

VARICELLA (CHICKENPOX)

WHAT IS VARICELLA (CHICKENPOX)?

Varicella (Chickenpox) is a highly contagious disease caused by the varicella (or herpes) zoster virus (VZV). Following the infection, the virus remains in the body and becomes dormant, lodging in clusters of sensory nerve cells from where it can reactivate (usually) later in life to cause shingles, or herpes zoster. The chickenpox virus is not the same type of virus that causes monkeypox (an orthopoxvirus).

WHAT ARE THE SYMPTOMS?

The infection is highly contagious to people who have never had chickenpox or who have not been vaccinated. A person becomes infected via the airways or eyes through droplets from respiratory tract secretions of an infected person or by direct contact with the fluid in their skin lesions/blisters. The incubation period of varicella is around 2 weeks (range 10-21 days) after exposure to the virus.

The most obvious symptom of varicella is an itchy, generalised, red rash that turns into fluid-filled blisters, which then burst and crust over, but it can also cause flu-like symptoms, such as fever, headache and sore throat. Waves of blisters on or near the trunk appear over about a week and an infected person is infectious from 48 hours 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).

Complications are less common in children, who tend to have a relatively mild infection, but adults have a higher risk of developing viral pneumonia related to varicella. Other potential complications in all age groups and, in particular to immunosuppressed people or pregnant women, are related to the skin (secondary bacterial infections) and, potentially very serious or even fatal, the central nervous system (encephalitis) and disseminated disease.

WHERE IS IT FOUND?

While chickenpox is endemic (widespread) in all countries, outbreaks often tend to occur among children in the winter/spring of countries with temperate climates, and in young adults in the cooler, dry months of those with tropical climates.

RISK TO TRAVELLERS

For travellers, the risk of chickenpox is potentially as high in developed countries as in developing ones due to fragmented varicella immunisation schedules. Few countries routinely use the vaccine, but coverage is increasing. Non-immune adults and children should consider vaccination, especially those planning extended stays or extensive travel.

HOW IS VARICELLA (CHICKENPOX) TRANSMITTED?

The virus is transmitted from person to person by direct contact with varicella or herpes zoster (HZ or shingles), inhalation of aerosolised droplets from respiratory tract secretions of patients with varicella, or rarely from the inhalation of aerosolised droplets from vesicular fluid of skin lesions of patients with varicella or disseminated HZ (shingles). The virus enters the host through the upper respiratory tract or the conjunctiva. In utero infection can also occur as a result of transplacental passage of virus during maternal varicella infection, resulting in congenital varicella syndrome.

HOW IS VARICELLA (CHICKENPOX) TREATED?

Treatment is generally supportive in the management of symptoms, however antiviral medications may be used for high risk cases. Varicella infection usually confers life-long immunity.

WHAT IS VARICELLA (CHICKENPOX) VACCINATION?

Australian children are vaccinated against varicella as part of the standard [childhood immunisation](#) schedule.

Type: Injectable

- Monovalent varicella virus vaccine
- In combination with measles, mumps, rubella vaccine

Contraindications: Varicella vaccine is a live, attenuated virus vaccine and as such it should not be given to people who are immune compromised, to pregnant women or those planning pregnancy. Pregnancy should be avoided for 28 days after vaccination. The vaccine should not be administered to individuals who have previously experienced a serious reaction to this vaccine, who are known to be hypersensitive to any of the vaccine components or who are unable to receive a live vaccine.

SCHEDULE

Australian children are vaccinated against chickenpox as part of the standard [childhood immunisation](#) schedule.

For **children under 14 years**, one varicella vaccine dose is routinely given at 18 months of age in combination with measles mumps and rubella antigens. A *second dose is recommended* to prevent break-through infections, however it is **not** funded.

For **individuals over 14 years and adults**: 2 doses given at least 4 weeks apart, particularly in the case of healthcare workers, childhood educators and carers, people who work in long-term care facilities and at-risk travellers.

In the event a non-immune person is significantly exposed to someone with chickenpox, a single dose of varicella vaccine offers a degree of protection (particularly against moderate to severe disease) when given within 3-5 days of exposure. The Australian Immunisation Handbook advises that vaccination in these cases 'reduces the likelihood of varicella infection after exposure, especially moderate to severe disease. It also provides long-term protection. Vaccinating exposed people during outbreaks prevents further cases and controls outbreaks'.

LEVEL OF PROTECTION

Vaccine efficacy is estimated to be 90% against infection and 95% against severe infection.

POSSIBLE SIDE EFFECTS

- Pain and swelling at site of infection in 7 to 30% of people.
- Mild, chickenpox-like rash in 5% of recipients (usually fewer than 5 lesions) lasting less than 1 week.
- Fever in 10-15% of healthy children and adults.

As with all vaccines, there is a small risk of allergic reactions.

References:

Australian Immunisation Handbook <https://immunisationhandbook.health.gov.au/vaccine-preventable-diseases/varicella-chickenpox>

Australian Government Health Department <https://www.health.gov.au/health-topics/chickenpox-varicella#what-is-chickenpox>

World Health Organization <https://www.who.int/immunization/diseases/varicella/en/>

Centers For Disease Control and Prevention <https://www.cdc.gov/vaccines/vpd-vac/varicella/hcp-effective-duration.htm>

FAQS

CAN YOU BE VACCINATED AGAINST CHICKENPOX?

Yes. It's recommended that individuals who are able to receive a live vaccine have the required age-appropriate doses of the chickenpox vaccine: children, adolescents, and also for adults who have never had chickenpox and have never received the chickenpox vaccine.

CAN A CHILD GET CHICKENPOX AFTER THE VACCINE?

Yes, it is still possible to get chickenpox, however these break-through infections are generally mild and the period of infectiousness is shorter.

DO I NEED A CHICKENPOX VACCINATION AFTER EXPOSURE?

Yes, you are likely to be advised to get the vaccine against chickenpox within three to five days of exposure to an infected person (if you are able to receive a live vaccine). You need two vaccine doses 28 days apart, if aged over 14 years.

WHEN CAN YOU GET THE VARICELLA VACCINE?

It's recommended, as per the National Immunisation Program, that the varicella or chickenpox vaccine is given in one initial shot to children aged between 12 and 18 months. A booster shot is administered for more protection when the child is four to six years old - but not funded.

WHEN DO TODDLERS GET THE CHICKENPOX VACCINE?

As mentioned, two doses of the varicella vaccine are recommended by health authorities for children (toddlers), adolescents, and adults who have never been infected with chickenpox and have never had the vaccine.

WHERE TO GET A CHICKENPOX VACCINE?

There are various recognised immunisation providers including Travelvax whose health professionals can administer the vaccine. If you're eligible, the chickenpox vaccine may be free under the National Immunisation Program (NIP).

HOW LONG DOES CHICKENPOX VACCINE LAST?

Nobody knows for sure how long the chickenpox vaccines remain effective, but live vaccines generally provide long-lasting immunity.

HOW OFTEN DO YOU NEED A VARICELLA VACCINE?

It's recommended that all children aged under 14 years receive two doses of varicella vaccine. The first dose is usually scheduled for 18 months of age, the second between four and six years along with their dose of a diphtheria, tetanus, pertussis (whooping cough) and polio-containing vaccine.

IS CHICKENPOX VACCINE EFFECTIVE?

The chickenpox vaccine is very effective with two doses providing more than 90 percent protection preventing the majority of people vaccinated from getting the disease. Those who do contract chickenpox even when vaccinated tend to get a much milder infection. Shingles infections can occur in people who have had a chickenpox infection - it is a

reactivation of the varicella-zoster virus - but not in those who have had no infection and have received the varicella vaccine.

More information on Varicella (Chickenpox) is available during your pre-travel consultation with Travelvax. Call 1300 360 164 for the location of the clinic nearest to you.