World Health Organization
REGIONAL OFFICE FOR Europe

SDG target 3.3: by 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, waterborne diseases and other communicable diseases.

Fact sheets on sustainable development goals: health targets

Viral Hepatitis

Viral hepatitis is a global public health challenge, taking a heavy toll on lives, communities and health systems. However, hepatitis has been largely ignored as a health and development priority until recently *(1,2)*. The 2030 Agenda for Sustainable Development calls for specific action to combat viral hepatitis, with huge opportunities for action *(3)*. Failure to combat viral hepatitis can compromise the achievement of the Sustainable Development Goals (SDGs), affecting health security and the reduction of inequalities. Action is necessary across sectors and settings to eliminate viral hepatitis as a public health threat.

Overview

Viral hepatitis is a liver disease responsible for an estimated 171 000 deaths in the European Region each year *(4)*. There are five hepatitis viruses (HAV, HBV, HCV, HDV and HEV)[1] with different modes of transmission that can affect different populations and result in different health outcomes.

- HAV and HEV are associated with food, waterborne or person-to-person transmission and typically resolve without long-term pathology.
- HBV, HCV and HDV are bloodborne infections with a high risk of transmission through unsafe injections and other medical practices, sexual contact and sharing equipment for injecting drug use.
- HBV transmission can also occur horizontally from mother to child or through household contacts in early childhood.
- HBV, HCV and HDV often result in chronic infection, which may remain undetected for decades and lead progressively to cirrhosis and liver cancer *(3,4)*.

[1] While this factsheet addresses all five hepatitis viruses, there is a particular focus on HBV and HCV, owing to the relative large public health burden they represent.

Viral hepatitis and SDGs: facts and figures

Effectively combating viral hepatitis produces public health benefits by reducing mortality and improving health and well-being in affected communities.

- In the European Region, approximately 15 million people are estimated to be living with chronic HBV infection and approximately 14 million with chronic HCV infection *(5)*.
- Two thirds of those infected are in eastern Europe and central Asia *(6).*
- Infections with HBV and HCV lead to more than 400 deaths in the Region every day *(6).*

End the epidemic of AIDS as a public health threat: viral hepatitis is a growing cause of mortality among people living with HIV. Combating viral hepatitis will improve the health and well-being of people living with HIV and reduce mortality.

- Globally, an estimated 2.75 million people living with HIV were co-infected with HCV and 2.6 million with HBV in 2015 *(7,8)*.

Reduce premature mortality from noncommunicable diseases: chronic hepatitis is a major cause of cirrhosis and primary liver cancer *(4,9)*. Preventing and treating viral hepatitis will reduce the number of deaths from these diseases.

- In the European Region, an estimated 171 000 people die each year from viral hepatitis-related causes, generally from the late effects of chronic HBV and HCV infection *(10)*.

Strengthen the prevention and treatment of substance abuse disorders: comprehensive harm reduction strategies can prevent and control epidemics of HBV and HCV among people who inject drugs; these people are at increased risk of HBV and are disproportionally affected with HCV infection *(4)*.

- Injection drug use accounts for 80% of new HCV infections with reported transmission route in countries of the European Union/European Economic Area *(11)*.

Achieve universal health coverage: priority actions required to eliminate viral hepatitis can contribute to the achievement of universal health coverage. Similarly, achieving universal health coverage is crucial and an overarching health target to combating viral hepatitis.

- Universal childhood vaccination and vaccination of the newborn when indicated will drastically reduce new HBV infections and reduce rates of chronic illness and death from the sequelae of liver cancer and cirrhosis.
    - After implementation of HBV vaccination programme, many countries of the European Region saw a reduction of the burden of disease due to HBV: from 8–15% of children becoming chronically infected with HBV to less than 1% among immunized children *(11)*.
    - Currently, a total of 49 Member States in the European Region (92%) have implemented universal childhood HBV immunization programmes *(4)*. Four remaining Member States, with very low HBV endemicity, rely on selective immunization of people who are at high risk for infection *(4,12,13)*.
    - Perinatal transmission of HBV is prevented in the European Region in all Member States through either universal newborn vaccination or universal screening of pregnant women and targeted prevention of transmission from mothers living with chronic HBV infection *(4)*. However, some countries still do not have effective systems to monitor the coverage of screening for pregnant women and the timeliness and completeness of post-exposure prophylaxis for newborns *(4)*.
- Infection prevention and control in health care settings, including blood and injection safety, have improved significantly in the European Region over recent decades. However, nosocomial transmission of viral hepatitis may continue to play an important role in some Member States, particularly in eastern Europe and central Asia (*4*).

Provide access to affordable medicines and vaccines: a substantial reduction in viral hepatitis-related morbidity and mortality is possible with recent developments in treatments for chronic infection. Chronic HCV infection can be cured in more than 90% of patients and chronic HBV infection can be effectively controlled.

- Although an increasing number of countries in the Region are providing access to treatment for HCV infection, affordability and sustainability of treatment, as well as treatment access, remain major obstacles in some countries, particularly because of the cost of novel direct-acting antiviral therapies for chronic HCV infection *(4)*.

Interventions for hepatitis infections are most effective when they occur in appropriate social, legal, policy and institutional environments that encourage and enable people to access and use services *(3)*. Progress has been achieved in some Member States of the European Region with regard to enhancing political commitment to control viral hepatitis, as evidenced by an increase in the number of countries developing national hepatitis prevention and control strategies and action plans *(4)*. However, geographical variability persists and specific populations can be more affected by, or be at higher risk of, viral hepatitis (Box 1).

- In the European Region the epidemiology of viral hepatitis is diverse, with very low prevalence of chronic HBV and HCV infection among the general population in northern Europe and high prevalence in many countries in southern and eastern Europe and central Asia *(4,14)*.
- In most countries of western and northern Europe, the majority of cases of chronic HBV infections is now registered as imported (*15)*, and the burden is considerably higher among migrants from countries with high prevalence *(11*).
- Certain groups (e.g. people with multiple sexual partners, men who have sex with men, people who inject drugs, transgender people, sex workers and health care workers) are particularly vulnerable to HBV and HCV infection, and co-infection with hepatitis and HIV is common (*4,9,14)*.

Commitment to act

Member States of the European Region agreed at the Regional Committee session in September 2016 to eliminate viral hepatitis as a public health threat by 2030, in line with Global health sector strategy on viral hepatitis, 2016–2021 *(3,4)*. Member States committed to a European Region in which the transmission of new hepatitis infections is halted, testing is accessible and all people living with chronic hepatitis have access to care, and affordable and effective treatment.

Box 1. Leaving no one behind...

To eliminate viral hepatitis, equity is critical: human rights violations, along with widespread stigmatization and discrimination, continue to hinder access to health services for populations that may be criminalized and marginalized and who are at higher risk of hepatitis infection, including people who inject drugs, men who have sex with men, prisoners, sex workers, mobile populations and people affected by conflict and civil unrest *(4)*.

Elimination of viral hepatitis as a major public health threat is feasible with the tools and approaches currently available and in development. The Action plan for the health sector response to viral hepatitis in the WHO European Region *(4)* is built around three organizing frameworks: **universal health coverage**, the **continuum of viral hepatitis services** and the **promotion of a public health approach**. Countries are encouraged to set national targets, in accordance with their local context, based on the following regional essential targets:

- 95% coverage with three-dose HBV vaccine in countries that implement universal vaccination;
- 90% coverage with interventions to prevent mother-to-child transmission of HBV by vaccinating the infant within 24 hours of birth against HBV or by other approaches;
- 100% of blood donations screened using quality-assured methods;
- 50% of injections administered with safety-engineered injection devices, integrated with broader infection control;
- at least 200 sterile injection equipment kits distributed per person per year for people who inject drugs, as part of comprehensive package of harm-reduction services;
- 50% of people living with chronic HBV and HCV infections are diagnosed and are aware of their condition; and
- 75% treatment coverage of people diagnosed with HBV and HCV infections who are eligible for treatment *(4)*.

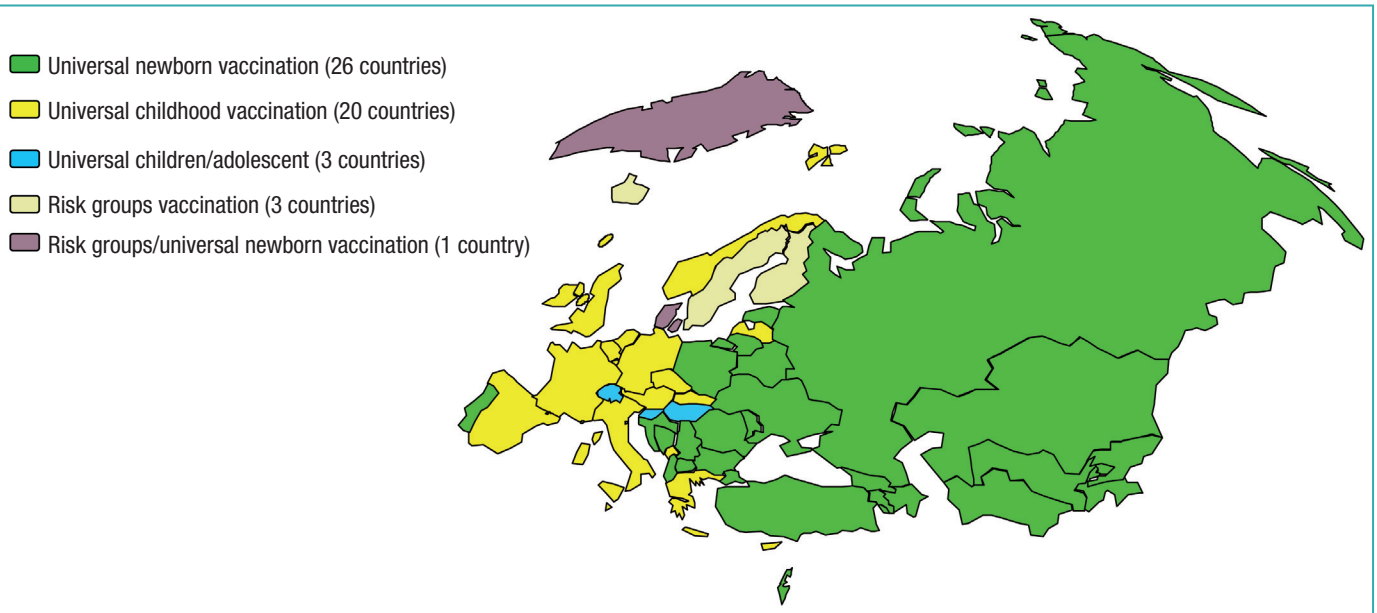
These targets will be achieved through the application of scientific evidence and technical knowledge. Full involvement of civil society, taking whole-of-society and whole-of-government approaches, should be ensured with respect for human rights, gender equality and equity and using a multisectoral partnership model (Box 2) *(3,4)*. It is also imperative to increase public awareness of these infections, to encourage advances in hepatitis medication, diagnostics and other technologies and to strengthen commitment to achieve health equity *(3)*.

Box 2. Intersectoral action

Prisons and health: the rates of infection with HIV, hepatitis and tuberculosis are much higher among prisoners than in the general population because of their own vulnerability compounded by the characteristics of their environment. Therefore, the prison setting presents not only challenges but also opportunities for the prevention and treatment of these diseases.

Public and penitentiary health systems are recommended to work together to ensure that harm reduction becomes the guiding principle of policy on the prevention of HIV and hepatitis transmission in penitentiary systems, for example taking opportunities such as pre-trial detention for screening and early detection and providing the same interventions as in the community *(16)*.

Fig. 1. Hepatitis B immunization policy, WHO European Region 2017



Source: WHO/UNICEF joint reporting forms.

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Monitoring progress

The WHO Regional Office for Europe is developing a joint monitoring framework for the SDG, Health 2020 and noncommunicable diseases indicators[2] to facilitate reporting in Member States and to provide a consistent and timely way to measure progress. Viral hepatitis compromises all Health 2020 targets *(17)*. The following, as proposed in the global indicators' framework of the United Nations Economic and Social Council (ECOSOC), will support monitoring progress in viral hepatitis *(18)*.

ECOSOC indicator
3.3.4. Hepatitis B incidence per 100 000 population

WHO support to its Member States

WHO activities to prevent and control viral hepatitis include:

- raising awareness and promoting partnerships;
- formulating evidence-based policy and data for action;
- promoting prevention of transmission by vaccination, safe injection practices and blood safety; and
- promoting wider access to monitoring, screening, care and treatment services for HBV infection *(4)*.

The WHO Regional Office for Europe provides technical support to Member States in planning and strengthening national responses to viral hepatitis, including raising awareness, surveillance, prevention, laboratory capacity and guidance on testing and treatment, and is supporting regional partnerships.

The WHO Regional Office for Europe supports Member States implementing and developing country-owned plans aligned with the Action plan for the health sector response to viral hepatitis in the WHO European Region *(4)*.

Partners

WHO collaborates with the following partners to achieve the goal of eliminating viral hepatitis as a public health threat in the European Region:

- European Commission
- European Centre for Disease Prevention and Control
- European Monitoring Centre for Drugs and Drug Addiction
- WHO collaborating centres, research institutions, national institutes of excellence, civil society (including patient organizations) and other partners and technical experts.

Resources

- Global health sector strategy on viral hepatitis 2016-2021
  http://apps.who.int/iris/bitstream/10665/246177/1/WHO-HIV-2016.06-eng.pdf?ua=1
- Action plan for the health sector response to viral hepatitis in the WHO European Region
  http://www.euro.who.int/__data/assets/pdf_file/0008/315917/66wd10e_HepatitisActionPlan_160555.pdf
- Manual for the development and assessment of national viral hepatitis plans, provisional, September 2015
  http://apps.who.int/iris/bitstream/10665/183726/1/9789241509350_eng.pdf
- Combating hepatitis B and C to reach elimination by 2030
  http://apps.who.int/iris/bitstream/10665/206453/1/WHO_HIV_2016.04_eng.pdf?ua=1
- World Hepatitis Summit 2015 meeting report: building momentum, making the case (best practice for HBV and HCV)
  http://www.who.int/hepatitis/publications/whs-2015-report.pdf?ua=1

Key definitions

- **Elimination of viral hepatitis as a public health threat.** The 90% reduction in number of new chronic HBV and HCV infections and 65% reduction in number of deaths by 2030, with milestones for 2020 defined as 30% and 10% reductions, respectively *(3)*.

[2] EUR/RC67/Inf.Doc./1: joint monitoring framework: proposal for reducing the reporting burden on Member States.

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