

VARICELLA ZOSTER VIRUS

What Is Varicella Zoster Virus?

Varicella zoster virus causes both chicken pox and shingles. Chicken pox is a common childhood disease with symptoms of slight fever, physical discomfort, uneasiness and skin rashes that blister into itching sores, which eventually scab. In adults, a chicken pox infection is more severe; many infected adults develop pneumonia.

Shingles (Herpes zoster) is a recurring disease that appears in older adults who were previously infected with the virus. It is a disease that affects the nervous system and causes inflammation of the nerve fibers to the skin.

After the first infection, the varicella virus can remain dormant for years without any symptoms or health effects. Then, the disease can appear suddenly with intense pain and tenderness along the affected nerve. Persons with shingles also experience mild fever and general discomfort. Skin eruptions or blisters similar to chicken pox appear along the path of the affected nerve; they last as long as two to four weeks. Pain may persist for additional weeks and months.

Who Is Susceptible?

Any worker who has not had chicken pox is at risk of infection with varicella. Susceptible workers should not be in contact with children or adults with either chicken pox or shingles. It is unlikely that workers can get shingles from a zoster patient, but contact with the patient can result in chicken pox.

How Is It Transmitted?

The most common way the virus is transmitted is through the respiratory secretions of patients. When patients cough or sneeze, they can release droplets containing the virus. Susceptible workers can inhale these droplets and may become infected. Workers may also be exposed to the virus from the discharges of chicken pox and shingles sores, and articles freshly soiled by these discharges (this form of transmission is very rare). Scabs of chicken pox and zoster are not infective.

What Is the Time Lapse Between Exposure and the Onset of Symptoms (Incubation)?

The incubation period for chicken pox is generally 14 to 16 days. For shingles or zoster, the time from infection to symptoms may be years.

Special Concerns

Pregnant women who are susceptible must have no contact with chicken pox or shingles patients. Infection during early stages of pregnancy may result in birth defects in the developing fetus.



Precautions to Protect Workers from Varicella Infection

- 1. Management should test workers for susceptibility to chicken pox to guarantee that workers at risk do not care for chicken pox and shingles patients.
- 2. Patients with chicken pox should be isolated in separate rooms; the doors should be kept closed.
- 3. Gowns and gloves should be worn while tending to both chicken pox and shingles patients.
- 4. If a susceptible worker must enter the room of a shingles or chicken pox patient, he or she should wear a mask.
- 5. Workers should wash their hands after touching the patient or potentially contaminated articles.
- 6. Articles contaminated with infectious material should be discarded or bagged and labeled before being sent to the laundry or for decontamination and reprocessing. Hot water-soluble bags that can be directly loaded into washing machines are recommended for use with isolation linen.

Alerting Workers About Patients

As soon as an infectious patient is identified, management should alert workers and post concise and detailed instruction cards in the vicinity of the patient (on the door or at the foot or head of the bed). All important isolation precautions should be listed on this card. Once workers have been informed about an infectious disease patient, it is their responsibility to follow all precautions outlined by management. In many patient care activities, workers can decrease the risk of acquiring infection by careful hand washing.

Worker Training

The Centers for Disease Control strongly recommends that healthcare facilities train workers about the potential of infection and infection control. Clearly written guidelines, policies and procedures should be available at all times to workers.

For more information, contact the AFT Healthcare Occupational Safety and Health Program at 202/393-5674.