

Incidence of Chickenpox in Alberta

Reported Cases per 100,000 Population, 2000 to 2014

Chickenpox is an infection caused by the varicella zoster virus. This virus can cause fever and a generalized rash called a pruritic vesicular rash. The rash tends to be a raised pink or red bump (papules) that break out for several days. The bumps then become fluid-filled blisters (vesicles) that tend to burst about a day later and then form scabs and crusts that cover the broken blisters.

While most individuals recover without lasting effects, complications can occur and include pneumonia, bacterial super-infection of lesions and, encephalitis (swelling of the brain). Following the introduction of a varicella zoster immunization program in 2001, the incidence of chickenpox in Alberta has decreased steadily until 2006.

When the immunization program was introduced in 2001 a single immunization was required. With the decrease in naturally circulating disease to naturally boost immunity, a second dose of varicella vaccine became part of the routine schedule in 2012 for children born on or after August 1, 2005.

Chickenpox rates have been increasing since 2006

In 2014, there were 1,634 self-reported cases of chickenpox. Of these, 46 per cent had one documented dose of a varicella containing vaccine and four per cent had two doses, prior to onset of chickenpox like symptoms.

Immunization coverage rates for one dose of a varicella containing vaccine by age two have been approximately 85 per cent for the past five years. While the incidence of disease has dropped significantly with vaccine introduction, it is unknown if current coverage rates are sufficient to provide herd immunity. Additionally, some regions of Alberta remain at higher risk, as coverage is not uniform across the province. As chickenpox becomes less common cases may be misdiagnosed for other infections that cause rash.

