Hepatitis B and vaccination: What you need to know

Hepatitis B is caused by the hepatitis B virus (HBV), which infects the liver, causes inflammation, and the death of liver cells. HBV infection can be either acute or chronic, and illness ranges in severity from asymptomatic (no symptoms) to severe disease. More than 90% of healthy adults with an acute HBV infection recover naturally from the infection within the first year. However, 90% of babies and up to 50% of children under 5 years of age who become infected with HBV will have life-long chronic infection. HBV infection can lead to liver cirrhosis and liver cancer in both children and adults.

Almost all countries have been providing universal HBV vaccination to children for the past 15 years or more. This has led to a significant reduction, and in some countries elimination, of chronic HBV in children and young adults.

How does it spread?

HBV is most commonly spread from mother to child at birth, but it can also spread from an infected child to an uninfected child during the first 5 years of life.

HBV can also spread during sexual contact or via any object contaminated with infected blood. Some examples include sharing needles or syringes, tattooing or the use of razors.
Is there a treatment?

There is no specific treatment for HBV, and 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. These drugs rarely have side effects and can effectively control the virus. However, most patients will require life-long treatment.

How can it be prevented?

Vaccination for HBV is 95% effective in preventing HBV infection and its consequences, including liver cancer. Universal HBV vaccination programmes for infants have been highly effective in reducing hepatitis B infection in many countries. Vaccination of adults who are at high risk for HBV infection, including healthcare workers, can also prevent transmission of HBV.

Blood safety strategies, including screening of all donated blood 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 condoms can also protect against transmission.