

# 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.<sup>43</sup> 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.<sup>44</sup>

## 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.

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

44 '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 staff<sup>45</sup> 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. phenegan) 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.

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<sup>45</sup> National Health and Medical Research Council 2008, *The Australian immunisation handbook*, 9th edn, NHMRC, Canberra.