

# Communicable Diseases Weekly Report

## Week 1, 1 January – 7 January 2017

In summary, we report:

- [Lymphogranuloma venereum \(LGV\)](#) – marked increase in notifications in 2016.
- [Shiga Toxigenic Escherichia coli \(STEC\) infection](#) – four sporadic cases reported, including one with haemolytic-uraemic syndrome (HUS). Impact of new testing method.
- [Summary of notifiable conditions activity in NSW](#)

For further information on infectious diseases on-line see [NSW Health Infectious Diseases](#).

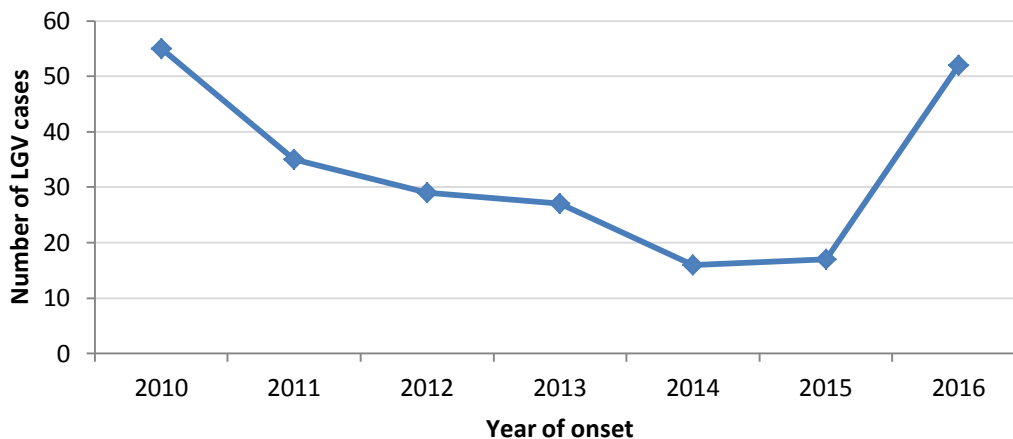
Also see [NSW Health Infectious Diseases Reports](#) for links to other surveillance reports.

### Lymphogranuloma venereum (LGV)

A marked and sustained increase in lymphogranuloma venereum (LGV) cases was observed in 2016. A total of 52 LGV cases were notified to NSW Health from 1 January to 31 December 2016 (Figure 1). This was more than three times the number of cases reported in the previous year (2015) and is the highest annual number of cases notified to NSW Health since 2010 (Figure 1).

NSW Health has issued a [clinician alert](#) to notify doctors of the current situation and encourage testing.

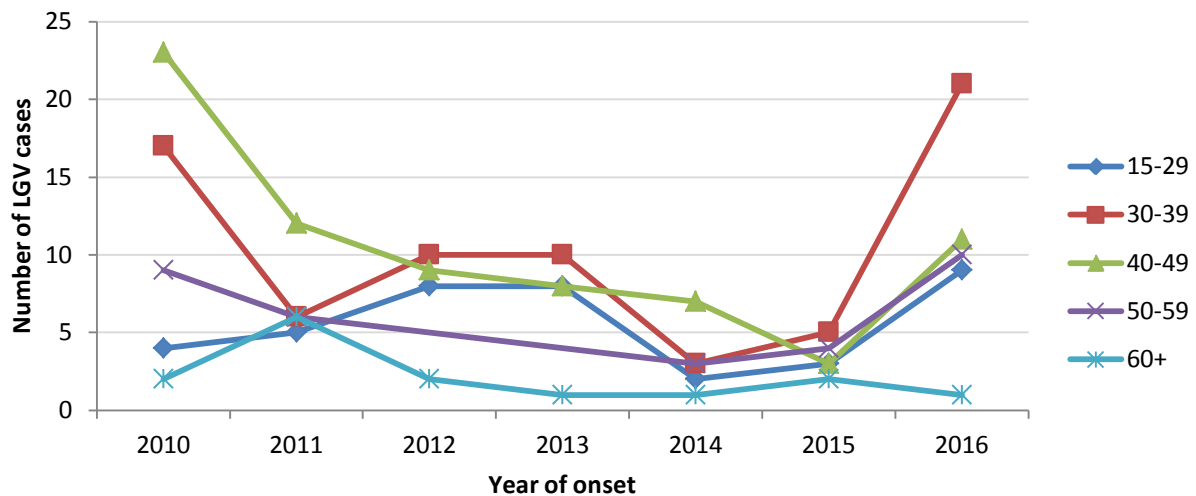
**Figure 1. Number of lymphogranuloma venereum (LGV) cases by year, NSW, 2010-2016.**



**\* Notes**

- Data source: NCIMS, NSW Health; data extracted 10 Jan 2017.
- Data for 2016 is preliminary, numbers may increase due to reporting delays.

LGV is a sexually transmissible infection (STI) and in Australia the infection is mainly seen in gay and bisexual men. All cases notified to NSW Health in 2016 were male and the majority (81%) were residents of metropolitan Sydney. In 2016, there was also a sharp increase in the proportion of cases in the 30-39 years age group, with smaller increases noted in the 15-29 years, 40-49 years and 50-59 years age groups (Figure 2).

**Figure 2. Number of lymphogranuloma venereum (LGV) cases by age group and year, NSW, 2010-2016.****\* Notes**

- Data source: NCIMS, NSW Health; data extracted 10 Jan 2017.
- Data for 2016 is preliminary, numbers may increase due to reporting delays.

LGV is caused by certain rare types of the bacterium *Chlamydia trachomatis*. Other types of *Chlamydia trachomatis* bacteria cause the more common chlamydia infection and trachoma, an eye disease. LGV causes a distinctly different illness to chlamydia.

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.

Infected lymph nodes become swollen and filled with pus. These 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 may result in deformity in the affected area.

Rectal exposure in women or gay and bisexual men can result in proctocolitis with mucoid or bloody discharge, anal pain, constipation, fever and a constant urge to pass stools. Proctocolitis may be difficult to distinguish from other conditions such as inflammatory bowel disease, colorectal cancer and lymphoma. If left untreated it can lead to chronic colorectal fistulas and strictures.

LGV is spread through unprotected anal, vaginal or oral sex, especially if there is trauma to the skin or mucous membranes. Having ulcers due to LGV increases the risk of becoming infected with HIV.

Using condoms for anal and vaginal sex, and dental dams and condoms for oral sex, reduces the risk of spreading LGV. To avoid infection, sex partners should not share sex toys, or toys should be washed and protected with a fresh condom between partners.

Antibiotics are effective in treating LGV infection. 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.

For further information see the [LGV factsheet](#) and [LGV data page](#).

## **Shiga Toxigenic *Escherichia coli* (STEC) infection**

Four cases of Shiga Toxigenic *Escherichia coli* (STEC) infection were notified in this reporting week (Table 1). Public health investigations have not identified any common links between the cases. Three cases were in people who had a history of contact with animals or animal faeces – two in regional areas of NSW and one during a visit to a farm in Victoria. The fourth case had no apparent high risk exposures but went on to develop haemolytic uraemic syndrome (HUS), a known complication of STEC infections. Of three cases with serogroup information available, all were caused by different strains of STEC: O26, O157 and O111.

An overall increase in STEC notification has been observed in NSW in recent months. This is thought to be primarily due to the widespread introduction of a new laboratory test (a multiplex PCR), which is used to screen all submitted stool specimens for a wide range of enteric diseases. Doctors routinely submit stool specimens for many reasons, and occasionally STEC is found in patients with mild gastroenteritis symptoms or an unrelated condition.

NSW public health units continue to investigate all notified STEC infections but there have been no new links between cases or common sources identified since the new test was introduced

*Escherichia coli* (*E. coli*) are bacteria commonly found in the gastrointestinal tract of people and animals. Many types of *E. coli* are harmless but some can produce toxins, called Shiga toxins (hence the acronym STEC) or verocytotoxins, which can result in severe disease in humans. STEC strains are carried by animals, particularly cattle.

People are infected when they come into contact with the faeces of an infected animal or person, either directly or indirectly through consuming contaminated food (e.g. undercooked hamburgers, unwashed salad vegetables, unpasteurised milk or milk products), drinking or swimming in contaminated water, person-to-person contact, or contact with animals on farms or petting zoos.

STEC infection causes a diarrhoeal illness, often with abdominal cramps, nausea and vomiting. The Shiga toxin may cause bleeding in the bowel so people with STEC gastroenteritis often have bloody diarrhoea.

STEC infections are also one cause of haemolytic uraemic syndrome (HUS), a severe and sometimes life-threatening illness characterised by haemolytic anaemia (a type of anaemia where the red blood cells break up), acute kidney failure (uraemia), and a low platelet count (thrombocytopenia). Children with STEC infections are more likely to develop HUS than adults.

STEC infections may be prevented by safe food handling and food storage, and good hand hygiene. This includes:

- washing your hands thoroughly with running water and soap before eating and preparing food, after touching pets and farm animals, and after using the toilet or changing nappies.
- only using clean knives and cutting boards when preparing ready-to-eat foods.
- thoroughly cooking all foods made from minced meat (e.g. hamburger patties and sausages).
- washing all fruit and vegetables before eating, and
- not eating or drinking unpasteurised dairy products.

For further information see the [STEC and HUS factsheet](#) and [STEC notification data page](#).

## 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 1 – 7 January 2017, by date received\***

		Weekly		Year to date			Full Year	
		This week	Last week	2017	2016	2015	2016	2015
Enteric Diseases	Cryptosporidiosis	28	16	28	13	7	1184	1040
	Giardiasis	37	25	37	61	55	3481	3412
	Hepatitis A	1	3	1	0	1	40	71
	Hepatitis E	1	0	1	2	1	16	20
	Rotavirus	21	4	21	20	13	744	1033
	STEC/VTEC	4	1	4	3	0	64	29
	Salmonellosis	68	38	68	111	110	4543	4022
	Shigellosis	6	2	6	6	2	303	172
	Typhoid	2	0	2	2	2	74	82
Respiratory Diseases	Influenza	99	69	99	79	65	35533	30301
	Legionellosis	1	4	1	3	3	131	96
	Tuberculosis	5	5	5	8	7	527	444
Sexually Transmissible Infections	Chlamydia	358	134	358	417	448	25970	22548
	Gonorrhoea	129	48	129	102	102	7007	5400
Vaccine Preventable Diseases	Adverse Event Following Immunisation	2	0	2	1	2	253	186
	Measles	2	1	2	0	0	16	9
	Meningococcal Disease	2	2	2	1	2	76	47
	Mumps	1	1	1	1	1	61	64
	Pertussis	145	88	145	385	95	10939	12081
	Pneumococcal Disease (Invasive)	6	1	6	12	10	543	494
Vector Borne Diseases	Chikungunya	1	0	1	1	0	38	37
	Dengue	2	3	2	5	5	458	343
	Malaria	2	1	2	0	0	59	47
	Ross River	32	7	32	12	21	504	1637
Zoonotic Diseases	Psittacosis	1	0	1	0	1	9	3
	Q fever	1	2	1	4	5	226	264

### \* 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.