

Varicella (chickenpox)

Description

Varicella is a highly infectious disease caused by the virus known as varicella or varicella zoster. The varicella zoster virus causes two distinct diseases: varicella (the initial infection) and herpes zoster (shingles, caused by the virus reactivating in the body).

The disease starts with cold-like symptoms, such as a runny nose, mild fever, cough and fatigue, and these are followed by a characteristic spotty rash. The rash usually starts on the trunk of the body and quickly spreads all over the body. It can develop inside the ears, nose and mouth; on the eyelids; and within the vagina. It continues to spread for 3 or 4 days and is usually very itchy.

The rash begins as small red spots that quickly turn into fluid-filled blisters. After a day or so, the fluid turns from clear and yellow to cloudy—these spots can easily burst and form a scab. Some blisters heal faster than others, so a person may have several stages of the rash at once.

People have different experiences with varicella. Some people have only a few spots; others are covered in spots. Varicella is usually a mild disease in children, but complications can occur in around 1% of cases.⁴⁴ The disease is more severe in adults and in people of any age who have impaired immunity.

How does it spread?

Varicella is spread by airborne droplets or contact with the fluid from the blisters. One infection gives long-lasting immunity—people rarely get varicella twice. People who have had varicella can get shingles (herpes zoster) later in life. Shingles is a reactivation of the varicella virus—direct contact with the shingles rash can cause varicella in people who have not already had it.

Incubation period

The average incubation period for varicella is 14–16 days, but may range from 10 to 21 days.

Infectious period

People are infectious from 2 days before the rash appears (i.e. during the coughing, runny nose stage) until all blisters have formed scales or crusts and dried.

Exclusion period

Children with varicella should be excluded until all blisters have dried. This is usually at least 5 days after the rash first appeared in non-immunised children, and less in immunised children.⁴⁵

Responsibilities of educators and other staff

- Advise the parent to keep the child home until all blisters have dried.
- If an educator or other staff member has varicella, they should stay home until all blisters have dried. Make sure staff and children always practise effective hand hygiene.
- Ensure that appropriate cleaning practices are being followed in the education and care service.
- Advise pregnant women to avoid contact with people who have varicella. Vaccination for varicella during pregnancy is not recommended, and pregnancy should be avoided for 1 month following varicella vaccination. If pregnant staff members are concerned, refer them to their doctor.

44 National Health and Medical Research Council 2008, *The Australian immunisation handbook*, 9th edn, NHMRC, Canberra.

45 'Chickenpox', in DL Heymann (ed.) 2008, *Control of communicable diseases manual*, 19th edn, American Public Health Association, Washington, DC.

Responsibilities of parents

- Ensure that children have been vaccinated against chickenpox.
- Keep the child at home until all blisters have dried.
- Encourage effective hand hygiene at home.
- Avoid contact between your child and other children or frail and elderly people until the child is feeling well.

Controlling the spread of infection

- Varicella is a vaccine-preventable disease. Immunisation is recommended for all educators and other staff⁴⁶ and is part of the National Immunisation Program Schedule for all children at 18 months of age.
- Vaccination after exposure can usually prevent a person getting symptoms of varicella if the vaccine is given within 3 days of exposure, and may prevent symptoms when given up to 5 days after exposure.
- Teach children about cough and sneeze etiquette.
 - Cough or sneeze into your inner elbow rather than your hand.
 - If you used a tissue to cover your nose or mouth when sneezing or coughing, put the tissue in the bin straight away.
 - Clean your hands.
- Ensure that staff practise appropriate cough and sneeze etiquette and hand hygiene.
- Avoid contact between the person who is ill and children, frail and elderly people, and pregnant women until the person is feeling well.

Treatment

There is no specific treatment for varicella, but calamine lotion or antihistamines (e.g. phenergan) may soothe the itch. A medicine that contains paracetamol may help lower the person's temperature or relieve discomfort. Do not give aspirin to any child less than 12 years old.

⁴⁶ National Health and Medical Research Council 2008, *The Australian immunisation handbook*, 9th edn, NHMRC, Canberra.