

Communicable Diseases Weekly Report

Week 40, 2 to 8 October 2022

In this report we provide information regarding chickenpox and a summary of notifiable conditions activity in NSW over the reporting period 40, 2 to 8 October 2022.

Due to the rapidly evolving nature of the situation, data on **COVID-19** notifications can be found separately on the NSW Health [Latest Updates on COVID-19](#) page.

For up-to-date information regarding the **Japanese encephalitis** outbreak and the NSW response, please visit the [NSW Health Japanese encephalitis page](#).

Information on notifiable conditions is available at the NSW Health [infectious diseases page](#). This includes links to other NSW Health [infectious disease surveillance reports](#) and a [diseases data page](#) for a range of notifiable infectious diseases.

Chickenpox

An increase in presentations to NSW emergency departments was noted in this reporting week, compared to the same period in the previous five years, particularly among those aged 17-34 years.

Chickenpox is an acute viral illness caused by Varicella-Zoster virus (also known as the herpes zoster virus). Chickenpox is a nationally notifiable disease however, in NSW individual cases are not required to be notified, rather presentations to NSW emergency departments for chickenpox are monitored via the Public Health Rapid Emergency Disease and Syndromic Surveillance (PHREDSS) system.

About Chickenpox (and shingles)

Chickenpox was a very common illness of children prior to the introduction of the varicella vaccine to the National Immunisation Program in 2005. Chickenpox is a highly contagious infection which generally causes a mild illness in children, however, can be severe in adults, and in people who are immunocompromised. If acquired during pregnancy chickenpox can cause harm the unborn baby including foetal malformations and skin scarring. Infection with chickenpox almost always results in lifelong immunity to the virus; however, people who have had chickenpox are at risk of developing Shingles in later life. Shingles is a reactivation of the chickenpox virus which causes a generally isolated, painful, chickenpox like rash, and may result in a complication called post-herpetic neuralgia which causes pain and tingling and may persist for weeks or months.

Symptoms of chickenpox

Chickenpox begins with a fever, runny nose and generally feeling unwell, followed by a skin rash. The rash usually begins as small lumps which turn into blisters and then scabs. The rash can be itchy and appears over three of four days. Over the course of the rash there may be "pox" in various stages of development.

Symptoms usually occur about two weeks after exposure to the virus.

Most people recover without complications, but in a small number of cases more serious complications including pneumonia and inflammation of the brain (encephalitis can occur). Very rarely the infection can be fatal.

Spread of chickenpox

People are considered infectious from one to two days before the rash appears, to up to five days after (once all the blisters have formed crusts or scabs). Chickenpox is spread via direct contact with fluid from the blisters, although may be spread by coughing in the first few days of the illness.

Chickenpox can also develop in people who are not immune, after contact with someone who has active shingles.

Who is at risk?

Anyone who has not had chickenpox or has not been vaccinated against it is at risk of developing chickenpox.

Because chickenpox was such a common illness of childhood prior to the introduction of the vaccine, many adults may be immune to the virus, due to having been exposed as children and either not developed symptoms or having had a very mild case which was not recognised as being chickenpox. Doctors may perform a blood test to look for antibodies, to identify whether a person is immune to chickenpox. Pregnant people are routinely screened for chickenpox immunity as part of their 12-week assessment.

People who have been vaccinated against chickenpox may still develop the infection, however the illness is usually much milder, and they are less infectious than someone who has not been vaccinated

Chickenpox and shingles vaccination

Chickenpox vaccination

Chickenpox vaccine is included as part of the National Immunisation Program (NIP) schedule and given to children at 18 months of age as part of a combination vaccine with measles, mumps, and rubella (MMRV) – this constitutes the second dose of measles mumps and rubella vaccine given to children.

One dose of chickenpox vaccine in early childhood (12 months to 12 years) provides very good protection against developing chickenpox (80-85% effective), and excellent protection at preventing severe disease (95-98% effective). This protection is increased for a longer period (possibly lifelong) if two doses are received (at least 4 weeks apart).

Children and adults (>14 years) with no prior history of chickenpox infection are recommended to receive two doses of chickenpox vaccine, four weeks apart to achieve long term protection against chickenpox, particularly against severe illness, which is more common if you acquire the infection at an older age.

Healthcare workers in NSW without evidence of immunity to chickenpox are required to receive two doses of chickenpox vaccine at least four weeks apart.

Child carers and early childhood educators are strongly recommended to receive two doses of chickenpox vaccine at least four weeks apart, if they do not have evidence of immunity.

The chickenpox vaccine is a live attenuated vaccine, so is not able to be given to people who are pregnant, or immunocompromised.

Shingles vaccination

People who have previously had chickenpox infection can be vaccinated to prevent developing shingles.

Risk of developing shingles increases with age, and it is more common in those aged greater than 50 years. People who are immunocompromised are also at increased risk of developing shingles, or may develop chickenpox after contact with someone with shingles.

Recommendations for the shingles vaccine depend on your age and proximity to immunocompromised persons:

Age	Recommendation and funding	Funding
50-59 years	Not routinely recommended unless you live with someone who is immunocompromised	Private purchase
≥60 years	Recommended.	private purchase
70 years +	Recommended.	A dose is provided as part of the NIP.

The Zoster vaccine is provided to persons over the age of 70 as part of the NIP. The Zoster vaccine is a live attenuated vaccine, so is not recommended for people who are immunocompromised.

People aged over 60 are recommended to receive the Zoster vaccine. For those aged 50-59, the vaccine is not routinely recommended unless they are live in a household with an immunocompromised person.

Summary of notifiable conditions activity in NSW

The following table summarises notifiable conditions activity over the reporting period alongside reports received in the previous week, year to date and in previous years (Table 1).

Table 1. NSW Notifiable conditions from 2 to 8 October 2022, by date received*

		Weekly		Year to date				Full Year		
		This week	Last week	2022	2021	2020	2019	2021	2020	2019
Enteric Diseases	Campylobacter	257	265	9021	8848	7026	8491	12014	10054	11482
	Cryptosporidiosis	8	6	348	357	457	490	444	549	669
	Giardiasis	24	29	1021	1281	1472	2729	1504	1872	3329
	Rotavirus	54	56	682	273	437	890	356	500	1777
	STEC/TEC	4	5	106	90	66	48	126	115	79
	Salmonellosis	34	51	2333	2323	2337	2797	3097	2883	3553
	Shigellosis	15	15	315	46	444	662	60	494	867
Other	Invasive Group A Streptococcus	9	2	29	0	0	0	0	0	0
	Monkeypox	1	0	53	0	0	0	0	0	0
Respiratory Diseases	Influenza	93	87	113553	72	7447	112254	124	7484	116423
	Legionellosis	6	3	186	148	122	119	213	170	153
	Respiratory syncytial virus (RSV)	289	408	3307	0	0	0	0	0	0
	Tuberculosis	5	15	374	449	452	444	558	625	589
Sexually Transmissible Infections	Chlamydia	440	527	19324	20489	20786	24770	25368	27239	32473
	Gonorrhoea	141	231	7963	6255	7681	9123	7620	9881	11686
Vaccine Preventable Diseases	Pertussis	2	3	55	38	1387	4823	43	1400	6386
	Pneumococcal Disease (Invasive)	13	16	431	346	271	511	387	350	690
Vector Borne Diseases	Barmah Forest	1	3	61	89	235	56	111	271	63
	Dengue	7	13	81	2	76	346	4	76	456
	Ross River	7	2	603	614	1892	533	659	1990	595

* Notes on Table 1: NSW Notifiable Conditions activity

- Only conditions which had one or more case reports received during the reporting week appear in the table.
- Due to the rapidly evolving nature of the situation, data on COVID-19 notifications can be found separately on the NSW Health [Latest Updates on COVID-19](#) page.
- Data cells represent the number of case reports received by NSW public health units and recorded on the NSW Notifiable Conditions Information Management System (NCIMS) in the relevant period (i.e. by report date).
- Note that [notifiable disease data](#) available on the NSW Health website are reported by onset date so case totals are likely to vary from those shown here.
- Cases involving interstate residents are not included.

- Chronic blood-borne virus conditions (such as HIV, hepatitis B and C) are not included here. Related data are available from the [Infectious Diseases Data](#), the [HIV Surveillance Data Reports](#) and the [Hepatitis B and C Strategies Data Reports](#) webpages.
- Notification is dependent on a diagnosis being made by a doctor, hospital or laboratory. Changes in awareness and testing patterns influence the proportion of patients with a particular infection that is diagnosed and notified over time, especially if the infection causes non-specific symptoms.