



Chickenpox (Varicella zoster)

Disease Fact Sheet

What is chickenpox?

Chickenpox is a highly communicable disease caused by a virus called the varicella zoster virus, a member of the herpes virus family.

What are the symptoms of chickenpox?

Initial symptoms include sudden onset of fever (up to 102°F) and feeling tired and weak. An itchy, blister-like rash soon follows. The blisters (vesicles) eventually dry, crust over and form scabs. The blisters tend to be more common on covered than on exposed parts of the body. They may appear on the scalp, armpits, trunk, and even on the eyelids and in the mouth. The disease is usually more severe in infants, adolescents and adults than in young children.

How soon do symptoms appear?

Symptoms commonly appear 13-17 days after exposure to a person with chickenpox, with a range of 10-21 days after exposure.

How is chickenpox spread?

Chickenpox is highly contagious. The virus that causes chickenpox is transmitted to others by direct person-to-person contact, by droplet or airborne spread of discharges from an infected person's nose and throat, or indirectly through articles freshly soiled by discharges from the infected person's lesions. The scabs themselves are not considered infectious.

When and for how long is a person able to spread chickenpox?

A person usually can transmit the virus that causes chickenpox from one to two days before the onset of the rash until all the rash lesions are crusted and dried, generally about five days after the rash onset. Contagiousness may be prolonged in people with altered immunity.

Does past infection with chickenpox make a person immune?

Chickenpox generally results in lifelong immunity. However, the virus that causes chickenpox may remain hidden (known as latent infection) and recur years later as a disease called herpes zoster (shingles) in older adults and sometimes in children. A vaccine to prevent shingles is now routinely recommended for adults aged 60 years and older.

Is there a vaccine to prevent chickenpox?

Yes, varicella vaccine was licensed in the U.S. in 1995 to prevent chickenpox. The first dose is recommended at 12-15 months of age, and the second dose at 4-6 years of age (kindergarten entry). Older individuals who are not immune should also receive two doses of vaccine. Adults born in the United States before 1980 generally are assumed to have had the disease and are therefore considered immune.

When newborns, susceptible pregnant women or persons who have weakened immune systems are exposed to a person with chickenpox, a shot of varicella zoster immune globulin (called VariZIG) may be effective in modifying or preventing disease if given within 10 days (ideally within 96 hours) of exposure.



Who gets chickenpox?

During the pre-vaccine era, almost everyone in the United States got chickenpox. Since the vaccine was licensed in 1995, the number of cases occurring each year has fallen more than 90%.

However, children who have only received one dose of varicella vaccine instead of two doses may come down with a milder form of the disease, called breakthrough disease. They usually have fewer than 50 lesions and may not appear very ill. Often the rash is not noticed because it may look like insect bites. However, the individual is still considered infectious.

Therefore, all individuals are recommended to receive two doses of vaccine to reduce the chances of breakthrough disease.

What are the complications associated with chickenpox?

Bacterial infection of skin lesions is the most common cause of chickenpox-associated hospitalizations and outpatient medical visits. In adults, pneumonia is the most common complication. Additionally, individuals taking high-dose steroid medications are particularly at risk for severe complications. Reye syndrome has been a potentially serious complication associated with clinical chickenpox. For this reason, children with chickenpox should not be treated with aspirin because aspirin may increase the risk of Reye syndrome. Newborn infants (less than one month old) whose mothers are not immune and patients with leukemia may experience severe, prolonged or fatal chickenpox.

What can a person or community do to prevent the spread of chickenpox?

The best method to prevent further spread of chickenpox is for people infected with the disease to remain home and avoid exposing others who are susceptible. People with symptoms of chickenpox should remain home until all the rash lesions are crusted (approximately five days). Avoiding contact with newborns, patients with weakened immune systems, and pregnant women is important.

Immunized people who develop breakthrough disease may have skin lesions that do not crust over. They should remain home until no new lesions appear within a 24-hour period.

What should I do if I think my child has been exposed to chickenpox?

If your child has received two doses of varicella vaccine or if you have been told by a doctor that your child previously had chickenpox, he or she is considered protected and no further action is needed. However, if you are unsure whether your child is protected, contact your doctor immediately. Varicella vaccine, if administered within three to five days after exposure, may prevent or reduce the severity of disease. Even if it is more than five days since exposure, immunization is still recommended to protect against future infection.