

HERPES AND PREGNANCY

As an expectant parent eagerly awaiting the birth of your new baby, you are probably taking a number of steps to ensure your baby's health. One step many experts recommend is that you become informed about herpes simplex virus (HSV). This common virus is usually a mild infection in adults. But in infants, HSV can cause a rare, but serious, illness.

What is herpes simplex virus?

HSV can cause sores near the mouth (oral herpes or "cold sores"), or sores on the genitals (genital herpes). HSV-1 is the usual cause of oral herpes, and HSV-2 is the usual cause of genital herpes. But either type of HSV can infect either part of the body. Either type can infect a baby.

How common is herpes simplex?

Approximately 80% of New Zealand adults have oral herpes and 20% have genital herpes. These figures are based on New Zealand studies and studies from countries with similar population groups to New Zealand. You can get genital herpes if you have sexual contact with a partner who is infected, or if a partner who has an active cold sore performs oral sex on you. Most people with HSV don't know they are infected because they have no symptoms, or symptoms too mild to notice.

How can herpes simplex spread to an infant?

- Herpes simplex is most often spread to an infant during birth if the mother has HSV in the birth canal during delivery.
- HSV can also be spread to the baby if he or she is kissed by someone with an active cold sore.

- In rare instances, HSV may be spread by touch, if someone touches an active cold sore and then immediately touches the baby.

How can herpes harm a baby?

HSV can cause neonatal herpes (babies up to 28 days old, infected by herpes), a rare but life-threatening disease. Neonatal herpes can cause eye or throat infections, damage to the central nervous system, mental retardation, or death. Medication may help prevent or reduce lasting damage if it is given early.

How many babies get neonatal herpes?

Less than 0.1% of babies born in the United States each year get neonatal-herpes. The limited information from Australasia suggests the incidence is even lower in Australia and New Zealand (4/100,000 live births in Australia). By contrast, some 20-25% of pregnant women have genital herpes. This means that the great majority of women with genital herpes give birth to healthy happy babies.

Which babies are most at risk?

Babies are most at risk from neonatal herpes if the mother contracts genital HSV for the first time late in pregnancy. This is because a newly infected mother does not have antibodies against the virus, so there is no natural protection for the baby during birth. In addition, a new herpes infection is frequently active, so there is a real chance that the virus will be present in the birth canal during delivery.

What about pregnant women who have a history of genital herpes?

Women who acquire genital herpes before they become pregnant have a very low risk (less than 1%) of transmitting the virus to their babies. This is because their immune system make antibodies that are passed to the baby through the placenta. Even if HSV is active in the birth canal during delivery, the antibodies help protect the baby. In addition, if a mother knows she has genital herpes, her doctor can take steps to protect the baby.

Protecting the Baby: Women with genital herpes

If you are pregnant and you have genital herpes, you may be concerned about the risk of spreading the infection to your baby. Be reassured that the risk is extremely small – especially if you have had herpes for some time. The following steps can help make the risk even smaller:

- Talk with your obstetrician or midwife. Make sure he or she knows you have genital herpes.
- At the time of labour, check yourself for any symptoms in the genital area – sores, itching, tingling or tenderness. Your health care provider will also examine you with a strong light to detect any signs of an outbreak.
- The choices regarding an active outbreak at the time of delivery should ideally be discussed with your obstetrician early in the pregnancy. The choices are to proceed with a vaginal delivery (avoiding routine use of instruments) or have a caesarian section. The risk of transmission with vaginal delivery is low (less than 3%) and needs to be weighed against the risk of caesarian section to the mother. Other factors that might affect your delivery need to be considered too before a decision can be made.
- Ask your LMC not to break the bag of waters around the baby unless necessary. The bag of waters may help protect the baby against any virus in the birth canal.
- Ask your LMC not to use foetal scalp monitor (scalp electrodes) during labour to monitor the baby's heart rate unless medically necessary. This instrument makes tiny punctures in the baby's scalp, which may allow herpes virus to enter. In most cases, an external monitor can be used instead.
- Ask that a vacuum or forceps not be used during delivery unless medically necessary. These instruments can also cause breaks in the baby's scalp, allowing virus to enter.

- After birth, watch the baby closely for about four weeks. Symptoms of neonatal herpes include blisters on the skin, fever, tiredness, irritability, or lack of appetite. While these can be several mild illnesses, don't wait to see if your baby will get better. Take him or her to the pediatrician at once. Be sure to tell the pediatrician you have genital herpes.
- The odds are strongly in favour of you having a healthy baby.

Protecting the Baby: Women who don't have genital herpes

The greatest risk of neonatal herpes is to babies whose mothers contract a genital infection late in pregnancy. While this is a rare occurrence, it does happen, and can cause a serious, even life-threatening, illness for the baby. The best way you can protect your baby is to know the facts about HSV and how to protect yourself. The first step may be finding out whether you already carry the virus. If you have a partner who knows they have genital herpes and you don't know whether you have it, you need to discuss this with your doctor.

How can I get tested for genital HSV?

If you have symptoms, the best test is a viral culture. To perform this test, your health care provider must take a sample from an outbreak while it is active, preferably on the first day. Test results are available in about a week.

If you don't have symptoms, a blood test can tell you whether you carry HSV-2, the type of herpes that usually infects the genital tract. A blood test may also tell you whether you have HSV-1, but in many cases this simply means you have oral herpes.

The most accurate blood test is the Western blot, not currently available in New Zealand. Other commercially available tests, such as immunoblot assays, are available through some laboratories.

Ask your doctor about these test as it differs regionally and some tests are not accurate. Also the doctor needs to be aware how to interpret the test in light of the clinical presentation.

How can I make sure I don't get genital HSV?

If you test negative for genital herpes, the following steps can help protect you from getting an infection during pregnancy:

- If your partner has genital herpes, abstain from sex during active outbreak. Between outbreaks, use a condom from start to finish every time you have sexual contact, even if your partner has no symptoms. (HSV can spread when no symptoms are present.) Consider abstaining from sex during the last trimester.
- If you don't know whether your partner has genital HSV, you may wish to ask your partner to be tested. If your partner has genital or oral HSV, there is a very real chance that you may acquire it unless you take steps to prevent transmission.
- Do not let your partner perform oral sex on you if your partner has an active cold sore (oral herpes). This can give you genital herpes.

What if I contract genital HSV during late pregnancy?

If you experience genital symptoms, or believe you have been exposed to genital HSV, tell your obstetrician or midwife at once. However, be aware that herpes can lie dormant for several years. What appears to be a new infection is usually an old one that is causing symptoms for the first time. Talk with your provider about the best way to protect your baby. If a pregnant women gets a new genital HSV infection during the last six weeks of pregnancy, a caesarean delivery is recommended, even if no outbreak is present, as there is a greater than 50% risk of neonatal HSV.

How can I protect my baby after birth?

A baby can get neonatal herpes in the first eight weeks after birth. Such infections are almost always caused by a kiss from an adult who has a cold sore. To protect your baby, don't kiss

him or her when you have a cold sore, and ask others not to. If you have a cold sore, wash your hands before touching the baby.

For Partners of Pregnant Women

If your partner is pregnant, and she does not have genital HSV, you can help ensure that the baby remains safe from the infection. Find out whether you have a genital HSV (see “How can I get tested?”). Remember, approximately 20% of sexually active adults have genital HSV, and most do not have symptoms. If you find that you have the virus, follow these guidelines to protect your partner during the pregnancy:

- Use condoms from start to finish every time you have sexual contact, even if you have no symptoms. HSV can be spread even when no symptoms are present.
- If you have genital outbreaks, abstain from sex until the outbreak has completely healed.
- Talk with your health care provider about taking antiviral medication to suppress outbreaks and to reduce the risk of transmission between outbreaks.
- Consider abstaining from intercourse during the last trimester. Explore alternatives such as touching, kissing, fantasising, and massage.
- If you have cold sores (usually caused by HSV-1), avoid performing oral sex on your partner when a cold sore is present.
- Your partner needs to tell her doctor if you have genital herpes so that all the issues can be discussed.

The best way to protect your baby from neonatal herpes is to prevent contracting genital HSV during late pregnancy, especially during the last six weeks.