

Chickenpox and Pregnancy



Region of Waterloo
PUBLIC HEALTH AND
EMERGENCY SERVICES

What is chickenpox?

Chickenpox is a very common infectious disease caused by the varicella-zoster virus. It is usually a mild childhood infection. Many adults have had chickenpox and are usually immune for life. This may change in the future with the introduction of vaccination against chickenpox (2004 in Ontario), however two doses of chickenpox vaccine provides protection from infection and these people are also considered immune.

What are the symptoms?

Chickenpox may begin with a fever, followed in a day or two by a rash that can be very itchy. The rash starts with red spots that soon turn into fluid-filled blisters that look like dew drops on a rose petal. After a few days crusts form over the blisters.

What is the incubation period?

A person can develop symptoms anytime between 10 -21 days (usually 14-16 days) after being exposed to an infectious person.

How is it spread?

Chickenpox is easily spread person to person from respiratory drops in the air, or direct contact with the fluid in a chickenpox blister.

When is the person infectious?

Chickenpox is infectious for as long as five days before, but usually only 1-2 days before the onset of rash and continuing until all lesions are crusted (usually about five days).

What is shingles?

Shingles is a painful, burning rash usually on one side of the body or face caused by the reappearance of the chickenpox virus. After a person recovers from chickenpox the varicella-zoster virus becomes inactive in the nerve roots in the body and usually remains there for life. Sometimes it is reactivated by conditions such as older age, stress and immune suppression. It is spread by direct contact with the rash, but only to someone who has not had chickenpox (that exposed person would develop chickenpox, not shingles).

Should a person with chickenpox be excluded from school or day care?

No, unless the child does not feel well enough to participate in normal activities. The Ontario Ministry of Health and Canadian Pediatric Society adopted this policy in 1999. Research shows that by the time the rash appears, it is too late to stop the spread of the disease. Chickenpox is most infectious 1–2 days before the rash and when children feel most ill.

Is chickenpox dangerous?

The vast majority of children who get chickenpox do well. Sometimes chickenpox has been associated with complications such as bacterial skin infections, pneumonia and encephalitis (swelling of the brain). Rarely, chickenpox in healthy children has been associated with severe strep A skin infections known as necrotizing fasciitis (referred to in the media as flesh eating disease) and strokes (virus attacks vessels in the brain). Chickenpox can be more severe in adults, pregnant women, newborns and persons who are immune suppressed (e.g. leukemia).

What are the concerns in pregnancy?

There can be concerns both for the fetus and the pregnant mother.

Risks to Fetus:

In the first two trimesters, there is a small increased risk (0.4-2 per cent) of congenital anomalies such as shortened limbs, eye and brain damage and skin lesions. After 28 weeks gestation there is minimal increased risk unless the woman develops chickenpox within five days before or 48 hours after delivery. If this occurs, the infant is at high risk of severe infection.

Risks to pregnant woman:

Pregnant women who get chickenpox are at higher risk of complications. They are at an increased risk (5-10 per cent) of developing severe pneumonitis especially in the second or third trimester. Antiviral medication may be needed.

What's considered an exposure to chickenpox?

A significant exposure to an infectious person with chickenpox includes any of the following situations:

- Continuous household contact
- Being indoors for more than 1 hour with a person with chickenpox
- Being in the same hospital room for more than 1 hour, or more than 15 minutes of face-to-face contact with a person with chickenpox
- Touching the lesions or articles freshly soiled by discharges from vesicles of a person with active chickenpox

What should I do if I am pregnant and have not had chickenpox?

Your health care provider can do a blood test to see if you have had chickenpox. Many adults who have no known history of chickenpox are actually immune when tested, indicating they did have chickenpox in the past. If you lived in a developing country, you are less likely to be immune because chickenpox is less common in these countries. If the blood test shows you have not had chickenpox, avoid exposure to chickenpox. You can reduce your risk of exposure by getting the chickenpox vaccine for household members who have not had chickenpox.

What if I had the vaccine for chickenpox?

If you have had two doses of the chickenpox vaccine, you would be considered immune to chickenpox. Two doses of vaccine are over 98 per cent effective for at least 10 years. It is not recommended to have blood work to check immunity because the current testing available is not sensitive or accurate enough for people who have had the vaccine; it may give a false negative result. The blood test is only accurate to determine immunity from a past natural infection.

References

1. [J. Obstet Gynaecol Can 2012;34\(3\): 287-292. SOGC Clinical Practice Guideline. Management of Varicella Infection \(Chickenpox\) in Pregnancy](#)
2. [Committee on Infectious Diseases, American Academy of Pediatrics \(2015\). Red Book \(30th ed\)](#)
3. [An Advisory Committee Statement \(ACS\) National Advisory Committee on Immunization \(NACI\). Updated recommendations for the use of varicella zoster immune globulin \(Varlg\) for the prevention of varicella in at-risk patients. July 2016.](#)
4. [An Advisory Committee Statement \(ACS\) National Advisory Committee on Immunization \(NACI\). Varicella Proof of Immunity – 2015 Update](#)
5. [Canadian Paediatric Society. Position Statement: School and daycare exclusion policies for chickenpox: A rational approach. 1999, reaffirmed Feb 2016.](#)

Alternate formats of this document are available upon request.

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What should I do if I am pregnant and have been exposed to chickenpox?

If you have had chickenpox at any time in your life or two doses of the chickenpox vaccine you are not at risk. The infection cannot be transferred to the fetus unless you actually get chickenpox during your pregnancy. It is important to determine if you have been exposed to someone during the infectious period (see previous page). See your physician for a blood test and follow up:

1. If the blood test confirms you are immune you are at no risk
2. If the blood test indicates you are not immune your doctor may recommend a product called Varlg (varicella zoster immune globulin) – it is a blood product that contains antibodies to protect you from getting chickenpox from that exposure. It is best to give within 96 hours from exposure, but can be given up to 10 days after exposure. Your doctor may also advise that you get two doses of the chickenpox vaccine after your pregnancy to protect yourself in the future.
3. If you get infected with chickenpox you should see your doctor as soon as possible because antiviral medication and close follow up may be recommended. If you get chickenpox within five days before or 48 hours after delivery your baby is at high risk of severe infection, so should get the Varlg shortly after birth to protect him/her.