

# Communicable Diseases Weekly Report

## Week 40, 29 September to 5 October 2019

In summary, we report:

- [Legionellosis](#) – spring potting mix warning for gardeners
- [Typhoid fever](#) - two new notifications and travel warning
- [Summary of notifiable conditions activity in NSW](#)

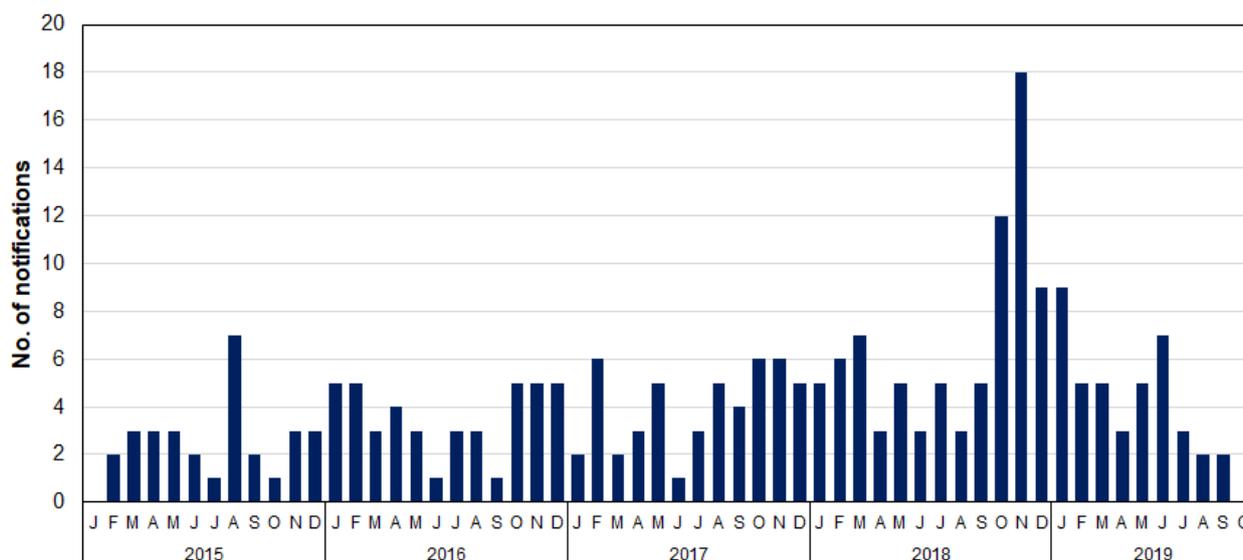
For further information see NSW Health [infectious diseases page](#). This includes links to other NSW Health [infectious disease surveillance reports](#) and a [diseases data page](#) for a range of notifiable infectious diseases.

### Legionellosis

Legionellosis (Legionnaires’ disease) is caused by infection with Legionella bacteria. The risk of infection from one particular type, *Legionella longbeachae*, tends to increase in the spring and summer months and is often linked to unprotected exposure to potting mix or similar soil-based products.

While there have been no cases of *L. longbeachae* notified so far in October, in 2018 there was a large increase in notifications for the months of October (n=12), November (n=18) and December (n=9) – see Figure 1. Many of these cases reported prior exposure to potting mix or similar material.

**Figure 1. Legionellosis (*Legionella longbeachae*) notifications in NSW residents, by month of disease onset. January 2015 to 5 October 2019.**



Legionellosis is a type of pneumonia and the symptoms include fever, chills, cough and shortness of breath. Some people also have muscle aches, headache, tiredness, loss of appetite and diarrhoea. People with legionellosis often have severe symptoms and infection is associated with a 10 to 15 per cent mortality rate.

The risk of legionellosis is greater with increasing age (most cases are aged over 50 years), with smoking, and immunosuppression as a result of chronic medical conditions, cancer or taking high-dose corticosteroid medicines.

## Reducing the risk in the garden

Legionellosis is not spread from person to person, but can occur from inhaling contaminated water aerosols or dust.

*L. longbeachae* bacteria are commonly found in the soil and they thrive in potting mix and garden compost. *L. longbeachae* infection is believed to be most commonly acquired through inhalation of dust from these contaminated products.

As gardening activities tend to increase during spring and summer this is an important time to promote awareness about the safe use of potting mix and compost. To reduce the risk of infection, people handling these products should:

- wet the material beforehand to suppress dust
- wear gloves and a protective facemask
- wash hands with soap and water after handling potting mix, mulch or soil.

Always follow the safety instructions included on potting mix packaging.

## Further information

- NSW Health [Legionellosis/Legionnaires' disease website](#)
- NSW Health [Legionellosis disease data](#).

## Typhoid fever

Two notifications of typhoid fever were received this reporting period among unrelated adult residents of regional NSW ([Table 1](#)). Both cases were acquired while travelling overseas, one in India and the other in Pakistan.

Typhoid fever is caused by an infection with bacteria called *Salmonella* Typhi. People with typhoid may experience mild or severe symptoms. The symptoms may include fever, headache, non-productive cough, general discomfort and a lack of appetite. Some people have rose-coloured spots on the trunk of the body. Constipation or diarrhoea may occur. If symptoms are severe, hospitalisation may be required.

Typhoid fever symptoms generally start 8 to 14 days following infection but possibly as early as 3 days or as late as 60 days after infection. Typhoid fever is treated with antibiotics.

## Typhoid vaccination

Children aged  $\geq 2$  years and adults are recommended to receive typhoid vaccine if they are travelling to typhoid-prone (endemic) regions, particularly where food hygiene may be suboptimal and drinking water may not be properly treated, and when visiting friends and relatives.

People travelling overseas should visit their GP or travel clinic at least four weeks before travel to confirm they are up to date with the vaccinations recommended for their destinations, and to allow time to have any vaccines they are missing.

Note that the effectiveness of typhoid vaccines wanes after a few years – most people typhoid need to be revaccinated against typhoid every three years to boost their protection.

It is also important to remember to be alert for symptoms of typhoid on your return from overseas even if you have been vaccinated, and let your doctor you have been travelling overseas.

## Extensively drug-resistant typhoid in Pakistan

Recently, an extensively drug-resistant (XDR) type of typhoid has emerged in Pakistan. XDR typhoid infections do not respond to most antibiotics used to treat typhoid fever.

At least one person in NSW has been diagnosed with XDR typhoid following travel to Pakistan. All travellers to Pakistan are at risk of getting XDR typhoid fever.

People who are planning travel to South Asia, including Pakistan, should be vaccinated against typhoid prior to travel and take extra precautions to reduce the risk of exposure to unsafe food and untreated water.

## How typhoid spreads

The bacteria that cause typhoid fever are found in the faeces of infected people. Transmission usually occurs when faecally-contaminated food and water are ingested.

Some people (known as carriers) continue to carry the bacteria even after symptoms have resolved, or may never have symptoms. These people can transmit the infection to others, even if they do not have symptoms. Antibiotic treatment is also required to treat carriers to prevent the spread of infection.

Typhoid fever is more common in less developed countries with poor sanitation, poor hand hygiene and food handling standards, and untreated drinking water. Raw fruits, vegetables and shellfish are the types of foods most often associated with the illness. Flies may also transfer the bacteria to food.

### Further information:

- NSW Health [typhoid fact sheet](#)
- NSW Health [staying health when travelling overseas fact sheet](#).

## 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 29 September – 5 October 2019, by date received\***

		Weekly		Year to date			Full Year	
		This week	Last week	2019	2018	2017	2018	2017
Enteric Diseases	Cryptosporidiosis	5	7	486	585	1146	708	1266
	Giardiasis	44	45	2691	2298	2545	2937	3135
	Hepatitis A	2	0	49	75	50	86	71
	Listeriosis	1	0	12	17	14	19	20
	Rotavirus	30	50	855	647	1609	808	2319
	STEC/VTEC	1	1	48	40	43	57	53
	Salmonellosis	51	46	2786	2580	2937	3340	3680
	Shigellosis	18	16	662	311	173	531	236
	Typhoid	2	1	56	46	46	58	55
Respiratory Diseases	Influenza	948	1582	111826	14502	98191	17423	103851
	Legionellosis	1	1	120	116	97	171	138
	Tuberculosis	11	16	430	396	402	508	542
Sexually Transmissible Infections	Chlamydia	557	582	24556	24269	22221	31192	29000
	Gonorrhoea	206	201	9147	8279	7088	10618	9159
	LGV	1	1	44	70	32	85	50
Vaccine Preventable Diseases	Measles	1	0	54	17	28	18	32
	Meningococcal Disease	2	2	50	55	73	72	91
	Pertussis	86	122	4785	3649	4341	6280	5366
	Pneumococcal Disease (Invasive)	12	15	517	530	539	681	683
Vector Borne Diseases	Barmah Forest	1	1	52	63	105	74	127
	Dengue	3	7	338	216	228	299	306
	Ross River	6	4	509	479	1536	571	1653
Zoonotic Diseases	Q fever	1	1	179	169	167	228	210

### \* 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.
- 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.