What is chickenpox?

Chickenpox (varicella) is a very contagious disease caused by the varicella-zoster virus. It can be passed from an infected person when they cough or sneeze, or through direct contact with blisters on the skin.

Symptoms include a blister-like skin rash, itchiness, tiredness and fever. Chickenpox in children is usually mild. However, infections in newborn babies, immunocompromised people and adults can be severe and occasionally fatal. Infection in a pregnant woman can cause malformations, skin scarring and other problems for the baby.

People who have previously had chickenpox may develop shingles (herpes zoster) later in life, where the varicella-zoster virus is reactivated in the nerve tissue.

Quick facts

The rate of hospital admissions for children under 15 has fallen significantly since the introduction of chickenpox vaccination.

Vaccination against chickenpox reduces the risk of severe illness, and also reduces the likelihood of infection.

Vaccination against chickenpox

Vaccination against chickenpox was first included in the Australian National Immunisation Program (NIP) in 2005. The NIP provides a combined MMR-varicella (MMR-V) vaccine for young children.

Vaccination against chickenpox is also recommended for people who work with vulnerable groups, including healthcare workers, people working in childcare or early childhood education, and people working in long-term care facilities.

The chickenpox vaccine reduces the risk of severe outcomes from chickenpox and the risk of infection. Some vaccinated people may develop chickenpox but their symptoms are likely to be mild, with fewer blisters than in an unvaccinated person.

In 2017, 93% of Australian 2 year olds were fully vaccinated against chickenpox; however, vaccination rates vary by where a child lives.
Chickenpox notifications

Since 2006, varicella-zoster (which causes chickenpox and shingles) has been notifiable in all Australian states and territories apart from in New South Wales. This means that diagnosed cases are reported to state or territory health departments. However, in many cases the notification does not specify whether the person has chickenpox or shingles. Furthermore, each year many chickenpox cases do not seek medical care or do not have formal laboratory tests done, so their illness is not reported. For these reasons, notifications are likely to be an underestimate of the true number of chickenpox cases occurring in Australia.

Hospitalisations and deaths due to chickenpox

In 2016, there were 395 hospital admissions for chickenpox in Australia, of which 26% (101) were in children aged under 15 years. Since the introduction of chickenpox vaccination, the rate of hospital admissions for children under 15 has fallen significantly (left figure). Between 1994 and 2005, an average of 541 children per year were admitted to hospital for chickenpox compared to an average of 171 per year between 2006 and 2016.

Between 1997 and 2016, chickenpox caused 132 deaths in Australia. There were 15 deaths in children aged under 15, only 2 of which occurred after vaccination commenced (right figure). The yearly death rate among people aged 15 and over has stayed relatively stable, with less than 1 death per million population between 1997 and 2016.