

Communicable Diseases Weekly Report

Week 45, 4 November to 10 November 2018

In summary, we report:

- [Gonorrhoea](#) – increase in notifications
- [Legionellosis \(Legionnaires’ disease\)](#) - 5 new cases
- [Summary of notifiable conditions activity in NSW](#)

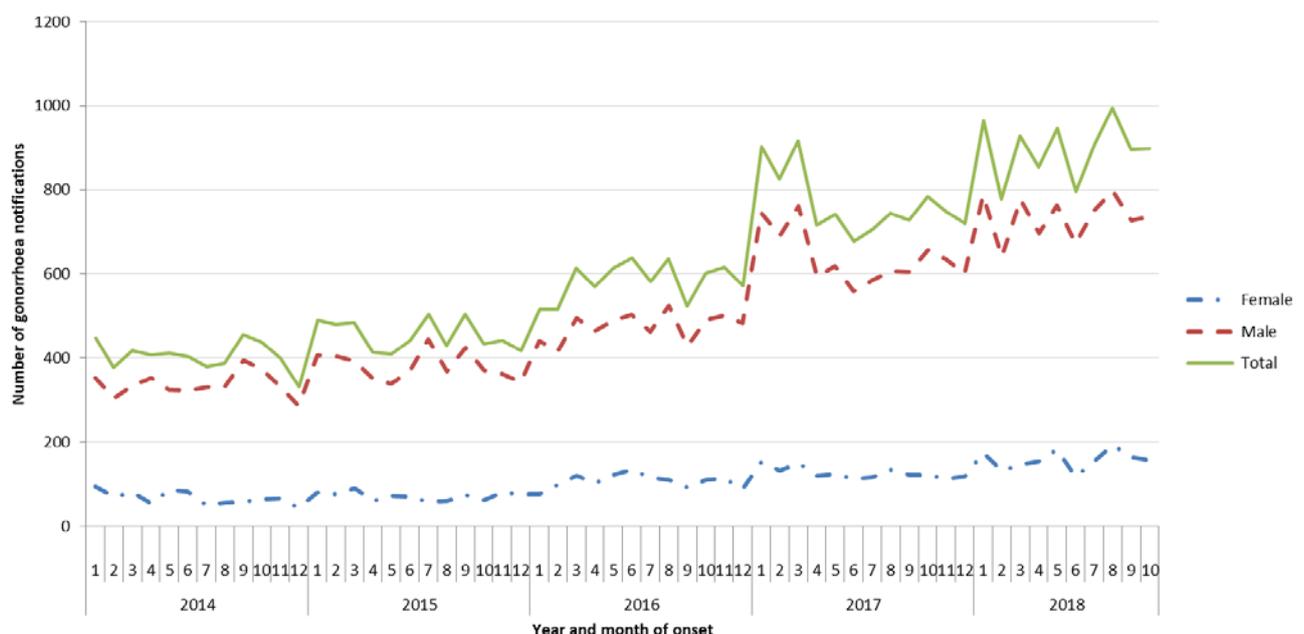
For further information see NSW Health [infectious diseases page](#). This includes links to other NSW Health [infectious disease surveillance reports](#) and a [diseases data page](#) for a range of notifiable infectious diseases.

Gonorrhoea

The number of gonorrhoea notifications each month in NSW has continued to increase (Figure 1). In 2017, 9,173 gonorrhoea notifications were received, a 31% increase compared to 2016. In 2018, to 10 November, 9,296 gonorrhoea notifications were received, higher than the number (7988) of cases notified in the same period in 2017 ([Table 1](#)).

The transmission of gonorrhoea in NSW is thought to be mainly associated with male-to-male sex, with 83% of notifications in 2017 being in men. However, an increasing number of women have been notified with gonorrhoea since 2016, suggesting that heterosexual transmission may be increasing.

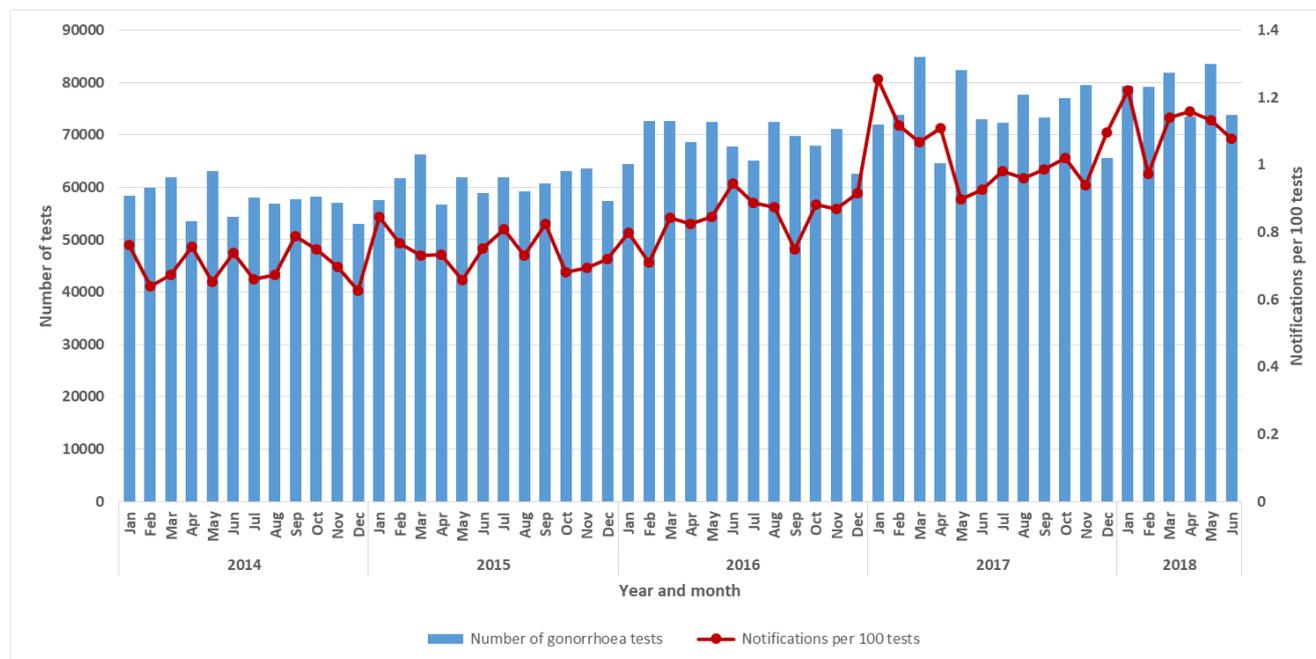
Figure 1. Number of gonorrhoea notifications by gender, year and month of onset, NSW, 1 January 2014 to 31 October 2018



Source: NSW Notifiable Conditions Information Management System (via SAPHaRI)
 Note: 'Total' includes transgender persons, and persons whose gender was not reported

People with gonorrhoea often have no symptoms, particularly women and those with gonorrhoea of the throat or rectum. Therefore, the number of people screened for gonorrhoea is likely to affect the number of people diagnosed with this infection. From 2013, NSW improved access to HIV testing with concurrent testing for other sexually transmissible infections for gay and bisexual men. All specimens submitted for chlamydia testing are also tested for gonorrhoea. Laboratory data shows an increasing trend in the number of gonorrhoea tests performed in NSW from January 2014 to June 2018. The number of notifications per 100 tests has also increased (Figure 2), suggesting that along with better detection of infections, there may have been an increase in gonorrhoea transmission (incidence) in NSW over this period.

Figure 2. Number of gonorrhoea tests and notification to test ratio, NSW, 1 January 2014 – 30 June 2018



Source: NCIMS and NSW Denominator project, NSW Health

Sexual health screening of gay and bisexual men who are considering taking antiretroviral drugs to prevent HIV (pre exposure prophylaxis, or PrEP) may be contributing to the increase in gonorrhoea tests and male gonorrhoea notifications. PrEP was rolled out rapidly and at scale across NSW via a large clinical trial that commenced on 1 March 2016. Following listing of HIV PrEP on the Pharmaceutical Benefits Scheme the trial ceased recruitment on 30 April 2018, by which time 9,477 NSW participants had been recruited.

Gonorrhoea is predominantly a sexually transmissible infection caused by the bacterium *Neisseria gonorrhoeae*. It is spread through contact with mucous membranes of infected people and infections can occur in the throat, anus, urethra, cervix and eyes. Infection with gonorrhoea in men can commonly result in discharge from the penis and pain when urinating. Women can experience an abnormal vaginal discharge. Gonorrhoea often does not cause any symptoms. If untreated, gonorrhoea can result in infections of the skin, joints, blood stream, heart valves and lining of the brain (meningitis). Untreated gonorrhoea in women can lead to infection in the womb and fallopian tubes (pelvic inflammatory disease or PID) and this can result in infertility. Infertility can also occur in men if the infection spreads down the urethra and into the epididymis.

Gonorrhoea can be prevented by the use of condoms for vaginal and anal sex and dental dams for oral sex.

Many strains of *Neisseria gonorrhoeae*, both overseas and within Australia, are resistant to a wide range of antibiotics. The detection earlier in 2018 of two cases in Australia of infection due to a strain of gonococcal bacteria that is highly resistant to the two antibiotics currently used to treat gonorrhoea, as well as to other antibiotics known to be effective in treating gonorrhoea, is of great

concern. Public health authorities across Australia are working with the *National Neisseria Network* and other experts to reduce the risk that extensively-drug resistant strains of gonococcal bacteria become established in Australia.

Follow the links for more information on [gonorrhoea](#) and [gonorrhoea notifications](#).

Legionellosis (Legionnaires' disease)

There were five notifications of legionellosis (Legionnaires' disease) this reporting week (Table 1). All but one of the infections were caused by *Legionella longbeachae* and were likely acquired during unprotected exposure to different brands of garden potting mix or other garden materials.

Legionellosis 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 legionellosis 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 corticosteroid medicines. People with legionellosis often have severe symptoms and infection is associated with a 10 to 15 per cent mortality rate.

Legionellosis is caused by infection with *Legionella* bacteria. There are around 50 different species of *Legionella* bacteria but most infections in NSW are caused by *L. pneumophila* or *L. longbeachae*.

Legionellosis is not spread from person to person, but can occur from inhaling contaminated water aerosols or dust. *L. longbeachae* is commonly found in the soil and it thrives in potting mix and garden compost. *L. longbeachae* infection is usually associated with unprotected exposure to these materials and is most likely acquired through inhalation of contaminated dust.

Gardening activities increase during spring and summer so this is an important time to promote awareness about the safe use of potting mix and compost. To reduce the risk of infection, people handling these products should wet the material beforehand to suppress dust and wear gloves and a protective facemask. Washing hands with soap and water after handling potting mix, mulch or soil is also important. The safety instructions included on the product packaging should be followed.

Follow the link for more information on the [regulatory control of Legionnaires' disease](#).

Follow the links for more information on [Legionnaires' disease](#) and on [notifications of Legionnaires' disease](#)

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 4 November to 10 November 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Enteric Diseases	Cryptosporidiosis	12	9	635	1190	927	1266	1184
	Giardiasis	59	51	2341	2812	3104	3134	3480
	Rotavirus	15	12	714	2093	553	2319	750
	STEC/VTEC	1	2	47	45	49	53	65
	Salmonellosis	78	58	2873	3251	3950	3680	4533
	Shigellosis	23	19	411	200	267	235	310
Respiratory Diseases	Influenza	158	158	15772	102913	34457	103853	35540
	Legionellosis	5	5	126	123	114	138	134
	Tuberculosis	17	6	452	472	447	542	533
Sexually Transmissible Infections	Chlamydia	464	531	26963	25223	22674	28972	25987
	Gonorrhoea	159	192	9296	7988	6031	9170	6992
	LGV	3	0	74	43	54	50	60
Vaccine Preventable Diseases	Adverse Event Following Immunisation	4	3	268	260	233	279	262
	Haemophilus influenzae type b	1	0	5	8	4	9	5
	Pertussis	232	221	4603	4802	9417	5365	10956
	Pneumococcal Disease (Invasive)	23	7	607	628	482	683	545
Vector Borne Diseases	Barmah Forest	1	0	65	116	34	127	40
	Chikungunya	3	1	8	40	26	47	39
	Dengue	4	5	233	265	427	306	485
	Ross River	6	10	523	1597	433	1653	595
Zoonotic Diseases	Q fever	3	3	196	183	191	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 are 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.