

Communicable Diseases Weekly Report

Week 18, 27 April to 3 May 2015

In summary, we report:

- **Mumps** – in an unvaccinated child
- **Haemolytic Uraemic Syndrome** – three reported cases so far this year
- **Legionnaires' Disease** – returned traveller from Anzac commemorations in Europe
- **Summary of notifiable conditions activity in NSW**

For further information on infectious diseases and alerts see the [Infectious Diseases](#) webpage.

Follow the [A to Z of Infectious Diseases](#) link for more information on specific diseases.

For links to other surveillance reports, including influenza reports, see the [NSW Health Infectious Diseases Reports](#) webpage.

Mumps

There has been one confirmed case of mumps this week, occurring in an unvaccinated child from the Northern NSW Local Health District (Table 1). There have been 15 cases of mumps reported in NSW so far this year, well down on the 40 cases reported in the same time period last year.

Mumps is an acute viral disease caused by the mumps virus which 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.

Common symptoms of mumps 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, spontaneous abortion and hearing loss.

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

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Haemolytic Uraemic Syndrome

A case of haemolytic uraemic syndrome (HUS) was notified this week in an adult from the Wollongong area (Table 1). The case's exposures are being investigated and include overseas travel before onset of illness. HUS is a rare condition and in NSW there are between 5 and 10 cases of HUS reported each year.

HUS is a severe condition characterised by **haemolytic** anaemia (anaemia caused by destruction of red blood cells), acute kidney failure (**uraemia**), and a low platelet count (thrombocytopenia) which can lead to bleeding. It is more likely to affect children and carries a 5-10% mortality rate. The most common cause of HUS is infection with shiga toxin-producing *Escherichia coli* (STEC) bacteria.

E. coli are bacteria commonly found in the gastrointestinal tract of people and animals. Many strains of *E.coli* are harmless but some strains produce toxins which can cause a range of diseases including diarrhoeal illnesses and HUS. STEC strains are carried by animals, particularly cattle. People are infected when they come into contact with the faeces of an infected animal or person, either directly or indirectly through consuming contaminated food (e.g. undercooked beef burgers, unwashed salad vegetables, and unpasteurised milk or milk products), drinking or swimming in contaminated water, person-to-person contact, or contact with animals on farms or petting zoos.

STEC infections are prevented by safe food handling and good hand hygiene. Ready to eat foods should not be allowed to come into contact with raw meat, and equipment used to prepare raw meat such as knives and cutting boards should be thoroughly washed immediately after use. Foods made from minced meat, such as hamburger patties and sausages should be cooked thoroughly and not eaten if there is any pink meat inside. Fruit and vegetables should be washed before eating and unpasteurised dairy products should not be consumed. Hands should be washed before eating and preparing food, after touching pets and farm animals, and after using the toilet or changing nappies.

See the STEC/HUS [factsheet](#) for more information.

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Legionnaires' Disease

Two new cases of Legionnaires' disease (legionellosis) were reported this week (Table 1). One case was believed to have been acquired locally while the other case, a *Legionella pneumophila* serogroup 1 (LP1) infection, was notified in a person who had been travelling overseas.

The overseas-acquired case reported travel in a number of countries in Europe and in Turkey as part of an organised travel group visiting battlefields from the First World War. One of the hotels in Belgium in which the case stayed has also been linked to another, non-Australian case of LP1 infection and an investigation is on-going.

Legionnaires' disease 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. Risk factors for Legionnaires' disease include increasing age (most cases are aged over 50 years), smoking, and immunosuppression as a result of chronic medical conditions, cancer or taking high dose corticosteroids. People with Legionnaires' disease often have severe symptoms and infections are associated with a 15% mortality rate.

Legionnaires' disease is not spread from person to person. *L. pneumophila* bacteria can contaminate air conditioning cooling towers, spas, plumbing systems and other bodies of warm water. Outbreaks are sometimes associated with contaminated cooling towers that are part of air conditioning systems in large buildings. Regular inspections, disinfection and maintenance of cooling towers and plumbing systems limit the growth of the bacteria and prevent outbreaks of Legionnaires' disease.

Legionnaires' disease can also be caused by other serogroups of *L. pneumophila* and other types of *Legionella* bacteria. *L. longbeachae* is the next most common cause in NSW and tends to follow exposure to contaminated potting mix and soil. To prevent this type of Legionnaires' disease it is recommended that people handling potting mix wet the mix beforehand to reduce dust, wear gloves and a mask, and wash their hands after handling potting mix or soil.

Legionnaires' disease has an incubation period of 2-10 days so people exposed to the bacteria during overseas travel may develop illness on their return. In 2014, five of the 70 cases of Legionnaires' disease were acquired overseas, all due to *L. pneumophila*. Legionella infection should be considered in the diagnosis of returned travellers presenting with pneumonia.

Follow the links for more information on Legionnaires' disease and on notifications of Legionnaires' disease.

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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 27 April to 3 May 2015, by date received

		Weekly		Year to date		Full Year	
		This week	Last week	2015	2014	2013	2014
Enteric Diseases	Cryptosporidiosis	29	28	499	205	793	429
	Giardiasis	62	69	1427	1226	963	2942
	Haemolytic Uremic Syndrome	1	0	3	4	6	7
	Rotavirus	3	7	127	134	166	714
	Salmonellosis	81	106	2040	2086	1663	4304
	Shigellosis	1	1	64	107	51	210
	Typhoid	1	0	19	20	30	44
Respiratory Diseases	Influenza	85	121	1513	1080	599	20888
	Legionellosis	2	4	35	31	37	72
	Tuberculosis	7	6	119	150	155	473
Sexually Transmissible Infections	Chlamydia	387	446	8013	8705	7827	22899
	Gonorrhoea	58	71	1817	1790	1661	4876
Vaccine Preventable Diseases	Adverse Event Following Immunisation	5	1	64	129	329	255
	Diphtheria	1	0	1	0	0	0
	Mumps	1	0	15	40	32	82
	Pertussis	118	100	2189	712	941	3051
	Pneumococcal Disease (Invasive)	8	11	97	96	129	512
Vector Borne Diseases	Barmah Forest	9	15	119	91	199	163
	Chikungunya	1	0	20	8	7	27
	Dengue	6	6	144	179	102	378
	Malaria	2	1	19	35	39	87
	Ross River	54	58	1180	211	214	677

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 [Infectious Diseases Data](#) webpage.

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