# Viral hepatitis B and C burden of disease, policy adoption and implementation status in WHO regions, 2024



The World Health Organization (WHO) collaborates with countries and partners to collect data through the Global Hepatitis Reporting System. WHO gathers information on disease burden, testing, and treatment coverage of hepatitis B and C, as well as information on hepatitis related health systems and national policies.

This fact sheet provides a summary of key epidemiological data from year end 2022, previously published in the Global hepatitis report 2024, and gives an overview of the global progress on viral hepatitis B and C response and countries' capacity to deliver hepatitis B and C testing and treatment services.

## 1. Hepatitis B and C burden, testing, and treatment coverage in WHO regions

The WHO Global hepatitis report 2024 presents the data collected from 187 countries for 2022, compared to estimates from 130 countries in 2019 and 42 countries in 2018 (1). Key findings are highlighted as follows:

- Viral hepatitis is a leading contributor to global burden of infectious diseases. About 1.3 million people died of viral hepatitis in 2022, similar to the number of deaths caused by tuberculosis. Deaths from viral hepatitis and tuberculosis were on par as the second leading causes of death among communicable diseases in 2022, after COVID-19.
- Increasing mortality and liver cancers cases.
   More comprehensive data from 187 countries show
   that the estimated number of viral hepatitis deaths
   increased from 1.1 million in 2019 to 1.3 million in
   2022 with Hepatitis B causing 83% and hepatitis C
   17% of the deaths.
- Initial modest declines in incidence show potential for sustainable impact based on strong prevention and an HCV cure. The estimated number of people newly infected by viral hepatitis declined from 3 million in 2019 to 2.2 million in 2022. Of which, 1.2 million were hepatitis B and nearly 1.0 million hepatitis C. These revised estimates reflect improved data and accuracy from prevalence surveys. They also suggest that hepatitis B and C prevention, (immunization and safe injections), and expanding hepatitis C cure, have had an impact on reducing incidence.
- Overall, about 304 million people were living with viral hepatitis B and C in 2022. An estimated 254 million were living with hepatitis B and 50 million

- were living with hepatitis C. Half the burden of chronic hepatitis B and C infection is among people 30–54 years old, and men account for 58% of all cases. An estimated 12% of the burden is among children, mainly for hepatitis B.
- There is regional variation in the viral hepatitis burden and response. The WHO African Region accounted for 63% of new hepatitis B infections, while 18% of newborns in the Region received the hepatitis B birth-dose vaccination. The Western Pacific Region accounts for 47% of hepatitis B deaths, and treatment coverage remains low. Among high-income countries, the United States of America has an increasing burden of hepatitis C among people who use drugs.
- The global coverage of viral hepatitis prevention, diagnosis, and treatment is too low, and people living with viral hepatitis and their communities continue to bear the heavy burden of the epidemics.
  - Only 13% of people living with chronic hepatitis B infection had been diagnosed and nearly 3% had received antiviral therapy at the end of 2022.
  - Only 36% of people living with hepatitis C had been diagnosed between 2015 and 2022, and 20% had received curative treatment, highlighting the opportunity for better linkages between diagnosis and provision of care.
  - Almost 7 million people were receiving hepatitis B treatment and 12.5 million people have received hepatitis C curative treatment, far below the global targets for eliminating viral hepatitis by 2030.
- In 2022, an estimated 45% of infants received a dose of the hepatitis B vaccine within 24 hours of birth. Coverage varies by region, ranging between 18% in the African Region the WHO region with the highest prevalence of hepatitis B and 80% in the Western Pacific Region.
- The global response is off-track towards 2030 goals. If action is taken now to assure universal access to viral hepatitis interventions, we can see the major public health impact of reducing incidence by 90%, mortality by 65% and the costs of achieving global targets by 15%. The benefits of achieving global targets will be apparent by 2030, saving 2.85 million lives and averting 9.5 million new infections



and 2.1 million cases of cancer. Looking towards 2050, universal access will save nearly 23 million lives and prevent nearly 53 million new viral hepatitis infections and 15 million cases of cancer.

 There is a window of action in 2024–2026 to regain the trajectory to achieve the Sustainable Development Goals. Based on a range of results obtained from several country investment case studies, there is an estimated return on investment of US\$ 2–3 for every dollar invested to prevent liver cancer deaths and thus avoiding the increased future health system costs of cancer treatment and care.

The trends in incidence and mortality of hepatitis B and C are shown in Figures 1.1 and 1.2 below, highlighting the increase in hepatitis B mortality and initial, modest signs of the impact of HCV cure on incidence and mortality.

Fig 1.1 Trends in incidence and mortality of hepatitis B, 2015-2030

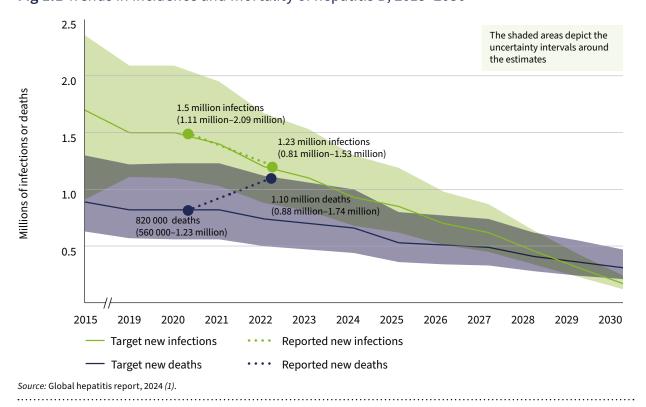
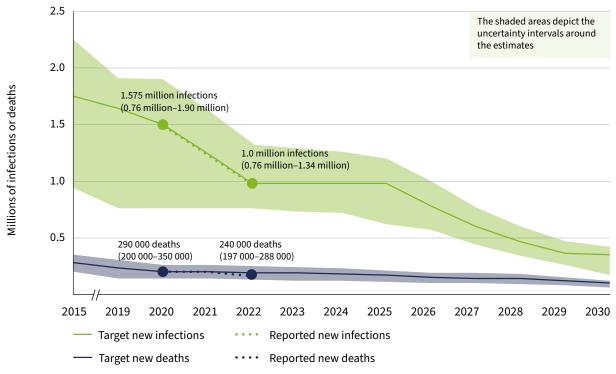
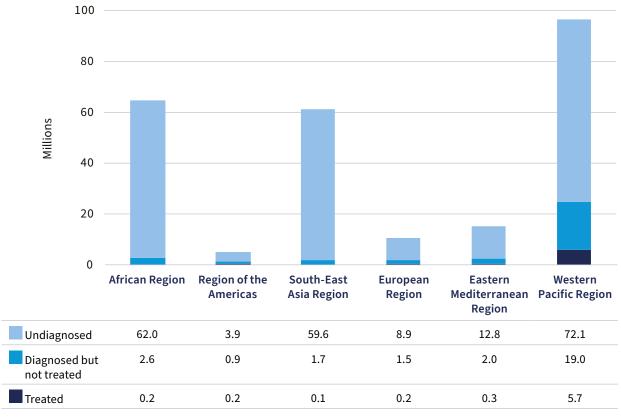


Fig 1.2 Trends in incidence and mortality of hepatitis C, 2015–2030



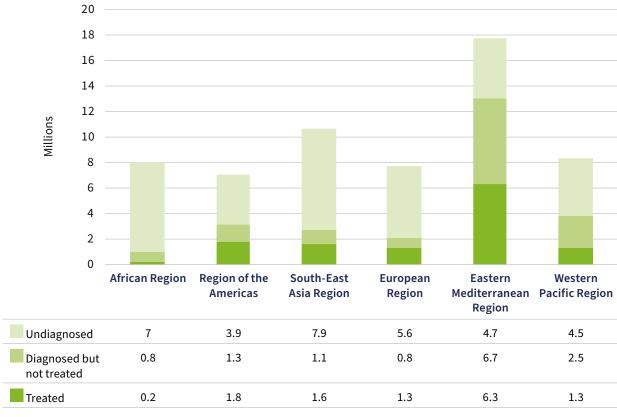
Source: Global hepatitis report, 2024 (1).

Fig 1.3 Cascade of diagnosis and treatment for hepatitis B by WHO region, 2022



Source: Global hepatitis report, 2024 (1).

Fig 1.4 Cascade of diagnosis and treatment for hepatitis C by WHO region, 2022



Source: Global hepatitis report, 2024 (1).

## 2. Assessment of health systems and policies: results from a country survey

In 2023, a detailed health system and policy assessment was conducted in all countries through the Global Reporting System for Viral Hepatitis. We summarize below the data reported by 81 countries to provide insight into the development of national policies, strategic plans, information systems, and the integration of health services in various WHO regions.

Of the total 81 reporting countries, 20 were from the WHO Region of the Americas, 19 from the African Region, 13 from the Western Pacific Region, 13 from the European Region, 10 from the Eastern Mediterranean Region, and 6 from the South-East Asia Region. The countries presented here reported their data to WHO on a voluntary basis and are not necessarily representative of the health system and policy in their corresponding regions.

### 2.1 National Strategic Plans for Viral Hepatitis B and C (HBV and HCV)

WHO guides countries in formulating national strategic plans (NSPs) and estimating their costs to support a comprehensive national response for both HBV and HCV (2). These plans should align with regional strategies and the Global Health Sector Strategies for 2022–2030 (3).

Through the Global Reporting System for Viral Hepatitis, 59 countries<sup>1</sup> reported the development

of NSPs for eliminating viral hepatitis B and C. Among these, 51 countries developed NSPs for both HBV and HCV, 4 for HBV only, and 4 for HCV only. Of the 59 countries with NSPs, 31 reported having costed NSPs, 44 countries included specific screening and testing strategies for HCV in their NSPs, while 46 included the strategies for HBV.

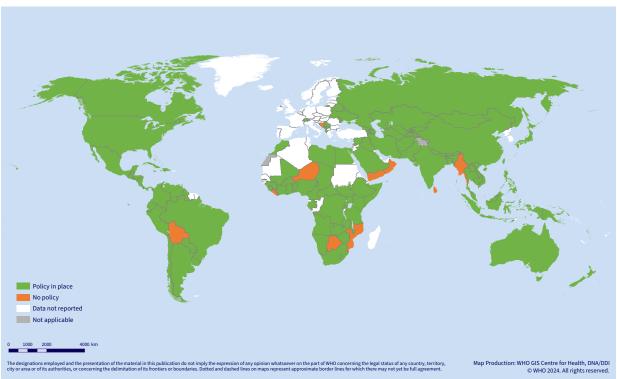
#### 2.2 National policies and implementation status of hepatitis B testing among pregnant women.

WHO recommends that all pregnant women should be tested for hepatitis B, HIV, and Syphilis during pregnancy as part of the triple elimination strategy aimed at preventing mother-to-child transmission of HIV, syphilis, and hepatitis B infections. This strategy seeks to reduce the incidence of hepatitis B among children under 5 years old and improve the health of women of reproductive age and their offspring (4-6).

Out of 118 countries reporting to the Global Reporting System for Viral Hepatitis and to the Global AIDS Monitoring (compilation of 2023 and 2024 data) (7), 106 countries reported having a national policy for screening HBV during pregnancy (Fig. 2.1).

Among 66 countries<sup>2</sup> that reported the National Policy in Global Reporting System for Viral Hepatitis, 55 countries reported routine hepatitis B (HBsAg) testing at antenatal care (ANC) clinics and 35 countries reported testing for HBeAg or HBV viral load among HBsAg-positive pregnant women (Fig. 2.2).



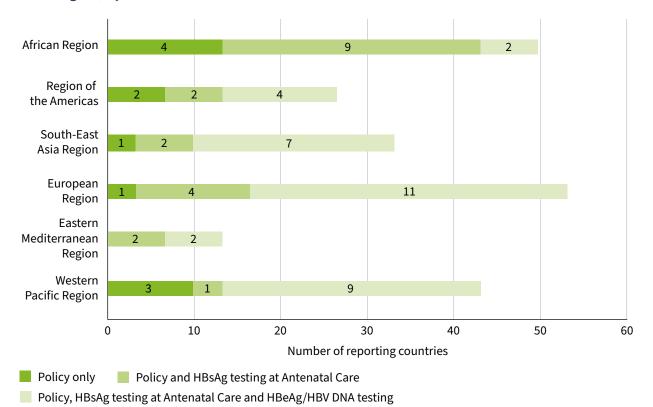


Sources: Global AIDS Monitoring (UNAIDS/WHO/UNICEF), 2024, and WHO global country survey for the viral hepatitis response, 2023.

<sup>&</sup>lt;sup>1</sup> 59 countries with NSPs included 15 from the African Region, 6 from the Eastern Mediterranean Region, 8 from the European Region, 14 from the Region of the Americas, 5 from the Southeast Asia Region, and 11 from the Western Pacific Region.

<sup>&</sup>lt;sup>2</sup> 66 countries with National Policy included 15 from the African Region, 8 from the Eastern Mediterranean Region, 10 from the European Region, 16 from the Region of the Americas, 4 from the Southeast Asia Region, and 13 from the Western Pacific Region.

**Fig 2.2** Adoption of national policies on hepatitis B testing among pregnant women by WHO region, by end of 2023



Source: GLOBAL REPORTING FOR VIRAL HEPATITIS 2023 (who.int).

## 2.3 National information system for reporting data on testing and treatment of hepatitis B and C

WHO has issued consolidated guidelines on strategic information to enhance person-centered monitoring which prioritizes indicators supporting person-centered health services, the core prevention, diagnosis, and treatment interventions for viral hepatitis elimination (8).

Out of 81 responding countries, 55 reported having National Information Systems.<sup>3</sup> Among these, 52 reported the system with the indicators for hepatitis C testing and treatment, 48 for hepatitis B testing and treatment, and 44 for hepatitis B testing among pregnant women.

## 2.4 Integration of Hepatitis B and C services into other existing health services in WHO regions

WHO underscores the importance of simplified service delivery in the public health approach to testing, care, and treatment for chronic hepatitis B and C.

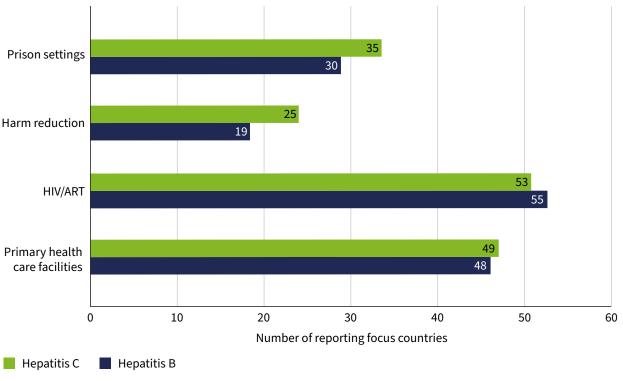
It recommends expanding hepatitis testing and treatment by decentralizing care to lower-level facilities and integrating these services into existing healthcare systems (6,9).

Among the 81 countries that responded, 48 reported integrating HBV services and 49 reported integrating HCV services at primary healthcare facilities. HBV services were integrated into 55 countries and HCV services in 53 countries at HIV/ART clinics or PrEP sites. Additionally, 19 countries reported integrating HBV services and 25 reported integrating HCV services at harm reduction or OAT sites, while 30 countries integrated HBV services and 35 integrated HCV services within prison settings.

Hepatitis B and C integration is more commonly found in primary healthcare and HIV/ART clinics compared to harm reduction sites and prison settings. While this observation is consistent across countries and WHO regions, it may be limited by the data available from a restricted number of countries.

<sup>&</sup>lt;sup>3</sup> 55 countries with National Information System included 13 from the African Region, 7 from the Eastern Mediterranean Region, 5 from the European Region, 13 from the Region of the Americas, 6 from the Southeast Asia Region, and 11 from the Western Pacific Region.

**Fig 2.3.** Integration of viral hepatitis testing and treatment services with other health services in 81 reporting countries, by end of 2023



Source: GLOBAL REPORTING FOR VIRAL HEPATITIS 2023 (who.int).

#### 2.5 Urgent actions to be taken to meet the 2030 targets

- Achieving the 2030 targets for eliminating viral hepatitis requires a significant boost in testing and treatment capacity for hepatitis B and C infections. It is crucial to accelerate access to testing and treatment in WHO regions with the highest burden of undiagnosed and untreated people. Many countries urgently need large-scale screening and treatment programs to reduce global disparities and ensure that no one is left behind. This includes scaling up testing to prevent mother-to-child transmission of hepatitis B.
- The slow decline in incidence also indicates the need to accelerate the hepatitis B birth dose and childhood vaccine, in conjunction with other EMTCT strategies such as maternal testing and prophylaxis/treatment.
   The new WHO guideline for HBV offers public health recommendations to speed up both prevention and treatment efforts for HBV (6).

- More countries should estimate the cost of their NSP to define national priorities, and to ensure more efficient and effective implementation; and where there is no national plan, countries should develop an NSP.
- The WHO recommends that countries use data and take a stepwise approach to improve monitoring and evaluation, which will in turn support planning and implementation. Countries should prioritize establishing national information systems with relevant indicators for hepatitis B and C.
- Integrating hepatitis services into pre-existing facilities is an efficient and cost-effective strategy for scaling up services and promoting sustainability. Countries should take action to accelerate the provision of person-centered services at local health facilities by incorporating them into various existing health service delivery points and evaluating the impact of integration on the acceleration of service coverage.

#### References

- 1. Global hepatitis report 2024: action for access in low- and middle-income countries. Geneva: World Health Organization; 2024. (https://www.who.int/publications/i/item/9789240091672, accessed 8 July 2024).
- 2. Guidance for national strategic planning: health sector response to HIV, viral hepatitis, and sexually transmitted infections. Geneva: World Health Organization; 2023. (https://www.who.int/publications/i/item/9789240076389, accessed 8 July 2024).
- 3. Global health sector strategies on, respectively, HIV, viral hepatitis and sexually transmitted infections for the period 2022–2030. Geneva: World Health Organization; 2022. (https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/strategies/global-health-sector-strategies, accessed 8 July 2024).
- 4. Global guidance on criteria and processes for validation: elimination of mother-to-child transmission of HIV, syphilis and hepatitis B virus. Geneva: World Health Organization; 2022. (https://www.who.int/publications/i/item/9789240039360, accessed 8 July 2024).
- 5. Introducing a framework for implementing triple elimination of mother-to-child transmission of HIV, syphilis and hepatitis B virus: policy brief. Geneva: World Health Organization; 2024. (https://www.who.int/publications/i/item/9789240086784, accessed 8 July 2024).

- 6. Guidelines for the prevention, diagnosis, care and treatment for people with chronic hepatitis B infection. Geneva: World Health Organization; 2024. (https://www.who.int/publications/i/item/9789240090903, accessed 8 July 2024).
- 7. UNAIDS: Global AIDS Monitoring. Geneva: Joint United Nations Programme on HIV/AIDS; 2024. (https://www.unaids.org/en/global-aids-monitoring, accessed 8 July 2024)
- 8. Consolidated guidelines on person-centred viral hepatitis strategic information: using data to support country scale-up of hepatitis prevention, diagnosis, and treatment services. Geneva: World Health Organization; 2024. (https://www.who.int/publications/i/item/9789240091313, accessed 8 July 2024).
- 9. Guidelines for the care and treatment of persons diagnosed with chronic hepatitis C virus infection. Geneva: World Health Organization; 2018. (https://www.who.int/publications/i/item/9789241550345, accessed 8 July 2024).

#### **World Health Organization**

Global HIV, Hepatitis and Sexually Transmitted Infections Programmes 20, avenue Appia 1211 Geneva 27 Switzerland

www.who.int

#### For more information, contact:

E-mail: hiv-aids@who.int www.who.int/teams/global-hivhepatitis-and-stis-programmes

WHO/UCN/HHS/SIA/2024.13 © WHO 2024.

Some rights reserved.
This work is available under the CC BY-NC-SA 3.0 IGO licence.

