

The varicella-zoster virus causes chickenpox and shingles. Chickenpox is a highly contagious disease that results from a first infection with the virus. It causes an itchy rash, red spots, or blisters all over the body.

Chickenpox can cause serious illness in anyone, especially pregnant women, newborns, teens and adults, and those with a compromised immune system. After initial infection, the virus becomes dormant, but emerges later in life as shingles.

HOW IS VARICELLA TRANSMITTED?

Chickenpox is spread from person-to-person through direct contact or through the air via the spread of respiratory droplets or aerosolized vesicular fluid from skin lesions. People with chicken pox should self-isolate at home until all lesions have crusted over. If they need to leave their home to seek medical care, they should wear a surgical mask at all times.

Shingles is generally only transmitted by direct contact with skin lesions. People with shingles can generally work and attend class as long as the lesions remain covered.

WHAT ARE THE SYMPTOMS?

Symptoms of chicken pox which appear a few days prior to the rash include fever, tiredness, loss of appetite, and headache. The rash appears first on the chest, back, and face, and then spreads over the entire body.



The average incubation period is fourteen to sixteen days. Persons with chickenpox are considered infectious from one to two days before the rash appears and until all lesions are crusted over.

The virus enters a dormant stage after initial infection. In about one third of people, the virus will become active again, causing a painful infection called shingles. Shingles is often characterized by a group or string of blisters that wrap around the side of the torso. When infection is on the face, it can cause damage to the eyes. After a shingles infection, some people develop persistent severe pain in the area of the rash, a condition known as post-herpetic neuralgia.

HOW CAN VARICELLA INFECTION BE PREVENTED?

A two-dose vaccine exists for the prevention of chickenpox in children and adults who were never infected.

WHAT I NEED TO KNOW

- Chickenpox is spread from lesions and respiratory droplets; shingles is spread only from lesions.
- Vaccination protects against the primary infection and can prevent shingles in individuals already infected.
- Isolate at home if diagnosed with chicken pox until the illness resolves and the lesions have cleared.
- Wash your hands frequently.
- Avoid sharing towels, sheets, and other materials with infected persons.
- Know your immune status. If you are unsure, please contact your healthcare provider.
- Contact biosafety@usc.edu or (323) 442-2000 for more information.

Some people may still develop chickenpox after vaccination (i.e., breakthrough disease) which manifests as a rash that occurs more than 42 days later. These occurrences are rare and usually a shorter duration than unvaccinated persons.

It is recommended that healthy adults over age 50 (regardless of whether they have had chickenpox/shingles) receive two doses of the shingles vaccine. The shingles vaccine can prevent shingles and its consequences.

IS THERE A TREATMENT FOR VARICELLA?

Antiviral medications are available for both chickenpox and shingles, and are most effective soon after the rash develops. Avoid scratching to prevent the virus from spreading to others and prevent the development of potential bacterial infections.

RESOURCES

HealthLinkBC - [Chickenpox \(Varicella\)](#)
CDC - [Chickenpox \(Varicella\)](#)