

Pregnancy and Hepatitis B

What is Hepatitis B?

Hepatitis B is the most common serious liver infection in the world. It is caused by the hepatitis B virus (HBV) that attacks liver cells and can lead to liver failure, cirrhosis (scarring) or liver cancer later in life. The virus is transmitted through direct contact with infected blood and bodily fluids, and from a hepatitis B positive woman to her newborn during pregnancy or childbirth.



If I am pregnant, should I be tested for hepatitis B?

Yes, all pregnant women should be tested for hepatitis B! Pregnant women who are infected with hepatitis B can transmit the virus to their newborns during pregnancy or childbirth. Almost 90% of babies born to infected mothers will become chronically infected with hepatitis B at birth if there is no prevention. But the good news is that a hepatitis B infection can be prevented.

What if I test positive for hepatitis B while I am pregnant?

If a pregnant woman tests positive for hepatitis B, then she should be referred to a liver specialist or a doctor with experience treating people with HBV for further evaluation and care.

How can I protect my newborn from hepatitis B?

A newborn baby can be protected from hepatitis B infection if the first dose of the hepatitis B vaccine is given to the baby in the delivery room or within the first 24 hours of life (recommended by the World Health Organization, WHO), preferably within 12 hours (recommended by the Centers for Disease Control and Prevention, CDC). Along with giving the hepatitis B vaccine at birth, one dose of hepatitis B immunoglobulin (HBIG) can be given to the baby, if available. These two shots must be given at birth, at different injection sites in order to help prevent a hepatitis B infection. These medications should be ordered in advance so that they are available at the time of delivery. The infant will need to complete two more doses of the hepatitis B vaccine to provide complete protection. These two doses are usually given at 1 and 6 months of age. If a baby born to an HBV-infected mother does not receive the HBV vaccine beginning at birth, then they have greater than a 90% possibility of becoming chronically infected. There is no second chance! It is vitally important that all newborns be vaccinated at birth against hepatitis B!

In addition, if a pregnant woman tests positive for the hepatitis B e-antigen (HBeAg+) and has a high viral load (high HBV DNA blood test), then treatment with oral antiviral medications after the first 3-6 months of pregnancy (during the second or third trimester) should be discussed with a doctor. Decreasing one's hepatitis B viral load could help reduce the risk of transmitting the virus during pregnancy and childbirth.

What if my doctor recommends the pentavalent vaccine starting at 6 weeks instead of the birth dose of the HBV vaccine?

The pentavalent vaccine is a combination 5-in-1 vaccine, which includes the HBV vaccine, and is given starting at 6 weeks. For babies born to mothers with hepatitis B, it is critical that they receive the first dose of the HBV vaccine in the delivery room or within 24 hours of life, preferably within 12 hours. Waiting for the first dose of the pentavalent vaccine is too late and will NOT protect the baby from hepatitis B. Be sure to specifically request the first dose of HBV vaccine (monovalent vaccine), which may not be free, but will protect your newborn from a lifetime of living with chronic hepatitis B!

Do I need treatment during my pregnancy?

All women who are diagnosed with hepatitis B in pregnancy should be referred for follow-up care with a liver specialist or a doctor who is knowledgeable about hepatitis B. Your doctor should order blood tests including the hepatitis B e-antigen (HBeAg), HBV DNA level, and other liver related blood tests, especially liver enzymes (ALT/SGPT and AST/SGOT) to determine how active the virus is, and the overall health of your liver. Women who are HBeAg-positive with a lot of virus in their body (high viral load) have an increased risk of transmitting the hepatitis B virus to their newborn even if their baby receives the vaccine and HBIG. A doctor may recommend starting oral antiviral treatment during the 2nd or 3rd trimester (after 3-6 months of pregnancy) to lower the viral load before delivery and continue the treatment for several months after the pregnancy.

Do I need treatment after pregnancy?

If you are prescribed antivirals during pregnancy, you must continue to see your doctor regularly for at least 6 months so they can make sure that you stay healthy and to determine whether you would benefit from continued treatment or not.

Can I breastfeed my baby if I am infected with hepatitis B?

According to the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO), it is safe for a HBV positive woman to breastfeed her child. The benefits of breastfeeding outweigh the potential risk of transmitting the virus through breast milk. In addition, since all newborns should receive the hepatitis B vaccine at birth, the risk of transmission is reduced even further. For women taking antiviral treatment, there is data from HIV literature to support the safety of tenofovir (TDF) during breastfeeding, but be sure to discuss this with your doctor.

For more information:

- Hepatitis B Foundation – www.hepb.org
- U.S. Centers for Disease Control and Prevention – www.cdc.gov/hepatitis/hbv/perinatalxmtn.htm
- WHO – http://apps.who.int/iris/bitstream/10665/208278/1/9789241509831_eng.pdf?ua=1
- Immunization Action Coalition – <http://www.immunize.org/birthdose>
- GAVI Vaccine Alliance: Pentavalent Vaccine Support – www.gavi.org/support/nvs/pentavalent/