

VARICELLA (CHICKENPOX)



ABOUT THIS DISEASE

Chickenpox is a very contagious disease caused by the varicella-zoster virus.

Although chickenpox can be a mild disease in most children, serious complications from chickenpox can occur, especially in persons at high risk (infants, adolescents, adults, pregnant women, and people with weakened immune systems), including:

- Bacterial infections of the skin
- Pneumonia (infection in the lungs)
- Infection or inflammation of the brain
- Bleeding problems
- Blood stream infections (sepsis)
- Dehydration (not having enough water in the body)
- Death

SIGNS AND SYMPTOMS

The classic symptom of chickenpox is a rash that turns into itchy, fluid-filled blisters that eventually turn into scabs. The rash may first appear on the head, chest, and back, and then spreads to the rest of the body, including inside the mouth, eyelids, or genital area. It usually takes about one week for all of the blisters to become scabs.

Other symptoms that may appear 1 – 2 days before the rash include:

- Fever
- Tiredness
- Loss of appetite
- Headache

It takes about 2 weeks (range 10 to 21 days) after exposure to a person with chickenpox or shingles for someone to develop symptoms.

TRANSMISSION

Chickenpox spreads easily through the air when an infected person coughs or sneezes. It can also spread by touching an infected person's blisters.

Chickenpox can also be spread from people with shingles to others who have never had chickenpox or received the varicella vaccine.

A person with chickenpox can spread the disease from 1 to 2 days before the rash appears until all of their rash blisters have formed scabs (usually 5 – 7 days).

DIAGNOSIS

Chickenpox is diagnosed by a combination of symptoms, physical signs, and laboratory tests. People with symptoms of chickenpox or persons without protection against the disease (see “Immunity” below) who have been exposed to someone with chickenpox or shingles should contact a healthcare provider immediately.

TREATMENT

Care of patients with chickenpox consists mainly of ensuring adequate intake of fluids, bed rest, and fever control. Use non-aspirin medications, such as acetaminophen to relieve fever from chickenpox. Do **NOT** use aspirin or aspirin-containing products to relieve fever from chickenpox, as giving aspirin-containing products to children with chickenpox has been associated with Reye’s syndrome, a severe disease that affects the liver and brain and can cause death.

Calamine lotion and colloidal oatmeal baths may help relieve some of the itching. Keeping fingernails trimmed short may help prevent skin infections caused by scratching blisters.

Health care providers may prescribe an antiviral medication for persons at risk for developing serious disease. The medication works best if given within the first 24 hours after the rash starts.

IMMUNITY

In general, persons with at least one of the following may be considered protected from chickenpox:

- Written documentation of adequate varicella vaccination (see “Prevention” below)
- Blood test showing they are immune to varicella or have had the disease
- Born in the United States before 1980*
- Diagnosis of a history of varicella or herpes zoster by a health care provider

*Not valid for health care personnel, pregnant women, and immunocompromised persons. For unvaccinated healthcare personnel born before 1980, see “Information for Clinicians” below.

“Breakthrough” varicella can occur in vaccinated persons. Breakthrough disease is usually mild; patients typically have fewer than 50 skin lesions and a shorter illness compared with unvaccinated people who get chickenpox.

For most people, getting chickenpox once provides immunity for life. However, for a few people, they can get chickenpox more than once, although this is not common.

RISK IN HAWAII

Summary of Reported Cases of Notifiable Diseases:

<http://health.hawaii.gov/docd/resources/reports/summary-of-reported-cases-of-notifiable-diseases/>

PREVENTION

The best way to prevent chickenpox is to get vaccinated at the recommended age.

All children should receive two doses of varicella vaccine. The first dose is given at age 12 - 15 months and the second dose at 4 - 6 years of age.

Varicella vaccine should be given to all adolescents and adults who do not meet any of the criteria for protection from chickenpox (see "Immunity" above). Persons aged 13 years of age and older should receive two doses of varicella vaccine separated by at least 4 weeks.

If you are not protected against chickenpox and are exposed to someone with chickenpox or shingles, contact your healthcare provider immediately:

- Varicella vaccine may prevent or lessen the severity of illness if given within 3 days and possibly up to 5 days after exposure to persons aged 12 months or older.
- Persons at increased risk for severe disease and complications are recommended to receive VariZIG (a blood product containing antibodies to the varicella virus), ideally within 4 days and up to 10 days of exposure.

Some people should not get the varicella vaccine (e.g., persons with immune system problems, pregnant women). Ask your healthcare provider for more information.

ADDITIONAL RESOURCES

- CDC Website: <https://www.cdc.gov/chickenpox/index.html>
- Vaccine Information Statement: <https://www.cdc.gov/vaccines/hcp/vis/vis-statements/varicella.pdf>

INFORMATION FOR CLINICIANS

- CDC Website: <https://www.cdc.gov/chickenpox/hcp/index.html>