

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.¹ 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.² It has the highest level of unmet need for family planning and one of the lowest immunization coverage levels among one-year-olds.² The African Region furthermore has severe shortages in its health workforce.³

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 2020.⁴ Currently, however, it is the only region where mortality from communicable, maternal, perinatal and nutritional conditions still exceeds mortality from noncommunicable diseases.⁵

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.⁶

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 $\geq 90\%$ of children in sub-Saharan Africa exposed to infection by the age of 10 years.^a The prevalence of hepatitis E in the Region varies from $<2\%$ in several countries to $>20\%$ in Central Africa.^b

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

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

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

^c 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.

^d 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.

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

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,

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

² *World Health Statistics 2012*. Geneva, WHO, 2012. Available at: http://www.who.int/gho/publications/world_health_statistics/2012/en/ (accessed on 03 May 2013).

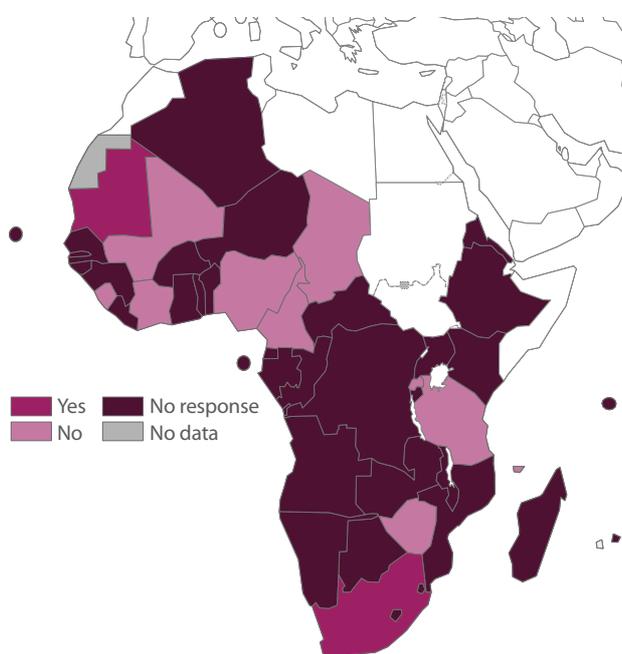
³ *The African Health Monitor*, April–June 2010; (12):22–29. Available at: <http://ahm.afro.who.int/issue12/pdf/AHM%2012Complete.pdf> (accessed on 03 May 2013).

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

⁵ *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 (accessed on 03 May 2013).

⁶ 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 acute 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 chronic 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
<i>If YES – Hepatitis outbreaks are further investigated (N=115)</i>	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.

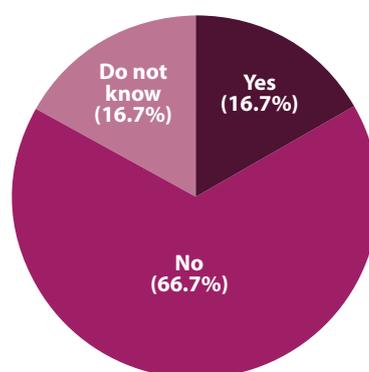
Prevention of transmission

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.

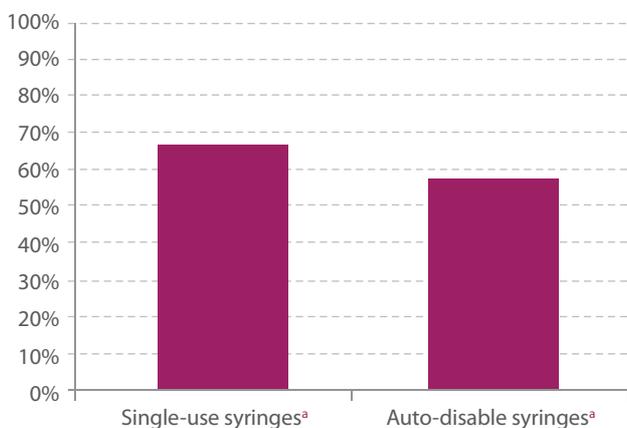
One responding Member State (8.3%, South Africa) reported that health-care workers are vaccinated against hepatitis B prior to starting work that might put them at risk of exposure to blood.

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 ($N=12$)



^a 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.

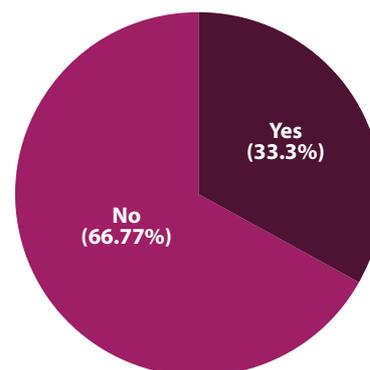
Two responding Member States (16.7%, Côte d'Ivoire and Rwanda) indicated that they have national policies relating to screening and referral to care for hepatitis B and hepatitis C.

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)

Awareness-raising, partnerships and resource mobilization (first WHO strategic axis)	
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%
Evidence-based policy and data for action (second WHO strategic axis)	
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%
Prevention of transmission (third WHO strategic axis)	
Increasing coverage of the birth dose of the hepatitis B vaccine	66.7%
Screening, care and treatment (fourth WHO strategic axis)	
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%