

# Chickenpox Varicella

Chickenpox (varicella) is a highly contagious disease caused by the varicella-zoster virus.

## Signs and Symptoms:

The disease starts with cold-like symptoms such as a mild fever, headache, runny nose and cough. A day or two later a rash begins, starting as small pink blotches but rapidly progressing to itchy blisters which usually last three to four days before drying out and turning into scabs.

## Treatment:

No specific treatment is recommended or required for otherwise healthy children and adults with chickenpox.

It is important to try to prevent a young child from scratching the rash as this can result in permanent scarring or secondary infection. To reduce the itchiness, try adding an anti-itch solution (eg. Pinetarsol) to frequent baths.

Use paracetamol to lower temperature or to reduce discomfort. Aspirin **must not** be given to young children and adolescents due to the risk of developing a severe condition called Reyes Syndrome. This is particularly important for children who have or who may be developing chickenpox.

## Transmission:

Chickenpox is spread through coughing, sneezing and direct contact with the fluid in the blisters of the rash. The dry scabs are not infectious. Since shingles blisters also contain the virus, a person who has never had chickenpox can become infected with chickenpox from someone who has shingles.

An individual with chickenpox is infectious for about one to two days before the onset of the rash and until the blisters have all scabbed, usually four to five days. The usual time between contact with the virus and developing the illness is about 14 to 16 days, although sometimes it can take longer.

## Prevention:

### Immunisation

Immunisation is the best way to protect against chickenpox. However, it is also important to maintain good hygiene practices, such as regular hand washing, particularly after contact with a sick person.

A safe and effective vaccine is available in Australia to prevent chickenpox (varicella). If a person has already had chickenpox, they are immune to the disease and do not need to be vaccinated. If there is uncertainty whether a person has had chickenpox, it is still quite safe to have the vaccine.

The National Immunisation Program Schedule provides a combined measles, mumps, rubella and varicella (MMRV) vaccine free of charge to all children aged 18 months. Prior chicken pox infection is *not* a contraindication to this vaccine, and such children should still receive MMRV vaccine.

Vaccination is also recommended (but not funded) for *non-immune* people in the following groups:

- non-immune adolescents over 14 years of age and adults (this requires two doses given at least four weeks apart to achieve adequate protection from chickenpox)
- high-risk occupations where exposure to chickenpox is likely (eg. healthcare workers, teachers, childcare staff)
- women planning a pregnancy (chickenpox vaccine should not be given during pregnancy nor should the

- recipient become pregnant for 28 days after vaccination)
- women immediately after delivery of a baby
- parents of young children
- household contacts of people with lowered immunity.

Varicella vaccine has been shown to be effective in preventing chicken pox if given within three days and possibly up to five days of contact with an infected person, with earlier administration being preferable. An injection of zoster immune globulin (ZIG) given within 96 hours of exposure to chickenpox provides immediate but temporary protection against chickenpox and may be recommended if exposure has occurred for individuals at high risk of severe disease or pregnant women who are not immune to chickenpox. ZIG is not recommended for otherwise healthy children or adults.

Like all medications, vaccines may have side effects. Most side effects are minor, last a short time and do not lead to any long-term problems. There may be some swelling, redness and soreness where the injection was given and fever. A mild chickenpox-like rash may develop at the injection site or on the body. If this occurs, the rash usually appears about eight days after vaccination (but can appear any time between five to 26 days). People with this rash should avoid contact with people with weakened immune systems. More serious side effects are extremely rare. Contact your immunisation provider if you or your child has a reaction following vaccination which you consider serious or unexpected.

### Health outcome:

For the majority of children, chickenpox is a mild illness of short duration with complete recovery. While chickenpox is usually a mild disease in healthy children, life-threatening complications such as pneumonia or inflammation of the brain (encephalitis) are possible. It can be fatal in about three in 100,000 cases.

Chickenpox is more severe in adults and can cause serious and even fatal illness in immunosuppressed individuals of any age. Chickenpox can also cause shingles (herpes zoster) in later life.

If a woman develops chickenpox during pregnancy, there is a very small but real chance of damage to her unborn baby. If she develops chickenpox late in pregnancy or very soon after birth, the infection can be serious and even life threatening for the newborn baby. Pregnant women and those with new born infants in their first month of life, who have had household or face to face contact with a person with chickenpox, should seek urgent medical attention.

### Control

People with chickenpox should be excluded from childcare facilities, schools or work for at least five days after the rash first appears and until **dry** scabs have replaced all blisters. Any contacts with lowered immunity, such as those with leukaemia, should be immediately excluded and referred for specialist advice.

### Other resources:

- [13 HEALTH](http://www.health.qld.gov.au/13health/) [http://www.health.qld.gov.au/13health/] (call 13 43 25 84)
- [Immunise Australia](http://www.immunise.health.gov.au/) [http://www.immunise.health.gov.au/] (call 1800 671 811)

### Related Content

- [Queensland Health immunisation website](https://www.health.qld.gov.au/public-health/topics/immunisation/default.asp)  
[https://www.health.qld.gov.au/public-health/topics/immunisation/default.asp]
- [Having a vaccination: what to expect](http://conditions.health.qld.gov.au/HealthConditions/2/Infections-Parasites/192/Immunisation-Vaccination/732/Having-a-vaccination-what-to-expect)  
[http://conditions.health.qld.gov.au/HealthConditions/2/Infections-Parasites/192/Immunisation-Vaccination/732/Having-a-vaccination-what-to-expect]
- [Shingles \(herpes zoster\) fact sheet](http://conditions.health.qld.gov.au/HealthCondition/condition/14/217/127/shingles-herpes-zoster)  
[http://conditions.health.qld.gov.au/HealthCondition/condition/14/217/127/shingles-herpes-zoster]

## References

Heymann, D., ed. 2015. *Control of Communicable Diseases Manual*, 20th edition. Washington, DC: American Public Health Association, pp669-675.

National Health and Medical Research Council, updated August 2016. [The Australian Immunisation Handbook](http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home) [<http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home>] [<http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home>](10th Ed.) Canberra: National Capital Printing.

## Help and assistance:

For further assistance, please contact your local doctor, community health centre or nearest [public health unit](https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units/default.asp) [<https://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units/default.asp>].