

The hepatitis B vaccine

for newborns

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Babies under one year who catch hepatitis B can develop chronic hepatitis B, which can lead to liver disease and liver cancer in adulthood. Babies are most at risk of catching hepatitis B at birth, which is why it is recommended that all babies are vaccinated against hepatitis B within 24 hours of being born. In Australia, the vaccine is free for all newborn babies.

How will hepatitis B affect my baby?

Hepatitis B is a serious infectious disease that mainly affects the liver¹. Around 90 per cent of babies who catch hepatitis B at birth will develop chronic hepatitis B, a condition that can lead to liver disease and liver cancer². There is no cure for chronic hepatitis B infection and people with the disease need long-term antiviral therapy to reduce the risk of developing liver cancer³. Around one in four babies who catch hepatitis B at birth or soon after will die of liver failure or liver cancer as an adult⁴.

How does hepatitis B affect adults, including pregnant women?

The risk of developing chronic hepatitis B is far greater in babies than it is in adults¹—less than 10 per cent of infected adults develop chronic hepatitis B. Most adults who are infected with the hepatitis B virus recover fully. While infected, they may have no symptoms at all or very mild flu-like symptoms, or they may suffer from fever, nausea and vomiting, pain in the liver, pain in the joints and yellowing of the skin (called 'jaundice'). Many people who are carrying hepatitis B don't know that they have the virus.

How effective is the hepatitis B vaccine?

Between 90 and 95 per cent of people under 40 who have had three doses of the hepatitis B vaccine, as recommended in the National Immunisation Program, are protected against the hepatitis B virus⁵.



Is it safe to give the vaccine to a newborn baby?

Yes, the hepatitis B vaccine is safe for newborns. There is no evidence that it affects a mother and baby's ability to breastfeed⁶⁻⁷ or that it has any association with Sudden Unexpected Death in Infancy (SUDI), Sudden Infant Death Syndrome (SIDS)⁸ or autism⁹. You can read more about these studies at skai.org.au.

Premature babies are even more vulnerable to infection than full-term babies. For that reason, it is just as important to give the hepatitis B vaccine to premature babies to protect them from this serious infection. Health professionals can advise parents on the best time for a premature baby to have their first dose of the vaccine, and whether an additional dose is required.

Why are babies vaccinated at birth?

Babies are at the highest risk of catching hepatitis B at the time of their birth. Many people who have hepatitis B are not aware that they have the virus. Vaccinating babies as soon as they are born helps prevent them from catching hepatitis B from other children or family members who don't know they are infected.

Most mothers are tested for hepatitis B during their pregnancy, but it is important that all babies are vaccinated at birth, regardless of the results of that test. This is because very recent hepatitis B infections sometimes go undetected by the test, and because some mothers who tested negative earlier in their pregnancy may catch hepatitis B after having the test.

How does the hepatitis B vaccine work?

In Australia, the hepatitis B vaccine is given in four doses across the first year of life: at birth, and then at six weeks, four months and six months¹. Hepatitis B vaccination for babies has been part of the National Immunisation Program since 2000. Different vaccination schedules are recommended for older children, teenagers and adults.

The vaccine works by training the baby's immune system to recognise and get rid of the hepatitis B virus. The vaccine contains 'antigens' which are tiny fragments of the hepatitis B virus. When a baby's immune system detects the antigens in the vaccine, it produces antibodies to fight them and get rid of them. The vaccine does not contain any blood products and is not a 'live' vaccine. The synthetic fragments cannot reproduce themselves or cause disease.

If you have any worries about how you feel after your vaccination, you can get help from your doctor, or your nearest emergency department, or by calling Health Direct on 1800 022 222.

References

For links to the references used in this factsheet, please go to skai.org.au.

