

## Varicella-Zoster (Chickenpox) Disease Fact Sheet

### What is chickenpox?

Chickenpox is a highly contagious disease caused by the varicella-zoster virus, a member of the herpes virus family. In temperate climates, chickenpox occurs most frequently in winter and early spring.

### Who gets chickenpox?

Chickenpox is common in the United States; however, cases of chickenpox are expected to decrease as more individuals are immunized with the varicella (chickenpox) vaccine.

### How is chickenpox spread?

Chickenpox is transmitted to others when an infected person coughs or sneezes and sends the virus into the air. A susceptible person then inhales the virus into his or her mouth and nose and then becomes infected by the virus. Chickenpox may also be spread to a susceptible person if the susceptible person comes in contact with the infected person's skin lesions (rash) or comes in contact with clothing or linens that have been soiled with discharges from the infected person's skin lesions or respiratory tract (nose, mouth, lungs). When the rash of chickenpox scabs over, the scabs are not considered infectious.

### What are the symptoms of chickenpox?

The main symptoms of chickenpox are an itchy, blister-like rash that occurs more on the face, scalp, and trunk than on other areas of the body. The blisters eventually dry, crust over, and form scabs. Adults sometimes get one to two days of fever and tiredness before developing the rash. Children usually have the rash occur at the same time as the fever and tiredness.

### How soon do symptoms appear?

Symptoms commonly appear 14 to 16 days (range of 10 to 21 days) after exposure to someone with chickenpox or herpes zoster (shingles)

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

A person is most able to transmit chickenpox from 1 to 2 days before the onset of rash until all lesions have crusted. People who are immunocompromised may be contagious for a longer period of time.

### When can my child return to school after getting chickenpox?

When all lesions are crusted, your child may return to school. A good rule of thumb to follow is whenever the last lesion to appear is crusted over, it is safe to return to school. This usually takes a week. Please notify the school of any case of chickenpox so that the school nurse can notify families of students who are immunocompromised, such as those students with leukemia undergoing chemotherapy.

### Does past infection with chickenpox make a person immune?

Chickenpox infection generally results in lifelong immunity.

### What are the complications associated with chickenpox?

The most common complications from chickenpox are bacterial infections of the skin and soft tissues in children and pneumonia in adults. These infections may be severe. Other complications from varicella include cerebellar ataxia, encephalitis and hemorrhagic complications leading to bleeding disorders, including disseminated intravascular coagulation. Newborn children (less than 1 month old) whose mothers are not immune and patients with leukemia may suffer severe, prolonged or fatal chickenpox. Immunocompromised patients, including those on immunosuppressive drugs, may have an increased risk of developing a severe form of chickenpox or shingles. Reye syndrome has been a potentially serious complication associated with

clinical chickenpox involving those children who have been treated with aspirin. Aspirin or aspirin-containing products should NEVER be given to a child or adolescent with chickenpox.

### **Is there a vaccine for chickenpox?**

YES. While no vaccine is 100% effective in preventing disease, the chickenpox vaccine is very effective: about 8 to 9 of every 10 people who are vaccinated are completely protected from chickenpox. In addition, the vaccine almost always prevents severe disease. If a vaccinated person does get chickenpox, it is usually a very mild case lasting only a few days and involving fewer skin lesions (usually less than 50), mild or no fever, and few other symptoms. Children should receive 2 doses of vaccine; the first at 12 to 15 months of age and the second at 4 to 6 years of age. Older children and adults without evidence of immunity to chickenpox should be vaccinated as well. Older children and adults who have previously had chickenpox do not need to be vaccinated. Contact your doctor or local health department for further information about the chickenpox vaccine.

### **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 may be susceptible. Someone with chickenpox should remain home until 1 week after the rash began or until the lesions become dry and crusted. Individuals with chickenpox (or shingles) should pay particular attention to avoiding unnecessary exposure of non-immune newborns, pregnant women and immunocompromised people to varicella.

### **Is there a treatment for chickenpox?**

In 1992, acyclovir was approved by the US Food and Drug Administration for treatment of chickenpox in healthy children. However, because chickenpox tends to be mild in healthy children, most physicians do not feel that it is necessary to prescribe acyclovir. A shot of varicella zoster immune globulin (VZIG) may be indicated for some susceptible individuals (for example pregnant women, high-risk newborns, and immunocompromised patients) who have had exposure to a case of chickenpox (or shingles). The VZIG may modify or prevent disease in these individuals if the shot is given within 96 hours after exposure.

### **What is shingles?**

Shingles (herpes zoster) is caused by the chickenpox virus that remains in the nerve roots of all persons who had chickenpox and can come out in the body again years later to cause illness. Shingles is more common after the age of 50 and the risk increases with advancing age. Shingles causes numbness, itching or severe pain followed by clusters of blister-like lesions in a strip-like pattern on one side of the body. The pain can persist for weeks, months or years after the rash heals and is then known as post-herpetic neuralgia.

### **Is shingles contagious?**

People with shingles are contagious to persons who have not had chickenpox. Therefore, people who have not had chickenpox can catch chickenpox if they have close contact with a person who has shingles. However, a person cannot catch shingles itself from someone else. Shingles is caused by the chickenpox virus which has been dormant (staying quiet) in a person's body ever since that person had chickenpox. So, a person gets shingles from his or her own chickenpox virus, not from someone else.

### **Is there a vaccine for shingles?**

YES. A vaccine to reduce the risk of shingles was licensed in 2006. It has been recommended for person 60 years of age and older. Contact your doctor or local health department for further information about the shingles vaccine.