

Communicable Diseases Weekly Report

Epi-Week 13 24 March 2014 – 30 March 2014

In summary, we report:

- Lymphogranuloma venereum two new cases
- Pertussis lowest number of notifications year to date since 2007
- Summary of notifiable conditions activity in NSW

For further information on infectious diseases and alerts see the <u>Infectious Diseases</u> webpage.

Follow the A to Z of Infectious Diseases link for more information on specific diseases.

For links to other surveillance reports, including influenza reports, see the <u>NSW Health Infectious</u> <u>Diseases Reports</u> webpage.

Lymphogranuloma venereum (LGV)

Two cases of lymphogranuloma venereum (LGV) were notified this reporting week (Table 1). There have been four cases to date in 2014; all are adult males. Three are from the South Eastern Sydney Local Health District (LHD) area, and one is from the Northern Sydney LHD area.

LGV is a sexually transmissible infection (STI) caused by certain types of the bacterium *Chlamydia trachomatis*. Other types of *Chlamydia trachomatis* bacteria cause the STI chlamydia or the eye disease trachoma.

LGV and chlamydia are quite different infections. LGV begins as a small painless ulcer at the site of infection. This is usually in the genital area, rectum or mouth. This heals by itself after a few days and most people are not aware of it. Over the next two to six weeks, the infection spreads to the local lymph glands usually in the groin or inside the pelvis. Symptoms at this stage may also include fever, tiredness, muscle and joint pain, loss of appetite and headaches. The lymph nodes become swollen and filled with pus. They may open up and discharge the pus to the surface of the skin or to the inside of the rectum or vagina in women. The infected lymph nodes and adjacent infected tissues are called buboes. If untreated, the course of the disease is prolonged with scarring that results in severe disability.

LGV is spread through unprotected vaginal, anal or oral sex, especially if there is trauma to the skin or mucous membranes. It is treated with antibiotics that should be taken for at least two to three weeks in order to clear the infection. Having ulcers due to LGV increases the risk of becoming infected with HIV.

LGV can be prevented by using condoms for anal and vaginal sex, and dental dams and condoms for oral sex. Sex partners should not share sex toys, or toys should be washed and protected with a fresh condom between partners. People who have LGV should not have sex until they have completed a course of antibiotics to prevent spreading the infection to their partner. Sexual partners of people diagnosed with LGV should be tested.

LGV is found throughout the world, but is most common in tropical and subtropical areas. It occurs in parts of Africa, southeast Asia, Latin America and the Caribbean. Recent outbreaks have occurred in western Europe, the United States, Canada and Australia in men who have sex with men. Many of these men also have HIV, other STIs and hepatitis C. Symptoms are less noticeable early in the disease in women, and in endemic countries late complications are reported more frequently in women than men.

In New South Wales in 2010, there was a large increase of LGV notifications in men who have sex with men. Most lived in inner Sydney. There were a total of 57 cases in 2010 compared with four in 2009. All of the 147 notifications of LGV in NSW from 2010 to 2013 have been in men.

Follow the link for further information on lymphogranuloma venereum.

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Pertussis

Pertussis notifications from 1 January to 30 March 2014 are fewest in number for the same period since 2007 (Figure 1), despite likely increased use of sensitive PCR testing during this time. Pertussis notifications in NSW have been consistently at or below 200 per month since January 2013, the lowest rate during the last five years. Year to date in 2014 there have been 498 notifications, compared with 729 and 2,299 for the same period in 2013 and 2012 respectively.

2000 1500 of notifications 1000 è. 500 0 Jul-04 Jan-05 Jul-05 Jan-06 Jul-06 Jan-07 Jul-07 Jan-08 Jan-09 Jul-09 Jan-10 Jul-10 Jan-11 Jul-11 Jul-08 Jul-12 Jul-13 Jan-14 Jan-04 Jan-12 Jan-13 Month of disease onset

Figure 1. Number of notifications of pertussis, NSW, 01 January 2004 to 30 March 2014

Pertussis is a highly contagious respiratory infection caused by the bacterium *Bordetella pertussis*. It can be life threatening for babies and young children, particularly those not fully protected by vaccination. During coughing attacks, a baby's breathing can be obstructed and they may become blue or stop breathing. Pertussis can lead to pneumonia, feeding problems with weight loss, seizures, brain damage, and in some cases, death. Elderly people can also experience serious complications if infected with pertussis.

Pertussis begins with symptoms of a cold with a blocked or runny nose, mild fever and a cough. The cough becomes characteristic in that it occurs in bouts of severe coughing, often followed by vomiting or a crowing noise (the whoop) which occurs as air is drawn back into the chest. Bouts of coughing often persist for many weeks. People who have been immunised may have a persistent cough without the characteristic whoop.

Vaccination provides the best protection against pertussis. It is very effective in preventing severe pertussis, but less effective against milder coughing illness. Immunity, both from natural infection and from vaccination, is not long lasting so booster doses are required for good protection.

Babies should be protected from pertussis by ensuring they are vaccinated on time, ensuring children and adults in contact with the baby are vaccinated, and keeping the baby away from anyone with a cough. Infants should receive three doses of pertussis vaccine with the first dose given as early as 6 weeks of age, the second dose given at 4 months of age and the third dose given at 6 months of age. A booster dose is due at 3½ years of age and a second booster in year 7 of high school.

Whooping cough vaccination is strongly recommended for adults in contact with young babies too young to be vaccinated. Woman planning a pregnancy, or those in the third trimester of pregnancy are encouraged to be vaccinated to protect their young babies. An alternative is vaccination of the mother as soon as possible after birth of the baby.

Follow the links for further information on pertussis vaccination in NSW and pertussis notifications.

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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 24 March to 30 March 2014, by date received.*

		This	Last week	Year to date			Full Year	
		week		2014	2013	2012	2013	2012
Enteric Diseases	Cryptosporidiosis	9	10	154	594	203	1132	65
	Giardiasis	95	69	860	735	691	2240	201
	Rotavirus	8	9	95	130	207	508	175
	Salmonellosis	99	103	1514	1271	1099	3486	294
	Shigellosis	4	11	95	40	52	136	13
Respiratory Diseases	Influenza	54	46	743	446	242	8401	803
	Legionellosis	2	4	19	25	43	104	10
	Tuberculosis	7	6	90	109	124	436	46
Sexually Transmissible Infections	Chlamydia	491	448	6171	5889	6246	21077	2126
	Gonorrhoea	108	81	1265	1241	1085	4270	411
	LGV	2	0	4	11	4	28	2
Vaccine Preventable Diseases	Adverse Event Following Immunisation	11	12	82	256	84	508	26
	Pertussis	29	26	498	729	2299	2378	599
	Pneumococcal Disease (Invasive)	10	8	69	85	66	490	56
Vector Borne Diseases	Barmah Forest	6	4	59	145	111	441	35
	Dengue	9	14	121	67	97	294	28
	Malaria	2	3	28	29	13	93	6
	Ross River	6	10	117	142	206	513	59
Zoonotic	Q fever	1	1	49	36	40	155	12

* 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 <u>Database of Adverse Event Notifications</u>.
- 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.

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