

## CHICKENPOX (VARICELLA)

Chickenpox (also known as varicella) is an acute viral illness. It is a common childhood infection that may be prevented by vaccination. It is highly contagious, but rarely serious for most children.

**CAUSE** Varicella-zoster virus, a member of the herpesvirus family.

**SYMPTOMS** Mild fever and generalized skin rash that begins on the chest, back, underarms, neck, and face. It starts out as red bumps. Within several hours, the bumps turn into small blisters (fluid-filled bumps), and then scabs after a few days. The sores commonly occur in batches with different stages (bumps, blisters, and sores) present at the same time.

Chickenpox can be severe in newborns and those with weakened immune systems. Most people have had chickenpox by the time they are adults. However, when it does occur in adults, it may be more severe. Complications that commonly lead to hospitalization and can lead to death include severe skin and soft tissue infections, pneumonia, encephalitis, and dehydration.

**SPREAD** From person to person by touching the blister fluid or secretions from the nose or mouth of a person with chickenpox. Varicella-zoster virus can also spread through the air, when a person with chickenpox coughs or sneezes tiny droplets with virus and another person breathes them in (airborne spread).

**INCUBATION** It takes from 10 to 21 days, usually 14 to 16 days, after being exposed until symptoms develop.

**CONTAGIOUS PERIOD** From 1 to 2 days before the rash begins until all blisters have become scabs (generally within 5 days with a range of 4 to 7 days after the appearance of the first blisters in an otherwise healthy child). Persons who have progressive varicella (development of new lesions greater than 7 days) might be contagious longer.

**DIAGNOSIS** Based on typical symptoms and the characteristic rash. Breakthrough disease is a varicella disease that develops more than 42 days after vaccination which typically is mild, with less than 50 skin lesions, low or no fever, and shorter (4 to 6 days) duration of illness.

**TREATMENT** Recommend parents/guardians call their healthcare provider.

**DO NOT GIVE ASPIRIN or OTHER SALICYLATE-CONTAINING MEDICATIONS TO ANY CHILD OR ADOLESCENT UNDER 18 YEARS OF AGE.**

**EXCLUSION** Childcare and School: Until all the blisters have dried into scabs; usually by day 6 after the rash began.

It takes 10-14 days after receiving vaccine to develop immunity. Vaccine failures occasionally occur. The incubation period is 10 to 21 days. Therefore, exclude children who:

- appear to have chickenpox regardless of whether or not they have received varicella vaccine, or
- develop blisters within 10 to 21 days after vaccination.

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### EXCLUSION CONTINUED

Chickenpox can occur even if someone has had the varicella vaccine. These are referred to as “breakthrough infections” and are usually less severe and have an atypical presentation. The bumps rather than blisters may be present; therefore, scabs may not be present. These cases should be excluded until all bumps/blisters/scabs (sores) have faded and no new sores have occurred within a 24-hour period, whichever is later. Sores do not need to be completely resolved.

Although extremely rare, the vaccine virus has been transmitted to susceptible contacts by vaccine recipients who develop a rash following vaccination. Therefore, exclude vaccine recipients who develop a rash after receiving varicella vaccine, using the above criteria.

Exposed children without symptoms do not need to stay home unless chickenpox develops.

### PREVENTION/CONTROL

- All children should be routinely vaccinated with two doses of varicella vaccine; with the first dose at age 12-15 months and the second dose typically at 4-6 years of age.
- If you think a child has chickenpox, have the parent/guardian call their healthcare provider before taking the child in.
- Cover nose and mouth with a tissue when coughing or sneezing or cough/sneeze into your sleeve. Dispose of used tissues.
- Wash hands thoroughly with soap and warm running water after contact with secretions from the nose or mouth or blister fluid. **Thorough handwashing is the best way to prevent the spread of communicable diseases.**
- Clean and sanitize mouthed toys, objects, and surfaces and clean and disinfect objects and surfaces contaminated with secretions from the nose or mouth and/or blister fluid at least daily and when soiled. (See pgs 34-36.)
- Susceptible persons (have not had chickenpox or varicella vaccine in the past) who have been exposed to someone with chickenpox should call their healthcare provider immediately. This is especially important for pregnant women and persons with a weakened immune system. Getting varicella vaccine within 3 days, and possibly up to 5 days, of exposure may prevent disease in these people. Antiviral medicine may also be prescribed.

For more information, call Hennepin County HSPHD-Epidemiology at (612) 543-5230 or call your local health department.