

Communicable Diseases Weekly Report

Week 37, 12 September to 18 September 2016

In summary, we report:

- [Zika virus](#) – one new confirmed case
- [Gonorrhoea](#) – increasing notifications
- [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.

Zika virus

There was one new case of Zika virus infection confirmed this reporting week (Table 1). The adult male case had recently travelled to the Caribbean and likely acquired the infection there in August or September 2016. This brings the total confirmed cases in NSW in 2016 to 12. There have also been nine probable cases of ZIKV infection. Infections have followed travel to various countries in South America, the Caribbean and the Pacific.

Zika virus (ZIKV) is a mosquito-borne virus transmitted primarily by the exotic *Aedes aegypti* mosquito. Sexual transmission and congenital infection can also occur.

Many countries in the Americas, the Pacific and Asia have reported recent outbreaks. See the [list of countries with active Zika transmission](#) for more information.

There is scientific consensus that pregnant women with ZIKV can transmit the infection to their unborn babies with potentially serious consequences, including microcephaly. ZIKV infection is also associated with other serious neurological complications, such as Guillain-Barré Syndrome.

Women who are pregnant or who are considering pregnancy should defer travel to areas with active outbreaks of ZIKV. If they choose to travel to ZIKV-affected areas they should strictly follow guidance to avoid being bitten by mosquitoes.

Pregnant women should also avoid unprotected sex with a male partner who has recently travelled to a ZIKV-affected area for the duration of the pregnancy. Australian guidance to reduce the risk of a pregnant woman becoming infected with ZIKV and to prevent transmission of ZIKV to sexual partners has been [updated](#).

The *Aedes aegypti* mosquitoes that are primarily responsible for transmission of ZIKV are not established in NSW but are found in parts of north Queensland. There is a risk that local outbreaks could occur in these areas if an infected person visited and was bitten by mosquitoes (as occasionally occurs with dengue), but this is not a risk in NSW.

All travellers to affected areas should avoid being bitten by mosquitoes. *Aedes aegypti* mosquitoes prefer to live and bite people indoors, and peak biting activity is during daylight hours. They hide under furniture and tend to bite the feet and ankles. People may not notice they are being bitten.

Travellers to affected areas should stay in accommodation with screened windows and doors, wear loose fitting clothing that covers the arms and legs, and apply insect repellent containing DEET or picaridin to exposed skin, especially during daylight hours and in the early evening. For additional advice on steps to avoid being bitten by mosquitoes see the [Mosquitoes are a Health Hazard Factsheet](#).

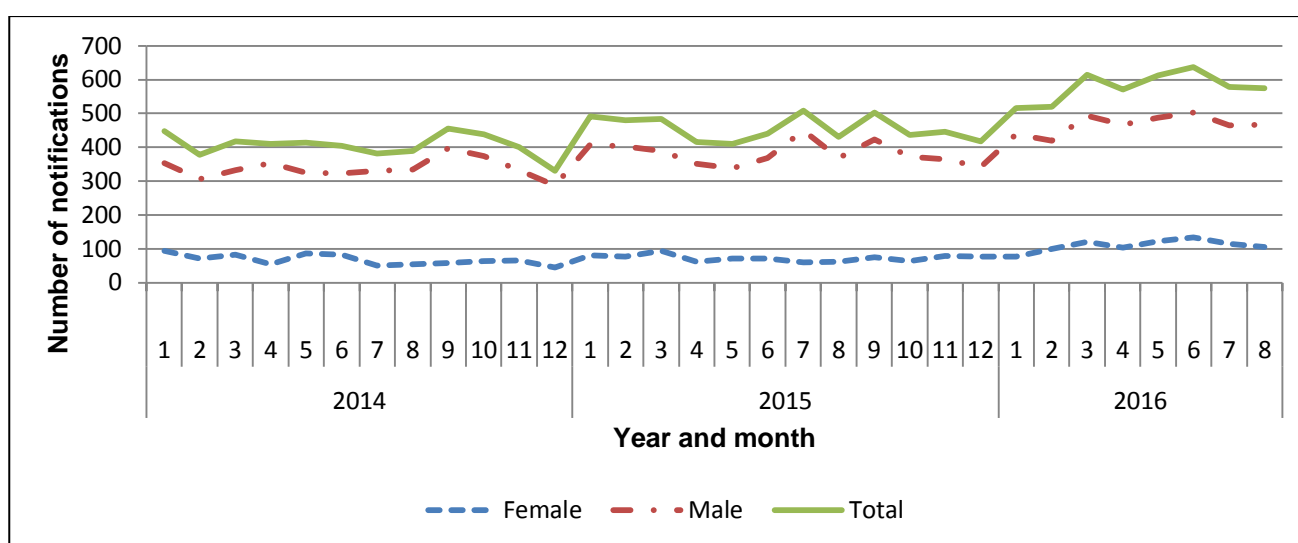
For more information see the [Zika virus alert](#) and [Zika virus factsheet](#). Also see the Commonwealth Department of Health [Zika virus website](#) for information for medical practitioners and the current list of countries with active transmission of the virus.

Gonorrhoea

The number of gonorrhoea notifications in NSW continues to increase (Figure 1). In 2016, 4,939 gonorrhoea notifications have been received to 21 September, an 18% increase compared to the same period in 2015. The transmission of gonorrhoea in NSW is thought to be mainly associated with male-to-male sex, with 81% of the 4,939 notifications being in men. However, in 2016 there has been a relatively larger increase in the number of females notified with gonorrhoea compared to the increase in males; the male to female notification ratio has decreased (Figure 2). This may suggest that heterosexual transmission may be increasing.

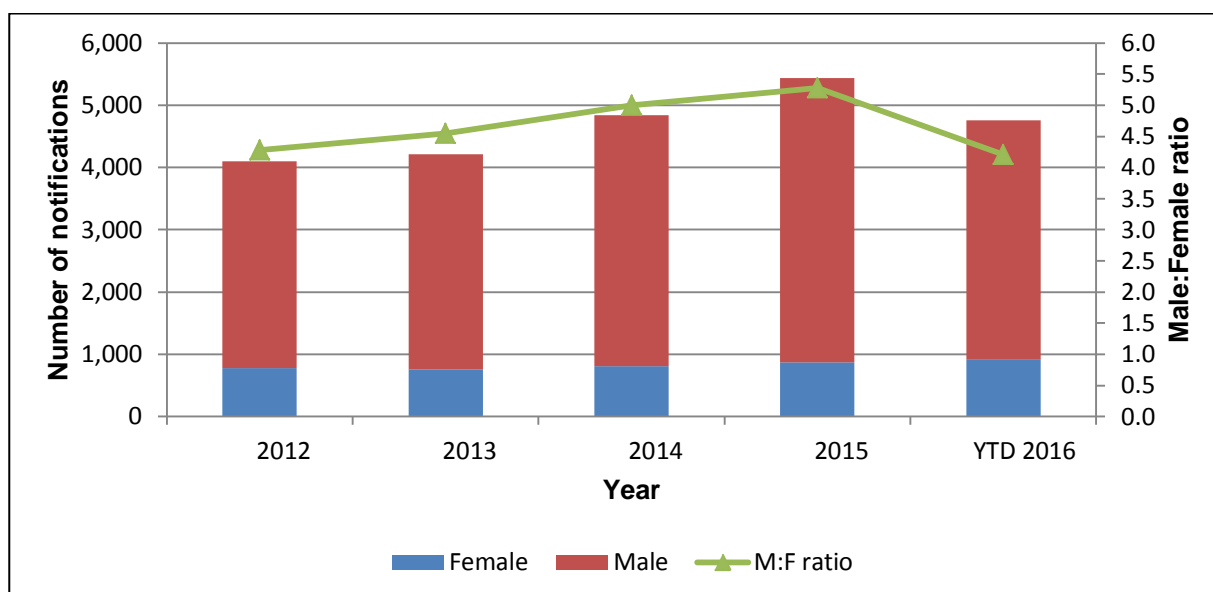
More than half of the notifications were from inner-Sydney, with 28% of cases living in South Eastern Sydney Local Health District and 24% in Sydney Local Health District. A smaller proportion of notifications were received from the Hunter New England and Western Sydney Local Health Districts (12% and 11% respectively).

Figure 1: Number of gonorrhoea notifications by gender, year and month of notification, NSW, January 2014 - August 2016



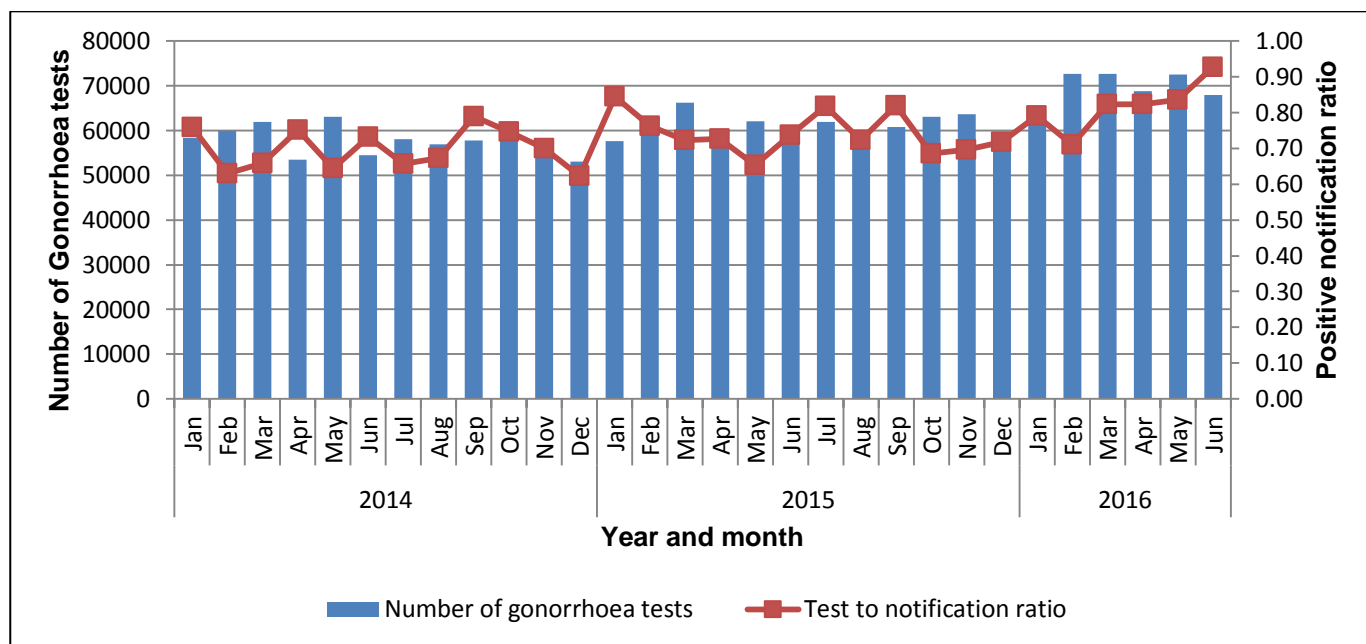
Source: NSW Notifiable Conditions Information Management System (via SAPHaRI)
 Note: 'Total' includes transgender persons, and persons whose gender was not reported

Figure 2: Number of gonorrhoea notifications by gender and year of notification and male to female ratio, NSW, 1 January 2012 - 21 September 2016



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 from January 2014 to June 2016 shows that there has been an increase in the number of tests performed in 2016, along with a small increase in the positive notification ratio (Figure 3). This suggests that along with better detection of infections, there may be an increase in gonorrhoea transmission (incidence) in NSW over this period.

Figure 3. Number of gonorrhoea tests and test to notification ratio, by year and month, NSW, January 2014 – June 2016



Source: NSW Denominator data project, NSW Health.

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.

Many strains of *Neisseria gonorrhoeae*, both overseas and within Australia, are resistant to a wide range of antibiotics. Of concern is the emergence overseas of some strains of gonococcal bacteria that are highly resistant to the major classes of 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](#).

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 12 to 18 September 2016, by date received *

		Weekly		Year to date			Full Year	
		This week	Last week	2016	2015	2014	2015	2014
Enteric Diseases	Cryptosporidiosis	5	12	830	678	299	1038	429
	Giardiasis	44	50	2720	2520	2120	3415	2942
	Hepatitis E	1	0	14	12	34	20	38
	Listeriosis	1	1	29	16	19	26	23
	Rotavirus	7	10	341	415	380	1036	714
	STEC/VTEC	2	0	31	13	27	29	31
	Salmonellosis	51	34	3495	3003	3175	4042	4273
	Shigellosis	6	7	219	128	154	172	212
Respiratory Diseases	Influenza	2517	3458	28447	23022	17769	30304	20888
	Legionellosis	2	2	96	76	50	96	72
	Tuberculosis	6	16	336	301	330	445	475
Sexually Transmissible Infections	Chlamydia	417	370	18283	15885	16517	22548	22899
	Gonorrhoea	100	79	4899	3809	3451	5401	4876
Vaccine Preventable Diseases	Adverse Event Following Immunisation	8	4	184	130	203	186	258
	Meningococcal Disease	3	0	54	32	21	46	37
	Mumps	1	0	35	39	65	63	82
	Pertussis	268	245	7622	6089	1544	12083	3051
	Pneumococcal Disease (Invasive)	16	18	379	354	362	495	511
Vector Borne Diseases	Dengue	3	3	343	247	313	343	378
	Malaria	1	2	38	31	71	47	87
	Ross River	3	1	358	1415	445	1638	673
	Zika virus	1	1	21	1	4	1	4
Zoonotic Diseases	Q fever	2	2	145	171	131	265	190

*** 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.