

VARICELLA-ZOSTER VIRUS (CHICKENPOX AND SHINGLES) AND PREGNANCY

Varicella-zoster virus (VZV) basics

Varicella-zoster is a herpesvirus that causes chickenpox, a common childhood illness. Most adults in the United States (90% - 95%) are immune to varicella. Chickenpox is highly contagious, but rarely serious for most children. After a person has had chickenpox, the varicella-zoster virus can remain inactive in the body for many years. Herpes zoster (shingles) occurs when the virus becomes active again.

Chickenpox first occurs as a blister-like skin rash and fever. The sores commonly occur in batches with different stages (bumps, blisters, and sores) present at the same time. The blisters usually scab over in 5 days. Children with weakened immune systems may have blisters occurring for a prolonged time period. Symptoms may be more severe in newborns, persons with weakened immune systems, and susceptible pregnant women. Serious problems can occur and may include pneumonia (bacterial and viral), brain infection (encephalitis), and kidney problems.

Shingles occurs when the virus, which has been inactive for some time, becomes active again. Severe pain and numbness along nerve pathways, commonly on the trunk or on the face, are present. Clusters of blisters appear 1 to 3 days later. The blisters are usually on one side of the body and closer together than in chickenpox. **Shingles does not spread as shingles from one person to another.** If people who have never had chickenpox have contact with the fluid from the shingles blisters, they can develop chickenpox.

For general fact sheets on chickenpox and shingles, see Section 6.

VZV and pregnancy

If a pregnant woman is not immune (has not had varicella vaccine or chickenpox in the past) and is infected with varicella during:

- First half (about 20 weeks) of the pregnancy, there is a very slight risk (0.4% to 2%) for birth defects or miscarriage.
- Second half of the pregnancy, the baby may have infection without having any symptoms and then get shingles (zoster) later in life.
- Five days before to 2 days after the delivery, it is likely the baby will get chickenpox. VariZIG may be recommended for the baby.

No cases of fetal infection or damage have been reported for women who develop shingles during pregnancy.

Exposure to VZV during pregnancy

If pregnant women are exposed to VZV, they should consult their health care provider for information about diagnosis, possible lab tests, and follow-up.

If a pregnant woman is not immune (has not had vaccine or chickenpox in the past) and has been exposed to chickenpox or shingles, she should call your health care provider immediately. The health care provider may recommend VariZIG, a varicella zoster immune globulin, which should be administered as soon as possible after exposure (but can be given up to 10 days after exposure).

VARICELLA-ZOSTER VIRUS AND PREGNANCY

Testing for VZV

A blood test can be done for VZV. This test may show that the patient:

- is immune (has already had varicella disease or varicella vaccine) and has no sign of recent infection. The patient does not need to be concerned about the exposure to chickenpox or shingles.
- is not immune and has not yet been infected. The woman may attempt to avoid contact with chickenpox and shingles cases during the pregnancy.
- have or recently had the infection. The infection should be discussed with the patient's health care provider.

VZV prevention

All adults working with children should know their vaccine history or immune status. To prevent chickenpox, women who are not immune and not pregnant should be vaccinated with the varicella vaccine. Pregnancy should be avoided for at least one month following immunization. **Varicella vaccine should not be given to pregnant women.**

If a non-immune woman is pregnant, she should receive varicella vaccine after the baby is delivered.

For more information, call Hennepin County HSPHD-Epidemiology at (612) 543-5230 or call your local health department.