Communicable Diseases Weekly Report

Week 47, 15 November to 21 November 2020

In summary, we report:

- Legionnaires' disease – new cases and advice
- 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

Four cases of Legionnaires' disease were notified in this reporting week (Table 1.) Two cases were due to *Legionella pneumophila* and two cases were due to *Legionella longbeachae*. The two cases of *Legionella pneumophila* have common areas of travel in the Hurstville and Sutherland areas and are being investigated by Randwick Public Health Unit.

Legionnaires' disease is an infection of the respiratory system often resulting in severe pneumonia. There are two types of *Legionella* bacteria commonly associated with Legionnaire's disease: *L. pneumophila* and *L. longbeachae*.

Legionnaires' disease is not spread from person to person. *Legionella* bacteria are present in the environment, and infection may occur after a person breathes in contaminated water vapour or dust. *L. pneumophila* may be found in building water systems, such as air-conditioning cooling towers and warm water systems, and has been associated with spas, showerheads and other aerosol-producing devices. *L. longbeachae* may contaminate soil, including bagged potting mix and landscaping products.

Following notification of a single case of Legionnaires' disease in NSW, public health officers work closely with the case and their family to investigate and try to identify potential sources. Where a cooling tower is identified as a potential source, NSW Health and Public Health Units work with local councils to examine and if necessary, remediate the tower to reduce ongoing risk. When the source is identified as soil or potting mix, education regarding the importance of using appropriate personal protective equipment is provided.

Cases and potential source sites of Legionnaires' disease are closely monitored by NSW Health epidemiologists. When cases are notified with similar time periods spent in the same location, or exposure to the same soil or landscaping product brand, thorough investigations are carried out to rule out common sources of infection.

Legionnaires' disease usually affects people of over 50 years of age. Those with existing lung conditions, smokers and people with suppressed immune systems are also at increased risk of infection.

Reducing risk of Legionnaires' disease

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

The risk of Legionnaire's disease can be reduced by:

- Businesses ensuring water cooling towers are well maintained – particularly after periods of decommission, in line with NSW Public Health Regulations
- Regular maintenance, including disinfection of spas, hot tubs and irrigation systems – particularly those sourced from stagnant water such as dams or reservoirs
- Taking appropriate precautions when gardening and handling soil and similar products:
    - Wet down products while working to reduce dust
    - Use appropriate personal protective equipment including mask and gloves
    - Wash hands after handling products and before eating, drinking, or smoking

Further information:

- NSW Health Legionnaires' disease fact sheet
- NSW Health Legionellosis notification data page

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 15 November to 21 November 2020, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2020	2019	2018	2019	2018
Enteric Diseases	Cryptosporidiosis	14	5	500	563	658	669	708
	Giardiasis	22	39	1628	3020	2687	3271	2936
	Rotavirus	3	2	439	1309	737	1755	807
	STEC/VTEC	7	5	86	62	52	80	57
	Salmonellosis	32	44	2590	3226	2987	3557	3335
	Shigellosis	6	7	477	784	464	867	529
Respiratory Diseases	Influenza	15	1	7463	115039	16293	116447	17408
	Legionellosis	4	0	138	137	149	153	171
	Tuberculosis	15	12	530	536	462	591	508
Sexually Transmissible Infections	Chlamydia	499	572	24495	29380	28469	32442	31174
	Gonorrhoea	168	184	9035	10674	9704	11702	10600
Vaccine Preventable Diseases	Pertussis	4	1	1399	5756	5157	6386	6280
	Pneumococcal Disease (Invasive)	5	11	317	627	623	692	681
Vector Borne Diseases	Barmah Forest	3	8	260	59	69	62	74
	Ross River	6	7	1939	568	535	592	571
Zoonotic Diseases	Leptospirosis	1	1	11	8	56	9	56

*** 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.
- Data cells in the 'Adverse Event Following Immunisation' category refer to suspected cases only. These reports are referred to the Therapeutic Goods Administration (TGA) for assessment. Data on adverse events following immunisation is available online from the TGA Database of Adverse Event Notifications.

- 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.
- The influenza data in Table 1 incorporates a batch of delayed notifications; 12 influenza cases from July 2019, and 2 influenza cases from March 2020.