serosurveys target children under the age of 17 years, while Myanmar said that its serosurveys target children over the age of 5 years and the general population. The most recent serosurvey in the Democratic People's Republic of Korea was conducted in 2009, and the most recent one in Myanmar was conducted in 2010.

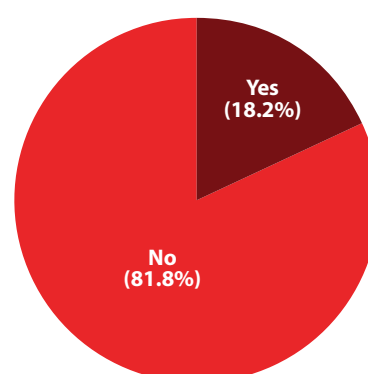
### Prevention of transmission

No responding Member State reported that they have a national policy on hepatitis A vaccination.

Two responding Member States (18.2%) reported that they have established the goal of eliminating hepatitis B ([Figure 2](#)). Member States with this goal were asked to specify the timeframe in which they seek to eliminate hepatitis B. The Democratic People's Republic of Korea said by 2016, and Sri Lanka said by 2015.

Member States were asked to report, for a given recent year, the percentage of newborn infants who had received the first dose of hepatitis B vaccine within 24 hours of birth. Among the seven governments providing this information, responses ranged from 0% to 99.9% (median, 75.4%). Governments were

**Figure 2.** Responses to the question, “Has your government established the goal of eliminating hepatitis B?” (N=11)



also asked to report, for a given recent year, the percentage of one-year-olds (ages 12–23 months) who had received three doses of hepatitis B vaccine. Among the eight governments providing this information, responses ranged from 38.0% to 99.0% (median, 93.9%).

Seven responding governments (63.6%) reported the existence of a national policy that specifically targets mother-to-child transmission of hepatitis B; details are presented in Table 4. Five governments with such a policy indicated that one component of the policy calls for screening of all pregnant women for hepatitis B. Seven governments with such a policy indicated that one component of the policy calls for administering the second and third doses of hepatitis B vaccine to all infants within 12 months of birth.

**Table 4.** Activities called for in national policy targeting mother-to-child transmission of hepatitis B (N=7)

	All pregnant women are screened for hepatitis B	All pregnant women found to have hepatitis B are counselled	Health-care providers follow up with all pregnant women found to have hepatitis B during pregnancy for the purpose of encouraging them to give birth at health-care facilities	Upon delivery, all infants born to women with hepatitis B receive hepatitis B immunoglobulin	All infants receive the first dose of hepatitis B vaccine within 24 hours of birth
Bhutan	X	X	X	X	X
Democratic People's Republic of Korea	X	X	X		X
India					X
Maldives	X	X	X	X	X
Myanmar	X	X	X		
Nepal		X			X
Thailand	X	X		X	X
<b>TOTAL</b>	<b>5</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>6</b>

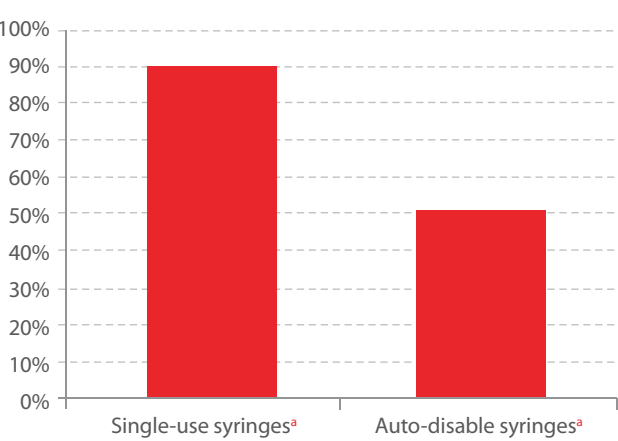
Five responding Member States (45.5%) reported the existence of a specific national strategy and/or policy for preventing hepatitis B and hepatitis C infection in health-care settings.

Five responding Member States (45.5%) reported that health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

Ten responding Member States (90.9%) reported the existence of a national policy on injection safety in health-care settings. These ten Member States were asked which types of syringes

the policy recommends for therapeutic injections. Single-use syringes are recommended in 90.0% of policies, and auto-disable syringes in half of policies (Figure 3).

**Figure 3.** Proportion of responding Member States with national policies on injection safety in health-care settings which recommend single-use syringes and auto-disable syringes for therapeutic injections (N=10)



<sup>a</sup> Respondents could select both “single-use syringes” and “auto-disable syringes”.

Ten responding Member States (90.9%) reported that single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Member States were asked for official estimates of the number and percentage of unnecessary injections administered annually in health-care settings (e.g. injections that are given when an equivalent oral medication is available). Ten Member States reported that the figures are not known and one did not reply.

Additional findings relating to the prevention of hepatitis transmission are presented in Table 5.

**Screening, care and treatment**

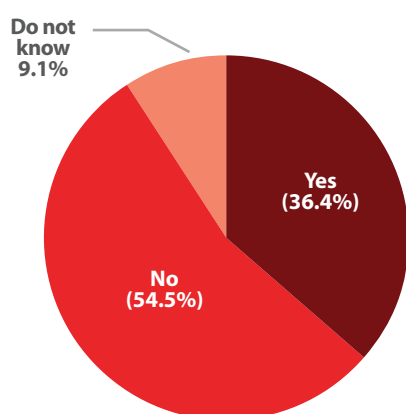
Member States were asked how health professionals in their countries obtain the skills and competencies required to effectively care for people with viral hepatitis. Eight Member States indicated that these are obtained in schools for health professionals (pre-service education) and on-the-job training.

Four responding Member States (36.4%) reported the existence of national clinical guidelines for the management of viral hepatitis (Figure 4). Two of these four responding Member States (50.0%) indicated that the guidelines include recommendations for cases with HIV coinfection.



**Table 5.** Hepatitis prevention: policies, practices and guidelines (N=11)

	Yes (%)	No (%)	Do not know (%)
There is a national infection control policy for blood banks	100	0	0
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B	90.9	9.1	0
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis C	81.8	9.1	9.1
There is a national policy relating to the prevention of viral hepatitis among people who inject drugs	18.2	63.6	18.2
The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety	45.5	54.5	0

**Figure 4.** Responses to the question, “Are there national clinical guidelines for the management of viral hepatitis?” (N=11)

Three responding Member States (27.3%) indicated that they have a national policy relating to screening and referral to care for hepatitis B. Two (18.2%) reported having such a policy for hepatitis C.

Regarding hepatitis B testing, ten responding Member States (90.9%) indicated that people register by name for testing. Eight of the ten members of that subset (80.0%) indicated that the names are kept confidential. Five responding Member States (45.5%) reported that the hepatitis B test is free of charge for all individuals. Among the six other Member States, Myanmar and Thailand reported that the hepatitis B test is free of charge for members of specific groups. Groups identified included blood donors and pregnant women. Six responding Member States (54.5%) reported that the hepatitis B test is compulsory for members of specific groups. Groups identified included blood donors and people living with HIV.

Regarding hepatitis C testing, ten responding Member States (90.9%) indicated that people register by name for testing. Eight of the ten members of that subset (80.0%) indicated that the names are kept confidential. Five responding Member States (45.5%) reported that the hepatitis C test is free of charge for all individuals. Among the six other Member States, Myanmar and Thailand reported that the hepatitis C test is free of charge for members of specific groups. Groups identified included blood donors and pregnant women. Six responding Member States (54.5%) reported that the hepatitis C test is compulsory for members of specific groups. Groups identified included blood donors and people living with HIV.

Six responding Member States (54.5%) reported that publicly funded treatment is available for hepatitis B and six (54.5%) that publicly funded treatment is available for hepatitis C. Information was not provided by any Member State regarding the amount spent on publicly funded treatment for hepatitis B and hepatitis C.

Nine responding Member States (81.8%) reported that at least one available drug for treating hepatitis B is on the national essential medicines list (Table 6). The drugs most commonly reported were lamivudine, interferon alpha, tenofovir and pegylated interferon.

Seven responding Member States (63.6%) reported that at least one available drug for treating hepatitis C is on the national essential medicines list. The drugs most commonly reported were interferon alpha, pegylated interferon and ribavirin.

#### World Health Organization assistance

Member States were asked to indicate areas in which they might want assistance from WHO for the prevention and control of viral hepatitis. Respondents most commonly selected the following: developing the national plan for viral hepatitis prevention and control (81.8%), estimating the national burden of viral hepatitis (81.8%) and conducting viral hepatitis surveillance (81.8%) (Table 7). Responses from individual Member States appear in Annex C.

**Table 6.** Proportion of Member States reporting drugs for treating hepatitis B and C on national essential medicines lists or subsidized by governments

<b>Drugs for treating hepatitis B</b>	<b>% of Member States reporting its inclusion (N=12)</b>
Lamivudine	63.6
Interferon alpha	45.5
Tenofovir	45.5
Pegylated interferon	36.4
Entecavir	36.4
Adefovir dipivoxil	36.4
Telbivudine	27.3
<b>Drugs for treating hepatitis C</b>	<b>% of Member States reporting its inclusion (N=12)</b>
Ribavirin	54.5
Pegylated interferon	45.5
Interferon alpha	45.5
Telaprevir	27.3
Boceprevir	18.2

**Table 7.** Viral hepatitis control and prevention: areas in which Member States indicated interest in receiving WHO assistance (N=11)

<b><i>Awareness-raising, partnerships and resource mobilization (first WHO strategic axis)</i></b>	
Developing the national plan for viral hepatitis prevention and control	81.8%
Integrating viral hepatitis programmes into other health services	63.6%
Awareness-raising	72.7%
<b><i>Evidence-based policy and data for action (second WHO strategic axis)</i></b>	
Viral hepatitis surveillance	81.8%
Estimating the national burden of viral hepatitis	81.8%
Developing tools to assess the effectiveness of interventions	63.6%
Assessing the economic impact of viral hepatitis	54.5%
<b><i>Prevention of transmission (third WHO strategic axis)</i></b>	
Increasing coverage of the birth dose of the hepatitis B vaccine	54.5%
<b><i>Screening, care and treatment (fourth WHO strategic axis)</i></b>	
Increasing access to treatment	54.5%
Increasing access to diagnostics	63.6%
Improving laboratory quality	0% <sup>a</sup>
Developing education/training programmes for health professionals	63.6%

<sup>a</sup> N=26 (This response option was not included in the survey completed by Member States of the South-East Asia Region.)

# WHO South-East Asia Region:

## COUNTRY SUMMARIES

# Bangladesh

Population (in millions) (2011)	<b>150.4</b>
Country classification (2012)	<b>Low-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$1940</b>
Total health expenditure as % of GDP (2010)	<b>3.48%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$148.45</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$66.43</b>
Life expectancy at birth (in years) (2009)	<b>65</b>
Human Development Index (2011)	<b>0.500</b>
Median age (in years) (2010)	<b>24</b>
Total fertility rate per woman (2010)	<b>2.2</b>

The Government of Bangladesh reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: Liver Foundation of Bangladesh.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are no standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

The government publishes hepatitis disease reports in journals.

Hepatitis outbreaks are not reported to the government. There is inadequate laboratory capacity nationally to support investigation of outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth or the percentage of one-year-olds nationally (ages 12–23 months) in a given recent year who received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is no specific national strategy and/or policy for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is no national policy on injection safety in health-care settings. Single-use or auto-disable syringes, needles and canulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. Not all donated blood units and blood products nationwide are screened for hepatitis B. It is not known whether all donated blood units (including family donations) and blood products nationwide are screened for hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

It is not known how health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis.

There are no national clinical guidelines for the management of viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for hepatitis B and hepatitis C do not register by name. Hepatitis B and hepatitis C tests are not free of charge, and are compulsory for blood donors.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drugs for treating hepatitis B drugs are on the national essential medicines list: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Bangladesh welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Bhutan

The Government of Bhutan reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants, prisoners, the homeless, people living with HIV, low-income populations, the uninsured, indigenous people and pregnant women.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for acute hepatitis B, but not for any type of chronic hepatitis.

There are no standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases are not registered nationally, but cases with HIV/hepatitis coinfection are.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are reported to the government and are further investigated.

Population (in millions) (2011)	0.7
Country classification (2012)	Lower-middle-income
Gross national income per capita (PPP int \$) (2011)	\$5570
Total health expenditure as % of GDP (2010)	5.19%
Per capita total health expenditure (PPP int \$) (2010)	\$274.76
Per capita government health expenditure (PPP int \$) (2010)	\$238.57
Life expectancy at birth (in years) (2009)	63
Human Development Index (2011)	0.552
Median age (in years) (2010)	25
Total fertility rate per woman (2010)	2.4

There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 29% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth, based on a policy introduced in mid-2011, and 93% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy for preventing hepatitis B and hepatitis C infection in health-care settings. However, health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are no national clinical guidelines for the management of viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name, and there is open access to their names. Hepatitis B and hepatitis C tests are free of charge for all individuals, and are compulsory for blood donors and people living with HIV.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list: lamivudine. No drug for treating hepatitis C is on the national essential medicines list.

The Government of Bhutan welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Democratic People's Republic of Korea

Population (in millions) (2011)	<b>24.5</b>
Country classification (2012)	<b>Low-income</b>
Gross national income per capita (PPP int \$) (2011)	--
Total health expenditure as % of GDP (2010)	--
Per capita total health expenditure (PPP int \$) (2010)	--
Per capita government health expenditure (PPP int \$) (2010)	<b>\$45.68</b>
Life expectancy at birth (in years) (2009)	<b>70</b>
Human Development Index (2011)	--
Median age (in years) (2010)	<b>33</b>
Total fertility rate per woman (2010)	<b>2.0</b>

The Government of the Democratic People's Republic of Korea reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission in health-care settings, and treatment and care.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. The name of this office was not provided. It has four staff members. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: health-care workers, including health-care waste handlers.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012, but has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: mass media and community and social organizations.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target population is children under the age of 17 years. The last serosurvey was carried out in 2009.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B by 2016.

Nationally, more than 90% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and more than 90% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy for preventing hepatitis B and hepatitis C infection in health-care settings. However, health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use and auto-disable syringes for therapeutic injections. However, single-use or auto-disable syringes, needles and cannulas are not always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B, but not for hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are national clinical guidelines for the management of viral hepatitis, but they do not include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. Information was not provided on who is eligible for this. Information was not provided on the amount spent by the government on publicly funded treatment.

The following drugs for treating hepatitis B are on the national essential medicines list: interferon alpha and pegylated interferon. The following drugs for treating hepatitis C are on the national essential medicines list: interferon alpha and pegylated interferon.

The Government of the Democratic People's Republic of Korea welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# India

The Government of India reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, and treatment and care.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It has four staff members. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: health-care workers, including health-care waste handlers.

## Awareness-raising and partnerships

It is not known whether the government held events for World Hepatitis Day 2012 or funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. The percentage of hepatitis cases reported as “undifferentiated” or “unclassified” hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are reported to the government and are further investigated. There is inadequate laboratory capacity nationally to support investigation of viral

Population (in millions) (2011)	1241.5
Country classification (2012)	Lower-middle-income
Gross national income per capita (PPP int \$) (2011)	\$3590
Total health expenditure as % of GDP (2010)	4.05%
Per capita total health expenditure (PPP int \$) (2010)	\$132.20
Per capita government health expenditure (PPP int \$) (2010)	\$38.57
Life expectancy at birth (in years) (2009)	65
Human Development Index (2011)	0.547
Median age (in years) (2010)	25
Total fertility rate per woman (2010)	2.6

hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth or what percentage of one-year-olds (ages 12–23 months) nationally in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

It is not known whether there is a specific national strategy and/or policy for preventing hepatitis B and hepatitis C infection in health-care settings. However, health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units

(including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

It is not known whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through on-the-job training.

It is not known whether there are national clinical guidelines for the management of viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are compulsory for blood donors.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list: lamivudine. The following drug for treating hepatitis C is on the national essential medicines list: ribavirin.

The Government of India welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Indonesia

Population (in millions) (2011)	<b>242.3</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$4500</b>
Total health expenditure as % of GDP (2010)	<b>2.61%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$112.07</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$55.01</b>
Life expectancy at birth (in years) (2009)	<b>68</b>
Human Development Index (2011)	<b>0.617</b>
Median age (in years) (2010)	<b>28</b>
Total fertility rate per woman (2010)	<b>2.1</b>

The Government of Indonesia reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, and treatment and care.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. There are 12 full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: health-care workers, including health-care waste handlers.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

Information was not provided on whether the government collaborates with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases are registered nationally, but it is not known whether cases with HIV/hepatitis coinfection are.

The government publishes hepatitis disease reports monthly and annually.

Hepatitis outbreaks are reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth. Nationally, 94% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use and auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Information was not provided on official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

It is not known whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are no national clinical guidelines for the management of viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge. Information was not provided on whether hepatitis B or hepatitis C tests are compulsory for members of any specific group.

Government employees are eligible for publicly funded treatment for hepatitis B and hepatitis C. Information was not provided on the amount spent by the government on such treatment.

The following drugs for treating hepatitis B are on the national essential medicines list: pegylated interferon, lamivudine, adefovir dipivoxil and telbivudine. The following drugs for treating hepatitis C are on the national essential medicines list: pegylated interferon and ribavirin.

The Government of Indonesia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Maldives

The Government of the Maldives reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: people who inject drugs, migrants and prisoners.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: non-governmental organizations that work with injecting drug users and other high-risk populations.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are no standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as “undifferentiated” or “unclassified” hepatitis is not known.

Liver cancer cases are not registered nationally, but cases with HIV/hepatitis coinfection are.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are not reported to the government. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

Population (in millions) (2011)	0.3
Country classification (2012)	Upper-middle-income
Gross national income per capita (PPP int \$) (2011)	\$7430
Total health expenditure as % of GDP (2010)	6.33%
Per capita total health expenditure (PPP int \$) (2010)	\$464
Per capita government health expenditure (PPP int \$) (2010)	\$280.69
Life expectancy at birth (in years) (2009)	75
Human Development Index (2011)	0.661
Median age (in years) (2010)	25
Total fertility rate per woman (2010)	1.8

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 98% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 96% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through on-the-job training.

There are no national clinical guidelines for the management of viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are compulsory for pregnant women, pre-surgical patients and foreign nationals applying for work visas.

Publicly funded treatment for hepatitis B and hepatitis C is available to the entire population. The amount spent by the government on such treatment is not known.

The following drugs for treating hepatitis B are on the national essential medicines list: lamivudine and tenofovir. No drug for treating hepatitis C is on the national essential medicines list.

The Government of the Maldives welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Myanmar

Population (in millions) (2011)	<b>48.3</b>
Country classification (2012)	<b>Low-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>--</b>
Total health expenditure as % of GDP (2010)	<b>1.97%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$34.41</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$4.19</b>
Life expectancy at birth (in years) (2009)	<b>64</b>
Human Development Index (2011)	<b>0.483</b>
Median age (in years) (2010)	<b>28</b>
Total fertility rate per woman (2010)	<b>2.0</b>

The Government of Myanmar reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, and treatment and care.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It has 20 staff members. There are 49 full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants, prisoners, the homeless, people living with HIV, low-income populations, the uninsured and indigenous people.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012, but has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Myanmar Medical Association, Myanmar Health Assistant Association, Myanmar Nurses' Association, Myanmar Maternal and Child Welfare Association and Myanmar Red Cross Association.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Less than 5% of hepatitis cases are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly and annually.

Hepatitis outbreaks are reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the most recent one was in 2010.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 10% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 38% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training, post-graduate training and continuing medical education activities.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for everyone, but they are free for pregnant women and blood donors. Hepatitis B and hepatitis C tests are compulsory for pregnant women, blood donors and people applying for employment.

Publicly funded treatment is available for hepatitis B and hepatitis C. Information was not provided on who is eligible for it, or on the amount spent by the government on such treatment.

The following drugs for treating hepatitis B are on the national essential medicines list: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list: interferon alpha, pegylated interferon and ribavirin.

The Government of Myanmar welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Nepal

The Government of Nepal reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: people who inject drugs and people living with HIV.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as “undifferentiated” or “unknown” hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

Population (in millions) (2011)	30.5
Country classification (2012)	Low-income
Gross national income per capita (PPP int \$) (2011)	\$1260
Total health expenditure as % of GDP (2010)	5.52%
Per capita total health expenditure (PPP int \$) (2010)	\$66.68
Per capita government health expenditure (PPP int \$) (2010)	\$22.03
Life expectancy at birth (in years) (2009)	67
Human Development Index (2011)	0.458
Median age (in years) (2010)	21
Total fertility rate per woman (2010)	2.7

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth or what percentage of one-year-olds (ages 12–23 months) nationally in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are no national clinical guidelines for the management of viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name, and there is open access to their names. Hepatitis B and hepatitis C tests are not free of charge and are not compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list: interferon alpha, pegylated interferon, ribavirin, boceprevir and telaprevir.

The Government of Nepal welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Sri Lanka

Population (in millions) (2011)	<b>21.0</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$5520</b>
Total health expenditure as % of GDP (2010)	<b>2.95%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$148.45</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$66.43</b>
Life expectancy at birth (in years) (2009)	<b>71</b>
Human Development Index (2011)	<b>0.691</b>
Median age (in years) (2010)	<b>31</b>
Total fertility rate per woman (2010)	<b>2.3</b>

The Government of Sri Lanka reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: children (through the Expanded Programme on Immunization) and health-care workers, including health-care waste handlers.

## Awareness-raising and partnerships

The government held a conference for World Hepatitis Day 2012, but has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases are registered nationally, but it is not known whether cases with HIV/hepatitis coinfection are.

The government publishes hepatitis disease reports weekly, as well as in a quarterly epidemiological bulletin.

Hepatitis outbreaks are reported to the government and are further investigated. There is inadequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B by 2015.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. However, 99% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is no national policy that specifically targets mother-to-child transmission of hepatitis B.

There is a specific national strategy and/or policy for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood; vaccinations are arranged with in groups and are provided on request through pharmacies.

There is a national policy on injection safety in health-care settings, which rec-

ommends single-use and auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are national clinical guidelines for the management of viral hepatitis, but it is not known whether they include recommendations for cases with HIV coinfection.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge and are not compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list: interferon alpha. The following drug for treating hepatitis C is on the national essential medicines list: interferon alpha.

The Government of Sri Lanka welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Thailand

The Government of Thailand reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. There are no people working full-time on hepatitis-related activities in any government agency/body.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: health-care workers, including health-care waste handlers.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 25% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports weekly and annually.

Hepatitis outbreaks are reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly. The most recent serosurvey, which targeted the general population, was carried out in 2004.

Population (in millions) (2011)	69.5
Country classification (2012)	Upper-middle-income
Gross national income per capita (PPP int \$) (2011)	\$8360
Total health expenditure as % of GDP (2010)	3.88%
Per capita total health expenditure (PPP int \$) (2010)	\$329.71
Per capita government health expenditure (PPP int \$) (2010)	\$247.42
Life expectancy at birth (in years) (2009)	70
Human Development Index (2011)	0.682
Median age (in years) (2010)	34
Total fertility rate per woman (2010)	1.6

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 99% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 98% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy for preventing hepatitis B and hepatitis C infection in health-care settings, but it addresses only vaccination for health-care workers. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and technical seminars.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B, but not for hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are for pregnant women, blood donors and civil servants. Hepatitis C tests are free of charge for blood donors. Hepatitis B and hepatitis C tests are compulsory for blood donors.

Publicly funded treatment is available for hepatitis B and hepatitis C. Patients under the universal coverage scheme are eligible. However, only lamivudine and tenofovir are included in the universal coverage package for hepatitis B, and major drugs for treating hepatitis C are not included. The amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list: lamivudine and tenofovir. No drug for treating hepatitis C is on the national essential medicines list.

The Government of Thailand welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Timor-Leste

Population (in millions) (2011)	<b>1.2</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$5200</b>
Total health expenditure as % of GDP (2010)	<b>9.12%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$83.98</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$46.88</b>
Life expectancy at birth (in years) (2009)	<b>67</b>
Human Development Index (2011)	<b>0.495</b>
Median age (in years) (2010)	<b>17</b>
Total fertility rate per woman (2010)	<b>6.2</b>

The Government of Timor-Leste reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, but not for any type of chronic hepatitis.

There are no standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are reported to the government and are further investigated. There is inadequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 67% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, but this policy is only for the immunization programme. It recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are no national clinical guidelines for the management of viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. Information was not provided on the amount spent by the government on such treatment.

Information was not provided on whether any drug for treating hepatitis B or hepatitis C is on the national essential medicines list.

The Government of Timor-Leste welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).









# Chapter 8:

## WHO Western Pacific Region

Twenty-seven Member States make up the Western Pacific Region, which has a total population of 1.8 billion. The population of China accounts for approximately three fourths of this total.<sup>1</sup>

The Western Pacific Region encompasses countries at different levels of socioeconomic development, and includes six high-income countries.<sup>2</sup> It also includes geographically isolated Pacific Island Countries with poor infrastructure.<sup>3</sup> Health indicators for the Region vary widely. Across countries, the median life expectancy at birth is 70 years. However, it is 8–11 years lower in five countries of the Region, while Japan's life expectancy of 83 years is the highest in the world.<sup>4</sup> Similarly, the median under-five mortality rate across countries is 19 per 1000 population, while the highest country rate is 83 per 1000 population (Papua New Guinea) and the lowest is 3 per 1000 (Japan and Singapore).<sup>4</sup>

Noncommunicable diseases caused 80% of deaths in the Western Pacific Region in 2008,<sup>5</sup> with cardiovascular diseases accounting for almost half of the deaths from noncommunicable diseases.<sup>6</sup> Among WHO regions, the Western Pacific Region has the highest prevalence of daily tobacco smoking among men (46%); it also has the highest rates of lung cancer among both sexes (combined).<sup>7</sup> Alcohol is another major risk factor, particularly in low- and middle-income countries in the Region.<sup>4</sup> Liver cancer rates in the Region are far higher than in other regions.<sup>7</sup>

Responses to the WHO/Alliance survey were received from 15 of the 27 Member States in the Region (55.6%).

**Box 1.** Responses to the 2012 Global Hepatitis Survey: WHO Western Pacific Region

### Member States that submitted surveys:

- |                     |                                    |                    |
|---------------------|------------------------------------|--------------------|
| • Australia         | • Lao People's Democratic Republic | • Papua New Guinea |
| • Brunei Darussalam | • Malaysia                         | • Singapore        |
| • Cambodia          | • Mongolia                         | • Solomon Islands  |
| • China             | • New Zealand                      | • Tonga            |
| • Japan             |                                    | • Viet Nam         |
| • Kiribati          |                                    |                    |

### Member States that did not submit surveys:

- |                                    |               |                     |
|------------------------------------|---------------|---------------------|
| • Cook Islands                     | • Nauru       | • Republic of Korea |
| • Fiji                             | • Niue        | • Samoa             |
| • Marshall Islands                 | • Palau       | • Tuvalu            |
| • Micronesia (Federated States of) | • Philippines | • Vanuatu           |

### Viral hepatitis in the WHO Western Pacific Region

Very low prevalence rates (<50% of population exposed by the age of 30 years) for hepatitis A have been consistently reported from high-income Asia–Pacific countries and Australasia (Australia and New Zealand). Very little information is available from island nations in the Region, though they appear, on average, to have an intermediate prevalence rate.<sup>a</sup>

Similarly, for hepatitis E, studies are scarce; however, prevalence estimates above 5% are not reported in the Region.<sup>b</sup>

In this Region, with the exception of Australia, Japan and New Zealand where the chronic hepatitis B infection rate varies from 2% to 4%, countries have an estimated rate of 5%–7% or more.<sup>c</sup>

The Region accounts for 48% of global liver cancer cases among men and 62% among women. Moreover, liver cancer is the third most common cause of cancer mortality among men in the Region.<sup>d</sup>

For hepatitis C infection, prevalence estimates are 2.6% for the Region.<sup>e</sup> Although strategies have been implemented to reduce the risk factors for hepatitis C infection, unsafe blood transfusion, unsafe injections and injecting drug use are the major routes of transmission in the Region.

<sup>a</sup> Jacobsen KH, Wiersma ST. Hepatitis A virus seroprevalence by age and world region, 1990 and 2005. *Vaccine*, 2010, 28:6653–6657.

<sup>b</sup> Aggarwal R. *The global prevalence of hepatitis E virus infection and susceptibility: a systematic review*. Geneva, World Health Organization, 2010.

<sup>c</sup> Ott JJ, Stevens, GA, Groeger J, Wiersma ST. Global epidemiology of hepatitis B virus infection: new estimates of age-specific HBsAg seroprevalence and endemicity. *Vaccine*, 2012, 30:2212–2219.

<sup>d</sup> GLOBOCAN 2008 [web site]. Lyon, France, International Agency for Research on Cancer, World Health Organization, 2008. Available at: <http://globocan.iarc.fr/> (accessed on 07 June 2013).

<sup>e</sup> Mohd Hanafiah K, Groeger J, Flaxman AD, Wiersma ST. Global epidemiology of hepatitis C virus infection: New estimates of age-specific antibody to HCV seroprevalence. *Hepatology*, 2013, 57:1333–1342.

<sup>1</sup> *International human development indicators. Population, total both sexes (thousands)*. New York, United Nations Development Programme, 2011. Available at: <http://hdrstats.undp.org/en/indicators/306.html> (accessed 29 October 2012)

<sup>2</sup> The World Bank. *Country and lending groups* [web site]. Available at: <http://data.worldbank.org/about/country-classifications/country-and-lending-groups> (accessed on 14 May 2013).

<sup>3</sup> *Country cooperation strategy at a glance: Pacific Island Countries*. Geneva, World Health Organization, 2011. Available at: [http://www.who.int/countryfocus/cooperation\\_strategy/ccsbrief\\_pci\\_en.pdf](http://www.who.int/countryfocus/cooperation_strategy/ccsbrief_pci_en.pdf) (accessed on 14 May 2013).

<sup>4</sup> Blakely T et al. Health status and epidemiological capacity and prospects: WHO Western Pacific Region. *International Journal of Epidemiology*, 2011, 40(4):1109–1121.

<sup>5</sup> *World health statistics 2012*. Geneva, WHO, 2012. Available at: [http://www.who.int/entity/healthinfo/EN\\_WHS2012\\_Full.pdf](http://www.who.int/entity/healthinfo/EN_WHS2012_Full.pdf) (accessed on 14 May 2013).

<sup>6</sup> *Causes of death 2008 summary tables*. Geneva, Health Statistics and Informatics Department, World Health Organization, May 2011. Available at: [http://www.who.int/entity/gho/mortality\\_burden\\_disease/global\\_burden\\_disease\\_DTH6\\_2008.xls](http://www.who.int/entity/gho/mortality_burden_disease/global_burden_disease_DTH6_2008.xls) (accessed on 14 May 2013).

<sup>7</sup> *Global status report on noncommunicable diseases 2010*. Geneva, WHO, 2011. Available at: [http://whqlibdoc.who.int/publications/2011/9789240686458\\_eng.pdf](http://whqlibdoc.who.int/publications/2011/9789240686458_eng.pdf) (accessed on 14 May 2013).

### National coordination

Ten responding Member States (66.7%) reported the existence of a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis (Figure 1). One of the ten Member States with a strategy or plan (Mongolia) reported that it focuses exclusively on viral hepatitis, and five (Brunei Darussalam, Cambodia, Lao People's Democratic Republic, Malaysia and Tonga) reported that it addresses other diseases as well. Two countries (China and Kiribati) reported that the strategy or plan addresses only hepatitis B, and two (Australia and Japan) reported that it addresses hepatitis B and hepatitis C.

**Figure 1.** Responses to the question, "Is there a written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis?"



The ten Member States that reported the existence of a strategy or plan were asked about its specific components. All ten reported the inclusion of components for raising awareness, vaccination and general prevention. Nine reported the inclusion of a component for prevention of transmission in health-care settings, eight reported the inclusion of a component for surveillance and seven reported the inclusion of a component for treatment and care. Five reported the inclusion of components for coinfection with HIV and the prevention of transmission via injecting drug use.

Five responding Member States (33.3%) reported that they have a governmental unit or department responsible solely for viral hepatitis-related activities. Member States that did so were

asked to indicate the number of staff members in the unit or department. Responses ( $N=5$ ) ranged from 0.1 (New Zealand) to 80 (Cambodia) (median, 7).

Member States were asked to report the number of people working full-time on hepatitis-related activities in all government agencies or bodies. Among the six Member States that provided data for this question, the number ranged from 0 to 84 (median, 0.5), with Mongolia reporting the largest number.

Thirteen responding Member States (86.7%) reported that they have a viral hepatitis prevention and control programme that includes activities targeting specific populations. The populations most commonly targeted are health-care workers, including health-care waste handlers (69.2% of responding Member States within this subset) and people who inject drugs (46.2% of responding Member States within this subset). Groups identified less frequently included indigenous populations, low-income populations, prisoners, migrants, people living with HIV, those who are uninsured and those who are homeless.

### Awareness-raising and partnerships

Six responding Member States (40.0%) reported that they had held events for World Hepatitis Day 2012 (28 July). Since January 2011, nine responding Member States (60.0%) had funded some type of viral hepatitis public awareness campaign other than World Hepatitis Day (Table 1).

Eight responding Member States (53.3%) reported that they collaborated with civil society groups within their countries to develop and implement the governmental viral hepatitis prevention and control programme. For example, China reported collaborating with the Wu Jieping Medical Foundation and Chinese Foundation for Hepatitis Prevention and Control, while Malaysia reported collaborating with the Malaysian Liver Foundation. (Further examples can be found in the summaries of country findings later in this chapter.)

### Evidence-based policy and data for action

Twelve responding Member States (80.0%) reported that they have routine surveillance for viral hepatitis; details appear in Table 2.

Twelve responding Member States (80.0%) indicated that their countries have standard case definitions for hepatitis infection and 12 (80.0%) indicated that their countries have a central registry for the reporting of deaths, including hepatitis deaths.

Seven Member States reported on the proportion of hepatitis cases and deaths registered as "undifferentiated" or "unclassified" hepatitis. The reported proportions ranged from 0% to 30.0% (median, 1.0%). Additional survey findings about surveillance are presented in Table 3.

Member States were asked how often hepatitis disease reports are published. Of the responding Member States, 33.3% reported that they publish hepatitis disease reports annually; 13.3%, monthly; and 13.3%, weekly. No hepatitis disease report is published by 33.3% of responding Member States.

**Table 1.** Topics of public awareness campaigns on viral hepatitis held in Member States since January 2011 (N=9)

	Australia	Brunei Darussalam	China	Japan	Lao People's Democratic Republic	Malaysia	Mongolia	New Zealand	Tonga
General information about hepatitis and its transmission	X		X	X	X	X		X	X
Vaccination for hepatitis A and hepatitis B			X	X		X		X	X
Importance of knowing one's hepatitis B and hepatitis C status								X	X
Safe water and good sanitation									X
Safer sex practices						X		X	X
Harm reduction for people who inject drugs						X		X	X
Safe workplace practices					X	X			X
Other <sup>a</sup>		X					X		

<sup>a</sup> Details can be found in the summaries of country findings later in this chapter.

**Table 2.** Types of surveillance in Member States that reported the existence of routine surveillance for viral hepatitis (N=12)

	Yes (%)	No (%)	Do not know (%)	No response (%)
There is a national surveillance system for <b>acute</b> hepatitis infection for the following forms of hepatitis:				
hepatitis A	75.0	8.3	0	16.7
hepatitis B	91.7	8.3	0	0
hepatitis C	75.0	16.7	0	8.3
hepatitis D	25.0	41.7	0	33.3
hepatitis E	50.0	25.0	0	25.0
There is a national surveillance system for <b>chronic</b> hepatitis infection for the following forms of hepatitis:				
hepatitis B	58.3	33.2	0	8.3
hepatitis C	41.7	50.0	0	8.3
hepatitis D	25.0	58.3	0	16.7

**Table 3.** Data registration and surveillance (N=15)

	Yes (%)	No (%)	Do not know (%)	No response (%)
Liver cancer cases are registered nationally	73.3	20.0	6.7	0
Cases with HIV/hepatitis coinfection are registered nationally	26.7	66.7	6.7	0
Hepatitis outbreaks are reported	93.3	0	6.7	0
If YES – Hepatitis outbreaks are further investigated (N=115)	100	0	0	0

Five responding Member States (33.3%, Australia, Cambodia, China, Japan, Lao People's Democratic Republic) reported the existence of a national public health research agenda for viral hepatitis.

Six responding Member States (40.0%) reported that viral hepatitis serosurveys are conducted regularly. Among this subset of responding Member States, two (Australia and Lao People's Democratic Republic) indicated that serosurveys take place every five years. Two Member States in the same subset (Lao People's Democratic Republic and Singapore) reported that the most recent viral hepatitis serosurvey was carried out in 2012.

#### Prevention of transmission

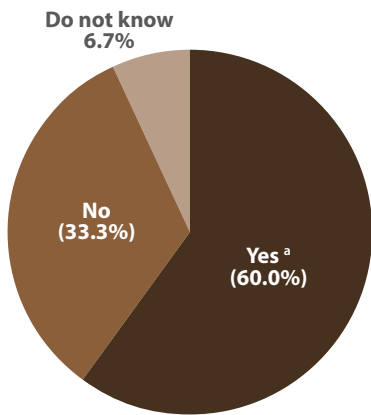
Five responding Member States (33.3%) reported that they have a national policy on hepatitis A vaccination.

Nine responding Member States (60.0%) reported that they have established the goal of eliminating or reducing hepatitis B (Figure 2). Member States with this goal were asked to specify the timeframe in which they seek to eliminate or reduce hepatitis B. Of the six Member States that answered this question, three (Brunei Darussalam, China and Mongolia) said 2012 and three (Cambodia, Lao People's Democratic Republic and Papua New Guinea) said 2017.

Member States were asked to report, for a given recent year, the percentage of newborn infants who had received the first dose of hepatitis B vaccine within 24 hours of birth. Among the 13 Member States that provided this information, responses ranged from 0% to 98.0% (median, 55.0%). Member States were also asked to report, for a given recent year, the percentage of one-year-olds (ages 12–23 months) who had received three doses of hepatitis B vaccine. Among the 15 Member States that provided this information, responses ranged from 0% to 98.8% (median, 93.0%).

Fifteen responding Member States (100%) reported the existence of a national policy that specifically targets mother-to-child transmission of hepatitis B; details are presented in Table 4. One third of Member States with such a policy (33.3%) indicated that one component of the policy calls for screening of all pregnant women for hepatitis B.

**Figure 2.** Responses to the question, “Has your government established the goal of eliminating hepatitis B?” (N=15)



<sup>a</sup> One Member State that answered “yes” to this question (Australia) added a comment indicating that the goal relates to reducing rather than eliminating hepatitis B.

Fourteen responding Member States (91.3%) reported the existence of a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

Eleven responding Member States (73.3%) reported that health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

Twelve responding Member States (80.0%) reported the existence of a national policy on injection safety in health-care settings. These Member States were asked which types of syringes the policy recommends for therapeutic injections. Single-use syringes are recommended in 100% of policies, and auto-disable syringes in 16.7% (Figure 3).

Twelve responding Member States (80.0%) reported that single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Member States were asked for official estimates of the number and percentage of unnecessary injections administered annually in health-care settings (e.g. injections that are given when an equivalent oral medication is available). Twelve Member States reported that the figures are not known and one (Tonga) reported that no unnecessary injection is administered annually in health-care settings. Cambodia reported that 50.0% of the total injections that are administered annually in health-care settings are unnecessary and Mongolia reported that 68.0% are unnecessary.

Additional findings relating to the prevention of hepatitis transmission are presented in Table 5.

**Table 4.** Activities called for in national policy targeting mother-to-child transmission of hepatitis B (N=15)

	All pregnant women are screened for hepatitis B	All pregnant women found to have hepatitis B are counselled	Health-care providers follow up with all pregnant women found to have hepatitis B during pregnancy for the purpose of encouraging them to give birth at health-care facilities	Upon delivery, all infants born to women with hepatitis B receive hepatitis B immunoglobulin	All infants receive the first dose of hepatitis B vaccine within 24 hours of birth
Australia				X	X
Brunei Darussalam	X	X	X	X	X
Cambodia					X
China				X	X
Japan	X	X	X	X	X
Kiribati	X	X			X
Lao People's Democratic Republic					X
Malaysia		X	X	X	X
Mongolia					X
New Zealand	X	X	X	X	
Papua New Guinea					X
Singapore	X	X	X	X	X
Solomon Islands					X
Tonga				X	X
Viet Nam					X
TOTAL	5	6	5	8	15

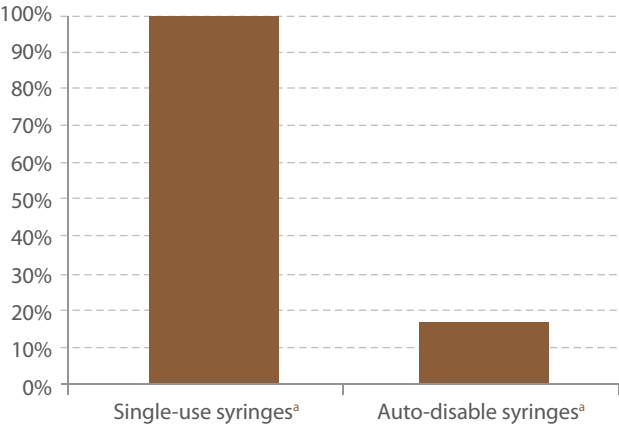
**Screening, care and treatment**

Member States were asked how health professionals in their countries obtain the skills and competencies required to effectively care for people with viral hepatitis. Responding Member States most frequently indicated that these are obtained in schools for health professionals (pre-service education, 80.0%). Additionally, on-the-job training was identified in 66.7% of responses, and postgraduate training in 53.3%.

Nine responding Member States (60.0%) reported the existence of national clinical guidelines for the management of viral hepatitis (Figure 4). Two of these nine Member States indicated that the guidelines include recommendations for cases with HIV coinfection. Five of 11 responding Member States (45.5%) indicated that there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.



**Figure 3.** Proportion of responding Member States with national policies on injection safety in health-care settings which recommend single-use syringes and auto-disable syringes for therapeutic injections (N=12)

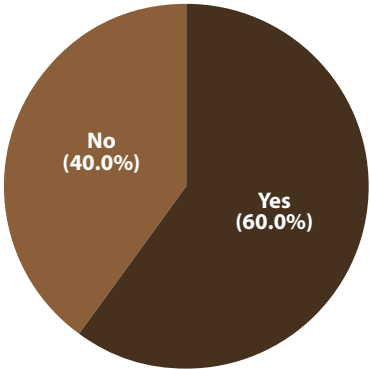


<sup>a</sup> Respondents could select both “single-use syringes” and “auto-disable syringes”.

**Table 5.** Hepatitis prevention: policies, practices and guidelines (N=15)

	Yes (%)	No (%)	Do not know (%)
There is a national infection control policy for blood banks	86.7	6.7	6.7
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B	100	0	0
All donated blood units (including family donations) and blood products nationwide are screened for hepatitis C	80.0	13.3	6.7
There is a national policy relating to the prevention of viral hepatitis among people who inject drugs	33.3	53.3	13.3
The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety	46.7	40.0	13.3

**Figure 4.** Responses to the question, “Are there national clinical guidelines for the management of viral hepatitis?” (N=15)



Ten responding Member States (66.7%) indicated that they have a national policy relating to screening and referral to care for hepatitis B. Five (33.3%) reported having such a policy for hepatitis C.

Regarding hepatitis B testing, 13 responding Member States (86.7%) indicated that people register by name for testing. Twelve members of that subset (92.3%) indicated that the names are kept confidential. Seven responding Member States (46.7%) reported that the hepatitis B test is free of charge for all individuals. Among the eight other Member States, three (37.5%) reported that the hepatitis B test is free of charge for members of specific groups. Groups identified included blood donors and health-care workers. Seven responding Member States (46.7%) reported that the hepatitis B test is compulsory for members of specific groups. Groups identified included blood donors, health-care workers, pregnant women and imprisoned people who inject drugs.

Regarding hepatitis C testing, 10 responding Member States (66.7%) indicated that people register by name for testing. All members of that subset (100%) indicated that the names are kept confidential. Four responding Member States (26.7%) reported that the hepatitis C test is free of charge for all individuals. Among the eight other Member States that answered the question, three (37.5%) reported that the hepatitis C test is free of charge for members of specific groups. Groups identified included blood donors and health-care workers. Seven responding Member States (46.7%) reported that the hepatitis C test is compulsory for members of specific groups. Groups identified included blood donors, pregnant women and imprisoned people who inject drugs.

Eight responding Member States (53.3%) reported that publicly funded treatment is available for hepatitis B and seven (46.7%) that publicly funded treatment is available for hepatitis C. One responding Member State reported the amount spent on publicly funded treatment for hepatitis B and hepatitis C. Details can be found in the summaries of country findings later in this chapter (see New Zealand).

**Table 6.** Proportion of Member States reporting drugs for treating hepatitis B and C on national essential medicines lists or subsidized by governments

Drugs for treating hepatitis B	% of Member States reporting its inclusion (N=12)
Lamivudine	60.0
Interferon alpha	53.3
Tenofovir	40.0
Pegylated interferon	40.0
Entecavir	40.0
Adefovir dipivoxil	33.3
Telbivudine	20.0
Drugs for treating hepatitis C	% of Member States reporting its inclusion (N=12)
Ribavirin	46.7
Pegylated interferon	40.0
Interferon alpha	40.0
Telaprevir	6.7
Boceprevir	0.0

Eleven responding Member States (73.3%) reported that at least one available drug for treating hepatitis B is on the national essential medicines list or subsidized by the government (Table 6). The drugs most commonly reported were lamivudine and interferon alpha.

Eight responding governments (53.3%) reported that at least one available drug for treating hepatitis C is on the national essential medicines list or subsidized by the government. The drugs most commonly reported were ribavirin, interferon alpha and pegylated interferon.

#### World Health Organization assistance

Member States were asked to indicate areas in which they might want assistance from WHO for the prevention and control of viral hepatitis. Respondents most commonly selected the following: increasing access to treatment (46.7%), increasing access to diagnostics (46.7%), improving laboratory capacity (46.7%) and developing education/training programmes for health professionals (46.7%) (Table 7). Responses from individual Member States appear in Annex C.

**Table 7.** Viral hepatitis control and prevention: areas in which Member States indicated interest in receiving WHO assistance (N=15)

<b>Awareness-raising, partnerships and resource mobilization (first WHO strategic axis)</b>	
Developing the national plan for viral hepatitis prevention and control	40.0%
Integrating viral hepatitis programmes into other health services	40.0%
Awareness-raising	33.3%
<b>Evidence-based policy and data for action (second WHO strategic axis)</b>	
Viral hepatitis surveillance	33.3%
Estimating the national burden of viral hepatitis	26.7%
Developing tools to assess the effectiveness of interventions	13.3%
Assessing the economic impact of viral hepatitis	20.0%
<b>Prevention of transmission (third WHO strategic axis)</b>	
Increasing coverage of the birth dose of the hepatitis B vaccine	40.0%
<b>Screening, care and treatment (fourth WHO strategic axis)</b>	
Increasing access to treatment	46.7%
Increasing access to diagnostics	46.7%
Improving laboratory quality	46.7%
Developing education/training programmes for health professionals	46.7%

# WHO Western Pacific Region:

## COUNTRY SUMMARIES

# Australia

Population (in millions) (2011)	<b>22.6</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$38 110</b>
Total health expenditure as % of GDP (2010)	<b>8.73%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$3441.04</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$2339.68</b>
Life expectancy at birth (in years) (2009)	<b>82</b>
Human Development Index (2011)	<b>0.929</b>
Median age (in years) (2010)	<b>37</b>
Total fertility rate per woman (2010)	<b>1.9</b>

The Government of Australia reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of hepatitis B and hepatitis C. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants, prisoners, the homeless, people living with HIV, indigenous people, pregnant women, men who have sex with men, sex workers, partners and other household and intimate contacts of people who have chronic hepatitis B infection, people travelling to and from high-prevalence countries, people with mental health issues, and children born to mothers who have tested positive for hepatitis B infection.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: Ministerial Advisory Committee on Blood Borne Viruses and Sexually Transmissible Infections, Blood Borne Viruses and Sexually Transmissible Infections Standing Committee, Australian National Council on Drugs, Hepatitis Australia, Australian Society for HIV Medicine, and Australian Injecting and Illicit Drug Users League Incorporated.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. It is not known whether there is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target population is the general population. The last serosurvey was carried out in 2007–2008.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but the timeframe is not specified.

It is not known what percentage of newborn infants nationally in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 92% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is no national policy on injection safety in health-care settings. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis or for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B tests are not free of charge for all individuals, but they are free for high-risk groups. Hepatitis C tests are not free of charge. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. The following people are eligible: medicare holders. Information was not provided on the amount spent by the government on such treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Australia did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.



# Brunei Darussalam

The Government of Brunei Darussalam reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs, migrants, prisoners, people living with HIV, pregnant women, blood donors and blood recipients.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012, but has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak in-

Population (in millions) (2011)	0.4
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	--
Total health expenditure as % of GDP (2010)	2.84%
Per capita total health expenditure (PPP int \$) (2010)	\$1448.74
Per capita government health expenditure (PPP int \$) (2010)	\$1229.77
Life expectancy at birth (in years) (2009)	77
Human Development Index (2011)	0.838
Median age (in years) (2010)	29
Total fertility rate per woman (2010)	2.0

vestigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but it is not known if this is the case for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B by 2012.

Nationally, 95% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 93% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, but not for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free for citizens, permanent residents and all children under the age of 12 years. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. The following groups are eligible: citizens, permanent residents and all children under the age of 12 years. The amount spent by the government on publicly funded treatment for hepatitis B and hepatitis C is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and lamivudine. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Brunei Darussalam did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Cambodia

Population (in millions) (2011)	<b>14.3</b>
Country classification (2012)	<b>Low-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$2230</b>
Total health expenditure as % of GDP (2010)	<b>5.61%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$121.08</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$45.08</b>
Life expectancy at birth (in years) (2009)	<b>61</b>
Human Development Index (2011)	<b>0.523</b>
Median age (in years) (2010)	<b>23</b>
Total fertility rate per woman (2010)	<b>2.6</b>

The Government of Cambodia reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: the National Immunization Programme. It has 80 staff members. There is one full-time equivalent staff member who works on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: newborn children.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: PATH and the Reproductive and Child Health Alliance.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis; it is based on syndromic reporting for jaundice.

There are no standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. The percentage of hepatitis cases reported as "undif-

ferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government published hepatitis disease reports in 2006 and 2011.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target population is children under the age of 5 years. Information was not provided on when the last serosurvey was carried out.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B by 2017.

Nationally, 68% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 94% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use and auto-disable

syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Fifty percent of injections administered annually in health-care settings are unnecessary, according to official government estimates.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are national clinical guidelines for the management of viral hepatitis, but they do not include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals, and are compulsory for blood donors.

Publicly funded treatment is available for hepatitis B and hepatitis C. Low-income people are eligible. The amount spent by the government on such treatment is not known.

No drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Cambodia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# China

The Government of China reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of hepatitis B. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, and treatment and care.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. The name of this office was not provided. It has seven staff members. There are seven full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers) and people who inject drugs.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: the Wu Jieping Medical Foundation and the Chinese Foundation for Hepatitis Prevention and Control.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C and E, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as “undifferentiated” or “unknown” hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory

Population (in millions) (2011)	1347.6
Country classification (2012)	Upper-middle-income
Gross national income per capita (PPP int \$) (2011)	\$16 330
Total health expenditure as % of GDP (2010)	5.07%
Per capita total health expenditure (PPP int \$) (2010)	\$378.91
Per capita government health expenditure (PPP int \$) (2010)	\$203.09
Life expectancy at birth (in years) (2009)	74
Human Development Index (2011)	0.687
Median age (in years) (2010)	35
Total fertility rate per woman (2010)	1.6

capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are children and the general population. The last serosurvey was carried out in 2006.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B by 2012.

Nationally, 91% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 94% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B, but not for hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals. They are free for certain groups, but information was not provided on which groups. Hepatitis B and hepatitis C tests are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B, but not for hepatitis C. Information was not provided on who is eligible or the amount spent by the government on such treatment.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drug for treating hepatitis C is on the national essential medicines list or subsidized by the government: ribavirin.

The Government of China welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Japan

Population (in millions) (2011)	<b>126.5</b>
Country classification (2012)	<b>High-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$35 330</b>
Total health expenditure as % of GDP (2010)	<b>9.49%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$3203.74</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$2643.96</b>
Life expectancy at birth (in years) (2009)	<b>83</b>
Human Development Index (2011)	<b>0.901</b>
Median age (in years) (2010)	<b>45</b>
Total fertility rate per woman (2010)	<b>1.4</b>

The Government of Japan reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of hepatitis B and hepatitis C. It includes components for raising awareness, vaccination, prevention in general, prevention of transmission in health-care settings, and treatment and care.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: the Office for Promotion of Hepatitis Measures within the Health Service Bureau of the Ministry of Health, Labour and Welfare. It has 12 staff members. There are two full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: health-care workers (including health-care waste handlers).

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: the Japan Hepatitis Council and the Viral Hepatitis Research Foundation of Japan.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 5.6% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports weekly.

Hepatitis outbreaks are required to be reported to the government. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. It is not known whether viral hepatitis serosurveys are conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and no one-year-old (age 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

It is not known whether there is a national policy on injection safety in health-care settings, or whether single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

It is not known how health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis.

There are national clinical guidelines for the management of viral hepatitis, but they do not include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for hepatitis B and hepatitis C do not register by name. Hepatitis B and hepatitis C tests are free of charge for all individuals and are not compulsory for members of any specific group.

Publicly funded treatment is available for hepatitis B and hepatitis C. The following group is eligible for such treatment for hepatitis B: patients receiving interferon therapy or nucleoside analogue therapy. The following group is eligible for publicly funded treatment for hepatitis C: patients receiving interferon therapy. Information was not provided on the amount spent by the government on such treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: pegylated interferon, lamivudine, adefovir dipivoxil and entecavir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, ribavirin and telaprevir.

The Government of Japan did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.



# Kiribati

The Government of Kiribati reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of hepatitis B. It includes components for raising awareness, vaccination, prevention in general, prevention of transmission in health-care settings, and treatment and care.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

It is not known whether the government held events for World Hepatitis Day 2012. It has not funded other viral hepatitis public awareness campaigns since January 2011.

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: the Kiribati Family Health Association.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for acute hepatitis B, but not for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as “undifferentiated” or “unknown” hepatitis.

Liver cancer cases are not registered nationally, but cases with HIV/hepatitis coinfection are.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is inadequate laboratory capacity nationally to support inves-

Population (in millions) (2011)	0.1
Country classification (2012)	Lower-middle-income
Gross national income per capita (PPP int \$) (2011)	\$3300
Total health expenditure as % of GDP (2010)	11.25%
Per capita total health expenditure (PPP int \$) (2010)	\$257.53
Per capita government health expenditure (PPP int \$) (2010)	\$212.03
Life expectancy at birth (in years) (2009)	68
Human Development Index (2011)	0.624
Median age (in years) (2010)	--
Total fertility rate per woman (2010)	2.9

tigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

It is not known whether the government has established the goal of eliminating hepatitis B.

Information was not provided on the percentage of newborn infants nationally in a given recent year who received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 77.9% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood

products nationwide are screened for hepatitis B and hepatitis C.

It is not known whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis. Information was not provided on whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B, but not for hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals, and are compulsory for blood donors, pregnant women, sailors and overseas workers.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

No drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Kiribati welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Lao People's Democratic Republic

Population (in millions) (2011)	<b>6.3</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$2580</b>
Total health expenditure as % of GDP (2010)	<b>44.47%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$97.15</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$32.34</b>
Life expectancy at birth (in years) (2009)	<b>63</b>
Human Development Index (2011)	<b>0.524</b>
Median age (in years) (2010)	<b>21</b>
Total fertility rate per woman (2010)	<b>2.7</b>

The Government of Lao People's Democratic Republic reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general and prevention of transmission in health-care settings.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. Information was not provided on how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), newborns and children.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012, but has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: B, C and E. Information was not provided on whether there is a national surveillance system for any type of chronic hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. The percentage of hepatitis cases reported as "undifferentiated" or "unclassified" hepatitis is not known.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

It is not known whether the government publishes hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is inadequate laboratory capacity nationally to support hepatitis B outbreak investigations and other surveillance activities. Information was not provided on whether there is adequate laboratory capacity nationally to support investigation of other types of viral hepatitis outbreaks and other surveillance activities.

There is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are children aged 5–9 years and women aged 15–45 years. The last serosurvey was carried out in 2012.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B by 2017.

Nationally, 20% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 79% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use and auto-disable syringes for therapeutic injections. Single-use or auto-disable syringes, needles and

cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

It is not known whether there is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

It is not known whether the government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education) and on-the-job training.

There are national clinical guidelines for the management of viral hepatitis, but it is not known whether they include recommendations for cases with HIV coinfection.

It is not known whether the government has national policies relating to screening and referral to care for hepatitis B. Information was not provided on whether the government has national policies relating to screening and referral to care for hepatitis C.

People testing for hepatitis B register by name. Information was not provided on whether their names are kept confidential within the system. Hepatitis B tests are not free of charge. Information was not provided on whether people testing for hepatitis C register by name, or whether hepatitis C tests are free of charge for all individuals. Information was not provided on whether hepatitis B or hepatitis C tests are compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: interferon alpha. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Lao People's Democratic Republic welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Malaysia

The Government of Malaysia reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission via injecting drug use, prevention of transmission in health-care settings, treatment and care, and coinfection with HIV.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), people who inject drugs and blood donors.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: the Malaysian Liver Foundation.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B and C.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 2% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities

Population (in millions) (2011)	28.9
Country classification (2012)	Upper-middle-income
Gross national income per capita (PPP int \$) (2011)	\$15 650
Total health expenditure as % of GDP (2010)	4.39%
Per capita total health expenditure (PPP int \$) (2010)	\$641.13
Per capita government health expenditure (PPP int \$) (2010)	\$355.92
Life expectancy at birth (in years) (2009)	73
Human Development Index (2011)	0.761
Median age (in years) (2010)	26
Total fertility rate per woman (2010)	2.6

ties for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 91.13% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 97.37% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis, but there are for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B and hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge for all individuals, but they are free for health-care workers following exposure. Hepatitis B tests are compulsory for health-care workers and blood donors. Hepatitis C tests are compulsory for blood donors.

Publicly funded treatment for hepatitis B and hepatitis C is available to Malaysian citizens who seek care at certain public hospitals. Information was not provided on the amount spent by the government on such treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil, entecavir, telbivudine and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of Malaysia did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Mongolia

Population (in millions) (2011)	<b>2.8</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$4290</b>
Total health expenditure as % of GDP (2010)	<b>5.44%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$217.53</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$119.84</b>
Life expectancy at birth (in years) (2009)	<b>69</b>
Human Development Index (2011)	<b>0.653</b>
Median age (in years) (2010)	<b>25</b>
Total fertility rate per woman (2010)	<b>2.5</b>

The Government of Mongolia reports as follows.

## National coordination

There is a written national strategy or plan that focuses exclusively on the prevention and control of viral hepatitis. It includes components for raising awareness, surveillance, vaccination, prevention in general, prevention of transmission in health-care settings and coinfection with HIV.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: Hepatitis Surveillance Unit, National Center for Communicable Diseases. It has five staff members. There are 84 full-time equivalent staff members who work on hepatitis-related activities in all government agencies/bodies.

The government does not have a viral hepatitis prevention and control programme that includes activities targeting specific populations.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B and C, and for the following types of chronic hepatitis: B, C and D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 1.1% is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports monthly.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A, hepatitis B and hepatitis C, but not for hepatitis E.

Information was not provided on whether there is a national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B by 2012.

Nationally, 96.2% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 98.8% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. However, health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

According to official government estimates, 68% of injections administered annually in health-care settings are unnecessary.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education).

There are national clinical guidelines for the management of viral hepatitis, but they do not include recommendations for cases with HIV coinfection.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for hepatitis B and hepatitis C do not register by name. Hepatitis B and hepatitis C tests are not free of charge and are not compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C, but hospitalization for acute hepatitis is free of charge.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: lamivudine. The following drug for treating hepatitis C is on the national essential medicines list or subsidized by the government: ribavirin.

The Government of Mongolia welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# New Zealand

The Government of New Zealand reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is a designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities: the Public Health, Sector Capability and Implementation Business Unit of the Ministry of Health. It has one tenth of one full-time staff member. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: people who inject drugs.

## Awareness-raising and partnerships

The government held events for World Hepatitis Day 2012 and has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society groups to develop and implement its viral hepatitis prevention and control programme: the Hepatitis Foundation of New Zealand, Needle Exchange New Zealand and the Hepatitis C Support Group.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C, D and E, and for chronic hepatitis D.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 6.4% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

Population (in millions) (2011)	4.4
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	\$28 930
Total health expenditure as % of GDP (2010)	10.10%
Per capita total health expenditure (PPP int \$) (2010)	\$3020.05
Per capita government health expenditure (PPP int \$) (2010)	\$2513.32
Life expectancy at birth (in years) (2009)	81
Human Development Index (2011)	0.908
Median age (in years) (2010)	37
Total fertility rate per woman (2010)	2.2

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target population is people who inject drugs. The last serosurvey was carried out in 2009.

## Prevention of transmission

There is a national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, no newborn infant in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth. In a given recent year, 93% of one-year-olds (ages 12–23 months) received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are no national clinical guidelines for the management of viral hepatitis, but there are for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are free of charge for all individuals. Hepatitis B tests are compulsory for blood donors and immigrants, and hepatitis C tests for blood donors.

Publicly funded treatment for hepatitis B and hepatitis C is available to some segments of the population, but information was not provided on who is eligible. In fiscal year 2011/2012, the government spent NZ\$ 16 080 000 (US\$ 13 026 971) on such treatment for hepatitis B and hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: lamivudine, adefovir dipivoxil, entecavir and tenofovir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon and ribavirin.

The Government of New Zealand did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Papua New Guinea

Population (in millions) (2011)	<b>7.0</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$2570</b>
Total health expenditure as % of GDP (2010)	<b>3.58%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$87.71</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$62.76</b>
Life expectancy at birth (in years) (2009)	<b>63</b>
Human Development Index (2011)	<b>0.466</b>
Median age (in years) (2010)	<b>20</b>
Total fertility rate per woman (2010)	<b>4.0</b>

The Government of Papua New Guinea reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. There are no people working full-time on hepatitis-related activities in any government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: health-care workers (including health-care waste handlers).

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are no standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are not registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is inadequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B by 2017.

Nationally, 31% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 61% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. However, a hepatitis B vaccination programme for health-care workers was planned for February 2013.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are not always available in all health-care facilities.

Official government estimates of the number and percentage of unneces-

sary injections administered annually in health-care settings are not known.

There is no national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B, but not for hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

It is not known whether the government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

It is not known how health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis.

There are no national clinical guidelines for the management of viral hepatitis or for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government has national policies relating to screening and referral to care for hepatitis B, but not for hepatitis C.

People testing for hepatitis B register by name; the names are kept confidential within the system. Hepatitis B tests are free of charge for all individuals and not compulsory for members of any specific group. Information was not provided on whether people testing for hepatitis C register by name, whether the tests are free of charge for all individuals or compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: lamivudine and tenofovir. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Papua New Guinea welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Singapore

The Government of Singapore reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. There are no people working full-time on hepatitis-related activities in any government agency/body.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers) and people who inject drugs.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A, B, C and E, and for chronic hepatitis B.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. No hepatitis case is reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports weekly and annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are conducted regularly; the target populations are children under the age of 17 years and the general popula-

Population (in millions) (2011)	5.2
Country classification (2012)	High-income
Gross national income per capita (PPP int \$) (2011)	\$59 380
Total health expenditure as % of GDP (2010)	3.96%
Per capita total health expenditure (PPP int \$) (2010)	\$2272.64
Per capita government health expenditure (PPP int \$) (2010)	\$824.98
Life expectancy at birth (in years) (2009)	82
Human Development Index (2011)	0.866
Median age (in years) (2010)	38
Total fertility rate per woman (2010)	1.3

tion. The last serosurvey was carried out in 2012.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 31% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 61% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepati-

tis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, which include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B, but not for hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge. Hepatitis B tests are compulsory for injecting drug users in prison settings, and hepatitis C tests for health-care workers and injecting drug users in prison settings.

Publicly funded treatment for hepatitis B and hepatitis C is available to the entire population. The amount spent by the government on such treatment is not known.

The following drugs for treating hepatitis B are on the national essential medicines list or subsidized by the government: interferon alpha, pegylated interferon, lamivudine, adefovir dipivoxil and entecavir. The following drugs for treating hepatitis C are on the national essential medicines list or subsidized by the government: interferon alpha and pegylated interferon.

The Government of Singapore did not indicate a need for assistance from WHO in relation to viral hepatitis prevention and control.

# Solomon Islands

Population (in millions) (2011)	<b>7.0</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$2350</b>
Total health expenditure as % of GDP (2010)	<b>8.55%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$227.32</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$212.30</b>
Life expectancy at birth (in years) (2009)	<b>71</b>
Human Development Index (2011)	<b>0.510</b>
Median age (in years) (2010)	<b>20</b>
Total fertility rate per woman (2010)	<b>4.2</b>

The Government of Solomon Islands reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: all children under the age of 12 months.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012 and has not funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

It is not known whether there are standard case definitions for hepatitis. Hepatitis deaths are not reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

It is not known whether liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government does not publish hepatitis disease reports.

It is not known whether hepatitis outbreaks are required to be reported to the government. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has not established the goal of eliminating hepatitis B.

Nationally, 24% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 77% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is no specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings.

It is not known whether there is a national policy on injection safety in health-care settings. Single-use or auto-disable syringes, needles and cannulas are not always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

It is not known whether there is a national infection control policy for blood banks. All donated blood units and blood products nationwide are screened for hepatitis B, but it is not known whether all donated blood units (including family donations) and blood products nationwide are screened for hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through on-the-job training.

There are no national clinical guidelines for the management of viral hepatitis. Information was not provided on whether there are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for hepatitis B register by name; the names are kept confidential within the system. Hepatitis B tests are free of charge for all individuals and are not compulsory for members of any specific group. Information was not provided on whether people testing for hepatitis C register by name, whether the tests are free of charge for all individuals or whether they are compulsory for members of any specific group.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

No drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Solomon Islands welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).



# Tonga

The Government of Tonga reports as follows.

## National coordination

There is a written national strategy or plan that focuses primarily on the prevention and control of viral hepatitis, and also integrates other diseases. It includes components for raising awareness, surveillance, vaccination and prevention in general.

There is no designated governmental unit/department responsible solely for co-ordinating and/or carrying out viral hepatitis-related activities. There are no people working full-time on hepatitis-related activities in any government agency/body.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific populations: health-care workers (including health-care waste handlers), newborns and infants.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012, but has funded other viral hepatitis public awareness campaigns since January 2011 (Annex A).

The government collaborates with the following in-country civil society group to develop and implement its viral hepatitis prevention and control programme: Tonga Red Cross Society.

## Evidence-based policy and data for action

There is routine surveillance for viral hepatitis. There is a national surveillance system for the following types of acute hepatitis: A and B, and for chronic hepatitis B.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Of hepatitis cases, 30% are reported as "undifferentiated" or "unclassified" hepatitis.

Liver cancer cases are registered nationally, but cases with HIV/hepatitis coinfection are not.

The government publishes hepatitis disease reports annually.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support outbreak investigations and other surveillance activities for hepatitis A and hepatitis B, but not for hepatitis C and hepatitis E.

Population (in millions) (2011)	0.1
Country classification (2012)	Lower-middle-income
Gross national income per capita (PPP int \$) (2011)	\$5000
Total health expenditure as % of GDP (2010)	5.07%
Per capita total health expenditure (PPP int \$) (2010)	\$229.18
Per capita government health expenditure (PPP int \$) (2010)	\$186.78
Life expectancy at birth (in years) (2009)	71
Human Development Index (2011)	0.704
Median age (in years) (2010)	21
Total fertility rate per woman (2010)	3.9

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly, but they are conducted when donor funding is available. The target population is children aged 5–6 years. The last serosurvey was carried out in 2010.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but did not provide information about a specific timeframe for this.

Nationally, 98% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 98% of one-year-olds (ages 12–3 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

No injection administered annually in health-care settings is unnecessary, according to official government estimates.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B, but not for hepatitis C.

There is no national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government has guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education), on-the-job training and postgraduate training.

There are national clinical guidelines for the management of viral hepatitis, but they do not include recommendations for cases with HIV coinfection.

The government has national policies relating to screening and referral to care for hepatitis B, but not for hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B tests are free of charge for all individuals. Information was not provided on whether hepatitis C tests are free of charge for all individuals. Hepatitis B and hepatitis C tests are compulsory for migrants.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

The following drug for treating hepatitis B is on the national essential medicines list or subsidized by the government: interferon alpha. No drug for treating hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Tonga welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# Viet Nam

Population (in millions) (2011)	<b>88.8</b>
Country classification (2012)	<b>Lower-middle-income</b>
Gross national income per capita (PPP int \$) (2011)	<b>\$3250</b>
Total health expenditure as % of GDP (2010)	<b>6.84%</b>
Per capita total health expenditure (PPP int \$) (2010)	<b>\$215.34</b>
Per capita government health expenditure (PPP int \$) (2010)	<b>\$81.49</b>
Life expectancy at birth (in years) (2009)	<b>72</b>
Human Development Index (2011)	<b>0.593</b>
Median age (in years) (2010)	<b>28</b>
Total fertility rate per woman (2010)	<b>1.8</b>

The Government of Viet Nam reports as follows.

## National coordination

There is no written national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis.

There is no designated governmental unit/department responsible solely for coordinating and/or carrying out viral hepatitis-related activities. It is not known how many people work full-time on hepatitis-related activities in all government agencies/bodies.

The government has a viral hepatitis prevention and control programme that includes activities targeting the following specific population: newborns.

## Awareness-raising and partnerships

The government did not hold events for World Hepatitis Day 2012. It is not known whether the government has funded other viral hepatitis public awareness campaigns since January 2011.

The government does not collaborate with in-country civil society groups to develop and implement its viral hepatitis prevention and control programme.

## Evidence-based policy and data for action

There is no routine surveillance for viral hepatitis.

There are standard case definitions for hepatitis. Deaths, including from hepatitis, are reported to a central registry. Information was not provided on the percentage of hepatitis cases reported as "undifferentiated" or "unknown" hepatitis.

Liver cancer cases and cases with HIV/hepatitis coinfection are registered nationally.

The government does not publish hepatitis disease reports.

Hepatitis outbreaks are required to be reported to the government and are further investigated. There is adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities.

There is no national public health research agenda for viral hepatitis. Viral hepatitis serosurveys are not conducted regularly.

## Prevention of transmission

There is no national policy on hepatitis A vaccination.

The government has established the goal of eliminating hepatitis B but did not provide information about a specific time-frame for this.

Nationally, 55% of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth and 95% of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine.

There is a national policy that specifically targets mother-to-child transmission of hepatitis B (Annex B).

There is a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings. Health-care workers are not vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

There is a national policy on injection safety in health-care settings, which recommends single-use syringes for therapeutic injections. Single-use or auto-disable syringes, needles and cannulas are always available in all health-care facilities.

Official government estimates of the number and percentage of unnecessary injections administered annually in health-care settings are not known.

There is a national infection control policy for blood banks. All donated blood units (including family donations) and blood products nationwide are screened for hepatitis B and hepatitis C.

There is a national policy relating to the prevention of viral hepatitis among people who inject drugs.

The government does not have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety.

## Screening, care and treatment

Health professionals obtain the skills and competencies required to effectively care for people with viral hepatitis through schools for health professionals (pre-service education).

There are national clinical guidelines for the management of viral hepatitis. Information was not provided on whether these guidelines include recommendations for cases with HIV coinfection. There are national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis.

The government does not have national policies relating to screening and referral to care for hepatitis B or hepatitis C.

People testing for both hepatitis B and hepatitis C register by name; the names are kept confidential within the system. Hepatitis B and hepatitis C tests are not free of charge, and are compulsory for blood donors.

Publicly funded treatment is not available for hepatitis B or hepatitis C.

No drug for treating hepatitis B or hepatitis C is on the national essential medicines list or subsidized by the government.

The Government of Viet Nam welcomes assistance from WHO in one or more areas of viral hepatitis prevention and control (Annex C).

# ANNEXES

## ANNEX A: Primary topics or messages of public health awareness campaigns on viral hepatitis held since January 2011<sup>a</sup>

	WHO Region	General information about hepatitis	Vaccination for hepatitis A/ hepatitis B	Importance of knowing one's hepatitis B/ hepatitis C status	Safe water and good sanitation	Safer sex practices	Harm reduction for people who inject drugs	Safe workplace practices	Other
Afghanistan	EMRO								
Albania	EURO								
Andorra	EURO								
Antigua and Barbuda	AMRO								
Argentina	AMRO	X	X	X		X			
Armenia	EURO	X	X	X	X	X	X	X	X
Australia	WPRO	X							
Austria	EURO								
Azerbaijan	EURO								
Bahamas	AMRO								
Bahrain	EMRO								
Bangladesh	SEARO								
Barbados	AMRO								
Belarus	EURO	X	X			X	X	X	
Belgium	EURO								
Bhutan	SEARO								
Brazil	AMRO	X	X	X		X			X
Brunei Darussalam	WPRO								X
Bulgaria	EURO								
Cambodia	WPRO								
Cameroon	AFRO								
Canada	AMRO								
Chad	AFRO	X	X	X		X			
China	WPRO	X	X						
Colombia	AMRO								
Comoros	AFRO								
Costa Rica	AMRO								
Côte d'Ivoire	AFRO								
Croatia	EURO	X	X	X		X	X	X	
Cuba	AMRO	X	X	X	X	X	X	X	X
Cyprus	EURO								
Czech Republic	EURO								
Democratic People's Republic of Korea	SEARO	X	X	X	X			X	
Denmark	EURO								
Djibouti	EMRO								
Dominican Republic	AMRO								
Ecuador	AMRO								
Egypt	EMRO	X	X	X				X	

<sup>a</sup> The table lists all 126 Member States that responded to the survey, including Member States that did not provide responses to this survey question (i.e. Member States that did not report any primary topics or messages). Responses were provided by 36 Member States.



	WHO Region	General information about hepatitis	Vaccination for hepatitis A/ hepatitis B	Importance of knowing one's hepatitis B/ hepatitis C status	Safe water and good sanitation	Safer sex practices	Harm reduction for people who inject drugs	Safe workplace practices	Other
El Salvador	AMRO								
Estonia	EURO								
Finland	EURO								
France	EURO								
Georgia	EURO								
Germany	EURO								
Grenada	AMRO								
Guatemala	AMRO								X
Guyana	AMRO								
Honduras	AMRO								
Hungary	EURO								
India	SEARO								
Indonesia	SEARO	X		X	X				
Iran (Islamic Republic of)	EMRO	X						X	
Iraq	EMRO	X	X		X			X	
Ireland	EURO								
Israel	EURO								
Italy	EURO								
Jamaica	AMRO								
Japan	WPRO	X	X						
Jordan	EMRO	X	X	X	X	X	X	X	
Kiribati	WPRO								
Kuwait	EMRO								
Kyrgyzstan	EURO								
Lao People's Democratic Republic	WPRO	X						X	
Latvia	EURO								
Lebanon	EMRO								
Lithuania	EURO								
Luxembourg	EURO								
Malaysia	WPRO	X	X			X	X	X	
Maldives	SEARO								
Mali	AFRO								
Malta	EURO								
Mauritania	AFRO								
Mexico	AMRO								
Mongolia	WPRO								X
Montenegro	EURO								
Myanmar	SEARO	X	X			X	X		

## ANNEX A: Primary topics or messages of public health awareness campaigns on viral hepatitis held since January 2011 (continued)

	WHO Region	General information about hepatitis	Vaccination for hepatitis A/ hepatitis B	Importance of knowing one's hepatitis B/ hepatitis C status	Safe water and good sanitation	Safer sex practices	Harm reduction for people who inject drugs	Safe workplace practices	Other
Nepal	SEARO								
Netherlands	EURO	X		X		X	X	X	X
New Zealand	WPRO	X	X	X		X	X		
Nicaragua	AMRO								
Nigeria	AFRO								
Oman	EMRO								X
Pakistan	EMRO	X	X	X				X	
Panama	AMRO								
Papua New Guinea	WPRO								
Paraguay	AMRO								
Peru	AMRO								
Poland	EURO								
Qatar	EMRO	X	X	X				X	X
Republic of Moldova	EURO	X	X	X	X	X	X	X	X
Russian Federation	EURO	X	X	X	X	X	X	X	
Rwanda	AFRO								
Saint Kitts and Nevis	AMRO								
Saint Lucia	AMRO								
San Marino	EURO								
Serbia	EURO								
Sierra Leone	AFRO								
Singapore	WPRO								
Slovakia	EURO								
Slovenia	EURO	X	X	X		X	X		
Solomon Islands	WPRO								
Somalia	EMRO								
South Africa	AFRO								
South Sudan	EMRO								
Spain	EURO								
Sri Lanka	SEARO								
Sudan	EMRO								
Suriname	AMRO	X	X						
Sweden	EURO	X	X	X		X	X		
Switzerland	EURO								
Syrian Arab Republic	EMRO								
Tajikistan	EURO								
Thailand	SEARO								
The former Yugoslav Republic of Macedonia	EURO								

	WHO Region	General information about hepatitis	Vaccination for hepatitis A/ hepatitis B	Importance of knowing one's hepatitis B/ hepatitis C status	Safe water and good sanitation	Safer sex practices	Harm reduction for people who inject drugs	Safe workplace practices	Other
Timor-Leste	SEARO								
Tonga	WPRO	X	X	X	X	X	X	X	
Turkey	EURO	X		X		X	X	X	
Ukraine	EURO								
United Kingdom of Great Britain and Northern Ireland	EURO	X					X		
United Republic of Tanzania	AFRO								
United States of America	AMRO	X	X	X		X	X	X	
Uruguay	AMRO								
Uzbekistan	EURO								
Viet Nam	WPRO								
Yemen	EMRO								
Zimbabwe	AFRO								

## ANNEX B: Components of national policies that target mother-to-child transmission of hepatitis B<sup>a</sup>

	WHO Region	All pregnant women are screened for hepatitis B	All pregnant women found to have hepatitis B are counselled	Health-care providers follow up with all pregnant women found to have hepatitis B during pregnancy for the purpose of encouraging them to give birth at health-care facilities	Upon delivery, all infants born to women with hepatitis B receive hepatitis B immunoglobulin	All infants receive the first dose of hepatitis B vaccine within 24 hours of birth
Afghanistan	EMRO					
Albania	EURO		X	X	X	X
Andorra	EURO	X	X	X	X	X
Antigua and Barbuda	AMRO	X	X	X	X	X
Argentina	AMRO	X	X	X	X	X
Armenia	EURO	X	X	X	X	X
Australia	WPRO				X	X
Austria	EURO	X	X	X		
Azerbaijan	EURO	X	X	X		X
Bahamas	AMRO	X	X	X	X	
Bahrain	EMRO	X	X		X	X
Bangladesh	SEARO					
Barbados	AMRO					
Belarus	EURO	X	X	X	X	X
Belgium	EURO	X				
Bhutan	SEARO	X	X	X	X	X
Brazil	AMRO				X	X
Brunei Darussalam	WPRO	X	X	X	X	X
Bulgaria	EURO					X
Cambodia	WPRO					X
Cameroon	AFRO		X			
Canada	AMRO	X	X		X	X
Chad	AFRO					
China	WPRO				X	X
Colombia	AMRO	X	X	X	X	X
Comoros	AFRO	X				
Costa Rica	AMRO	X	X	X	X	X
Côte d'Ivoire	AFRO					
Croatia	EURO	X	X	X	X	X
Cuba	AMRO	X	X	X	X	X
Cyprus	EURO	X	X	X	X	X
Czech Republic	EURO		X		X	X
Democratic People's Republic of Korea	SEARO	X	X	X		X
Denmark	EURO	X	X	X	X	X
Djibouti	EMRO					X
Dominican Republic	AMRO					
Ecuador	AMRO	X			X	X
Egypt	EMRO			X		

<sup>a</sup> The table lists all 126 Member States that responded to the survey, including Member States that did not provide responses to this survey question (i.e. Member States that did not report having a policy with any of the specified activities). Responses were provided by 96 Member States.



	WHO Region	All pregnant women are screened for hepatitis B	All pregnant women found to have hepatitis B are counselled	Health-care providers follow up with all pregnant women found to have hepatitis B during pregnancy for the purpose of encouraging them to give birth at health-care facilities	Upon delivery, all infants born to women with hepatitis B receive hepatitis B immunoglobulin	All infants receive the first dose of hepatitis B vaccine within 24 hours of birth
El Salvador	AMRO					
Estonia	EURO	X	X			X
Finland	EURO	X	X	X	X	X
France	EURO	X	X		X	X
Georgia	EURO	X			X	X
Germany	EURO	X	X	X	X	
Grenada	AMRO	X	X	X	X	X
Guatemala	AMRO				X	
Guyana	AMRO	X	X	X		
Honduras	AMRO		X	X	X	X
Hungary	EURO	X	X	X	X	X
India	SEARO					X
Indonesia	SEARO					
Iran (Islamic Republic of)	EMRO					X
Iraq	EMRO	X	X	X	X	X
Ireland	EURO	X			X	X
Israel	EURO		X		X	X
Italy	EURO	X	X	X	X	
Jamaica	AMRO		X	X	X	X
Japan	WPRO	X	X	X	X	X
Jordan	EMRO		X	X	X	X
Kiribati	WPRO	X	X			X
Kuwait	EMRO	X	X	X	X	X
Kyrgyzstan	EURO					X
Lao People's Democratic Republic	WPRO					X
Latvia	EURO	X	X	X		X
Lebanon	EMRO				X	X
Lithuania	EURO					X
Luxembourg	EURO	X	X	X	X	X
Malaysia	WPRO		X	X	X	X
Maldives	SEARO	X	X	X	X	X
Mali	AFRO					
Malta	EURO		X			X
Mauritania	AFRO		X			X
Mexico	AMRO					
Mongolia	WPRO					X
Montenegro	EURO	X		X	X	
Myanmar	SEARO	X	X	X		

## ANNEX B: Components of national policies that target mother-to-child transmission of hepatitis B (continued)

	WHO Region	All pregnant women are screened for hepatitis B	All pregnant women found to have hepatitis B are counselled	Health-care providers follow up with all pregnant women found to have hepatitis B during pregnancy for the purpose of encouraging them to give birth at health-care facilities	Upon delivery, all infants born to women with hepatitis B receive hepatitis B immunoglobulin	All infants receive the first dose of hepatitis B vaccine within 24 hours of birth
Nepal	SEARO		X			X
Netherlands	EURO	X	X		X	X
New Zealand	WPRO	X	X	X	X	
Nicaragua	AMRO					
Nigeria	AFRO					
Oman	EMRO					X
Pakistan	EMRO	X				X
Panama	AMRO					X
Papua New Guinea	WPRO					X
Paraguay	AMRO					
Peru	AMRO					X
Poland	EURO	X	X		X	X
Qatar	EMRO	X	X	X	X	X
Republic of Moldova	EURO	X	X	X		X
Russian Federation	EURO	X	X	X		X
Rwanda	AFRO					
Saint Kitts and Nevis	AMRO					
Saint Lucia	AMRO					
San Marino	EURO	X	X	X	X	
Serbia	EURO	X	X	X		X
Sierra Leone	AFRO					
Singapore	WPRO	X	X	X		X
Slovakia	EURO	X	X	X	X	X
Slovenia	EURO	X	X	X	X	
Solomon Islands	WPRO					X
Somalia	EMRO					
South Africa	AFRO					
South Sudan	EMRO					
Spain	EURO	X	X		X	
Sri Lanka	SEARO					
Sudan	EMRO					
Suriname	AMRO	X	X	X	X	X
Sweden	EURO	X	X	X	X	X
Switzerland	EURO					
Syrian Arab Republic	EMRO					
Tajikistan	EURO					
Thailand	SEARO	X	X		X	X
The former Yugoslav Republic of Macedonia	EURO		X	X	X	X

	WHO Region	All pregnant women are screened for hepatitis B	All pregnant women found to have hepatitis B are counselled	Health-care providers follow up with all pregnant women found to have hepatitis B during pregnancy for the purpose of encouraging them to give birth at health-care facilities	Upon delivery, all infants born to women with hepatitis B receive hepatitis B immunoglobulin	All infants receive the first dose of hepatitis B vaccine within 24 hours of birth
Timor-Leste	SEARO					
Tonga	WPRO				X	X
Turkey	EURO	X	X	X	X	X
Ukraine	EURO	X	X	X		X
United Kingdom of Great Britain and Northern Ireland	EURO	X			X	
United Republic of Tanzania	AFRO					
United States of America	AMRO	X	X		X	X
Uruguay	AMRO	X	X	X	X	X
Uzbekistan	EURO					
Viet Nam	WPRO					X
Yemen	EMRO					
Zimbabwe	AFRO					

## ANNEX C: Areas in which Member States indicated that they might want assistance from the World Health Organization for the prevention and control of viral hepatitis<sup>a</sup>

	WHO Region	Developing the national plan for viral hepatitis prevention and control	Integrating viral hepatitis programmes into other health services	Awareness-raising	Viral hepatitis surveillance	Estimating the national burden of viral hepatitis	Developing tools to assess the effectiveness of interventions	Assessing the economic impact of viral hepatitis	Increasing coverage of the birth dose of the hepatitis B vaccine	Increasing access to treatment	Increasing access to diagnostics	Improving laboratory quality	Developing education/training programmes for health professionals	Other
Afghanistan	EMRO	X		X		X	X	X		X	X	X	X	X
Albania	EURO		X	X		X		X		X	X	X	X	
Andorra	EURO													
Antigua and Barbuda	AMRO													
Argentina	AMRO		X	X	X	X	X	X					X	
Armenia	EURO	X		X	X		X			X	X		X	
Australia	WPRO													
Austria	EURO													
Azerbaijan	EURO	X		X	X						X	X	X	
Bahamas	AMRO	X	X		X	X					X			
Bahrain	EMRO	X	X	X		X	X	X		X				
Bangladesh	SEARO	X	X	X	X	X	X	X	X	X	X		X	
Barbados	AMRO	X	X	X	X	X							X	
Belarus	EURO		X					X		X			X	
Belgium	EURO	X	X	X	X	X	X	X	X	X	X	X	X	X
Bhutan	SEARO					X			X					
Brazil	AMRO	X	X	X	X	X	X	X	X	X	X	X	X	
Brunei Darussalam	WPRO													
Bulgaria	EURO	X	X					X		X				
Cambodia	WPRO	X	X	X	X	X			X	X	X	X	X	
Cameroon	AFRO				X	X		X	X	X		X		
Canada	AMRO						X							
Chad	AFRO	X	X		X		X	X		X	X	X	X	
China	WPRO	X	X	X	X	X	X		X	X	X	X	X	
Colombia	AMRO						X							X
Comoros	AFRO	X		X	X	X			X	X	X	X		
Costa Rica	AMRO	X		X	X	X	X	X				X	X	
Côte d'Ivoire	AFRO	X	X	X	X		X		X	X	X	X		X
Croatia	EURO		X			X	X	X						
Cuba	AMRO										X	X		
Cyprus	EURO	X						X					X	
Czech Republic	EURO													
Democratic People's Republic of Korea	SEARO	X			X				X	X	X		X	
Denmark	EURO													
Djibouti	EMRO	X	X		X	X	X	X		X	X	X	X	X
Dominican Republic	AMRO	X	X	X	X	X		X	X	X	X		X	X
Ecuador	AMRO			X	X									
Egypt	EMRO			X	X	X	X	X			X	X	X	X

<sup>a</sup> The table lists all 126 Member States responding to the survey, including Member States that did not provide responses to this survey question (i.e. Member States that did not indicate an interest in receiving specific forms of assistance). Responses were provided by 100 Member States.



	WHO Region	Developing the national plan for viral hepatitis prevention and control	Integrating viral hepatitis programmes into other health services	Awareness-raising	Viral hepatitis surveillance	Estimating the national burden of viral hepatitis	Developing tools to assess the effectiveness of interventions	Assessing the economic impact of viral hepatitis	Increasing coverage of the birth dose of the hepatitis B vaccine	Increasing access to treatment	Increasing access to diagnostics	Improving laboratory quality	Developing education/training programmes for health professionals	Other
El Salvador	AMRO	X	X	X	X	X	X	X	X	X	X	X	X	X
Estonia	EURO	X		X									X	
Finland	EURO												X	X
France	EURO			X			X	X						
Georgia	EURO	X		X	X	X	X	X		X			X	
Germany	EURO													
Grenada	AMRO	X	X	X	X	X	X	X	X	X	X	X	X	
Guatemala	AMRO	X	X	X	X	X	X	X	X	X	X	X	X	
Guyana	AMRO	X	X	X	X	X	X	X	X	X	X	X	X	
Honduras	AMRO	X		X	X	X		X			X	X	X	
Hungary	EURO													
India	SEARO			X	X	X	X							
Indonesia	SEARO	X	X	X	X	X	X	X	X	X	X	X	X	
Iran (Islamic Republic of)	EMRO													
Iraq	EMRO	X	X	X	X	X	X	X		X	X	X	X	X
Ireland	EURO													
Israel	EURO													
Italy	EURO													
Jamaica	AMRO	X	X		X	X						X	X	
Japan	WPRO													
Jordan	EMRO			X					X				X	
Kiribati	WPRO	X							X	X	X	X	X	
Kuwait	EMRO	X					X						X	
Kyrgyzstan	EURO	X			X	X			X			X	X	
Lao People's Democratic Republic	WPRO	X	X	X	X	X	X	X	X	X	X	X	X	X
Latvia	EURO	X			X	X		X					X	
Lebanon	EMRO	X	X	X	X	X	X	X	X	X	X		X	
Lithuania	EURO		X	X		X	X	X			X			
Luxembourg	EURO													
Malaysia	WPRO													
Maldives	SEARO	X	X	X	X	X	X	X		X	X		X	
Mali	AFRO	X		X	X	X		X		X	X		X	
Malta	EURO		X	X						X			X	
Mauritania	AFRO	X		X	X	X	X		X	X	X	X	X	
Mexico	AMRO													
Mongolia	WPRO		X	X						X			X	
Montenegro	EURO	X	X		X	X							X	
Myanmar	SEARO	X		X	X	X			X		X			

## ANNEX C: Areas in which Member States indicated that they might want assistance from the World Health Organization for the prevention and control of viral hepatitis (continued)

	WHO Region	Developing the national plan for viral hepatitis prevention and control	Integrating viral hepatitis programmes into other health services	Awareness-raising	Viral hepatitis surveillance	Estimating the national burden of viral hepatitis	Developing tools to assess the effectiveness of interventions	Assessing the economic impact of viral hepatitis	Increasing coverage of the birth dose of the hepatitis B vaccine	Increasing access to treatment	Increasing access to diagnostics	Improving laboratory quality	Developing education/training programmes for health professionals	Other
Nepal	SEARO	X	X	X	X	X	X	X	X	X	X		X	X
Netherlands	EURO													
New Zealand	WPRO													
Nicaragua	AMRO	X			X						X		X	
Nigeria	AFRO	X	X	X	X	X	X	X	X	X	X	X	X	X
Oman	EMRO	X				X		X		X				X
Pakistan	EMRO	X	X	X	X		X	X	X	X	X	X	X	
Panama	AMRO	X	X	X	X	X	X	X	X	X	X	X	X	
Papua New Guinea	WPRO	X	X	X	X	X			X		X	X	X	
Paraguay	AMRO	X	X	X	X	X		X		X	X			
Peru	AMRO		X		X	X	X	X					X	
Poland	EURO					X		X						
Qatar	EMRO	X	X	X	X	X	X	X	X	X	X	X	X	
Republic of Moldova	EURO	X	X	X	X	X	X	X	X	X	X	X	X	
Russian Federation	EURO	X	X	X	X	X					X	X	X	
Rwanda	AFRO	X	X	X			X			X	X	X	X	
Saint Kitts and Nevis	AMRO		X	X	X	X					X		X	
Saint Lucia	AMRO	X	X	X	X	X	X	X	X	X	X	X	X	X
San Marino	EURO	X					X	X					X	
Serbia	EURO		X			X	X	X		X				
Sierra Leone	AFRO	X	X	X	X	X	X	X	X	X	X	X	X	X
Singapore	WPRO													
Slovakia	EURO	X	X					X						
Slovenia	EURO					X								
Solomon Islands	WPRO								X					
Somalia	EMRO	X	X	X	X	X	X	X	X	X	X	X	X	
South Africa	AFRO	X	X	X	X	X	X	X	X	X	X		X	
South Sudan	EMRO	X	X	X	X	X	X	X	X	X	X	X	X	X
Spain	EURO													
Sri Lanka	SEARO	X	X	X	X	X	X	X		X	X		X	
Sudan	EMRO	X	X	X	X	X	X	X		X	X	X	X	X
Suriname	AMRO	X	X	X	X	X	X	X	X	X	X	X	X	
Sweden	EURO													
Switzerland	EURO													
Syrian Arab Republic	EMRO	X	X	X	X	X	X	X	X	X	X	X	X	X
Tajikistan	EURO	X	X	X	X	X					X	X	X	
Thailand	SEARO	X	X			X	X	X						
The former Yugoslav Republic of Macedonia	EURO	X					X			X	X	X		

	WHO Region	Developing the national plan for viral hepatitis prevention and control	Integrating viral hepatitis programmes into other health services	Awareness-raising	Viral hepatitis surveillance	Estimating the national burden of viral hepatitis	Developing tools to assess the effectiveness of interventions	Assessing the economic impact of viral hepatitis	Increasing coverage of the birth dose of the hepatitis B vaccine	Increasing access to treatment	Increasing access to diagnostics	Improving laboratory quality	Developing education/training programmes for health professionals	Other
Timor-Leste	SEARO	X	X	X	X								X	
Tonga	WPRO							X		X	X	X	X	
Turkey	EURO													
Ukraine	EURO	X	X	X		X		X	X	X	X	X		
United Kingdom of Great Britain and Northern Ireland	EURO													
United Republic of Tanzania	AFRO	X	X	X	X	X	X	X			X	X	X	
United States of America	AMRO													
Uruguay	AMRO	X				X	X	X						
Uzbekistan	EURO							X		X				
Viet Nam	WPRO	X	X		X			X		X	X	X		
Yemen	EMRO	X	X	X	X	X	X	X		X	X	X	X	X
Zimbabwe	AFRO	X	X	X	X	X			X	X	X	X	X	

## ANNEX D: Study methodology and limitations

This report is based on a survey of all Member States of the World Health Organization (WHO). The survey was written in English and piloted across 13 WHO Member States. After feedback was incorporated into a final version, the survey was translated into French, Spanish, Portuguese and Russian.

Responses to the survey were sought from the identified focal point for viral hepatitis at the national department or ministry of health in each WHO Member State. These individuals were identified both through direct communication with government agencies and through international, regional and country offices of WHO. Data collection took place from July 2012 to February 2013.

The global, regional and country summaries in this report were developed using the completed survey responses supplemented by any additional details received. Quantitative data presented in tables and figures may total slightly less or slightly more than 100% due to the rounding of decimals. For country summaries that report the amount spent on publicly funded treatment for hepatitis B and hepatitis C, the United States dollar amount was calculated by converting from the local currency using the average 2012 exchange rate (1 January 2012–31 December 2012). The source for historical exchange rates was <http://www.oanda.com/currency/average>.

Country summaries are prefaced by additional country data intended to provide an overview of the context in which policy and programme development takes place. Sources for these data are provided in Table 1.

A number of study limitations may have influenced the findings presented in this report.

Of the 194 Member States, 126 responded to the survey (64.9%), while 68 did not provide responses. The research team's inability to obtain responses from some countries may be attributable to the lack of any clear national focal point or department leading viral hepatitis prevention and control efforts. Hence, countries with weak national viral hepatitis programmes may be underrepresented in the survey findings and the full extent of any gap in the policy response to hepatitis may not be reflected in the report.

Furthermore, the survey asked only about the existence of national policies, strategies and programmes; it did not seek to assess their quality or impact. Caution must be exercised in using survey findings to draw conclusions about implementation, service uptake and health outcomes.

Linguistic and definitional considerations should also be highlighted. As the survey was limited to the aforementioned five languages, although mitigated by many WHO country offices that provided assistance to respondents, this may have affected both response rates and respondents' thorough and clear understanding of the questions. Furthermore, some terms used in the survey may be understood differently in different regions and countries.

Finally, the data included here are those reported by the identified focal point from each Member State. It was not possible to verify the data submitted prior to publication of this report.

**Table 1.** Sources for country context data

<b>Population (in millions)</b>	<i>World population prospects: the 2010 revision.</i> New York, United Nations, Department of Economic and Social Affairs, Population Division, 2011.
<b>Country classification</b>	The World Bank. <i>Country and lending groups</i> (web site). <a href="http://data.worldbank.org/about/country-classifications/country-and-lending-groups">http://data.worldbank.org/about/country-classifications/country-and-lending-groups</a> (accessed 15 October 2012).
<b>Gross national income per capita (purchasing power parity in international dollars [PPP int \$])</b>	The World Bank. <i>GNI per capita, PPP (current international \$)</i> (web site). <a href="http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD/countries?display=default3Fcid3DEXT_BoletinES_W_EXT">http://data.worldbank.org/indicator/NY.GNP.PCAP.PP.CD/countries?display=default3Fcid3DEXT_BoletinES_W_EXT</a> (accessed 15 October 2012).
<b>Total health expenditure as % of GDP</b>	<i>The WHO Global Health Observatory</i> (web site). <a href="http://apps.who.int/gho/data/node.main">http://apps.who.int/gho/data/node.main</a> (accessed 15 October 2012).
<b>Per capita total health expenditure (PPP int \$)</b>	<i>The WHO Global Health Observatory</i> (web site). <a href="http://apps.who.int/gho/data/node.main">http://apps.who.int/gho/data/node.main</a> (accessed 15 October 2012).
<b>Per capita government health expenditure (PPP int \$)</b>	<i>The WHO Global Health Observatory</i> (web site). <a href="http://apps.who.int/gho/data/node.main">http://apps.who.int/gho/data/node.main</a> (accessed 15 October 2012).
<b>Life expectancy at birth</b>	<i>The WHO Global Health Observatory</i> (web site). <a href="http://apps.who.int/gho/data/node.main">http://apps.who.int/gho/data/node.main</a> (accessed 15 October 2012).
<b>Human Development Index</b>	<i>Human development Index tables. Human development report 2011 – sustainability and equity: a better future for all.</i> United Nations Development Programme, 2011. <a href="http://hdr.undp.org/en/media/HDR_2011_Statistical_Tables.xls">hdr.undp.org/en/media/HDR_2011_Statistical_Tables.xls</a> (accessed 15 May 2013).
<b>Median age</b>	<i>The WHO Global Health Observatory</i> (web site). <a href="http://apps.who.int/gho/data/node.main">http://apps.who.int/gho/data/node.main</a> (accessed 15 October 2012).
<b>Total fertility rate per woman</b>	<i>The WHO Global Health Observatory</i> (web site). <a href="http://apps.who.int/gho/data/node.main">http://apps.who.int/gho/data/node.main</a> (accessed 15 October 2012).



## ANNEX E: Responding to viral hepatitis: the World Health Organization/World Hepatitis Alliance 2012 survey of national governments

Your cooperation is requested in gathering data that will enable the World Health Organization and the World Hepatitis Alliance to assess the response to viral hepatitis at the global, regional and national levels.

This information is vital for measuring progress, identifying gaps and guiding future efforts. Please fully answer all questions in English. You may provide supporting information in any language. If you do not know the answer to a question, please make every effort to find the information. Please submit the completed survey, along with all supporting information, to [obaran@who.int](mailto:obaran@who.int) with a cc to [hepatitis@cphiv.dk](mailto:hepatitis@cphiv.dk).

### Contact information

First name \_\_\_\_\_

Last name \_\_\_\_\_

Position \_\_\_\_\_

Organization \_\_\_\_\_

Street address \_\_\_\_\_

City \_\_\_\_\_

Postal code / zip code \_\_\_\_\_

Country \_\_\_\_\_

Phone number \_\_\_\_\_

E-mail address \_\_\_\_\_

Web site \_\_\_\_\_

Where appropriate, please give the names and contact details of colleagues who provided supporting information.

1. In your country, is there a **written** national strategy or plan that focuses exclusively or primarily on the prevention and control of viral hepatitis?<sup>a</sup>

( ) yes ( ) no ( ) do not know

<sup>a</sup> Please e-mail us the relevant supporting information, including if you have a strategy or plan for other diseases which includes viral hepatitis.

#### If yes –

Is the strategy or plan exclusive for viral hepatitis or does it also address other diseases (e.g. HIV, sexually transmitted infections)?

- a. ( ) exclusive for viral hepatitis  
b. ( ) only for hepatitis B  
c. ( ) only for hepatitis C  
d. ( ) integrated with other diseases  
e. ( ) do not know

Please indicate whether the following are components of the strategy or plan:

- |   |         |        |                 |
|---|---------|--------|-----------------|
| 1. Raising awareness                                  | ( ) yes | ( ) no | ( ) do not know |
| 2. Surveillance                                       | ( ) yes | ( ) no | ( ) do not know |
| 3. Vaccination  | ( ) yes | ( ) no | ( ) do not know |
| 4. Prevention in general                              | ( ) yes | ( ) no | ( ) do not know |
| 5. Prevention of transmission via injecting drug use  | ( ) yes | ( ) no | ( ) do not know |
| 6. Prevention of transmission in health-care settings | ( ) yes | ( ) no | ( ) do not know |
| 7. Treatment and care                                 | ( ) yes | ( ) no | ( ) do not know |
| 8. Coinfection with HIV                               | ( ) yes | ( ) no | ( ) do not know |

2. Is there a designated governmental unit/department responsible only for coordinating and/or carrying out viral hepatitis-related activities?

( ) yes ( ) no ( ) do not know

a. If yes, how many staff members does it have? \_\_\_\_\_

b. Name of unit/department \_\_\_\_\_

3. How many people work full-time (or how many full-time equivalent staff) on hepatitis-related activities in all government agencies/bodies?

\_\_\_\_\_ people ( ) do not know

4. Did your government hold events for World Hepatitis Day 2012?<sup>a</sup>

( ) yes ( ) no ( ) do not know

<sup>a</sup> Please e-mail us the relevant supporting information.

5. Has your government funded any public viral hepatitis awareness campaign since January 2011, other than World Hepatitis Day?<sup>a</sup>

( ) yes ( ) no ( ) do not know

<sup>a</sup> Please e-mail us the relevant supporting information (including the names of the campaigns).

**If yes**, what were the primary topics or messages of the campaigns?

- a. ( ) General information about hepatitis and its transmission
- b. ( ) Vaccination for hepatitis A and hepatitis B
- c. ( ) Importance of knowing one's hepatitis B and hepatitis C status
- d. ( ) Safe water and good sanitation
- e. ( ) Safer sex practices
- f. ( ) Harm reduction for people who inject drugs
- g. ( ) Safe workplace practices
- h. ( ) Other – please specify:

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

6. Does your government have a viral hepatitis prevention and control programme that includes activities targeting specific populations?

( ) yes ( ) no ( ) do not know

**If yes**, please indicate which populations:

- a. ( ) Health workers (including health-care waste handlers)
- b. ( ) People who inject drugs
- c. ( ) Migrants
- d. ( ) Prisoners
- e. ( ) The homeless
- f. ( ) People living with HIV
- g. ( ) Low-income populations
- h. ( ) The uninsured
- i. ( ) Indigenous people
- j. ( ) Other - (please specify): \_\_\_\_\_

7. Does your government collaborate with any civil society group within your country (such as patient groups or national or local nongovernmental organizations) to develop and implement its viral hepatitis prevention and control programme? **If yes**, please name major partners.

( ) yes ( ) no major partners

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

8. Is there routine surveillance for viral hepatitis?

( ) yes ( ) no ( ) do not know

If yes, please answer the following questions regarding viral hepatitis surveillance. If no, please proceed to Question 11.

9. Is there a national surveillance system for the following types of **acute** viral hepatitis infection? Please check all that apply.

( ) yes ( ) no ( ) do not know

- a. Hepatitis A ( ) yes ( ) no ( ) do not know
- b. Hepatitis B ( ) yes ( ) no ( ) do not know
- c. Hepatitis C ( ) yes ( ) no ( ) do not know
- d. Hepatitis D ( ) yes ( ) no ( ) do not know
- e. Hepatitis E ( ) yes ( ) no ( ) do not know

10. Is there a national surveillance system for **chronic** hepatitis infection? Please check all that apply.

( ) yes ( ) no ( ) do not know

- a. Hepatitis B ( ) yes ( ) no ( ) do not know
- b. Hepatitis C ( ) yes ( ) no ( ) do not know
- c. Hepatitis D ( ) yes ( ) no ( ) do not know

**If yes**, please e-mail us the definitions and/or source used.

11. Are there standard case definitions for hepatitis infections?

( ) yes ( ) no ( ) do not know

12. Are deaths, including from hepatitis, reported to a central registry?

( ) yes ( ) no ( ) do not know

13. What percentage of hepatitis cases are reported as "undifferentiated" or "unclassified" hepatitis?

( ) yes ( ) no ( ) do not know

14. Are liver cancer cases registered nationally?

☐ yes ☐ no ☐ do not know

15. Are cases with HIV/hepatitis coinfection registered nationally?

☐ yes ☐ no ☐ do not know

16. How often are hepatitis disease reports published?

a. ☐ weekly b. ☐ monthly c. ☐ annually  
d. ☐ no reports published e. ☐ other: \_\_\_\_\_

17. Are hepatitis outbreaks required to be reported to the government?

☐ yes ☐ no ☐ do not know

a. **If yes**, are they further investigated?

☐ yes ☐ no ☐ do not know

18. Is there a national public health research agenda for viral hepatitis?<sup>a</sup>

☐ yes ☐ no ☐ do not know

<sup>a</sup> Please e-mail us the relevant documentation, including information about the budget and networks involved.

19. Are viral hepatitis serosurveys conducted regularly?

☐ yes ☐ no ☐ do not know

**If yes –**

a. How often? \_\_\_\_\_

b. When was the last one carried out? \_\_\_\_\_

c. Please specify the target populations:

1. ☐ Children (please specify age group): \_\_\_\_\_

2. ☐ General population

3. ☐ People who inject drugs

4. ☐ Men who have sex with men

5. ☐ Other groups: \_\_\_\_\_

20. Is there adequate laboratory capacity nationally to support investigation of viral hepatitis outbreaks and other surveillance activities?

☐ yes ☐ no ☐ do not know

a. Hepatitis A ☐ yes ☐ no ☐ do not know

b. Hepatitis B ☐ yes ☐ no ☐ do not know

c. Hepatitis C ☐ yes ☐ no ☐ do not know

d. Hepatitis E ☐ yes ☐ no ☐ do not know

21. Is there a national hepatitis A vaccination policy?

☐ yes ☐ no ☐ do not know

**If yes**, does the policy address vaccination for the following groups? Please check all that apply.

a. ☐ Travellers to highly endemic countries

b. ☐ Military personnel

c. ☐ Children, as part of the national routine vaccination programme

d. ☐ Ecological and sanitary workers

e. ☐ Other – please specify: \_\_\_\_\_

22. Has your government established the goal of eliminating hepatitis B?

☐ yes ☐ no ☐ do not know

a. **If yes**, in what timeframe (e.g. an end date)?

\_\_\_\_\_

23. Nationally, what percentage of newborn infants in a given recent year received the first dose of hepatitis B vaccine within 24 hours of birth?

\_\_\_\_\_

24. Nationally, what percentage of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine?

\_\_\_\_\_

25. Nationally, what percentage of one-year-olds (ages 12–23 months) in a given recent year received three doses of hepatitis B vaccine?
- Is there a national policy that specifically targets mother-to-child transmission of hepatitis B? Please check the following if the policy calls for any of these activities:
- ☐ All pregnant women are screened for hepatitis B
  - ☐ All pregnant women found to have hepatitis B are counselled
  - ☐ Health-care providers follow up with all pregnant women found to have hepatitis B during pregnancy for the purpose of encouraging them to give birth at health-care facilities
  - ☐ Upon delivery, all infants born to women with hepatitis B receive hepatitis B immunoglobulin
  - ☐ All infants receive the first dose of hepatitis B vaccine within 24 hours of birth
  - ☐ All infants receive the second and third doses of hepatitis B vaccine within 12 months of birth
26. Is there a specific national strategy and/or policy/guidelines for preventing hepatitis B and hepatitis C infection in health-care settings?
- ☐ yes      ☐ no      ☐ do not know
- If yes, are health workers vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood?
- ☐ yes      ☐ no      ☐ do not know
27. Is there a national policy on injection safety in health-care settings?
- ☐ yes      ☐ no      ☐ do not know
- If yes, what type of syringes does the policy recommend for therapeutic injections?
- ☐ single-use syringes
  - ☐ auto-disable syringes
  - ☐ do not know
28. Are single-use or auto-disable syringes, needles and cannulas always available in all health-care facilities?
- ☐ yes      ☐ no      ☐ do not know
29. What are your government's official estimates of the number and percentage of unnecessary injections administered annually in health-care settings? (e.g. injections that are given when an equivalent oral medication is available)
- Number \_\_\_\_\_ ☐ do not know
  - Percentage \_\_\_\_\_ ☐ do not know  
(as a proportion of total injections administered annually in health-care settings)
30. Is there a national infection control policy for blood banks?<sup>a</sup>
- ☐ yes      ☐ no      ☐ do not know
- <sup>a</sup> Please e-mail us the relevant supporting information, including the percentage of blood donations screened for hepatitis B virus, hepatitis C virus and HIV.
31. Are all donated blood units (including family donations) and blood products nationwide screened for hepatitis B?
- ☐ yes      ☐ no      ☐ do not know
32. Are all donated blood units (including family donations) and blood products nationwide screened for hepatitis C?
- ☐ yes      ☐ no      ☐ do not know
33. Is there a national policy relating to the prevention of viral hepatitis among people who inject drugs?<sup>a</sup>
- ☐ yes      ☐ no      ☐ do not know
- <sup>a</sup> Please e-mail us the relevant supporting information.
34. Does your government have guidelines that address how hepatitis A and hepatitis E can be prevented through food and water safety?
- ☐ yes      ☐ no      ☐ do not know
35. How do health professionals in your country obtain the skills and competencies required to effectively care for people with viral hepatitis?
- ☐ schools for health professionals (pre-service education)
  - ☐ on-the-job training
  - ☐ postgraduate training
  - ☐ other: \_\_\_\_\_
  - ☐ do not know

36. Does your government have a national policy relating to screening and referral to care for the following?<sup>a</sup>

( ) yes ( ) no ( ) do not know

a. Hepatitis B ( ) yes ( ) no ( ) do not know

b. Hepatitis C ( ) yes ( ) no ( ) do not know

<sup>a</sup> Please e-mail us the relevant supporting information.

37. Please answer the following questions about hepatitis B and hepatitis C testing in your country. Please check the appropriate boxes.

	a. Hepatitis B	b. Hepatitis C
1. When testing, do people register by name?	( ) yes ( ) no	( ) yes ( ) no
2. If people register by name, are their names kept confidential within the system, or is there open access to the names?	( ) confidential ( ) open access	( ) confidential ( ) open access
3. Is the test free of charge for all individuals?	( ) yes ( ) no	( ) yes ( ) no
4. Is the test free of charge for members of any specific group?	( ) yes (please indicate): ( ) no	( ) yes (please indicate): ( ) no
5. Is the test compulsory for members of any specific group?	( ) yes (please indicate): ( ) no	( ) yes (please indicate): ( ) no

38. Are there national clinical guidelines for the management of viral hepatitis?<sup>a</sup>

( ) yes ( ) no ( ) do not know

<sup>a</sup> Please e-mail us the relevant supporting information.

a. **If yes**, do they include recommendations for cases with HIV coinfection?

( ) yes ( ) no ( ) do not know

b. **If no**, are there national clinical guidelines for the management of HIV, which include recommendations for coinfection with viral hepatitis?

( ) yes ( ) no ( ) do not know

39. Is publicly funded treatment available for hepatitis B?

( ) yes ( ) no ( ) do not know

a. If yes, who is eligible for publicly funded treatment for hepatitis B? Please specify:

\_\_\_\_\_

40. Is publicly funded treatment available for hepatitis C?

( ) yes ( ) no ( ) do not know

a. If yes, who is eligible for publicly funded treatment for hepatitis C? Please specify:

\_\_\_\_\_

41. How much does the government spend on publicly funded treatment for hepatitis B and hepatitis C? (Please indicate currency. Please also indicate whether the amount is for one or both of the infections.)

\_\_\_\_\_

\_\_\_\_\_

42. Which of the following drugs for treating hepatitis B and hepatitis C are on the national essential medicines list or subsidized by the government? (Please check all that apply.)

a. Available drugs for treating hepatitis B:

1. ( ) Interferon alpha
2. ( ) Pegylated interferon
3. ( ) Lamivudine (Epivir-HBV, Zeffix or Heptodin)
4. ( ) Adefovir dipivoxil (Hepsera)
5. ( ) Entecavir (Baraclude)
6. ( ) Telbivudine (Tyzeka, Sebivo)
7. ( ) Tenofovir (Viread)
8. ( ) Other: \_\_\_\_\_

b. Available drugs for treating hepatitis C:

1. ( ) Interferon alpha
2. ( ) Pegylated interferon
3. ( ) Ribavirin
4. ( ) Boceprevir (Victrelis)
5. ( ) Telaprevir (Incivo, Incivek)
6. ( ) Other: \_\_\_\_\_



43. Please indicate in which areas, if any, your government might want assistance from the World Health Organization for the prevention and control of viral hepatitis:
- a. ( ) Developing the national plan for viral hepatitis prevention and control
  - b. ( ) Viral hepatitis surveillance
  - c. ( ) Increasing coverage of the birth dose of the hepatitis B vaccine
  - d. ( ) Estimating the national burden of viral hepatitis
  - e. ( ) Developing tools to assess the effectiveness of interventions
  - f. ( ) Increasing access to treatment
  - g. ( ) Increasing access to diagnostics
  - h. ( ) Improving laboratory quality
  - i. ( ) Awareness-raising
  - j. ( ) Developing education/training programmes for health professionals
  - k. ( ) Assessing the economic impact of viral hepatitis
  - l. ( ) Integrating viral hepatitis programmes into other health services
  - m. ( ) Other – please specify:



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