Hepatitis B in the WHO European Region

Fact sheet – July 2019

Hepatitis B is an infectious disease that attacks the liver and affects the lives of 15 million people in the WHO European Region. It is caused by the hepatitis B virus (HBV) and can cause acute and chronic infection leading to severe complications, including cirrhosis (liver scarring) and liver cancer in 20–30% of patients.

Chronic infection may not show symptoms for a long time, sometimes for decades. Most people find out about hepatitis B only after developing advanced disease. Hepatitis B is responsible for the deaths of 56,000 people every year.

Hepatitis B can be found in less than 0.1% of people in some countries in western, northern and central Europe to as high as 6–8% in some countries of eastern Europe and central Asia.

- Hepatitis B is a preventable viral infection that attacks the liver and causes cirrhosis, liver cancer and death.
- Hepatitis B virus (HBV) is transmitted through contact with blood, semen or other body fluids of an infected person. Infection at birth or early childhood often results in chronic infection.
- Most people are unaware of their HBV infection and find out about it when the disease is already advanced.
- Hepatitis B can be treated. Treatment is usually lifelong.
- Prevention of hepatitis B is the key. A safe and effective vaccine is available, providing lifelong protection. All children, as well as adults who are at risk of infection, should be vaccinated.

Modes of transmission

HBV is transmitted through contact with blood, semen or other body fluids of an infected person. It can be transmitted during childhood or from mother to child at birth. Between 80–90% of infants infected during the first year of life develop chronic infection.

Transmission also occurs through unprotected sex and reuse of needles, syringes and other equipment in health care settings or among people who inject drugs. Hepatitis B can also be transmitted through medical and dental procedures, tattooing, piercing, sharing personal hygiene items, razors, and manicure and pedicure material contaminated with infected blood. Hepatitis B is an important hazard for health workers.

HBV is not spread through breastmilk, food or water or by casual contact such as hugging, kissing or sharing food or drinks with an infected person.

Key facts on hepatitis B

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- Hepatitis B virus (HBV) is transmitted through contact with blood, semen or other body fluids of an infected person. Infection at birth or early childhood often results in chronic infection.
- Most people are unaware of their HBV infection and find out about it when the disease is already advanced.
- Hepatitis B can be treated. Treatment is usually lifelong.
- Prevention of hepatitis B is the key. A safe and effective vaccine is available, providing lifelong protection. All children, as well as adults who are at risk of infection, should be vaccinated.

Key facts and figures on hepatitis B in the European Region

- In the WHO European Region, hepatitis B affects lives of 15 million people living with the infection and causes 56,000 deaths every year.
- By 2019, 49 of the 53 countries in the Region will have conducted universal childhood hepatitis B vaccination.
- Both the European Vaccine Action Plan and the Action plan for the health sector response to viral hepatitis in the WHO European Region call for prevention of HBV through immunization. By reducing the estimated HBV prevalence in children aged under five years below 0.4% in 2015, the Region has contributed to the worldwide decline in HBV infections.
- Most of the people living with hepatitis B in the Region are adults born before the hepatitis B vaccine became available in the 1990s.
- In line with the Sustainable Development Goals, countries in the Region have committed to eliminate viral hepatitis as a public health threat by 2030, to achieve universal access to testing and to ensure that people living with chronic hepatitis have access to care and affordable and effective treatment.
**Prevention**

With 95% effectiveness, the hepatitis B vaccine is the cornerstone of prevention of HBV infection and its chronic consequences, including cirrhosis, liver cancer and death.

WHO recommends that all infants receive the hepatitis B vaccine as soon as possible after birth, preferably within 24 hours.

- Universal hepatitis B vaccination programmes for infants, with the first dose at birth, have been highly effective in reducing the incidence and prevalence of hepatitis B.
- These programmes have considerably reduced HBV infections among vaccinated infants to an estimated regional prevalence of 0.4% among children aged under five years. In many countries of eastern Europe and central Asia the number of new infections decreased more than 10 times after vaccination was introduced.
- Vaccination is also recommended for adults who are at high risk for HBV infection, including:
  - people who frequently require blood or blood products, dialysis patients, recipients of solid organ transplantations;
  - people in closed settings, including prisoners;
  - persons who inject drugs;
  - household and sexual contacts of people with chronic HBV infection;
  - people with multiple sexual partners;
  - people living with HIV;
  - health care workers and others who may be exposed to blood and blood products through their work.

Other preventive measures against HBV transmission include implementing blood safety strategies (quality-assured screening of all donated blood and blood components used for transfusion), safe injection practices and elimination of unnecessary and unsafe injections, and safer sex practices.

Infection prevention and control in health care settings, including blood and injection safety, have improved significantly in the Region over recent decades. Transmission of HBV associated with health care may, however, continue to play an important role in some Member States, particularly in eastern Europe and central Asia.

**Testing and treatment**

Testing is important to diagnose hepatitis B and treat it if needed. All people at risk of hepatitis B infection should be offered testing. Those most at risk of chronic hepatitis B infection in the Region are people who could be infected before the introduction of vaccination programmes and those born in countries where hepatitis B is common. They should seek testing and be offered immunization or treatment according to need.

There is no specific treatment for acute hepatitis B, and only supportive care is used in symptomatic cases. Chronic HBV infection can be treated with medicines. WHO recommends tenofovir or entecavir for the treatment of chronic hepatitis B. While some of those infected will not require treatment, all should be regularly checked.

**WHO response**

The WHO Regional Office for Europe provides technical support to Member States in planning and strengthening their national response to viral hepatitis, including with awareness-raising, surveillance, prevention, strengthening of laboratory capacity and provision of guidance on testing and treatment. The Regional Office also supports regional partnerships.

The Action plan for the health sector response to viral hepatitis in the WHO European Region complements the WHO Global Health Sector Strategy on Viral Hepatitis 2016–2021 and adapts it to the distinctive profile of the Region. The plan identifies priority actions for countries in the Region along the continuum of viral hepatitis services and sets regional targets and milestones for the elimination of hepatitis B as a public health threat by 2030. Member States in the Region have committed themselves to work towards halting the transmission of new hepatitis infections, making testing accessible and ensuring that all people living with chronic hepatitis have access to care and affordable and effective treatment.

Prevention of hepatitis B is also among the goals of the European Vaccine Action Plan 2015–2020, which outlines strategies to strengthen immunization programmes and ensure equitable access to vaccination.

**More information:**

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