

Communicable Diseases Weekly Report

Week 4, 21 to 27 January 2018

In summary, we report:

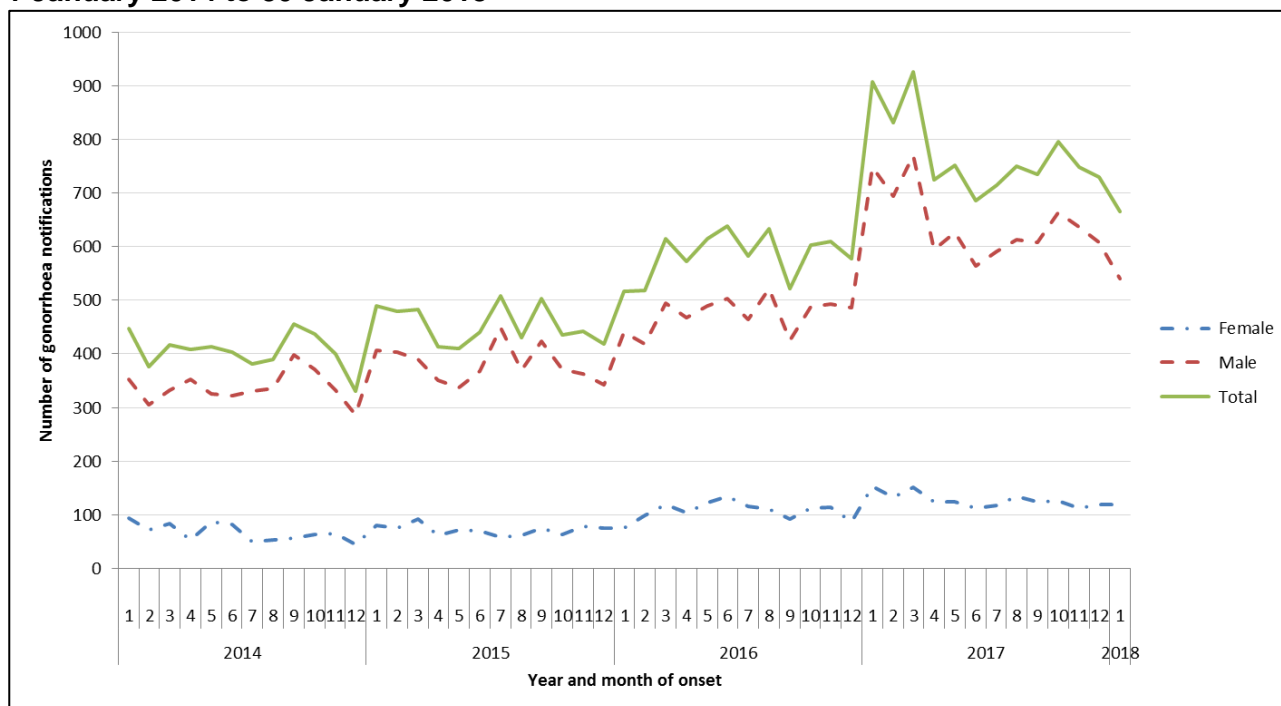
- [Gonorrhoea](#) – high number of notifications
- [Typhoid and paratyphoid fever](#) – 4 new cases
- [Summary of notifiable conditions activity in NSW](#)

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 monthly number of notifications of gonorrhoea in NSW remains high (Figure 1). In 2017, there were 9,278 notifications of gonorrhoea, a 33% increase compared to 2016. In 2018, 859 gonorrhoea notifications were received from 1 January to 30 January, similar to the number of gonorrhoea cases (846) notified to NSW Health during the same period in 2017.

Figure 1. Number of gonorrhoea notifications in NSW by gender and month of diagnosis, 1 January 2014 to 30 January 2018



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

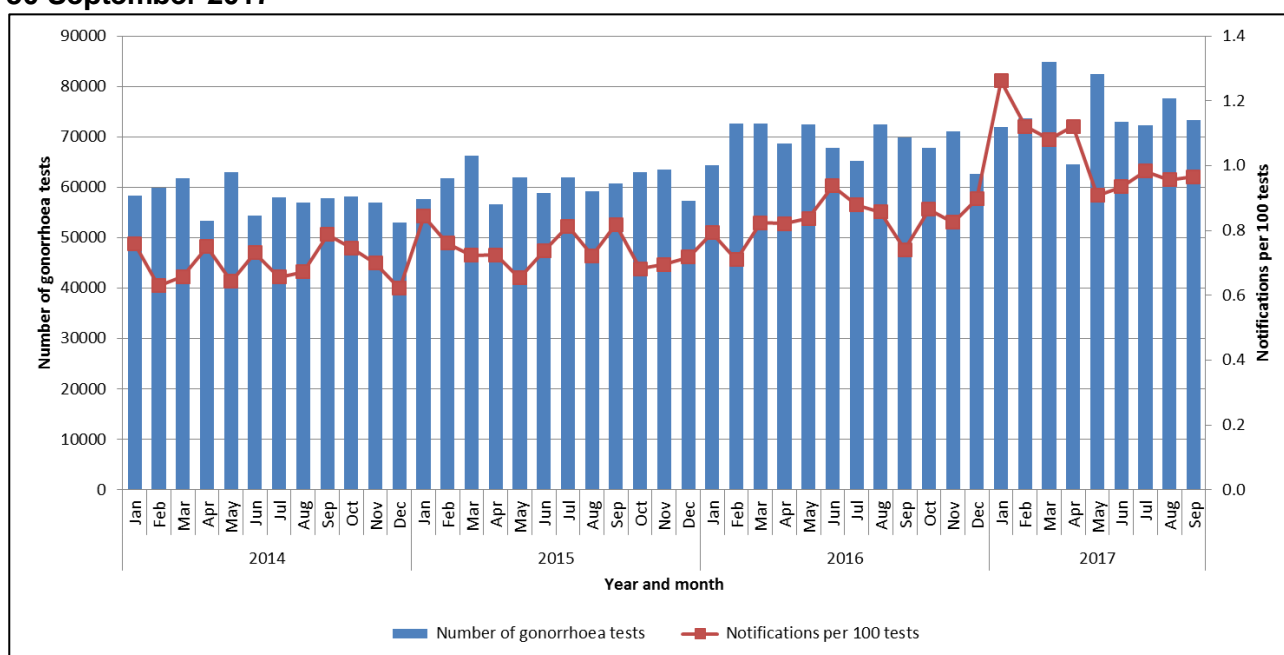
Transmission of gonorrhoea in NSW is mainly associated with male-to-male sex, with 83% of notifications in 2017 being in men. However, an increasing proportion of notifications have been in women since 2016, suggesting that heterosexual transmission may also be increasing.

In 2018 to 30 January, nearly half of the notifications were from inner-Sydney, with 28% of cases living in South Eastern Sydney Local Health District and 21% in Sydney Local Health District. A

smaller proportion of notifications were received from the Western and South Western Sydney Local Health Districts (10% and 8% respectively).

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. Laboratory data on the number of gonorrhoea tests done in NSW from January 2014 to September 2017 shows an increase in the number of tests performed in 2017 and an increase in the number of notifications per 100 tests (Figure 2). This suggests that there has been an increase in gonorrhoea transmission in NSW, or that testing has been more targeted to high risk people, or both, over this period. Sexual health screening of gay and bisexual men who are considering taking antiretroviral drugs to prevent HIV (pre exposure prophylaxis, or PrEP) as part of a large clinical trial that commenced on 1 March 2016 may be contributing to the increase in gonorrhoea tests and male gonorrhoea notifications. Over 8,000 participants have now been recruited to the trial.

Figure 2. Number of gonorrhoea tests and notification to test ratio, NSW, 1 January 2014 to 30 September 2017



Source: NSW Notifiable Conditions Information Management System and NSW Denominator project, NSW Health

Gonorrhoea is 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. If symptoms occur, these are usually discharge, pain and/or bleeding at the site of infection. Rarely, 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 testes.

Gonorrhoea can be prevented by the use of condoms for vaginal and anal sex and dental dams for oral sex. Sexual partners of cases should be contacted, tested and treated. Gonorrhoea in Australia remains treatable with antibiotics, however strains have emerged overseas that are highly resistant to antibiotics. In Australia, the National Neisseria Network monitors antibiotic resistance in gonococcal bacteria, and this information is used to inform treatment guidelines.

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

Typhoid and paratyphoid

One notification of typhoid and three of paratyphoid were received this reporting week (Table 1). All infections were thought to be acquired in India.

It is highly recommended that all travellers to developing countries aged 2 years and older are vaccinated against typhoid at least two weeks prior to travel. This is especially important for people visiting friends and relatives. However, there is no vaccine against paratyphoid.

Typhoid fever is a disease caused by the bacterium *Salmonella* Typhi. Paratyphoid fever is a disease caused by the bacterium *Salmonella* Paratyphi. These diseases cause a similar illness. Paratyphoid infections tend to be less severe and less common than typhoid. These diseases are rare in Australia and are often grouped together and called 'enteric fever'.

In Australia, most typhoid and paratyphoid infections are acquired overseas by individuals eating contaminated food or water in developing countries while visiting friends and relatives or travelling. These infections are different to infection with other species of *Salmonella*, which usually causes gastroenteritis.

People with enteric fever may experience mild or severe symptoms. The symptoms may include fever, headache, non-productive cough, general discomfort and a lack of appetite. Some people have rose-coloured spots on the trunk of the body. Constipation or diarrhoea may occur. If symptoms are severe, hospitalisation may be required. The time from contact with the typhoid bacteria to the start of symptoms (incubation period) is usually 8-14 days but can be as short as 3 days or as long as 60 days after infection. The incubation period for paratyphoid is shorter than for typhoid, usually 1-10 days.

Enteric fever is treated with antibiotics. Some people may never have symptoms but may be carriers of typhoid or paratyphoid. Antibiotic treatment is required to treat carriers also.

The bacteria that cause typhoid and paratyphoid fever are found in the faeces of infected individuals. Some people (known as carriers) continue to carry the bacteria even after symptoms have resolved. Transmission usually occurs when faecally-contaminated food and water are ingested. Therefore, typhoid fever is more common in less developed countries with poor sanitation, poor hand hygiene and food handling standards, and untreated drinking water. Raw fruits and vegetables and shellfish are the types of foods most often associated with the illness. Flies may also transfer the bacteria to food.

People travelling to countries where typhoid is common should:

- Receive the typhoid vaccine two weeks prior to travel (for those aged 2 years and older). Typhoid vaccination boosters are required every three years to protect against infection.
- Drink only bottled or boiled water (even when brushing teeth)
- Ask for drinks without ice and avoid ice-blocks that may have been made with contaminated water
- Wash hands thoroughly with soap and water before eating
- Eat food that has been thoroughly cooked, is hot and steaming when presented, and is eaten while still hot
- Avoid raw vegetables and fruit that you cannot peel yourself
- Avoid eating from street stalls.

People infected with typhoid, or who share a house with someone infected with typhoid, must not work if their work involves food handling or caring for children, patients or the elderly, and should not prepare food for others until their stool (faeces) samples have shown that they are not infectious. Children infected with typhoid should not attend child care until their stool samples have shown that they are no longer infectious. A number of stool tests will be required to ensure a person is no longer infectious.

For more information, see the following NSW Health fact sheets and resources:

- [Typhoid and paratyphoid fact sheet](#)
- [Fact sheet on staying healthy when travelling overseas.](#)

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 21 to 27 January 2018, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2018	2017	2016	2017	2016
Enteric Diseases	Cryptosporidiosis	15	17	67	142	80	1266	1184
	Giardiasis	60	49	195	279	294	2994	3480
	Hepatitis A	1	4	7	5	7	72	41
	Listeriosis	2	1	6	0	5	20	36
	Rotavirus	15	33	83	90	76	2318	750
	Salmonellosis	68	103	364	436	539	3686	4544
	Shigellosis	6	2	15	30	22	232	310
	Typhoid	1	0	3	5	8	55	37
Other Diseases	Acute Rheumatic Fever	1	0	1	0	1	18	14
Respiratory Diseases	Influenza	261	330	962	649	359	103862	35540
	Legionellosis	3	2	8	9	9	137	134
	Tuberculosis	13	10	35	35	33	506	535
Sexually Transmissible Infections	Chlamydia	441	742	2135	2299	1973	28982	25993
	Gonorrhoea	171	295	840	768	493	9252	7003
Vaccine Preventable Diseases	Adverse Event Following Immunisation	1	3	5	11	5	268	258
	Mumps	1	1	5	7	5	124	67
	Pertussis	55	78	288	604	1371	5366	10956
	Pneumococcal Disease (Invasive)	5	10	28	21	22	680	544
Vector Borne Diseases	Dengue	10	9	38	31	24	299	485
	Malaria	1	0	4	7	3	68	59
	Ross River	3	6	18	382	33	1649	594
Zoonotic Diseases	Q fever	4	2	12	18	19	201	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.
- 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.