Hepatitis B in the WHO European Region

Fact sheet – July 2018

Hepatitis B is a major public health problem. Approximately 15 million people in the WHO European Region are chronically infected with the hepatitis B virus (HBV), which can lead to severe complications such as cirrhosis (liver scarring) and liver cancer in 20–30% of patients. Chronic hepatitis B may not show symptoms for a long time, sometimes for decades. Most people are unaware of their HBV infection and, therefore, often present with advanced disease. Every year, about 56 000 people die from hepatitis B-related liver cancer or cirrhosis.

Hepatitis B prevalence ranges from a low of 0.1% in some countries in western, northern and central Europe to as high as 6–8% in some countries of eastern Europe and central Asia.

✅ Modes of transmission

HBV is transmitted through contact with the blood or other body fluids of an infected person. In countries with a high prevalence of HBV, infection can be transmitted from mother to child at birth or during close contact with infected people in early childhood. Infection acquired during the first five years of life usually leads to chronic hepatitis B.

Transmission can occur through unprotected sexual intercourse from a person infected with HBV to unvaccinated partners. 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 the use of razors and similar objects contaminated with infected blood. Hepatitis B is an important occupational hazard for health workers.

Key facts on hepatitis B

- Hepatitis B is a viral infection that affects the liver and can cause both acute and chronic disease.
- Hepatitis B virus (HBV) is transmitted through contact with the blood or other body fluids of an infected person. Infection at birth from mother to child or in early childhood, including from one child to another, often results in chronic infection.
- Chronic hepatitis B can lead to severe complications such as cirrhosis (liver scarring) and liver cancer. Most people are unaware of their HBV infection and, therefore, often present with advanced disease. Chronic hepatitis B can be treated when necessary. Treatment is usually lifelong.
- Prevention is 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, 15 million people are estimated to be infected with hepatitis B virus and every year about 56 000 die from hepatitis B-related liver disease.
- By 2018, 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 to 0.4% in 2015, the Region has contributed to the worldwide decline in HBV infections.
- Most of the 15 million people living with HBV in the Region are adults born before the hepatitis B vaccine became widely available in the 1990s.
- In line with the Sustainable Development Goals, countries in the Region committed themselves 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 liver cancer. 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 in many countries.

- Forty-nine of the 53 countries in the Region have established universal hepatitis B immunization programmes. Only 26 vaccinate all newborns, however; the other 23 start vaccination at the age of two months or later. 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 of adults who are at high risk for HBV infection, including health care workers, can prevent transmission of HBV to those who were not immunized as children.

Other preventive measures against HBV transmission include 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 (minimizing the number of partners and using condoms). 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.

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.

Testing and treatment

Testing is important to diagnose chronic HBV infection 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. It is estimated that only 10–15% of people living with hepatitis B may be eligible for treatment with antivirals. WHO recommends tenofovir or entecavir for treatment of chronic hepatitis B. While many of those infected will not require treatment, all should be regularly checked.

More information:
www.euro.who.int/hepatitis
www.who.int/hepatitis