

# HEPATITIS B

## Patient Information Fact Sheet

### ›What is hepatitis B?

Hepatitis B is a liver disease caused by infection with the hepatitis B virus. The word hepatitis actually means inflammation of the liver cells. The severity of infection can vary. Some people who acquire the hepatitis B virus will have no symptoms and become carriers of the infection. Prevention of infection and education about the disease are keys in controlling the spread of hepatitis B. Vaccinations are readily available for those at risk of contracting the virus.

### ›What are the symptoms of hepatitis B?

Symptoms of hepatitis B infection may appear from anywhere between 1 and 6 months after the virus enters the body. The period before symptoms occur is called the incubation period. The first symptoms of hepatitis B include nausea, fatigue, loss of appetite, mild fever, and occasionally, headaches. These symptoms may sometimes be mistaken for the flu. This stage of the disease is known as the prodromal period. After the prodromal period, jaundice develops. Jaundice is caused by a build-up of bilirubin; this substance is produced when red blood cells are broken down and is usually disposed of via the stools when the liver is working properly. If the liver begins to malfunction, the levels of bilirubin in the body rise, causing dark urine, pale stools and the characteristic yellowish discoloration of jaundice, affecting the whites of the eyes and, in severe cases, the skin.

The illness may last for a few weeks or continue for months. Recovery is usually complete within 6 months. Chronic hepatitis is when the infection lasts for longer than 6 months. In some people chronic hepatitis may lead eventually to cirrhosis of the liver and liver cancer. Many people have no symptoms and do not know that they are infected. However, these people are still capable of spreading the virus to others and may become permanent carriers of the virus.

### ›How is hepatitis B spread?

The hepatitis B virus is usually transmitted via infected bodily fluids, particularly blood and blood products. It is most often passed by sexual contact with an infected person, by needle sharing to inject drugs or by sharing personal items such as a razor. It is not passed by coughing or sneezing, or by contact with toilet seats. All blood and blood products are now tested so that transmission of the virus via a blood transfusion is not a risk.

Hepatitis B virus can also be passed from a mother to her child during the birth and via tattooing or acupuncture if proper precautions are not taken. Some groups of people are more at risk from accidental exposure to the virus, in particular healthcare workers, prison and police staff and care providers. Exposure can occur through injuries from used needles or if an infected person becomes violent and inflicts bites or wounds.

### ›Is there a vaccine available?

Safe **vaccines against hepatitis B** are available (Energix-B, Recombivax HB, Twinrix) and should be made available to all workers at risk of contracting the virus. Vaccination comprises a course of three injections: an initial injection followed by a second injection 1 month later and a third injection 6 months later. A blood test will usually be performed after the third injection to check the level

of immunity acquired. This level can be rechecked periodically and a booster given as necessary to maintain adequate levels of protection. The vaccination is usually available through the occupational health department in the workplace or from GP surgeries. Vaccination against hepatitis B should also be considered for travelers staying for prolonged periods in areas where infection with the virus is common and for people whose lifestyle puts them at increased risk of contracting the virus. If a person has not been immunized against hepatitis B and becomes at risk from possible exposure due to an accident, an immunoglobulin injection may be given. This provides short-term protection and needs to be given as soon as possible after the incident. It is an emergency measure only and does not provide long-term protection.

### ›How is hepatitis B treated?

Several antiviral drugs were approved in the last decade to treat chronic hepatitis B infection. They are **lamivudine** (Epivir-HVB), **tenofovir** (Viread), **entecavir** (Baraclude), and **adefovir dipivoxil** (Hepsera). These drugs aim to stop or slow the growth of virus circulating in the body and prevent liver damage.

A group of drugs known as **interferons** (eg, Intron A) may also be of benefit for people with chronic hepatitis B. These are a synthetic form of a substance the body's immune system produces naturally in order to fight infection. The aim of treatment with these medicines is to prevent the virus from causing any further damage to the liver. Treatment involves an injection three times a week for four to six months. Some people respond well to treatment while others respond at first but relapse when treatment is stopped.

### ›Further information

Centers for Disease Control and Prevention: [wwwnc.cdc.gov/travel/diseases/hepatitis-b](http://wwwnc.cdc.gov/travel/diseases/hepatitis-b)

Last reviewed: June 2013