

HEPATITIS

OVERVIEW OF HEPATITIS (A, B, C, D & E)

The word hepatitis simply means *inflammation* of the liver. Causes include liver infections by bacteria, viruses and parasites, in addition to liver damage caused by toxic chemicals and alcohol. Among the viruses, there are many that can cause hepatitis but Hepatitis A virus (HAV) and Hepatitis B virus (HBV) are the only two for which immunisations are available.

HEPATITIS A (HAV)



This is transmitted via the faecal-oral route. This means the infection is passed on by eating food or drinking water that has been contaminated by the faeces of an infected person. It is the most common vaccine preventable infection in the world. There is a 1:50 risk per month of contracting Hepatitis A for budget travellers in developing countries. Even with “5 star travel” in developing countries the risk is about 1:300 per month.

Outbreaks of Hepatitis A can occur anywhere in the world, and have often been associated with the eating of inadequately cooked shellfish which have come from water that has been contaminated with sewage. Eating raw vegetables grown in soil fertilised with infected faeces is another cause of outbreaks, or drinking untreated water.



The incubation period for Hepatitis A virus is around 30 days (range 2-6 weeks). Common symptoms include fever, loss of appetite, nausea, pain in the right upper abdomen, followed within several days by jaundice, a condition that turns your skin yellow. These symptoms may range from severe to mild and some people may have none. Children are often asymptomatic. However, the elderly are prone to severe illness. Rarely Hepatitis A is fatal. There is no specific treatment for Hepatitis A and the vast majority of cases will get better on their own, although those infected may be quite ill for weeks. Once people have recovered from Hepatitis A they are immune for life.



Being aware of how the virus is spread and taking appropriate food and water precautions will certainly minimise the risk of contracting the disease. You can be protected against Hepatitis A by vaccination. The vaccines are given as a series of two injections. The first provides a high level (99%) of immunity for twelve months. A second injection any time after this will give at least a further 20 years of protection. Vaccine reactions are rare, the most common complaint being temporary soreness at the injection site.



HEPATITIS B (HBV)

This is also a viral infection of the liver, but it can be much more serious than Hepatitis A. In infected individuals the Hepatitis B virus is present in body fluids such as blood, semen and vaginal secretions and is usually transmitted through sexual contact, intravenous drug use, close contact with blood from infected individuals or from an infected mother to child during birth. Hepatitis B can be transmitted through sporting accidents, accidental needle stick injuries, tattooing, ear-piercing, nicks from infected razors, acupuncture and dental procedures. It is not transmitted through contaminated food or water.



The incubation period for Hepatitis B is approximately 10 weeks (range 2-6 months). The infection causes gradually increasing fatigue, loss of appetite, nausea and pain in the right upper abdomen. There may be a rash, pain in the joints, followed by yellow discolouration of your skin and darkening of the urine. As with Hepatitis A, mild or asymptomatic infections occur, but less frequently. One important difference is that many people who contract Hepatitis B will become chronic carriers and will always remain capable of transmitting the disease. Some of these carriers will develop chronic hepatitis that can lead many years later to liver failure or liver cancer. In a small number of cases Hepatitis B leads rapidly to liver failure and death.



High-risk behaviours include unprotected sex, multiple sexual partners or encounters with sex workers, IV drug use, occupational exposure to sharps or blood products and living or travelling in regions where there is a high number of hepatitis B carriers. These areas include most of Asia, Africa, Central and South America and parts of Eastern Europe where up to 20% or more of apparently healthy people may be Hepatitis B carriers. Hepatitis B is now common enough in Australia, with 1 in 200 people being chronic carriers, that the Australian government currently subsidise Hepatitis B vaccinations for all babies.

Adults who are not yet protected by immunisation can take common sense precautions to avoid exposure to Hepatitis B. A synthetic vaccine has been manufactured with no risk of infection. The vaccine is given in 3 doses, usually at 0, 1 month and 6 months. An accelerated vaccine course can be given over one month with a booster 1 year later. Over 90% of vaccinated individuals will develop satisfactory immunity, which is life long. There is a combination Hepatitis A/ Hepatitis B vaccine available.

HEPATITIS C (HCV)

Hepatitis C received a great deal of attention when it was identified as the cause of most cases of hepatitis associated with blood products (eg blood transfusions). In most western industrialised countries, blood products are screened for HCV and other diseases such as HBV & HIV. However, in many less technologically developed countries, such screening tests are often not performed. HCV is transmitted in the same way as Hepatitis B. There is no vaccine presently available for HCV. As infection can lead to severe liver damage, measures to avoid infection are very important.



HEPATITIS D (HDV)

Hepatitis D, also known as delta virus, is a virus that actively infects people who have Hepatitis B. It is spread in the same way as Hepatitis B. Immunisation against Hepatitis B will prevent you from having Hepatitis D infection.

HEPATITIS E (HEV)

Hepatitis E has only recently received media attention following the return of a number of infected travellers from India, Nepal and Pakistan. However, outbreaks have occurred in many countries throughout Asia and to a lesser extent Africa. The Hepatitis E virus is transmitted in the same way as the Hepatitis A virus through contaminated food and water. Most outbreaks have been associated with the breakdown of normal sanitation measures or with flooding associated with contaminated water supplies. There is no vaccine available currently and no specific treatment, so dietary and hygiene precautions are strongly advised. Symptoms from Hepatitis E are usually brief except for pregnant women, and long term repercussions are rare.