Communicable Diseases Weekly Report

Week 9, 23 February to 29 February 2020

In summary, we report:

- Salmonellosis – cluster under investigation
- Legionellosis (Legionnaires' disease) –five new cases
- Novel coronavirus (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.

Salmonellosis

There have been 181 notifications of salmonellosis this reporting week (Table 1). Public health units are currently investigating the potential source of a genetically similar cluster of 53 *Salmonella* Typhimurium cases from across NSW. Salmonellosis is a form of gastroenteritis caused by *Salmonella* bacteria, which are commonly found in animals. Notifications usually begin to climb steeply in December each year and peak over summer. This is because *Salmonella* bacteria thrive in warmer weather and can produce an infective dose in contaminated food in a shorter time.

Products containing undercooked eggs, contaminated fresh produce and contamination of foods during food preparation are the most common source of salmonellosis in NSW. Eggs are a healthy and nutritious food, however they also need careful handling to keep them safe. People can follow the NSW Food Authority's nine simple egg safety recommendations to reduce the risk of *Salmonella* infection from eggs at home.

Restaurants, cafes, bakeries, caterers and manufacturers that make raw egg dressings, desserts and sauces are required to follow "Food Safety Guidelines for the Preparation of Raw Egg Products" or use alternatives to raw eggs in ready to eat foods. Safer alternatives include commercially produced dressings and sauces, or pasteurised egg products.

Symptoms of salmonellosis include fever, headache, diarrhoea, abdominal pain, nausea, and vomiting. Symptoms usually start around 6 to 72 hours after eating food contaminated with the organism. Symptoms typically last four to seven days, but can continue for much longer. Occasionally hospitalisation is required for management of dehydration, particularly in young babies, elderly people and those with weakened immune systems.

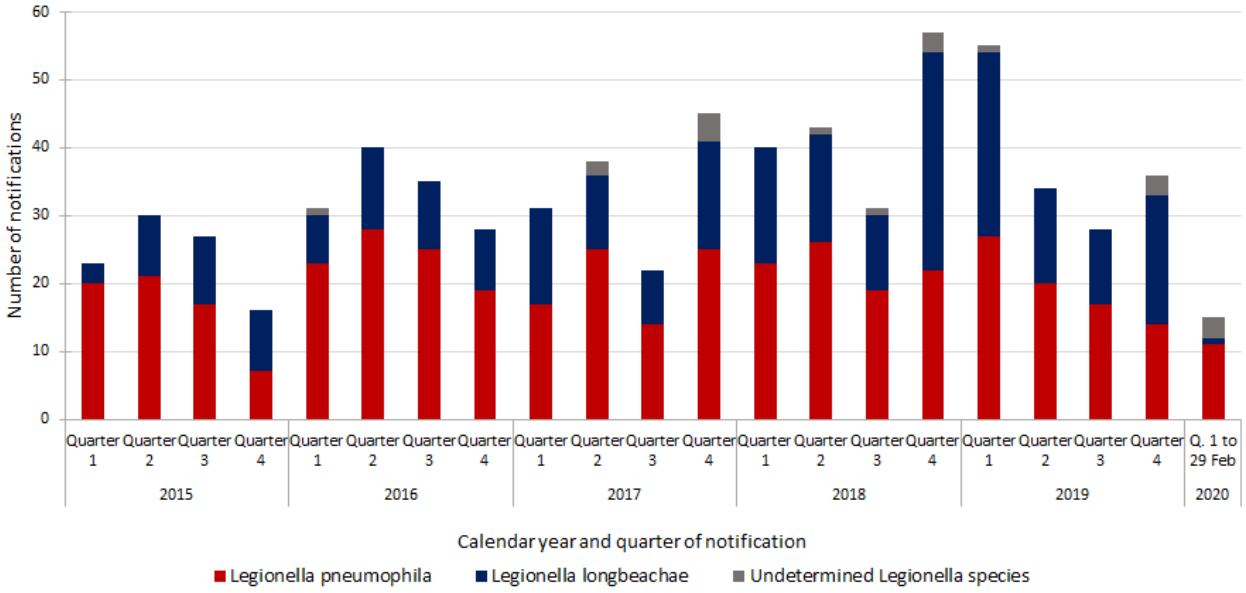
Follow the link for further information on the four food safety tips and safe handling of raw egg products from the NSW Food Authority.

Follow the link for the NSW Health salmonellosis factsheet.

Legionellosis (Legionnaires' disease)

Five new cases of legionellosis (Legionnaires' disease) were notified in this reporting week (Table 1). All five cases were caused by *Legionella pneumophila*, and four cases were attributed to *Legionella pneumophila* serogroup 1. Since the beginning of 2020 to 29 February, NSW Health has been notified of 11 infections with *Legionella pneumophila* (see Figure 1). This is slightly lower than the average of 14 notifications received in the same time period in the years 2015-2019.

Figure 1. Number of legionellosis cases by calendar year and month of notification, NSW, 1 January 2015 to 29 February 2020



Data source: NSW Notifiable Conditions Information Management System (NCIMS); data extracted 5 March 2020. Notification date reflects the earliest reporting date.

The five cases notified in this reporting week are residents of Sydney Local Health District, South Eastern Local Health District, and Illawarra Shoalhaven Local Health District. All five cases, three females and two males, are aged between 55 and 75 years. The cases all reported one or more risk factors for legionellosis, including past or current smoking and chronic diseases. Four cases required hospitalisation.

One case visited locations in the Haymarket area of the Sydney Central business district during their incubation period. Cooling towers in this area have been under investigation following notification of three cases with a common potential source of exposure in January and February. During the investigation, *Legionella* bacteria were identified in several cooling towers in the area. The cooling towers were immediately closed down and underwent decontamination. There is no ongoing public health risk associated with these towers. However, people who have been in the Haymarket area in the last month are advised to be on the lookout for symptoms of legionellosis. Further information regarding the Haymarket investigation and advice to the public is provided in media releases issued by South Eastern Sydney Local Health District issued on 8 February and 28 February.

The remaining four cases notified in this reporting week have not reported exposures in the Haymarket area. Investigations into possible sources of infection are ongoing.

Legionellosis is a type of pneumonia, which can be severe and occasionally fatal. Typical symptoms include fever, headache, chills, muscle aches, cough, and shortness of breath. The incubation period is commonly 5 to 6 days, but can be as short as 2 days or as long as 10 days. Legionellosis predominantly affects middle-aged and older people, particularly smokers, people with chronic lung disease, and people who are immunocompromised due to other medical conditions or medications.

Legionellosis is caused by *Legionella* bacteria. Most infections identified in NSW are caused by two *Legionella* species, *Legionella pneumophila* and *Legionella longbeachae*. *Legionella pneumophila* bacteria can contaminate warm water systems, whirlpool spas, air conditioning cooling towers, and other bodies of water. Legionellosis is not spread from person to person; it occurs from inhaling contaminated water aerosols or dust. Outbreaks are sometimes associated with aerosols generated by contaminated cooling towers on large buildings. Regular maintenance, inspection, and remedial action of cooling towers and plumbing systems limit the growth of the bacteria and prevent transmission of *Legionella*. To protect public health, requirements for risk-based management of water cooling and warm water systems are set out in public health legislation and regulations.

Further information

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

NSW Health information regarding the regulatory control of Legionnaires' disease

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 23 February – 29 February 2020, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2020	2019	2018	2019	2018
Enteric Diseases	Cryptosporidiosis	24	45	222	212	189	669	708
	Giardiasis	57	71	492	815	587	3271	2937
	Hepatitis A	2	0	11	19	21	61	86
	Paratyphoid	2	1	9	16	9	39	34
	Rotavirus	8	12	249	132	199	1756	808
	STEC/VTEC	3	3	22	20	11	80	57
	Salmonellosis	181	138	1033	957	842	3564	3336
	Shigellosis	29	28	272	173	42	869	531
	Typhoid	2	3	22	24	12	63	58
Respiratory Diseases	Influenza	554	579	5123	4692	2491	116448	17409
	Legionellosis	5	0	16	40	28	153	171
	Tuberculosis	11	13	76	89	82	598	507
Sexually Transmissible Infections	Chlamydia	634	691	5825	5809	5610	32452	31181
	Gonorrhoea	171	245	2092	2050	1876	11715	10609
Vaccine Preventable Diseases	Meningococcal Disease	1	0	6	8	10	59	72
	Mumps	3	3	20	13	22	56	72
	Pertussis	86	79	736	1185	707	6386	6280
	Pneumococcal Disease (Invasive)	6	8	78	60	68	692	681
Vector Borne Diseases	Barmah Forest	2	3	16	12	13	63	74
	Dengue	1	4	35	85	81	453	299
	Malaria	1	1	7	13	15	73	66
	Ross River	6	5	32	100	68	577	571
Zoonotic Diseases	Q fever	3	5	37	66	42	248	228

*** 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.