

Communicable Diseases Factsheet

# **Chickenpox and Shingles**

Chickenpox is a common viral infection that can reappear later in life as Shingles. Chickenpox vaccination is recommended for all infants at 18 months of age. Shingles vaccination is recommended for all adults at 70 years of age.

Last updated: 15 November 2022

# What is Chickenpox?

Chickenpox is a viral illness caused by Herpes zoster virus (also known as Varicella-Zoster virus)

In children it usually causes a relatively mild illness but it may reappear later in life as Shingles.

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 childhood vaccination began in November 2005, chickenpox was a very common illness. The incidence of chickenpox appears to have decreased as more people receive the vaccine.

# What are the symptoms?

Chickenpox (varicella) 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.

Persons who are previously vaccinated can still get chickenpox. If chickenpox occurs in a vaccinated person it is usually mild and less contagious than in an unvaccinated person.

# 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 vaccinated.

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?

Varicella infection can be prevented by vaccination.

All children (<14 years) in Australia are recommended to receive two doses of varicella vaccine, with the first dose given at 18 months of age. This first dose of varicella vaccine is funded under the

National Immunisation Program and is given as part of a combination vaccine called MMRV, which contains the second dose of the measles, mumps, and rubella vaccine.

Varicella vaccines can be used from 12 months of age, and this may be appropriate in the setting of travel or a varicella outbreak; however the MMRV vaccine should not be used as the first dose for measles, mumps, and rubella. For information on vaccine recommendations, dosage, and administration see the **Australian Immunisation Handbook (online Edition)** 

Varicella vaccination is also recommended for all non-immune adolescents (>14 years) and adults. This involves two doses, at least 1 month 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 samples.

# What is Shingles?

Shingles (also called Zoster) is caused by the reactivation in the body of the same 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 Shingles prevented?

A single dose of zoster vaccine is recommended and funded for adults at 70 years of age. Adults 71-79 years of age are eligible for free vaccine under a catch up program until 31 October 2021.

People aged 60–69 years are also recommended to have a single dose of zoster vaccine but this is not funded. The exact duration of vaccine efficacy is not known but protection does wane over time. The need for revaccination is not yet determined.

Adults aged 50–59 years are not routinely recommended to receive zoster vaccine, but they can receive it if they want to protect themselves against Shingles.

# **How are Shingles and Chickenpox 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 a notifiable condition 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.

Varicella vaccine protects against 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 people with

immunosuppression due to illness or treatments.

# **Further information**

For further information please call your local public health unit on  ${\bf 1300~066~055}$  or visit the NSW Health website at <a href="https://www.health.nsw.gov.au">www.health.nsw.gov.au</a>