

Communicable Diseases Weekly Report

Week 42, 13 October to 19 October 2019

In summary, we report:

- [Invasive meningococcal disease](#) – two new cases in children
- [Salmonella Weltevreden](#) – outbreak linked to frozen microwave meals
- [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.

Invasive meningococcal disease

Two new cases of invasive meningococcal disease (IMD) were notified in this reporting week ([Table 1](#)). Both cases occurred in children from different regional local health districts. One case was in a child in the 5-10 year age-group, the other case was in an infant. Both infections were caused by meningococcal serogroup B.

IMD is a serious and sometimes fatal infection caused by the bacteria *Neisseria meningitidis*. 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.

All age groups are at risk of IMD, but the risk of disease is highest in young children, particularly infants, and in adolescents and young adults aged 15 to 24 years. People with immune system deficiencies and those without a spleen are also predisposed to getting meningococcal disease.

The initial symptoms of IMD are non-specific and often mimic other illnesses making diagnosis difficult. Symptoms may include sudden fever; nausea, vomiting, abdominal pain, headache, neck stiffness, photophobia (dislike of bright lights), joint pain, and irritability. A red-purple rash that is non-blanching (i.e. 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 or refusal to eat.

For 2019 through to 19 October, there have been 52 cases of IMD in NSW. Of these cases, most were caused by serogroup B (58%), serogroup W (21%) and serogroup Y (21%). A quarter of these cases occurred in children aged less than 5 years, while a third occurred in people in the 15-24 year age-group. IMD in children aged 5 to 14 years is uncommon, representing about 3% of cases in the last five years.

The National Immunisation Program provides meningococcal ACWY vaccine to children at 12 months of age and high school students in Year 10. Adolescents aged 14 to 19 years who are not enrolled in school, or who miss out on the school vaccination can access free vaccine from their GP. A vaccine against the most common strains of meningococcal B is available in Australia via private prescription.

As vaccines do not cover all strains of meningococcal bacteria, NSW Health encourages all people to know the symptoms of meningococcal disease, and to act fast if they present, even if they or the person they care for has received a vaccine.

Further information

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

[Salmonella Weltevreden](#)

There have been 61 notifications of salmonellosis in this reporting week ([Table 1](#)).

This week, a multi-state outbreak investigation into cases of a rare type of *Salmonella* infection, *Salmonella* Weltevreden, found that most cases reported consuming a nationally distributed frozen microwave meal product. As a result of the investigation a [consumer level recall](#) of the product occurred on 19 October 2019. Food safety agencies are working with the company to identify the possible source of the contamination.

As at 24 October, at least 30 people in six states/territories with this rare type of *Salmonella* infection have reported consuming the same brand of frozen microwave meal. Of these, fourteen (47%) are residents of NSW.

Salmonellosis is a form of gastroenteritis caused by *Salmonella* bacteria, which are commonly found in animals. Notifications in NSW 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, and improper separation of foods during food preparation are the most common causes of outbreaks of salmonellosis in NSW. Frozen meals have been identified as the cause of *Salmonella* outbreaks in countries such as the USA and Canada.

Frozen food may not be ready-to-eat and should always be cooked thoroughly following manufacturer instructions before consumption. This is because they might include ingredients that have not gone through a pathogen kill-step process. Microwave ovens may not cook food evenly, so particular precaution must be taken to ensure the food is thoroughly cooked.

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

Further information

- NSW Food Authority links for further information on the [four food safety tips](#) and [safe handling of raw egg products](#)
- NSW Health [salmonellosis factsheet](#)
- NSW Health media release [Salmonella gastro linked to frozen microwave meals](#).

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 13 October – 19 October 2019, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2019	2018	2017	2018	2017
Enteric Diseases	Cryptosporidiosis	5	4	495	603	1162	708	1266
	Giardiasis	33	34	2755	2383	2637	2937	3135
	Hepatitis A	1	1	51	77	54	86	71
	Listeriosis	1	0	13	17	14	19	20
	Rotavirus	48	24	928	674	1893	808	2319
	STEC/VTEC	1	2	51	44	44	57	53
	Salmonellosis	61	50	2899	2678	3042	3339	3680
	Shigellosis	16	16	689	352	190	529	236
	Typhoid	1	1	57	47	48	58	55
Respiratory Diseases	Influenza	444	568	112987	15287	101905	17423	103851
	Legionellosis	1	1	121	121	102	171	138
	Tuberculosis	16	9	452	412	420	508	542
Sexually Transmissible Infections	Chlamydia	645	499	25714	25509	23354	31190	28999
	Gonorrhoea	184	196	9528	8720	7446	10617	9157
	LGV	1	0	45	71	37	85	50
Vaccine Preventable Diseases	Measles	1	0	55	17	31	18	32
	Meningococcal Disease	2	0	53	57	77	72	91
	Mumps	1	1	46	65	94	72	127
	Pertussis	108	91	4987	3970	4518	6280	5366
	Pneumococcal Disease (Invasive)	25	18	563	558	578	681	683
	Rubella	1	0	10	0	5	0	5
Vector Borne Diseases	Barmah Forest	1	0	56	64	109	74	127
	Dengue	5	10	354	224	242	299	306
	Ross River	5	0	527	499	1561	571	1653
Zoonotic Diseases	Q fever	3	2	194	178	173	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.