

Communicable Diseases Weekly Report

Week 22, 27 May to 2 June 2018

In summary, we report:

- [Q fever](#) – five cases reported
- [Measles](#) – one new case in a family contact
- [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.

Q fever

Five cases of Q fever were reported this week ([Table 1](#)). All of the cases were residents of regional local health districts in NSW. Their ages ranged from 7 to 51 years old and three (60%) were males. Two had direct contact with cattle, and two live in rural areas near cattle farms. One case is yet to be directly interviewed about their exposure.

This brings the total number of Q fever notifications reported to 2 June in 2018 to 77, compared to 98 in the same period last year ([Table 1](#)). Most cases in 2017 were in males aged between 40 and 70 years who resided in regional/remote areas of NSW.

Q fever is a disease caused by the bacterium *Coxiella burnetii*, which is spread to humans from animals. The main carriers of the disease are farm animals such as cattle, sheep and goats, but other animals such as kangaroos, bandicoots, and domestic pets (e.g. dogs and cats) can also be infected.

Individuals working in industries with regular exposure to animals, animal products or environments where animals are kept are at increased risk of contracting Q fever. Anyone who works or lives on a livestock farm, in particular, is at risk of infection. In NSW, most Q fever infections occur in farmers, followed by shearers, stockyard workers and livestock transporters. People who live on/near or visit (including tradespeople, fencers, labour hire workers and guests) livestock farms are also at risk even if they do not handle animals.

People usually get infected by breathing in infected aerosols or dust when working with infected animals, animal tissues or discharges (blood, placenta, urine, faeces or milk) or animal products (e.g. wool, hides). Infection can also occur through skin injuries (e.g. cuts with contaminated knives), and rarely through ticks, consuming unpasteurised milk or milk products, or (very rarely) from person-to-person.

Approximately 60% of people infected with *C. burnetii* have no or few symptoms. Those who become sick develop a flu-like illness about 2-3 weeks after exposure, which may include high fevers and chills, severe sweats, severe headaches (often behind the eyes), muscle and joint pains and extreme fatigue (tiredness). Most people make a full recovery and become immune to repeat infections. About 10–20% of acute cases develop chronic fatigue (post-Q fever fatigue syndrome), which can occur up to two years after the initial infection and last for many years. Two per cent of acute cases develop chronic Q fever months or years following the initial infection, with involvement of the heart valves (endocarditis). Certain conditions (e.g. pregnancy, immunosuppression, pre-existing heart valve lesions, vascular abnormalities or prostheses) may predispose individuals to chronic Q fever.

A vaccine is available to protect people against infection. Vaccination is recommended for all people who are working in, or intend to work in, a high-risk occupation such as abattoir work, veterinary care or farming. Pre-vaccination screening with both a blood test and a skin test is required before Q fever vaccination. Workplaces at risk of Q fever are required to implement risk control measures, including pre-screening and vaccination, and other safe work practices for all workers, contractors and others who may be exposed.

It is recognised that barriers to vaccination exist, including lack of access to appropriately skilled health professionals and lack of awareness of the importance of the vaccine. NSW Health has collaborated with the Australian College of Rural and Remote Medicine to develop an [online Q fever education module](#) to help GPs working in rural and remote areas diagnose Q fever and provide the vaccine to at-risk persons. NSW Health has also worked with the NSW Farmers' Association, NSW Country Women's Association and SafeWork NSW to launch a [Q fever education campaign](#). The NSW Government is also providing a further \$200,000 on research into an improved vaccine for the bacterial infection.

Follow the links for more information on [Q fever](#), [notifications data](#), [vaccine recommendations](#) and [workplace requirements](#).

A [toolkit](#) containing resources to support the education campaign can also be downloaded from the NSW Health website.



Measles

One new case of measles was notified in this reporting week ([Table 1](#)), in an infant sibling of the confirmed measles case reported in the previous report (Week 21/2018). The new case had been too late for post-exposure prophylaxis but the family had been advised to maintain home quarantine. This is the eighth case of measles notified in NSW this year, of which six have been acquired overseas.

The measles virus is highly infectious and is readily transmitted from person to person via respiratory secretions in the air, following coughing and sneezing. The time from exposure to onset of symptoms is around 10 days (range 7-18 days, occasionally longer) to the onset of fever and about 14 days to the onset of rash.

Symptoms of measles include fever, runny nose, sore red eyes and cough, followed three to four days later by a red, blotchy, non-itchy rash spreading from the head and neck to the rest of the body. For further information on measles see the [measles fact sheet](#).

People born during or after 1966 who have not received two doses of measles containing vaccine are at risk of measles. In NSW measles, mumps, rubella (MMR) vaccine and measles, mumps, rubella, varicella (MMRV) vaccine are offered to children at 12 months and 18 months of age respectively, as part of the National Immunisation Program.

Parents of children aged less than 12 months planning overseas travel should discuss their travel plans with their doctor, as the first dose [can be given before the child's first birthday under certain circumstances](#). People born during or after 1966 can access free MMR vaccine through their GP. People who are unsure if they have received two doses of a measles vaccine in the past can safely be given another dose.

Follow the link for more [measles vaccination information](#).

For further information on measles notifications in NSW residents see the [measles data 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 27 May – 2 June 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Enteric Diseases	Cryptosporidiosis	16	9	417	988	653	1266	1184
	Giardiasis	41	40	1246	1650	1871	2994	3480
	Hepatitis A	1	1	54	12	22	72	41
	Rotavirus	16	12	405	295	224	2318	750
	STEC/VTEC	2	1	27	26	18	53	65
	Salmonellosis	48	45	1758	2178	2478	3680	4533
	Shigellosis	6	4	95	91	129	235	310
	Typhoid	2	1	32	34	25	55	37
Respiratory Diseases	Influenza	93	107	4271	3985	3250	103851	35540
	Tuberculosis	6	5	190	202	201	544	534
Sexually Transmissible Infections	Chlamydia	624	600	13700	12870	11310	28977	25990
	Gonorrhoea	179	217	4553	4178	2906	9173	6996
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	13	131	156	124	271	258
	Measles	1	1	8	25	10	32	16
	Meningococcal Disease	1	1	26	27	22	91	70
	Mumps	3	2	40	62	15	128	67
	Pertussis	74	69	1647	2641	5111	5367	10956
	Pneumococcal Disease (Invasive)	14	26	173	170	156	681	545
Vector Borne Diseases	Dengue	6	3	138	151	256	306	485
	Malaria	1	0	24	31	19	68	59
	Ross River	20	24	277	1314	323	1653	595
Zoonotic Diseases	Q fever	5	2	77	98	105	210	231

* 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 (i.e. by report date). Note that [notifiable disease data](#) available on the NSW Health website is reported by onset date so case totals are likely to vary from those shown here.
- 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.