

# Hepatitis B in the WHO European Region

Fact sheet

July 2017

## What is Hepatitis B?

Hepatitis B is caused by the hepatitis B virus (HBV), which infects the liver and causes inflammation and death of liver cells. HBV infection can be either acute or chronic, and the associated illness ranges in severity from asymptomatic to symptomatic, progressive disease. More than 90% of healthy adults who are infected with HBV recover naturally from the infection within the first year; however, children under 5 years of age who become infected with the virus, particularly during the first year of life, are the most likely to develop chronic infection.

## How is it transmitted?

In highly endemic areas, HBV is most commonly spread from mother to child at birth (perinatal transmission); it can also be spread from an infected to an uninfected child during the first 5 years of life. Chronic infection is very common in infants infected by their mothers or in children under the age of 5 years.

HBV is also spread during percutaneous or mucosal exposure to infected blood and various body fluids, including saliva and menstrual, vaginal and seminal fluids. Sexual transmission of HBV may occur, particularly to unvaccinated men who have sex with men and to heterosexual persons with multiple sex partners or contact with sex workers. The virus may also be transmitted by reuse of needles and syringes, either in health care settings or among people who inject drugs. Other routes of transmission are medical, surgical and dental procedures, tattooing and use of razors and similar objects contaminated with infected blood.

## Is there a treatment?

There is no specific treatment for acute hepatitis B, and only general supportive care is used in symptomatic cases. Chronic HBV infection can be treated with drugs, including oral antiviral agents, which can slow the progression of chronic disease and improve long-term survival. WHO recommends oral use of tenofovir or entecavir, which are also used for treating HIV infection. These drugs rarely have side effects and can effectively control the virus. However most patients will require life-long treatment.

## How can hepatitis B be prevented?

A vaccine against HBV has been available since 1982, which is 95% effective in preventing HBV infection and its chronic consequences, including liver cancer. Universal HBV vaccination programmes for infants, with the first dose at birth, have been highly effective in reducing the incidence and prevalence of hepatitis B in many countries.

By 2017, 49 of the 53 countries in the WHO European Region conducted universal HBV vaccination, but only 26 vaccinated all newborns, while the other 23 started vaccination at the age of 2 months or later.

## KEY FACTS AND FIGURES

- Hepatitis B is a viral infection of the liver. It can be acute and chronic, which can lead to serious complications such as liver cirrhosis and liver cancer.
- The virus is transmitted through contact with infected blood while using unsterile needles or other medical equipment; or through contact with other body fluids, often during sexual contact.
- Hepatitis B can also be transmitted from mother to child, or from one child to another, often resulting in chronic infection.
- In the WHO European Region, 15 million people are estimated to be infected with hepatitis B virus and 56 000 die from hepatitis B-related liver disease each year.
- Chronic hepatitis B can be treated with antiviral drugs, but treatment usually is life-long
- Safe and effective vaccine is available, which provides life-long protection. All children, as well as adults who are at risk of infection, should be vaccinated.
- In 2016, all 53 Member States of the WHO European Region committed to the goal of elimination of viral hepatitis as a public health threat by 2030.

## More information:

[www.euro.who.int/hepatitis](http://www.euro.who.int/hepatitis)

[www.who.int/hepatitis](http://www.who.int/hepatitis)

<https://ecdc.europa.eu/en/viral-hepatitis>



Vaccination of adults who are at high risk for HBV infection, including health care workers, can prevent transmission of HBV.

Blood safety strategies, including quality-assured screening of all donated blood and blood components used for transfusion, safe injection practices and eliminating unnecessary and unsafe injections, can also protect against HBV transmission.

Safer sex practices, including minimizing the number of partners and using barrier protective measures (condoms), also protect against transmission.

### **Hepatitis B in the WHO European Region**

Chronic hepatitis B, defined as the persistence of hepatitis B surface antigen for 6 months or more, is a major public health problem. Worldwide, an estimated 257 million people are chronically infected. The major complications of chronic infection are cirrhosis (liver scarring) and liver cancer, which affect 20–30% of people who become chronically infected; an estimated 887 000 people died in 2015 from chronic hepatitis B. Most people are unaware of their HBV infection and therefore often present with advanced disease.

In the WHO European Region, approximately 15 million people are chronically infected with HBV, which leads to about 56 000 deaths a year from hepatitis B-related liver cancer and cirrhosis.

The epidemiology of hepatitis B in the Region is diverse, with a prevalence of hepatitis B surface antigen ranging from very low in the countries of western, northern and central Europe to intermediate and high in countries of eastern Europe and central Asia.

### **The WHO global and regional response**

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 hepatitis B.

In March 2015, WHO launched its first guidelines for the prevention, care and treatment of people living with chronic hepatitis B infection.

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

The WHO Regional Office for Europe also supports Member States in planning and strengthening vaccination systems. The Regional Office issued the European Vaccine Action Plan 2015–2020, which was endorsed by the Regional Committee in September 2014. The plan defines control of hepatitis B as one of the regional priorities and outlines strategies to strengthen immunization programmes and ensure equitable access to vaccination.

The elimination of hepatitis as a public health threat by 2030 – namely a 90% reduction in new infections and a cut in mortality of 65% over the 15-year period leading up to 2030 – are core targets of the first Global health sector strategy on viral hepatitis 2016–2021 endorsed by the World Health Assembly in 2016.

Complementing the global strategy and adapting it to the distinctive profile of the European Region, an Action Plan for the health sector's response to viral hepatitis was adopted by 53 European countries in September 2016. The plan identifies priority actions needed to be taken by these countries along the continuum of viral hepatitis services – including prevention, testing, treatment and care – and proposes targets and milestones for 2020.

The Regional Office, with WHO headquarters and partners, also organizes World Hepatitis Day on 28 July every year to increase awareness and understanding of viral hepatitis.