

Chickenpox and Shingles

Infectious Disease Factsheet: Chickenpox is a common viral infection that can reappear later in life as shingles. A vaccine is recommended for all infants and non immune adults.

What is Chickenpox?

- Chickenpox is a viral illness caused by the herpes zoster virus (also known as the Varicella-Zoster virus)
- In children it usually causes a relatively mild illness.
- Chickenpox in adults and immunosuppressed people can be severe.
- Infection in pregnancy can cause foetal malformations, skin scarring, and other problems in the baby.
- Before routine vaccination began in 2006, chickenpox was a very common illness. The incidence of chickenpox is likely to decrease as more people receive the vaccine.

What are the symptoms?

- Chickenpox begins with a sudden onset of slight fever, runny nose, feeling generally unwell and a skin rash.
- The rash usually begins as small lumps that turn into blisters and then scabs.
- The rash appears over three to four days. At any one time, the lesions of the rash vary in stages of development.
- Symptoms usually occur two weeks after exposure to the virus.
- Most people recover without complications, but sometimes the infection can lead to serious complications, such as pneumonia and inflammation of the brain. Rarely, the infection can be fatal.

How is it spread?

- Early in the illness, the virus is spread by coughing.
- Later in the illness, the virus is spread by direct contact with the fluid in the blisters.
- The infection is highly contagious to people who have never had chickenpox or who have not been immunised.
- People are infectious from one or two days before the rash appears (that is, during the runny nose phase) and up to five days after (when the blisters have formed crusts or scabs)
- Chickenpox infection triggers an immune response and people rarely get chickenpox twice.

Who is at risk?

- Anyone who has not had chickenpox or been vaccinated in the past can get chickenpox.
- People with a past history of chickenpox are likely to be immune to the virus. Even adults with no history of chickenpox have a chance of being immune (because of past infection that was mild). Doctors sometimes perform a blood test to see if these people need a vaccination.

How is it prevented?

- A free vaccine is now recommended for all children at 18 months of age and for children in their first year of high school who have not received chickenpox vaccine and who have not had chickenpox.

- The vaccine is also recommended for persons 14 years and over who are not immune. This involves 2 doses, 1 to 2 months apart. It is especially recommended for people at high risk, for example, health care workers, people living with or working with small children, women planning a pregnancy, and household contact of persons who are immunosuppressed.
- People with chickenpox should avoid others (and not attend childcare or school) until at least five days after onset of the rash and all the blisters have dried.
- People with chickenpox should cover the nose and mouth when coughing or sneezing, dispose of soiled tissues, wash their hands well and not share eating utensils, food or drinking cups.
- Pregnant women should avoid anyone with chickenpox or shingles and should see their doctor if they have been around someone with these illnesses.
- Children with an immune deficiency (for example, leukaemia) or who are receiving chemotherapy should avoid anyone with chickenpox or shingles as the infection can be especially severe.

How is it diagnosed?

Most cases can be diagnosed based on the symptoms and by appearance of the rash. Sometimes the diagnosis is confirmed by testing samples taken from the rash or from blood.

What is Shingles?

- Shingles is caused by the reactivation of the virus that causes chickenpox, usually in adulthood and many years after the initial chickenpox illness.
- The illness is characterised by a painful chickenpox-like rash on a small area of skin, usually on one side of the body.
- Pain and tingling associated with the rash may persist for weeks or months after the rash has cleared. This is called post-herpetic neuralgia.
- The virus can be spread by direct contact with the skin rash of infected people. This causes chickenpox in people who are not immune.
- Shingles develops more commonly in people who are immunosuppressed.

How is it treated?

Shingles can be treated with special antiviral drugs such as acyclovir. Your general practitioner can advise on ways to minimise the discomfort associated with the symptoms of infection. Chickenpox infection usually resolves without treatment.

What is the public health response?

Chickenpox is not currently notifiable in NSW but the incidence is monitored through the number of patients attending emergency departments and the number of patients who are hospitalised with chickenpox or shingles.

- The vaccine prevents chickenpox, even if given up to five days after exposure.
- Short-term immunisation with varicella-zoster immunoglobulin (VZIG) - which is made from antibodies in donated blood - can prevent illness in people at high risk of complications. This needs to be given within 96 hours of exposure to the virus to be effective. People at high risk of complications following exposure include pregnant women who have not had chickenpox and who have not been immunised, newborn babies, and some immunosuppressed patients.