Communicable Diseases Weekly Report

Week 15, 9 to 15 April 2017

In summary, we report:

- Measles – 1 new case
- Gonorrhoea – increasing notification trend
- Chlamydia – increasing notification trend
- STI Strategy Data Report – January to June 2016 data report released
- Summary of notifiable conditions activity in NSW

For further information on infectious diseases on-line see NSW Health Infectious Diseases.

Also see NSW Health Infectious Diseases Reports for links to other surveillance reports.

Measles

One case of measles was notified this reporting week (9 to 15 April 2017). The case was an unvaccinated contact of an earlier case at Wyndham College, Quakers Hill. Staff and students of Wyndham College who don't have evidence of receiving two doses of measles vaccine will be offered free vaccination at a clinic in the school on April 27.

Local public health units are following up identified close contacts. A media alert has been issued, listing places the case visited whilst infectious. NSW health is also maintaining a list of exposure sites of recent measles cases which can be accessed on our website.

It is important for everyone to make sure they are vaccinated against measles with at least two doses of a measles containing vaccine (MMR) particularly if they are traveling outside Australia.

The measles virus is transmitted from person to person via respiratory secretions in the air following coughing and sneezing. Symptoms of measles include fever, runny nose, sore red eyes and cough, followed three to four days later by a red blotchy rash spreading from the head and neck to the rest of the body.

Infection with the measles virus can be serious with common complications including middle ear infection and viral or bacterial bronchopneumonia. Acute encephalitis occurs rarely and subacute sclerosing panencephalitis is a very rare fatal complication, occurring many years after infection in about one per 100,000 cases.

Anyone born in or after 1966 should have had two doses of measles containing vaccine, which is free for people up to 51 years of age in NSW. Measles containing vaccine is now routinely offered to all children at 12 months (as measles-mumps-rubella) and 18 months (as measles-mumps-rubella-varicella) of age through the National Immunisation Program.

People born in or after 1966 who are unsure of their vaccination status, or have not had two vaccine doses in the past (and have not had a confirmed measles infection), should consult their GP for more advice. This is particularly important prior to overseas travel as the risk of being exposed to a case of measles is greater when travelling. Parents taking young infants overseas to countries where measles is common should discuss vaccination with their GP before they leave. In some circumstances measles vaccine can be given as early as nine months of age; however two further doses at 12 and 18 months are still required for full protection.

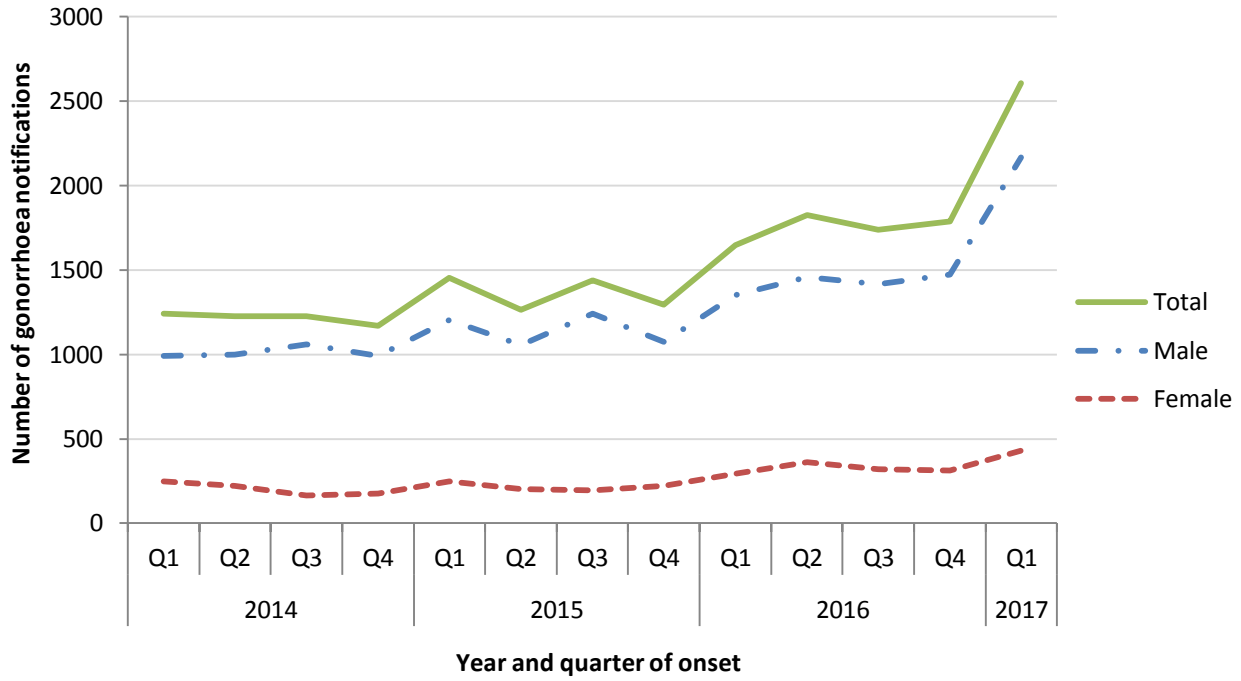
For more information please follow these links:

- measles fact sheet
- measles notifications
- measles vaccination information.

Gonorrhoea

The number of gonorrhoea notifications has continued to increase in 2017, with 2,608 cases (2,166 men, 431 women) in the first quarter, 58% higher than in the same period in 2015 (1,649) (Figure 1).

Figure 1. Number of gonorrhoea notifications by gender, year and quarter of onset, NSW, January 2014 to March 2017.



Data source: NCIMS, NSW Health; extracted 20 Apr 2017.

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. 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 denominator (testing) data in NSW shows that there has been an increase in the number of tests performed in 2016 compared to previous years.

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 vaginal discharge or abnormal bleeding particularly after sex. 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 testes.

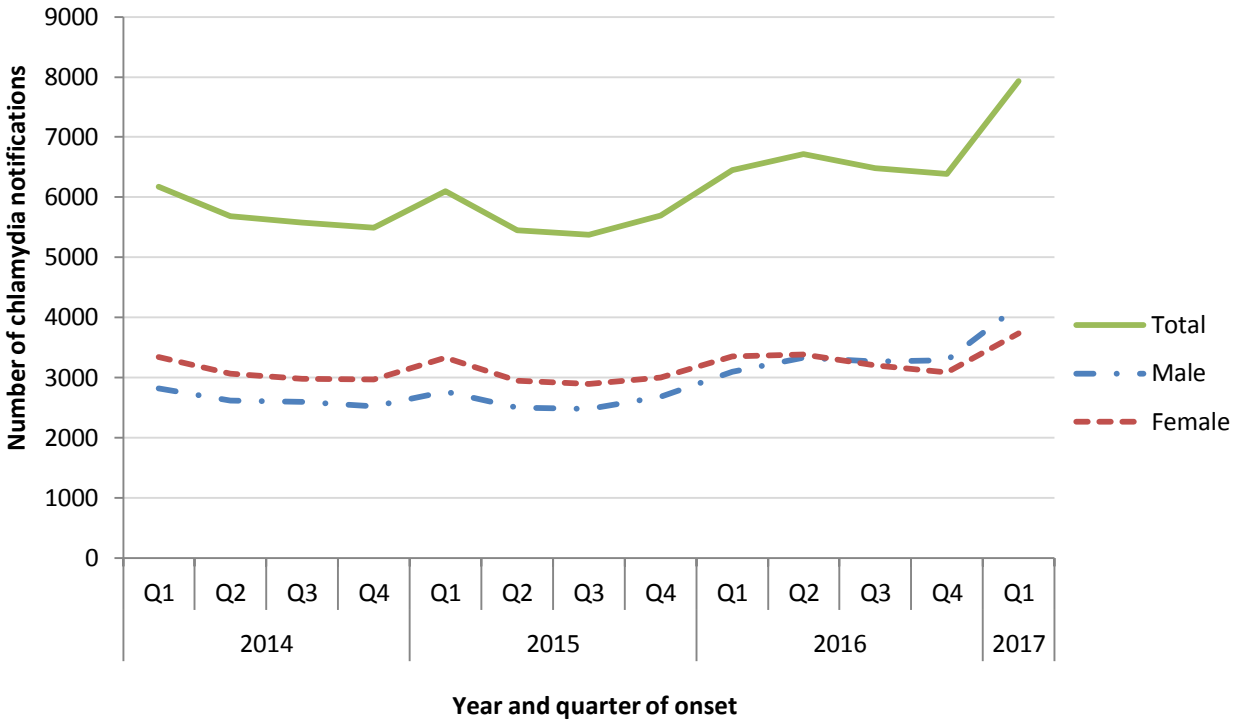
Gonorrhoea can be prevented by the use of condoms for vaginal and anal sex and dental dams for oral sex. Gonorrhoea in Australia remains treatable with antibiotics. Sexual partners of cases should be contacted, tested and treated.

Follow the links for more information on gonorrhoea and gonorrhoea notifications.

Chlamydia

The number of chlamydia notifications has also continued to increase in 2017, with 7,931 cases (4,191 men and 3,732 women) in the first quarter, 23% higher than in the same period in 2015 (6,455). The number of chlamydia notifications in men has exceeded the number of chlamydia notifications in women since mid-2016. (Figure 2)

Figure 2. Number of chlamydia notifications by gender, year and quarter of onset, NSW, January 2014 to March 2017.



Data source: NCIMS, NSW Health; extracted 20 Apr 2017.

Note: 'Total' includes transgender persons, and persons whose gender was not reported

Chlamydia can affect the urethra (the urine passage), cervix (the neck of the womb), rectum, anus, throat, and eyes. If chlamydia is not properly treated it can cause serious complications, including infertility.

Symptoms can occur within 2-14 days after infection. However, a person may have chlamydia for months, or even years, without knowing it. In women, symptoms can include lower abdominal cramps or pain, bleeding between regular periods, pain when passing urine, bleeding or pain during or after sex, and a change in vaginal discharge. In men symptoms include a discharge from the penis, pain when passing urine and swollen and sore testicles. Chlamydia is easily treated by a single dose of antibiotics.

It is important to see a doctor or sexual health clinic to get tested and treated. Using a condom correctly for vaginal, anal and oral sex can significantly reduce the risk of getting chlamydia and other sexually transmitted infections. Always use condoms with new or casual partners.

Follow the link for more information on chlamydia notification data

The Play Safe website has more information about common STIs and safe sex.

NSW STI Strategy 2016-2020 - first data report

Sexually transmissible infections (STIs) remain a significant public health burden in NSW. The **NSW STI Strategy 2016-2020** provides a framework to effectively respond to changes in STI epidemiology across NSW. The Strategy outlines four goals:

1. To reduce gonorrhoea and syphilis infections and reduce the burden of disease of chlamydia infection.
2. Sustain the low rates of STIs amongst sex workers.
3. Sustain the virtual elimination of congenital syphilis.
4. Maintain high coverage of HPV vaccination.

The **NSW STI Data Report January to June 2016** is now available. These Data Reports form the primary mechanism for reporting progress against the Strategy's targets. They will be developed on a biannual basis, and undergo a review process from experts from research, policy, clinical, community and peer organisations.

In summary, from January to June 2016:

Gonorrhoea

- A total of 3,429 gonorrhoea notifications were received by NSW Health, a rate of 90 per 100,000 population per annum. This represents a 27% increase in notifications compared to the same period in 2015, which had a gonorrhoea notification rate of 71 per 100,000 population. With respect to age, the highest annualised gonorrhoea notification rate was among people 25-29 years of age (275 notifications per 100,000)
- The gender specific gonorrhoea notification rate for males in the first six months of 2016 was 146.9 per 100,000 males per annum, a 22% increase compared to 2015. The female gender specific rate in the first half of 2016 was 33.7 per 100,000 females per annum, a 49% increase compared to 2015.

Chlamydia and chlamydia-associated pelvic inflammatory disease (PID)

- There were 13,128 chlamydia notifications received, an annualised rate of 341 per 100,000 population 15% higher than 2015 (297 per 100,000). The highest rates of chlamydia notifications continue to occur in people 20-24 years of age.
- In the first half of 2016, the annualised rates of chlamydia notification in both males and females were similar (334 per 100,000 males and 346 per 100,000 females respectively) whereas in previous years the female chlamydia notification rate was consistently higher than males. This change in the chlamydia notification trend was due to a 21% increase in the rate in males in the first six months of 2016.

Infectious syphilis

- The notification rate for infectious syphilis was 10.6 per 100,000 population per annum, 7% higher than the rate in 2015 (9.9 per 100,000 population). Between January and June 2016, 97% of infectious syphilis notifications were in males.
- Males notified with infectious syphilis were most commonly 30-39 years of age. Most men reported acquiring syphilis via male-to-male sex.

HPV vaccination

- HPV vaccination coverage data from the NSW School Vaccination Program are reported annually.
- In 2015 the vaccination rate for the full three-dose course of the drug was 82% for female and 80% for male Year 7 students. For all three doses the proportion of the eligible population receiving the vaccination is higher for females than for males.
- Across all LHDs in NSW, the same trend towards increasing vaccination coverage was observed.

More detailed data can be found in the **NSW Sexually Transmissible Infections Strategy 2016-2020 January to June 2016 Data Report.**

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 9 to 15 April 2017, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2017	2016	2015	2016	2015
Enteric Diseases	Cryptosporidiosis	26	29	805	459	432	1184	1040
	Giardiasis	55	87	1217	1343	1258	3481	3413
	Hepatitis E	2	0	8	10	4	16	20
	Rotavirus	9	23	201	175	115	746	1033
	STEC/VTEC	1	0	19	14	10	64	29
	Salmonellosis	93	125	1690	1878	1785	4542	4022
	Shigellosis	1	2	67	88	59	310	172
	Typhoid	4	4	54	42	36	74	82
Respiratory Diseases	Influenza	116	200	2632	2137	1274	35538	30301
	Legionellosis	2	2	35	41	28	134	96
	Tuberculosis	9	8	131	150	115	533	444
Sexually Transmissible Infections	Chlamydia	401	562	8964	7665	7032	25997	22545
	Gonorrhoea	123	181	2957	1935	1660	7004	5397
Vaccine Preventable Diseases	Adverse Event Following Immunisation	8	9	97	68	59	257	186
	Measles	1	6	23	10	5	16	9
	Meningococcal Disease	1	1	18	12	11	76	47
	Mumps	3	4	41	10	16	67	65
	Pertussis	73	116	1882	4003	1909	10957	12079
	Pneumococcal Disease (Invasive)	6	5	96	84	76	542	494
	Rubella	1	0	1	2	3	10	6
Vector Borne Diseases	Dengue	2	3	104	166	132	481	344
	Malaria	1	3	23	11	16	59	47
	Ross River	23	30	966	209	999	541	1635

*** 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.