

WHO IS A HEPATITIS B CARRIER?

When you are infected with the hepatitis B virus the body usually responds by getting rid of it after a few weeks. Some people become ill for a while with jaundice (yellow colouring to the skin and eyes) but many never realise they have been infected. In many young children, and a small proportion of adults, the body is not able to kill the virus and it settles down in the liver cells for many years – these people are HEPATITIS B CARRIERS. Surprisingly, very few carriers feel ill when they get infected. Many hepatitis B carriers are highly infectious. This means that they are producing new virus all the time and they are a risk to others, unless they are careful

CAN CARRIERS INFECT OTHER PEOPLE?

Carriers have “live” virus in their blood, saliva and sexual fluid for a number of years after they first get infected.



Though in time they may lose part of the virus (HBeAg) from the blood, they are still carriers, and virus is still found in the liver. Carriers can pass the virus to others by direct passage of body secretions – for example, having unprotected sex, by shar-

ing razors, towels or toothbrushes or by IV drug users sharing needles, but most infections in New Zealand occur in childhood, and probably through breaks in the skin from sores and grazes.

Mothers can also pass the virus to their babies at the time of birth (we now test all pregnant mothers and treat the babies of carriers to prevent this).



Please do not worry about spreading hepatitis B by sharing plates, cups, cutlery or handing food, but please remember that hepatitis A can be spread this way. Hepatitis A is a different virus and does not have carriers.

In New Zealand all blood transfusions are tested to check that they are free of hepatitis B, as well as hepatitis C.

CAN I AVOID INFECTING OTHERS?

You can reduce the risks to your family and friends by some simple precautions:

- Cover open sores and cuts
- Don't share razors, towels or toothbrushes

Remember carriers can infect their sexual partners. Unless you know your partner has already been infected or had the vaccinations you should use condoms.

All your household contacts should also be blood tested for hepatitis B. People who have lived closely with you for several years may be already infected. A blood test can detect if they are immune (been infected and recovered or previously vaccinated) or carriers. If they have not been infected or vaccinated against the hepatitis B virus it would be wise to get them protected by vaccination. We suggest you discuss this with your doctor or staff at the Hepatitis Foundation.

If you have an accident or go into hospital tell the people caring for you that you are a carrier – it helps them to avoid infection. We do not recommend you tell others, as they may not understand this virus.

IS IT PERSONALLY DANGEROUS TO BE A CARRIER?

Most New Zealand carriers do not develop serious disease, but some develop serious problems, often many years after they became infected :

Chronic Hepatitis – slow damage to the liver over several years. Usually causes no symptoms but can lead to scarring (cirrhosis).

Cirrhosis (scarring of the liver) – eventually results in liver failure and can be fatal.

Liver Cancer – this is the most serious complication of being a hepatitis B carrier and occurs mostly in males (1 in 6 male carriers) over the age of 30 years . Regular blood tests may pick this up early so that effective treatment can be started.

Male carriers seem to have greater risk of chronic liver disease than females. Carriers who become infected very young, from their mothers, seem to be at the greatest risk of all. Regular blood tests may help to detect these problems.

TESTS FOR HEPATITIS B CARRIERS

Tests which are often done on carriers include:

- **HBsAg** – (Hepatitis B surface antigen) this is a measure of virus coat in the blood and is positive in carriers.
- **HBeAg** – (Hepatitis e antigen) measure of live whole virus in blood, and if positive means the carrier is infectious to others. Usually present in the first few years of being a carrier.
- **Liver Function Tests** (especially ALT) – measures if there is active liver damage.

AFP (alpha-fetoprotein) – this is raised during active liver damage and often rises in the early stages of liver cancer. It may also be raised in other conditions, notably in pregnancy, but this is quite normal.

IS THERE ANY TREATMENT TO GET RID OF THE VIRUS?

Once you are a carrier there is no easy way to get rid of the virus. Medicines called INTERFERON and ZEFFIX are sometimes given to carriers suffering continuing damage to the liver.

INTERFERON treatment lasts for 4 to 6 months, and sometimes longer and is self-injected by the patient.

ZEFFIX treatment works by stopping the virus replicating, and helps your body to deal with the virus, which can improve your liver and protect your liver from further damage. You must meet a certain criteria to be eligible for these treatments and they do not work for all patients.

Information on Interferon & Zeffix treatment may be obtained from the Hepatitis Foundation or your family doctor.

Many carriers will have the virus in their livers for the rest of their lives, but some will eventually lose the virus completely. Scientists are working on new treatments which may be easier to take and less expensive. These treatments may be available in a few years.