

Communicable Diseases Weekly Report

Week 37, 11 to 17 September 2022

In this report we provide information regarding Measles, Sexually Transmitted Infections Strategy release and Japanese Encephalitis serosurvey results and a summary of notifiable conditions activity in NSW over the reporting period week 37, 11 to 17 September 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.

Measles

During this reporting period NSW Health confirmed the first case of measles in NSW since February 2020.

The case, a person in their 50s, acquired their infection while travelling in Asia last month and developed symptoms after returning to Sydney. Between the 4th and 6th of September 2022 they visited locations in Malabar, Maroubra and the University of NSW whilst unknowingly infectious with measles. Health Protection NSW issued a [media alert](#) notifying people who had attended venues visited by person to be on the lookout for [signs and symptoms](#) of measles. Clinicians are advised to suspect measles in patients with fever, runny nose, cough and or conjunctivitis and a non-itchy rash if they have been in one of the locations identified in the media release at the same time as the case, or recently returned from overseas.

Measles is a highly contagious, acute viral illness caused by the measles virus, which is spread through the air when an infected person coughs, sneezes or talks. Measles has been eliminated in Australia since 2014, meaning that it no longer circulates locally, and risk of infection in Australia is rare. Cases of measles in Australia are usually associated with importations from places overseas where it remains endemic, by visitors or returned travellers.

Over the last two years there have been no cases of measles in NSW, likely as a result of international border closures and reduced international travel. This case is a reminder that with international borders re-opening, importations of measles are likely to occur, and it's important for everyone to make sure they are fully protected against measles.

Measles vaccination is highly effective with two doses of measles vaccine providing life-long protection in 99 out of 100 people vaccinated. Anyone born during or after 1966 should ensure they have received two doses of measles vaccine at least four weeks apart. Measles vaccine is provided for free for children as part of the National Immunisation Program (NIP) at 12 and 18 months of age. NSW Health makes the measles vaccine available free to anyone born during or after 1966 who doesn't have two documented doses of measles vaccine.

People travelling with children between the ages of 6 and 12 months should discuss their travel plans with their doctor, as infants can receive the measles vaccine as early as 6 months of age if travelling to an area considered high risk for measles.

Signs and symptoms of measles

People who are exposed to measles will usually become sick after about 10 days, but it can take as little as seven and as many as 18 days for symptoms to appear. The main symptoms of measles include:

- Fever
- Cough
- Runny nose
- Conjunctivitis (sore, red, eyes)
- Generally feeling unwell/tiredness
- Followed 3-4 days later by a non-itchy, spotty rash that starts on the face and neck and spreads to other parts of the body.

Up to one third of people with measles will have serious complications including:

- Otitis media (middle ear infection)
- Diarrhoea (more common in infants)
- Pneumonia
- Encephalitis (swelling of the brain) (1 in 1000)

One in 100,000 people who get measles will develop chronic, progressive brain inflammation several years after infection. This severe complication is called sub-acute sclerosing panencephalitis and is fatal.

Anyone experiencing symptoms should seek medical attention and should call their doctor or emergency department before attending so that spread of measles to others in the waiting room can be prevented.

Further information:

- [NSW Health measles fact sheet](#)
- [NSW Health measles notification data page](#)
- [NSW measles homepage](#)
- [NSW Health measles vaccination FAQs](#)

Sexually Transmitted Infections Strategy release

On 16 September NSW Health released the 'NSW Sexually Transmissible Infections Strategy 2022-2026'. The new long-term road map encourages prevention, regular testing and timely access to treatment for those affected by Sexually Transmissible Infections (STIs).

NSW remains a world leader in responding to STIs, with notifications for HIV having dropped to the lowest levels on record. However, data shows some STI rates, such as infectious syphilis, have doubled since 2016 from 11.2 notifications per 100,000 people, to 21.2 per 100,000 people in 2021. Additionally, antimicrobial resistant gonorrhoea is a re-emerging concern with detection of gonorrhoea with high level resistance to azithromycin and a strain of gonorrhoea with decreased susceptibility to ceftriaxone in NSW in 2022.

The strategy sets out four key focus areas to achieve ambitious targets, which include the elimination of congenital syphilis and reduction of syphilis and gonorrhoea notification rates by five per cent by 2026.

- **Prevent** new infections through education, health promotion and utilising new and existing methods, such as condoms, vaccines and health promotion.
- **Test** often, normalise testing, and promote innovative testing models such as peer-based testing and point-of-care testing.
- **Treat** STIs rapidly and reduce onward transmission and enhance partner notification and contact tracing; and

- **Equity** and access to services to reduce STI-related stigma and remove barriers affecting health seeking behaviour.

The strategy was developed in consultation with clinicians, academics, community partners, and local health services across NSW through a strong partnership which will help to effectively respond to STIs.

Aim		Vision			
Reduce the prevalence and impacts of sexually transmissible infections in NSW.		A NSW where people are informed about the risks of sexually transmissible infections (STIs) and can easily access prevention methods and testing. Those affected by STIs receive timely treatment and their partners are promptly notified. Innovations are pursued, and stigma, discrimination, and other barriers to knowledge, prevention, testing, and treatment are removed.			
Goals	1. Prevent new infections through new and existing methods, education and health promotion 	2. Test often, normalise testing, and promote innovative testing models 	3. Treat STIs rapidly and effectively, and reduce onward transmission 	4. Equity and Access to services, reduce STI-related stigma, and remove barriers to seeking healthcare 	
Targets	1.i 75% of sexually active young people use condoms with casual partners 1.ii 5% reduction in notification rates of infectious syphilis and gonorrhoea by 2026	2.i 100% of pregnancies are screened for syphilis at least once 2.ii 5% increase each year in comprehensive STI testing in the priority populations MSM, sex workers, trans and gender diverse people, and Aboriginal people	3.i Eliminate congenital syphilis 3.ii 95% of people diagnosed with infectious syphilis are treated within two weeks of being tested	4.i At least 90% of STI notifications have Aboriginal status specified 4.ii 75% reduction in reported experience of stigma related to STI service provision in NSW healthcare settings	
Initiatives	1.1 Condoms 1.2 School education 1.3 Health promotion 1.4 Peer education and outreach 1.5 Vaccines and other biomedical prevention	2.1 Innovative models 2.2 Workforce development 2.3 Digital integration 2.4 Antenatal care 2.5 Research	3.1 Partner notification 3.2 Manage antimicrobial resistance 3.3 Models of care 3.4 Surveillance	4.1 Accessible services 4.2 Communications 4.3 Aboriginal services 4.4 Person-centred care	

More information about the NSW Sexually Transmissible Infections Strategy 2022 – 2026 including the strategic framework can be found here: <https://www.health.nsw.gov.au/sexualhealth/Pages/nsw-sti-strategy.aspx>

Japanese Encephalitis serosurvey results

Japanese Encephalitis is a disease caused by the Japanese Encephalitis virus, which is transmitted through the bite of an infected mosquito. It is a common infection in the tropical regions of Asia and was detected for the first time in NSW in late February 2022. A total of 13 locally acquired confirmed cases were notified to NSW Health between January and March 2022, with 2 deaths.

In this reporting week, NSW Health released a short report summarising the findings of a community blood survey for Japanese Encephalitis on the NSW Health website:

<https://www.health.nsw.gov.au/environment/pests/vector/Documents/jev-serosurvey-report.pdf>.

The survey aimed to estimate how many people were infected during this period. The survey found that approximately one in 11 people (8.7% of 917 participants) in the five regional towns visited had evidence of Japanese Encephalitis virus infection, whom could have only been infected in NSW during the early months of 2022. More participants aged 50 years and older had evidence of infection compared to younger participants. These results are being used to inform the public health response to Japanese Encephalitis in NSW such as public mosquito bite prevention messaging.

In response, NSW Health has expanded access to Japanese Encephalitis vaccine to some people in high-risk LGAs in regional NSW. People who are aged over 50 years old, living or working in one of 14 specified LGAs in NSW and spending at least 4 hours outdoors each day, are now eligible for free vaccination. More information can be found at: <https://www.health.nsw.gov.au/JEvaccine>

In areas where Japanese Encephalitis virus is normally found, the virus is maintained in a natural cycle between mosquitos and some types of birds. The virus can also infect other animals, such as pigs.

Most people, over 99% of those infected with Japanese Encephalitis Virus, will have no or very mild symptoms. Some infected people experience an illness with fever and headache. People with a severe infection may experience neck stiffness, disorientation, tremors, coma and seizures. Among those who develop severe infection, some will go on to experience permanent neurological complications or possibly death. Symptoms, if they are to occur, usually develop 5 to 15 days after being bitten by infected mosquitoes.

The most effective prevention against infection with Japanese Encephalitis and other mosquito-borne diseases is to prevent mosquito bites.

More information on Japanese Encephalitis, prevention, and surveillance is available at <https://www.health.nsw.gov.au/environment/pests/vector/Pages/japanese-encephalitis.aspx>

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 11 to 17 September 2022, by date received*

		Weekly		Year to date				Full Year		
		This week	Last week	2022	2021	2020	2019	2021	2020	2019
Enteric Diseases	Campylobacter	266	243	8274	8317	6493	7804	12014	10054	11482
	Cryptosporidiosis	4	8	331	353	446	477	444	549	669
	Giardiasis	29	30	940	1233	1408	2590	1504	1872	3329
	Rotavirus	59	44	505	258	419	735	356	500	1777
	STEC/VTEC	1	2	94	82	62	44	126	115	79
	Salmonellosis	30	39	2225	2230	2256	2643	3097	2883	3554
	Shigellosis	15	9	278	46	424	611	60	494	867
Other	Invasive Group A Streptococcus	5	8	18	0	0	0	0	0	0
	Monkeypox	1	2	51	0	0	0	0	0	0
Respiratory Diseases	Influenza	105	162	113257	70	7427	106984	124	7485	116429
	Legionellosis	3	1	172	137	109	111	213	170	153
	Respiratory syncytial virus (RSV)	968	654	2005	0	0	0	0	0	0
	Tuberculosis	14	9	350	422	411	400	558	625	589
Sexually Transmissible Infections	Chlamydia	515	507	17856	19445	19259	22897	25368	27239	32473
	Gonorrhoea	219	217	7400	5992	7100	8462	7621	9881	11686
Vaccine Preventable Diseases	Measles	1	0	1	0	16	48	0	16	58
	Pertussis	2	0	47	38	1381	4455	43	1400	6386
	Pneumococcal Disease (Invasive)	14	15	394	332	259	461	387	358	690
Vector Borne Diseases	Barmah Forest	1	1	55	84	222	52	111	271	63
	Dengue	3	0	50	2	76	322	4	76	456
	Malaria	1	1	23	6	22	48	8	25	73
	Ross River	8	7	589	601	1867	506	659	1990	595
Zoonotic Diseases	Psittacosis	1	0	12	14	21	6	17	30	11
	Q fever	2	1	131	140	158	185	204	209	249

* 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.