

Information during pregnancy

Hepatitis B

What is hepatitis B?

Hepatitis B is a viral infection that affects the liver. When people have this illness they may be jaundiced (yellowing of the skin and eyes), suffer tiredness, loss of appetite, vomiting, stomach upsets and pain, and generally feel unwell.

The virus is passed on through close contact with blood or other body fluids, or through sex without a condom.

Most people recover from hepatitis B, and are no longer infectious afterwards. Some people recover from the infection, but continue to carry the virus in their blood and can pass it on to others – they are called hepatitis B carriers. Some people have an ongoing infection for longer than six months – this is called chronic hepatitis B.

The longer the person carries this virus the more likely they are to have long-term health problems. People with chronic hepatitis B infection may benefit from treatment with antiviral drugs and need follow-up blood tests. In the future they may develop liver disease, eg, liver failure and liver cancer.

If you'd like to find out more about this, ask your doctor for more information.

Partners and children of a person who carries the hepatitis B virus can be tested and offered hepatitis B immunisation if they have not already been immunised.

Protecting your baby from hepatitis B with immunisation

If your blood test is positive for hepatitis B, this indicates that the virus is carried in your blood and the infection can be passed onto your baby during labour or delivery.

Your baby can be protected from the virus by giving the hepatitis B vaccine and hepatitis B immunoglobulin (special antibodies) directly after birth. These free injections will give your baby initial protection from the disease. Both the vaccine and immunoglobulin are safe and effective products. Mothers with hepatitis B can breastfeed safely, as long as the baby has had the immunoglobulin and the vaccine.

Your baby will also need the usual hepatitis vaccine (combined with protection against five other diseases) at 6 weeks, 3 months and 5 months of age. This vaccine protects almost all children (95 percent) from hepatitis B infection. All immunisations on the National Immunisation Schedule (see below) are free. Talk about these with your family doctor or nurse.

At nine months of age and after their vaccines have been completed your baby will be given a blood test to check if your baby is now protected against hepatitis B or has been infected with the virus. If your baby is not protected, a further two doses of the hepatitis B vaccine may be required.

National Immunisation Schedule

To protect your baby from hepatitis B and other diseases your baby needs to have at:

	Hep B	HBIG	RV1	DTaP-IPV-Hep B/Hib	PCV13	MenB	Hib	MMR	VV	DTaP-IPV	Tdap	HPV
Birth*	•	•										
6 weeks			•	•	•							
3 months			•	•		•						
5 months				•	•	•						
12 months					•	•		•				
15 months							•	•	•			
4 years										•		
11 or 12 years											•	•

Hep B – hepatitis B; HBIG – hepatitis B immunoglobulin; RV1 – rotavirus; D – diphtheria; T – Tetanus; aP – acellular Pertussis; IPV – inactivated Polio vaccine; Hib – Haemophilus influenzae type b; PCV13 – Pneumococcal; MenB – Meningococcal B; MMR – Measles-Mumps-Rubella; VV – varicella (chickenpox); d – adult dose diphtheria; ap – adult dose acellular pertussis; HPV – human papillomavirus.

* Hep B and HBIG are given at birth to babies of hepatitis B positive mothers.

Hepatitis B vaccine

The hepatitis B vaccine is synthetically produced and does not contain blood products. The vaccine is one of the vaccines on the National Immunisation Schedule which all children receive.

Hepatitis B immunoglobulin

Hepatitis B immunoglobulin is a purified blood product and contains high levels of the hepatitis B antibody. It is best given within the first 12 hours after birth. This protects your baby until the vaccine has time to work.

How does hepatitis B vaccine and immunoglobulin protect your baby?

The body's immune system fights illness and infections. If an infection enters your body the immune system makes antibodies from your blood cells to fight the infection. The antibodies "remember the infection" and protect you from illness in the future.

The antibodies in the hepatitis B immunoglobulin product protect your baby immediately against hepatitis B. The vaccine stimulates the body to make antibodies which will provide long term protection but this takes time so the immunoglobulin protects your baby until the immunisation starts to work.

How are immunoglobulins made?

This blood product is made from blood collected from healthy volunteer New Zealand donors or North American donors. No-one can be a blood donor if they have health problems, a family history of particular conditions, a serious infection, or have taken part in certain activities. All blood donations are screened for hepatitis B, HIV, hepatitis C, and syphilis. There have been no cases of these diseases in New Zealand as a result of a person having had hepatitis B immunoglobulin. The manufacturing process for hepatitis B immunoglobulin minimises the chance of transmitting infection.

What are the risks when you are given a blood product, eg, hepatitis B immunoglobulin?

As with any medical procedure, blood products such as hepatitis B immunoglobulin carry some risks. Some of the risks are:

- severe inflammatory reactions: these are very rare and can be treated
- mild inflammatory reactions: any vaccine/injection may cause a rash or rise in temperature
- infection from the injection. However, serious infections from blood products are extremely rare because of the careful selection and testing of donors.

The chance of serious problems is low. Although there have been rare reports of variant Creutzfeldt-Jakob disease (vCJD) being spread by blood, any person with a known risk of contracting vCJD is excluded from donating blood.

Is there an alternative treatment to the hepatitis B immunoglobulin?

There is currently no alternative treatment available to minimise the risk of your baby catching hepatitis B at birth. The hepatitis B vaccine alone is not as effective as giving both the hepatitis B vaccine and immunoglobulin. In the weeks before delivery, women with very high levels of hepatitis B virus in their blood may be offered daily treatment with an antiviral medicine to reduce the level of virus in their blood at delivery. This treatment does not replace the need for their babies to receive immunoglobulin and vaccinations.

Consent for treatment for your baby

As with any treatment, you have the right to decide whether you want your baby to have these treatments. This leaflet provides information on hepatitis B, and the benefits and risks of these injections. Your lead maternity carer (LMC), doctor or nurse will discuss this treatment with you and answer any concerns or questions you may have.

If you agree to your baby receiving the hepatitis B vaccine and hepatitis B immunoglobulin shortly after birth, and the hepatitis B vaccines at 6 weeks, 3 months and 5 months of age, your LMC will ask you to sign a consent form to show that you understand and consent to this treatment.

The consent form will also ask if you agree to the local public health service contacting you about the blood test that is given when your baby is nine months of age.

The information you give us about you and your child will be kept by your doctor, local Medical Officer of Health, in your maternity records and on the National Immunisation Register/ Aotearoa Immunisation Register.

Your LMC will also discuss with you the other vaccines on the National Immunisation Schedule and can provide you with more information on immunisation.

Immunisation records

Your doctor or nurse keeps a record of all the immunisations given to your baby and they also write them in the back of your child's *Well Child Tamariki Ora My Health Book*. Remember to take this book each time your baby is immunised.

All childhood immunisations are recorded on the National Immunisation Register /Aotearoa Immunisation Register so that authorised health professionals can find out what immunisations have been given. It helps them identify people who are due for immunisations or who have missed out.

Immunisation details can be withheld from the register. Withholding this information means your child's doctor will not have access to their immunisation records. Please ask your doctor or nurse if you would like more information.

For more information about immunisation check

the following websites:

- www.health.govt.nz/immunisation
- www.healthed.govt.nz
- www.immune.org.nz