

Communicable Diseases Weekly Report

Week 17, 25 April to 1 May 2016

In summary, we report:

- Cryptosporidiosis 29 cases
- Mumps one new case reported
- Summary of notifiable conditions activity in NSW

For further information on infectious diseases on-line see <u>NSW Health Infectious Diseases</u>. Also see <u>NSW Health Infectious Diseases Reports</u> for links to other surveillance reports.

Cryptosporidiosis

There were 29 cases of cryptosporidiosis notified this reporting week which is slightly above the previous 5-year average of 23 cases per week for the same period (Table 1). Of the 18 cases that have been followed up, 11 cases reported exposure to public pools, four of which were exposed to the same pool in Sydney. All affected pools were referred to local environmental health officers for investigation. Other risk factors identified included overseas travel (two cases) and exposure to a family member with a similar illness (two cases). Three cases could not identify a risk exposure. Cryptosporidiosis cases tend to decline in autumn when temperatures and public pool usage decrease.

Cryptosporidiosis is a diarrhoeal disease caused by the parasitic protozoan, *Cryptosporidium* spp. These microscopic parasites are transmitted as environmentally hardy cysts (oocysts), shed from infected humans and animals (including dogs, cats, livestock and wildlife) and can survive up to six months in moist environments. It 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 in such instances.

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 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
- 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 all contact with these groups for at least 48 hours after complete resolution of symptoms.

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

- cryptosporidiosis factsheet
- factsheet on cryptosporidium and giardia in swimming pools and spa pools
- public health unit control guidelines
- advice for public swimming pool operators.

Mumps

There has been one confirmed case of mumps this week in an adult from South Eastern Sydney Local Health District (<u>Table 1</u>). The individual was unvaccinated and acquired the infection while overseas. There have been 8 cases of mumps in NSW this year compared to 17 reported in NSW in the same time period last year.

Mumps is an acute viral disease. Common symptoms include fever, loss of appetite, tiredness and headaches followed by swelling and tenderness of the salivary glands. Complications are rare but can be serious including encephalitis and meningitis, orchitis (infection of the testes), spontaneous abortion and hearing loss. The mumps virus is transmitted through contact with respiratory secretions; usually from respiratory droplets through the airborne route but also through direct contact with the saliva of an infected person.

Mumps is a vaccine preventable disease, and notifiable in NSW. Vaccination against mumps is with the measles-mumps-rubella (MMR) vaccine and the measles-mumps-rubella-varicella vaccine, given as part of the National Immunisation Program and scheduled at 12 and 18 months of age respectively.

If you or your child have not received this vaccine, it is important that you see your general practitioner to discuss a catch-up schedule particularly if you are planning international travel. Additional doses of MMR vaccine are safe, so anyone unsure of their vaccination status should be vaccinated. MMR vaccine is provided free in NSW to all people born during or after 1966 who do not have written documentation of receiving two doses.

For more information see the NSW Health Mumps factsheet .

- 2 - Back to top

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 25 April to 1 May 2016, by date received

		Weekly		Year to date			Full Year	
		This week	Last week	2016	2015	2014	2015	2014
Enteric Diseases	Cryptosporidiosis	29	38	529	463	185	1038	429
	Giardiasis	53	82	1480	1344	1099	3415	2942
	Hepatitis A	1	1	20	44	33	71	80
	Rotavirus	10	5	183	125	119	1036	714
	STEC/VTEC	1	0	15	11	19	29	31
	Salmonellosis	60	101	2039	1916	1889	4045	4275
	Shigellosis	7	4	98	60	104	172	212
Respiratory Diseases	Influenza	108	165	2344	1404	954	30301	20888
	Legionellosis	3	1	43	32	28	96	72
	Tuberculosis	6	8	159	127	141	443	475
Sexually Transmissible Infections	Chlamydia	319	484	8461	7535	7683	22549	22900
	Gonorrhoea	82	114	2075	1744	1574	5401	4876
	LGV	1	0	16	10	4	20	14
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	8	67	60	120	182	256
	Meningococcal Disease	1	2	15	12	11	46	37
	Mumps	1	0	8	16	40	63	82
	Pertussis	128	157	4266	2046	634	12077	3052
	Pneumococcal Disease (Invasive)	10	9	106	88	85	494	511
	Rubella	2	1	6	3	3	6	10
Vector Borne Diseases	Dengue	8	18	185	140	155	340	378
	Malaria	1	1	13	17	31	47	87
	Ross River	16	41	317	1061	166	1639	673
Zoonotic Diseases	Q fever	3	4	75	74	67	267	190

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 other blood-borne virus case reports are not included here but are available from the <u>Infectious Diseases Data</u> webpage.