

Chlamydia, caused by the bacterium, *Chlamydia trachomatis*, is the most common curable bacterial sexually transmitted infection (STI) in the western world. Chlamydia has two routes of transmission; sexual transmission, which accounts for the vast majority of cases, and vertical transmission from mother to baby during vaginal childbirth.

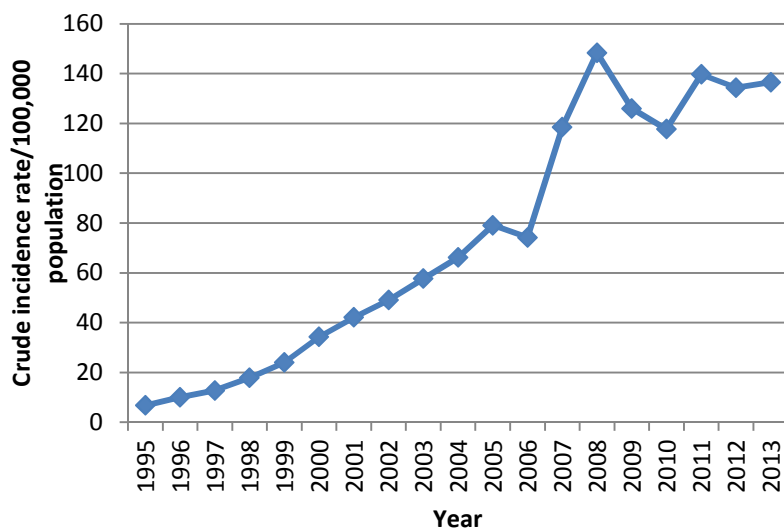
Lymphogranuloma venereum (LGV) is an aggressive form of *Chlamydia trachomatis*. LGV is caused by one of three (L1, L2 or L3) serovars of *C. trachomatis*. The organism targets the lymphatic system and lymph nodes. LGV is a chronic disease that has a variety of acute and late manifestations.

In 2013, all laboratories reported cases of *Chlamydia trachomatis* infection and LGV to the national Computerised Infectious Disease Reporting (CIDR) system. Enhanced information was sought on all cases of LGV including demographic information, symptoms, HIV status, co-infections and probable country of infection.

Chlamydia

As of 25th June, 2014, there were 6,262 notifications of *Chlamydia trachomatis* infection in 2013 giving a crude incidence rate (CIR) of 136.5 per 100,000 population. The rate has remained steady in recent years with rates of 139.6/100,000 and 134.3/100,000 reported in 2012 and 2011, respectively (figure 1).

Figure 1: Trend in CIR of *Chlamydia trachomatis* infection in Ireland, 1995-2013



There were 17 cases of *Chlamydia trachomatis* infection in young children. Three-quarters of these were reported as conjunctivitis. Details of the specimen or clinical symptoms were not reported for 4 cases. The age range was 3 weeks to 2 months. Cases were reported from 7 HSE areas.

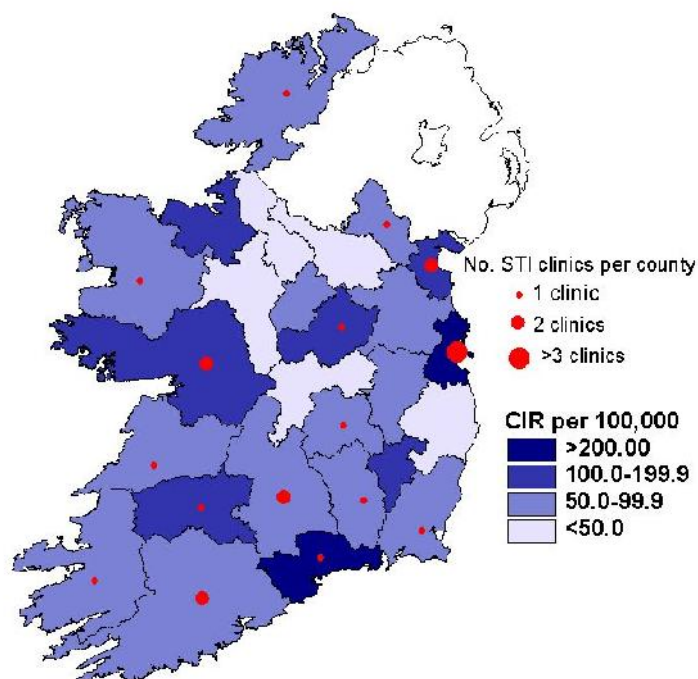
Cases of *Chlamydia trachomatis* infection were reported from all HSE areas with just over half (53%) reported in HSE East. The highest CIR was in HSE East (206.6/100,000) followed by HSE South East (132.4/100,000) and HSE Midwest (122.6/100,000). The CIR in six counties was greater than the national CIR with the highest rate reported in Waterford (283.8/100,000) (see figure 2).

It is important to note that patient's area of residence was not provided for all cases reported through CIDR. For laboratory notifications uploaded to CIDR, the location of the laboratory was used to assign area of residence where patient's address details were not provided. As a result, the rates and numbers of cases by HSE area may reflect the location of STI services, including laboratories, as well as differences in reporting practices by clinics and clinicians from one area to another.

A list of STI clinics is available at www.yoursexualhealth.ie.

The large volume of notifications in HSE East and the use of more automated processes for processing notifications in CIDR which do not allow for de-duplication of cases reported more than once, may have contributed to an over estimate of cases of *Chlamydia trachomatis*.

Figure 2: CIR of *C. trachomatis* infection by county, 2013



There were 2,751 chlamydia cases diagnosed in men and 3,420 in women (table 1), giving a male to female ratio of 0.8:1. More than three-quarters of cases were reported in people aged less than 30 years, with the largest proportion aged 20-24 years (42.2%).

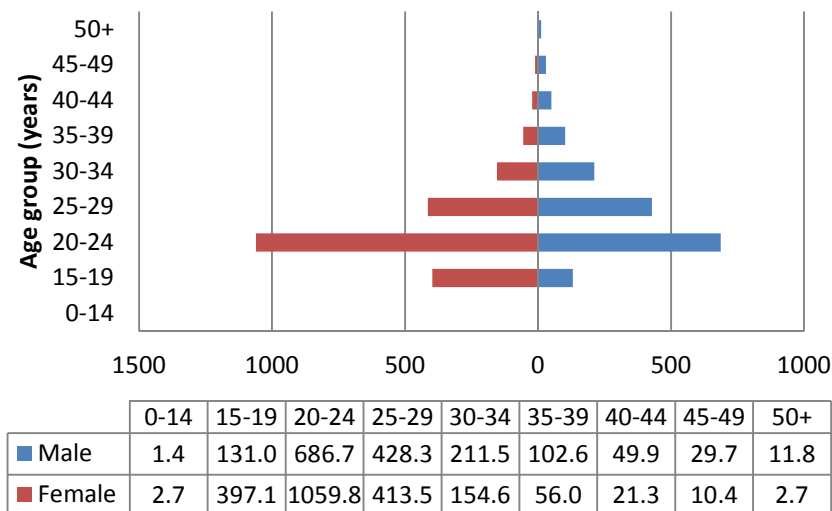
Table 1: Number of cases, CIR & median age of chlamydia & LGV cases by gender, 2013

	Total	Male	Female
Chlamydia			
Number of cases	6,262	2,751	3,420
CIR	136.5	121.0	147.7
Median Age (range)*	25 yrs (14 -81 yrs)	26 yrs (16 -81 yrs)	24 yrs (14 -71 yrs)
LGV			
Number of cases	5	5	0
CIR	0.1	0.2	0.0
Median Age (range)	31 yrs (27 -44 yrs)	31 yrs (27 -44 yrs)	-

*excluding cases <14 years

The highest age specific rate in 2013 was in 20-24 year olds (876 per 100,000 population). The rate in females (1,060 per 100,000) was almost 1.5 times greater than in males in this age group (687 per 100,000) (see figure 3).

Figure 3: Rate of chlamydia (per 100,000 population) by gender and age group, 2013 (n=6,160[^])



Age-specific incidence rate

[^]Excludes 102 cases whether gender (n=90), age (n=11) or both (n=1) are unknown

Since the start of 2013, case-based data on STIs (except ano-genital warts and non-specific urethritis) have been reported via CIDR from all HSE areas. This has enabled linkages to be made between different infections in the same patient facilitating the reporting of multiple infections and providing a clearer understanding of the burden of STIs.

Among patients diagnosed with *Chlamydia trachomatis* infection, there were also 249 cases of STIs other than HIV, 9 cases of HIV, 6 cases of hepatitis B and 3 cases of hepatitis C during 2013 (table 2). Since full patient identifiers were not provided for all cases, the true figure is likely to be much higher.

The setting in which the patient was seen was reported for 47% (n=2,947) of chlamydia cases (table 3). Where reported, more than half (57%) of cases were diagnosed in general practice and 39% in a hospital outpatient setting (STI clinic).

Where reported, 50% of men were diagnosed in general practice and 48% in a hospital outpatient setting. Women were more likely to be diagnosed in general practice, with more than 60%

Table 2: Number of cases of chlamydia diagnosed with another STI, Hepatitis B/C during 2013**

Disease	No.
Gonorrhoea	190
Hepatitis B (acute and chronic)	6
Hepatitis C	3
Herpes simplex (genital)	34
HIV	9
Syphilis	21
Trichomoniasis	4

**Patients may be counted more than once in this table

diagnosed in general practice and a third in a hospital outpatient setting (Pearson chi square 34.39, $p < 0.0000001$).

Table 3: *Chlamydia trachomatis* infection cases gender and setting where patient was seen where known, 2013 (n=2,947)

	Male		Female		Unknown		Total	
	N	%	N	%	N	%	N	%
Emergency Dept.	3	0.3	16	1.0	0	0.0	20	0.7
GP	552	50.0	1,000	61.3	9	90.0	1,672	56.7
Hospital (Day Patient)	2	0.2	4	0.2	0	0.0	6	0.2
Hospital (Inpatient)	0	0.0	31	1.9	0	0.0	33	1.1
STI clinic (Hospital outpatient)	527	47.7	548	33.6	1	10.0	1,157	39.3
Other	21	1.9	33	2.0	0	0.0	58	2.0
Total	1,105	100.0	1,632	100.0	10	100.0	2,947	100.0

Lymphogranuloma venereum

As of 25th June, 2014, there were 5 cases of LGV reported in 2013 compared with 4 cases in 2012 and 2 in 2011. The crude incidence rate for 2013 was 0.1 per 100,000 population.

All cases were reported in HSE East in men who have sex with men (MSM); three cases were reported as HIV positive.

Technical note

1. Data are analysed by date of notification on CIDR.
2. Data for this report were extracted from CIDR on 25th June, 2014, and were correct at the time of publication.
3. Percentages are rounded up in the text and are provided to one decimal place in the tables.