

Communicable Diseases Weekly Report

Week 49, 5 to 11 December 2021

In summary, we report:

- [Legionnaires' disease](#) – new cases and advice
- [Invasive meningococcal disease \(IMD\)](#) – one case reported this week
- [Novel coronavirus 2019 \(COVID-19\)](#)
- [Summary of notifiable conditions activity in NSW](#)

For further information see 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.

Legionnaires' disease

Five cases of Legionnaires' disease were notified in this reporting week ([Table 1](#)); four caused by *Legionella pneumophila*, and one caused by *L. longbeachae*.

Legionnaires' disease is an infection of the respiratory system caused by *Legionella* bacteria and is usually characterised by fever, chills, cough and shortness of breath. Some people may also experience muscle aches, headache, tiredness, loss of appetite and diarrhoea. Legionnaires' disease usually affects people over the age of 50 and can result in severe pneumonia, especially in those who smoke, have existing lung conditions or suppressed immune systems.

Legionnaires' disease is not spread from person to person, but infection may occur after breathing in water aerosols or environmental dust contaminated with *Legionella* bacteria.

There are two types of *Legionella* bacteria that commonly cause Legionnaires' disease: *L. pneumophila*, which can be present in building water systems such as air-conditioning cooling towers and warm water systems, and *L. longbeachae*, which may be found in soil, bagged potting mix and landscaping products.

Following notification of a case of Legionnaires' disease, NSW Health works closely with the case and their family to investigate potential sources. To date, no environmental source has been identified for recent cases. NSW Health consistently checks for common potential sources between cases, and monitors for any further cases or crossover in exposures.

Reducing risk of Legionnaires' disease:

Certain activities such as gardening, irrigation, and re-commissioning of spas or large air-conditioning systems may increase the risk of *Legionella* bacteria exposure.

The risk of Legionnaires' disease can be reduced by:

- Businesses ensuring cooling water systems are well maintained, particularly after periods of intermittent operation or seasonal usage, in line with the NSW Public Health Regulation.
- Regular maintenance (including disinfection) of spas, hot tubs and irrigation systems – particularly those sourced from untreated water sources such as dams or reservoirs.
- Taking appropriate precautions when gardening and handling soil, potting mix and similar products, including:
 - Wetting down gardening products while working to reduce dust

- Use of appropriate personal protective equipment including a P2/N95 mask and gloves
- Washing hands after handling soil and potting mix and before eating, drinking, or smoking.

Further information:

- [NSW Health Legionnaires' disease fact sheet](#)
- [NSW Health Legionellosis notification data page](#)
- [NSW Guidelines for Legionella Control in Cooling Water Systems](#)

Invasive meningococcal disease (IMD)

One case of invasive meningococcal disease (IMD) was reported this week in an adolescent from a regional area of NSW ([Table 1](#)). Laboratory testing revealed the infection was caused by *Neisseria meningitidis* (meningococcal bacteria) serogroup B.

Although rare, IMD can occur year-round but tends to increase in late winter and early spring. Measures to reduce transmission of COVID-19, such as wearing face masks, social distancing and staying at home, can also reduce transmission of IMD and have likely contributed to the lower numbers of IMD cases reported so far this year. However, with restrictions easing and more socialising at end-of-year celebrations, it is important to stay alert to the symptoms of meningococcal disease and act fast if it is suspected.

There are six serogroups of meningococcal bacteria associated with IMD in humans (A, B, C, W, X, Y), of which four (B, C, W, Y) cause almost all IMD in Australia. People of all ages are susceptible to contracting IMD, but the disease is more common in children under 5 years of age, and people aged 15-24 years.

Meningococcal bacteria are not easily spread from person to person, but can be passed between people in secretions from the back of the nose and throat. People who have only had minor exposure to someone with meningococcal disease have a very low risk of developing the disease. Spread of the bacteria from one person to another generally requires close and prolonged contact, such as living in the same household or intimate kissing.

The initial symptoms of IMD are often non-specific and can mimic other illnesses like gastroenteritis or COVID-19, making the diagnosis in the early stages difficult. Symptoms can vary, but may include sudden fever, nausea, vomiting, abdominal pain, headache, neck stiffness, photophobia (sensitivity to bright lights), joint pain and irritability. A red-purple rash that is non-blanching (does not disappear when pressure is applied) is typical but does not always appear, or may only occur late in the disease.

In young children, symptoms may also include irritability, difficulty waking up, high-pitched crying, rapid or laboured breathing and refusal to eat.

IMD can result in meningitis, septicaemia (bloodstream infection) or both. People with IMD can become very unwell very quickly, and the disease can be fatal within hours of the first symptom appearing. Anyone who thinks they, or someone they care for, might be experiencing symptoms of IMD should seek urgent medical care.

Meningococcal disease can be prevented through vaccination. In NSW meningococcal vaccines are provided free of charge under the National Immunisation Program (NIP) to the following groups:

Vaccine	Groups eligible for free vaccine
Meningococcal ACWY vaccine	All children at 12 months of age Children aged 15-19 years (via the NSW School Vaccination Program or their GP) People with certain medical conditions that cause increased risk of infection (including asplenia, hyposplenia, complement deficiency and those receiving eculizumab treatment)
Meningococcal B vaccine	Aboriginal children < 2 years of age People with certain medical conditions that cause increased risk of infection (including asplenia, hyposplenia, complement deficiency and those receiving eculizumab treatment)

Anyone outside of these groups wishing to protect themselves against meningococcal disease can access the vaccines via private prescription from their GP. If there are concerns that a teenager has missed their meningococcal ACWY vaccine due to school closures this year, this can be checked on the Australian Immunisation Register (AIR). If required, GPs can arrange catch up vaccination.

More information on meningococcal disease is available from:

- NSW Health [meningococcal disease website](#) and [meningococcal disease factsheet](#)
- The [Australian Immunisation Handbook](#) for more information on meningococcal vaccines
- NSW Health [meningococcal disease data](#)

Novel coronavirus 2019 (COVID-19)

For up-to-date information regarding the COVID-19 outbreak and the NSW response, please visit the [NSW Health COVID-19 page](#).

Summary of notifiable conditions activity in NSW

The following table summarises notifiable conditions activity over the reporting period (Table 1).

Table 1. NSW Notifiable conditions from 05 December to 11 December 2021, by date received*

		Weekly		Year to date			Full year	
		This week	Last week	2021	2020	2019	2020	2019
Bloodborne	Hepatitis C - Newly Acquired	1	0	11	17	27	17	29
Enteric Diseases	Cryptosporidiosis	15	8	417	516	615	549	669
	Giardiasis	13	29	1452	1768	3182	1869	3323
	Hepatitis A	1	0	7	18	59	18	61
	Rotavirus	7	4	282	445	1529	464	1753
	STEC/VTEC	7	5	121	98	73	115	80
	Salmonellosis	60	67	2893	2674	3357	2885	3556
Respiratory Diseases	Influenza	9	5	103	7477	115643	7485	116432
	Legionellosis	5	8	195	146	146	170	153
	Tuberculosis	11	21	535	572	562	625	588
Sexually Transmissible Infections	Chlamydia	456	405	24380	25605	30881	27256	32482
	Gonorrhoea	129	119	7327	9344	11106	9890	11692
Vaccine Preventable Diseases	Meningococcal Disease	1	1	23	20	57	22	59
	Pneumococcal Disease (Invasive)	2	2	376	329	650	359	690
Vector Borne Diseases	Barmah Forest	3	1	105	268	61	271	63
	Ross River	5	4	637	1968	580	1990	593

*** 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.
- The shigellosis case definition changed on 1 July 2018 to include probable cases (PCR positive only), hence case counts cannot be validly compared to previous years.
- 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.