

# Chickenpox (Varicella)

Chickenpox is a common childhood disease caused by the varicella zoster virus and producing a rash and other symptoms. Although there is a risk of serious complications, these rarely occur. Vaccination against chickenpox is now recommended for most children. Infection with the varicella virus can cause severe disease in newborns and young infants.

## What is chickenpox?

Until recently, chickenpox was one of the most common infectious diseases of childhood. It is caused by a widespread and highly contagious virus called the varicella zoster virus. Once your child has had chickenpox, he or she usually won't be infected again. The virus can be "reactivated" later in life, causing a disease called herpes zoster, but this is less common in children than adults.

The virus spreads by means of respiratory secretions (such as coughing or sneezing), or by contact with fluids from the rash. In the past, nearly all children in a family caught chickenpox in childhood. An effective varicella vaccine is now available and is recommended for most children. Although vaccinated children occasionally get chickenpox, the disease is usually very mild.

Chickenpox is generally mild in children, but there is a risk of serious complications. Chickenpox in pregnant women or in newborns may result in serious illness.

## What does it look like?

Symptoms of chickenpox develop about 2 weeks after your child is exposed to someone with the varicella zoster virus. Initial symptoms, more common in older children, include:

- Fever, usually about 100°F to 102°F (38°C to 39°C), but sometimes higher.
- Loss of appetite, sometimes with abdominal pain.
- Headache and "feeling sick."

A few days later, your child starts to develop the typical chickenpox rash:

- The rash starts as small red spots, which can be extremely itchy.
- The spots develop into small raised blisters, which eventually break open and turn crusty.
- Meanwhile, new "crops" of rash continually develop, so that all stages are present at once.
- The rash usually occurs on the face and trunk at first, then spreads to the arms and legs.

- Some children develop ulcers or blisters in other areas, such as the mouth and throat, vagina, or the eyes and surrounding area.

If your child has received varicella vaccine:

- The chances of catching chickenpox are greatly reduced.
- If he or she does catch chickenpox, the symptoms will likely be mild. However, vaccinated children with chickenpox can still spread the disease to others.

## What causes chickenpox?

- Chickenpox is caused by a virus called varicella zoster virus. Before the varicella vaccine was available, nearly everyone was infected with this virus sometime during childhood.
- The virus spreads very easily by direct contact with someone who is infected. If your child has chickenpox, any other children or adults who have not had the disease or vaccination will probably be infected as well. Chickenpox may also spread through contact with other children at school. It takes 10 to 21 days after exposure for the skin rash to begin.
- Chickenpox is contagious starting a day or two before the skin rash appears. It continues to be contagious until 5 days after the rash began, or as long as there are still blisters.

## What are some possible complications of chickenpox?

Serious complications of chickenpox are uncommon but can occur.

- *Pneumonia* is rare but can occur. Symptoms include coughing and difficulty breathing.
- *Infections involving the brain* are also rare. Your child may have unsteady walking, severe headaches, or a stiff neck and may not be acting normally.
- *Bacterial infection of the skin* may cause the skin rash to become more red or tender. You may see pus coming from the sores.
- *Scarring of the skin* may occur if your child scratches too much.
- Severe abdominal pain and bleeding from skin blisters are important warning signs of severe infection. *If either of these symptoms occurs, call our office immediately!*
- Varicella during pregnancy can cause severe problems. The fetus or infant may develop severe disease before or shortly after birth. If you are pregnant, have never had chickenpox, and believe you may have been exposed

to someone infected with varicella, inform your doctor immediately!

- *Herpes zoster*: Sometime after your child recovers from chickenpox, he or she has a small risk of developing *herpes zoster*. The main symptom is a group of blisters in just one area of the body. It is usually not very serious.

### What puts your child at risk of chickenpox?

- If your child has not been vaccinated, he or she will be at increased risk for chickenpox. Chickenpox can occasionally occur in a vaccinated child but is likely to be mild.
- Children with diseases that interfere with normal immune function (for example, human immunodeficiency virus [HIV] or cancer) are more likely to become infected with varicella and to develop severe chickenpox.

### Can chickenpox be prevented?

- Varicella vaccination is recommended for nearly all children. A first dose of vaccine is given after age 1 and a second dose at 4 to 6 years of age. (If your child has definitely had chickenpox, he or she doesn't need this vaccine.) Two more doses are needed after age 13.
- Avoid contact with other children who have chickenpox. This may be difficult, however, as the virus can spread before the skin rash appears. Have your child wash his or her hands frequently.
- If your child has been exposed to chickenpox before getting the varicella vaccination, the vaccine may still be effective in preventing the disease.
- A special preparation of antibodies taken from blood (called VZIG) may help to prevent disease in certain high-risk patients who are exposed to varicella, including children with reduced immune function, pregnant women, and newborns of mothers with chickenpox.

### How is chickenpox treated?

- If your child has the typical rash and other symptoms of chickenpox, it will probably be obvious to your doctor.
- Acyclovir, an antiviral drug, may be used in certain situations. However, for most otherwise healthy children with

chickenpox, this drug doesn't make that much difference. Your doctor may not recommend it.

- Acyclovir may be recommended for other family members, such as:
  - Children with skin or lung diseases.
  - Children using oral or inhaled steroid medications.
  - Children taking aspirin regularly.
- Otherwise, give home treatments to keep your child comfortable:
  - Use a washcloth soaked in cool water to reduce itching, which can become quite severe. Keep your child's nails short to avoid damage to the skin from scratching. Antihistamines may be prescribed to control itching.
  - *Do not* give aspirin to children with chickenpox, because it may lead to a serious complication called Reye's syndrome. If needed, other pain relievers (such as acetaminophen or ibuprofen) may be used.
- Once the rash has crusted over, chickenpox is no longer contagious. Your child can return to school or day care 5 days after the rash began, as long as there are no more blisters.
- Your child should get better, with complete clearing of the skin rash, within 7 to 10 days. If not, or if other symptoms develop, call your doctor's office.

### When should I call your office?

Call our office if:

- Your child's skin rash and other symptoms of chickenpox haven't cleared up within 7 to 10 days or if new symptoms develop.
- Chickenpox sores show signs of infection: soreness, redness, warmth, or pus.
- Your child has a severe cough or difficulty breathing.
- Your child shows unsteady walking, severe headaches, or a stiff neck or is not acting normally.
- *If your child has severe abdominal pain or bleeding from the blisters, call our office.* 
- *If you are pregnant, never had chickenpox, and believe you may have been exposed to someone infected with varicella, inform your doctor immediately.* 