

# Chickenpox

## What is chickenpox?

Chickenpox is a highly infectious disease that usually occurs during childhood. By adulthood, more than 90% of Americans have had chickenpox. Since the mid-1990s, most children have been vaccinated against the infection.

The disease is caused by the varicella-zoster virus (VZV), a form of the herpes virus. Transmission occurs from person-to-person by direct contact or through the air by coughing or sneezing.

Until 1995, chickenpox infection was a common occurrence, and almost everyone had been infected by the time he or she reached adulthood. However, the introduction of the chickenpox vaccine in 1995 has caused a decline in the incidence of chickenpox in all ages, particularly in children ages 1 through 4 years. The varicella vaccine can help prevent this disease, and 2 doses of the vaccine are recommended for children, adolescents, and adults who are not already immune to chickenpox (have already had the disease).

## What are the symptoms of chickenpox?

Symptoms are usually mild among children, but may be life threatening to healthy infants, children, and adults, and people with impaired immune systems. The following are the most common symptoms of chickenpox. However, each child may experience symptoms differently. Symptoms may include:

- Fatigue and irritability 1 to 2 days before the rash begins
- Itchy, red rash that progresses to tiny, fluid-filled blisters on the trunk, face, scalp, under the armpits, on the upper arms and legs, and inside the mouth
- Fever
- Feeling ill
- Decreased appetite
- Muscle and/or joint pain
- Cough or runny nose

The symptoms of chickenpox may resemble other skin problems or medical conditions. If a person who has been vaccinated against the disease is exposed, then he or she may still get a milder illness with a limited and less severe rash and mild or no fever. Always consult your child's doctor for a diagnosis.

## How is chickenpox spread?

Once infected, chickenpox may take 10 to 21 days to develop. Chickenpox is contagious for 1 to 2 days before the appearance of the rash and until the blisters have dried and become scabs. The blisters usually dry and become scabs within 4 to 5 days of the onset of the rash, but there are usually several new crops of blisters developing during this time period. Children should stay home and away from other children until all of the blisters have scabbed over.

Family members who have never had chickenpox have a 90% chance of becoming infected when another family member in the household is infected.

## **How is chickenpox diagnosed?**

Chickenpox is usually diagnosed based on a complete medical history and physical exam of your child. The rash of chickenpox is unique, and usually a diagnosis can be made from a physical exam.

## **What is the treatment for chickenpox?**

Specific treatment for chickenpox will be determined by your child's doctor based on:

- Your child's age, overall health, and medical history
- Extent of the condition
- Your child's tolerance for specific medications, procedures, or therapies
- Expectations for the course of the condition
- Your opinion or preference

Treatment for chickenpox may include:

- Acetaminophen for fever (Do not give aspirin)
- Antibiotics for treating bacterial infections that may develop (antibiotics do not treat the chickenpox infection)
- Calamine lotion (to relieve itching)
- Antiviral drugs (for severe cases)
- Rest
- Increased fluid intake (to prevent dehydration)
- Cool baths with baking soda (to relieve itching)

Children should not scratch the blisters, as this could lead to secondary bacterial infections. Keep your child's fingernails short to decrease the likelihood of scratching.

## **Immunity from chickenpox**

Most people who have had chickenpox will be immune to the disease for the rest of their lives. However, the virus remains dormant in nerve tissue and may reactivate, resulting in herpes zoster (shingles) later in life. Rarely, a secondary case of chickenpox does occur. Blood tests can confirm immunity to chickenpox in people who are unsure if they have had the disease.

## **What complications are commonly associated with chickenpox?**

Complications can occur from chickenpox. Those most susceptible to severe cases of chickenpox are infants, adults, pregnant women, and people with impaired immune systems. Unborn babies may also be infected if the mother has not had chickenpox prior to pregnancy. Even healthy children may develop complications for chickenpox, most commonly serious skin infections. Complications of chickenpox may include:

- Secondary bacterial infections
- Pneumonia
- Encephalitis (inflammation of the brain)
- Cerebellar ataxia (defective muscular coordination)
- Transverse myelitis (inflammation along the spinal cord)
- Reye syndrome (a serious condition that may affect all major systems or organs)
- Death