

Communicable Diseases Weekly Report

Week 3, 14 to 20 January 2018

In summary, we report:

- [Hepatitis A](#) – four new cases
- [Cryptosporidiosis](#) – increased notifications
- [Influenza](#) – increase in inter-seasonal activity
- [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.

Hepatitis A

Four new cases of hepatitis A infection were reported this week ([Table 1](#)). All of these cases are thought to have acquired the infection while overseas. On average, there are three cases reported in NSW per month, and usually most cases have acquired their infection overseas.

From 25 July to 20 January 2018, there have been a total of 37 cases of hepatitis A reported in NSW which are under investigation as part of a locally transmitted outbreak.

Update on the outbreak: molecular typing of the viruses isolated from 32 of these cases has shown that they share an identical partial genome sequence, meaning that the cases are all part of the same outbreak. The median age of the 32 cases is 41 years (range 21 to 69 years). Thirty of the 32 cases are male, with 17 reporting being men who have sex with men (MSM). Four of the 32 cases travelled outside Australia during their exposure period. These 31 cases are residents of South Eastern Sydney Local Health District (LHD) (10), Sydney LHD (9), Northern Sydney LHD (3), Central Coast LHD (3), Western Sydney LHD (2), South Western Sydney LHD (2), Hunter New England LHD (2) and Illawarra Shoalhaven LHD (1). Three of the six cases who live outside Sydney reported travel to Sydney during their exposure period. The five remaining cases are those most recently notified and have molecular typing results pending: four are male, two are children (aged 3 and 12), and all are thought to have acquired their infection while overseas.

The molecular typing of hepatitis A viruses in this cluster shows they are very similar to a strain currently circulating in Europe associated with a large, multi-country outbreak. Since June 2016, 1,500 confirmed hepatitis A cases and 2,660 probable or suspected cases have been reported in Europe, predominantly among MSM (see the [ECDC report](#)).

It is suspected that the earlier outbreak cases and some of the later cases have been exposed to a common source as they share overlapping exposure periods. Secondary cases have also been identified, with evidence that some infections have been transmitted from person to person. Men who engage in sexual activity with other men (MSM) are being reminded to get vaccinated, as anal sex and oral-anal sex have been identified as risk factors for infection (see [media release](#)). Despite extensive investigation, to date no food item or other possible exposure has been found in common with all the cases. NSW public health units are continuing to investigate possible sources of infection in conjunction with the NSW Food Authority (see the related [media release](#)).

Hepatitis A is a viral infection of the liver. Symptoms include feeling unwell, lack of appetite, aches and pains, fever, nausea, and abdominal discomfort, followed by dark urine, pale stools and jaundice (yellowing of the skin and eyes). For more information on the illness see the NSW Health [hepatitis A fact sheet](#).

Follow the link for NSW Health [hepatitis A notification data](#) .

Cryptosporidiosis

Sixteen notifications of cryptosporidiosis were received this reporting period (Table 1). Cases were mainly reported among residents of Hunter New England, Sydney and Western Sydney Local Health Districts. Cryptosporidiosis incidence typically peaks during summer months between January and March each year, often linked with overseas travel, swimming pools and other recreational water exposures. In response to the increasing notifications, public health units have worked with councils to ensure pool operators are undertaking appropriate infection control measures to reduce the risk of outbreaks such as superchlorination and reminding patrons to not swim if they have diarrhoea.

Cryptosporidiosis is a diarrhoeal disease caused by the parasitic protozoan, *Cryptosporidium* species. These microscopic parasites are transmitted as environmentally hardy cysts (oocysts) shed from infected humans and animals (including dogs, cats, livestock and wildlife) which can survive up to six months in moist environments. Cryptosporidiosis is spread through the faecal-oral route directly from person to person, from animal to person, and by ingesting contaminated food and water.

Cryptosporidiosis outbreaks have been linked to sources such as contaminated drinking water, swimming pools, spa pools, and to petting infected animals.

Infection may be asymptomatic, but disease usually presents as profuse watery diarrhoea and abdominal cramps after a 7 day incubation period (range 1-12 days). Nausea, vomiting, fever, dehydration and weight loss may also be present. Symptoms typically resolve within 1-2 weeks; however, some people may experience recurrence of symptoms for up to a month, and chronic or extra-intestinal infections may occur in people who are immunocompromised.

Patients are infectious while they excrete oocysts, which may continue for several weeks after diarrhoea stops.

As *Cryptosporidia* are resistant to usual levels of chlorine in swimming or spa pools, outbreaks are frequently associated with community pools. High doses of chlorine (superchlorination) and cleaning of filters are required to prevent further infections.

Public pool operators are required to manage pools in accordance with the *Public Health Regulation 2012*, which includes requirements on the levels of disinfectants. The occurrence of two or more cases linked to a pool should prompt intervention by local public health units, including advice on superchlorination.

Preventive measures for individuals include:

- hand washing (especially after handling animals or animal manure, changing nappies, working in the garden and before preparing food);
- not drinking untreated water and avoiding swallowing water when swimming; and,
- avoiding swimming in natural waters within a week of heavy rain.

Cases or relevant care-givers should be informed about the nature of the infection and how it is spread, with emphasis on hygienic practices, particularly to:

- not swim for at least two weeks after the diarrhoea has stopped;
- not share towels or linen for at least two weeks after the diarrhoea has stopped; and
- not handle food for other people for at least 48 hours after the diarrhoea has stopped.

Children who have diarrhoea should be kept home from school, preschool, childcare or playgroup until at least 24 hours after the diarrhoea has completely stopped. Carers of the sick, children or the elderly should avoid contact with these groups for at least 48 hours after complete resolution of symptoms if possible.

For more information, see the following NSW Health factsheets and guidance:

- [cryptosporidiosis factsheet](#)
- [factsheet on cryptosporidium and giardia in swimming pools and spa pools](#)
- [advice for public swimming pool and spa pool operators.](#)

Influenza

Influenza notifications are on the rise with 319 influenza notifications reported this week (Table 1), compared with 245 for the previous week. Already this year notifications (688) have surpassed notifications seen for the same time period last year (483).

In the most recent [global influenza update](#), the World Health Organization has reported that influenza activity is high and continuing to increase in the temperate zone of the northern hemisphere, with influenza A(H3N2) virus accounting for the majority of influenza detections (62%), but with influenza B (mostly from the Yamagata lineage) activity also high in Europe and increasing in North America.

It is likely that the increased inter-seasonal influenza activity seen in NSW is at least partly related to overseas travellers returning with influenza infections, which may trigger local transmission and may be linked to a recent increase in influenza outbreaks reported in residential care facilities.

Residential care facilities need to be aware that respiratory outbreaks (including influenza) can occur in facilities at any time of the year and that early detection and isolation of symptomatic residents is key to preventing further spread within the facility. It is also important that relatives and staff members be reminded to stay away from the facility if they are unwell.

Influenza is a highly contagious respiratory illness caused by influenza viruses. There are two main types of influenza virus that cause infection in humans - types A and B - and many sub-types or strains. Influenza can occur throughout the year but activity usually peaks in winter. For further information on the illness see the NSW Health [Influenza fact sheet](#).

From April 2018 the NSW Government will provide free influenza vaccines for all NSW children aged from six months to under five years of age who are not already eligible under the National Immunisation Program (NIP). Parents can access the free flu shot from their usual immunisation provider: their GP, community health centre or participating local council. For further information see the NSW Health [Free flu shots for children aged 6 months to under 5 years program](#).

The 2018 seasonal influenza vaccines are being updated, with the A(H3N2) component changed to be better matched to the circulating strain. The A(H1N1) and B components will not be changed and they remain well-matched to the strains currently circulating in the northern hemisphere.

Influenza vaccination is also particularly recommended (and funded under the NIP) for all people aged 65 years and over, Aboriginal people aged six months to under 5 years and aged 15 years and over, pregnant women and people aged six months and over with medical conditions that put them at greater risk of severe influenza. Follow the link for further information on [influenza vaccination under the NIP](#).

Follow the link for further [influenza notifications data](#). Please also note that comprehensive [NSW influenza surveillance reports](#) are also available. These are published monthly in the inter-seasonal period and weekly during the influenza season.

Follow the link to the NSW Health [influenza homepage](#) for a range of additional influenza resources.

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 14 to 20 January 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Bloodborne Diseases	Hepatitis B - Newly Acquired	1	0	1	1	3	15	13
	Hepatitis C - Newly Acquired	1	1	2	1	2	43	25
	Hepatitis D	1	0	2	0	0	19	20
Enteric Diseases	Cryptosporidiosis	16	27	51	109	54	1266	1184
	Giardiasis	48	56	134	203	219	2994	3480
	Hepatitis A	4	0	5	3	7	72	41
	Listeriosis	1	3	4	0	4	20	36
	Rotavirus	26	18	59	63	54	2318	750
	STEC/VTEC	2	1	5	9	5	53	65
	Salmonellosis	98	117	296	318	339	3686	4544
Shigellosis	2	4	9	21	19	232	310	
Respiratory Diseases	Influenza	319	245	688	483	269	103863	35540
	Legionellosis	2	1	5	5	6	137	134
	Tuberculosis	10	6	22	30	26	506	535
Sexually Transmissible Infections	Chlamydia	704	599	1651	1769	1537	28980	25994
	Gonorrhoea	283	218	656	582	385	9250	7004
Vaccine Preventable Diseases	Adverse Event Following Immunisation	3	0	4	8	3	268	258
	Meningococcal Disease	2	2	5	7	1	91	70
	Pertussis	73	91	228	469	1112	5363	10956
	Pneumococcal Disease (Invasive)	10	8	22	18	20	681	544
Vector Borne Diseases	Chikungunya	1	0	2	1	3	47	39
	Dengue	8	13	26	20	18	298	485
	Ross River	5	2	12	282	25	1650	594

* Notes on Table 1: NSW Notifiable Conditions activity

- 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.
- 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](#).
- Only conditions for which at least one case report was received appear in the table. HIV and chronic blood-borne virus case reports are not included here but are available from the [Infectious Diseases Data](#) webpage.