



SURVEILLANCE REPORT

Annual Epidemiological Report for 2016

Lymphogranuloma venereum

Key facts

- Lymphogranuloma venereum (LGV) is a systemic STI caused by Chlamydia trachomatis serovars L1, L2, or L3.
- In 2016, 2 043 cases of LGV were reported in 22 countries.
- Three countries (France, the Netherlands and the United Kingdom) accounted for 86% of all notified cases.
- Almost all cases in 2016 were reported among men who have sex with men; among the cases with known HIV status, 78% were HIV-positive.
- The number of reported cases continued to increase with 15% more cases reported in 2016 compared to 2015
- A number of countries have not reported LGV cases over the years, suggesting probable underdiagnosis and underreporting.

Methods

This report is based on data for 2016 retrieved from The European Surveillance System (TESSy) on 27 November 2017. TESSy is a system for the collection, analysis and dissemination of data on communicable diseases.

For a detailed description of methods used to produce this report, please refer to the *Methods* chapter [1].

An overview of the national surveillance systems is available online [2].

A subset of the data used for this report is available through ECDC's online *Surveillance atlas of infectious diseases* [3].

In 2016, the majority of reporting countries (13) used the standard EU case definitions. Four countries reported using national case definitions, and five countries did not report which case definition was in use. Surveillance systems for LGV in Europe vary: 15 countries reported having comprehensive surveillance systems. Four countries reported that they operate sentinel systems which only capture LGV diagnoses from a selection of healthcare providers, and three countries did not report the type of surveillance system. Reporting of LGV infections is compulsory in 16 countries, 14 of which have comprehensive surveillance systems. Countries with sentinel systems have voluntary reporting, with the exception of Hungary, where reporting is compulsory.

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This report does not contain information on LGV infection rates because many LGV surveillance systems do not generate data that are considered representative of the national population. There are also significant differences in the availability of LGV diagnostics across Europe.

Epidemiology

In 2016, 22 countries provided LGV surveillance data. Thirteen of these 22 countries reported a total of 2 043 cases, while the remaining nine countries reported zero cases (Table 1). Sweden reported LGV cases for the first time in 2016. Three countries (France, the Netherlands and the United Kingdom) accounted for 86% of all notified cases. Compared with 2015, the number of cases reported in 2016 increased by 15%, with increases of 25% or more being reporting in Belgium, Denmark, Finland, France, Hungary, Ireland, the Netherlands and Norway. Decreases in reported cases were only observed in the Czech Republic (-2.5%), Portugal (-60%) and the United Kingdom (-3%).

Table 1. Distribution of confirmed cases of lymphogranuloma venereum, EU/EEA, 2012-2016

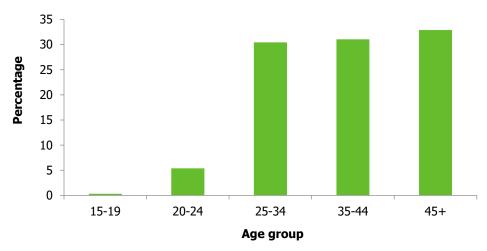
| Country | 2012 | 2013 | 2014 | 2015 | 2016 | |
|---------------|--------|--------|--------|--------|------------------------|--------|
| | Number | Number | Number | Number | Surveillance system | Number |
| Austria | | | | | - | |
| Belgium | 23 | 48 | 60 | 62 | Se | 88 |
| Bulgaria | | | | | - | |
| Croatia | 0 | 0 | 0 | 0 | Co | 0 |
| Syprus | 0 | 0 | 0 | 0 | Co | 0 |
| zech Republic | 9 | 8 | 22 | 40 | Co | 39 |
| enmark | 24 | 32 | 36 | 26 | - | 44 |
| stonia | 0 | 0 | 0 | 0 | Co | 0 |
| inland | 5 | 7 | 2 | 2 | Co | 8 |
| rance | 186 | 331 | 377 | 469 | Se | 596 |
| Sermany | | | | | - | |
| Greece | 0 | | | | - | |
| ungary | 1 | 2 | 3 | 3 | Se | 14 |
| celand | | 0 | 0 | 0 | - | 0 |
| eland | 3 | 5 | 35 | 22 | Co | 46 |
| aly | 27 | 21 | 12 | 3 | Se | |
| atvia | 0 | 0 | 0 | 0 | Co | 0 |
| iechtenstein | | | | | - | |
| ithuania | | | | 0 | Co | 0 |
| uxembourg | 0 | 0 | 0 | 0 | - | 0 |
| lalta | 0 | 1 | 0 | 0 | Co | 0 |
| etherlands | 190 | 112 | 172 | 181 | Se | 245 |
| orway | 0 | 0 | 21 | 13 | Co | 19 |
| oland | 0 | 0 | 0 | 0 | Co | 0 |
| ortugal | | | 1 | 10 | Co | 4 |
| lomania | | | | | - | |
| lovakia | | | | | - | |
| lovenia | 0 | 0 | 0 | 1 | Co | 1 |
| pain | - | | - | | - | |
| weden | 0 | 0 | 0 | 0 | Co | 20 |
| nited Kingdom | 402 | 512 | 678 | 948 | Co | 919 |
| U/EEA | 870 | 1079 | 1419 | 1780 | | 2043 |

Source: Country reports

Legend: Co = comprehensive; Se: sentinel

Transmission category was reported for 1 675 cases in 2016 (82% of all reported cases). All but four cases were reported among men who have sex with men (MSM). Age was reported for 96% of cases, with the large majority of cases distributed evenly among 25–34-year-olds (30%), 35–44-year-olds (31%) and those aged 45 years or over (33%) (Figure 1).

Figure 1. Age distribution of confirmed LGV cases, EU/EEA, 2016

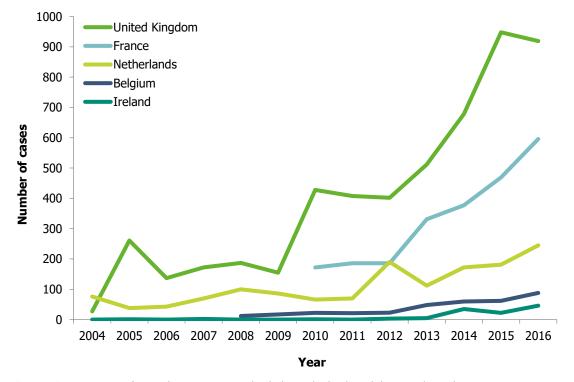


Source: Country reports from Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Hungary, Iceland, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovenia, Sweden and the United Kingdom.

In 2016, information on HIV status was available for 48% of all reported LGV cases (903 cases). Among these cases, 70% were HIV positive. Between 2004 and 2016, HIV status was reported and known for 5 304 cases (64% of all reported cases); among these, 4 160 (78%) were HIV positive.

Between 2004 and 2016, 10 105 cases of LGV were reported in 15 countries, with the majority of cases diagnosed and reported in the United Kingdom (52%; 5 234 cases), France (23%; 2 317 cases) and the Netherlands (14%; 1 449 cases). The overall increasing trend in reported cases of LGV between 2004 and 2016 is partly due to an increase in the number of reporting countries but mostly driven by an increase in case numbers in most of the reporting countries (Figure 2).

Figure 2. Number of confirmed LGV cases in the five EU/EEA Member States with the highest numbers of cases in 2016, 2004–2016



Source: Country reports from Belgium, France, Ireland, the Netherlands and the United Kingdom.

Discussion

In 2016, the number of reported cases of LGV continued to increase in most reporting countries, with the largest increases reported from Hungary, Finland, Ireland and Denmark, although the numbers reported in some of these countries are still small. Cases in Ireland have increased due to an outbreak ongoing since 2014 [4]. The United Kingdom reported a small decrease in the number of reported cases after three years of increasing case numbers. This is of interest as it coincided with lower numbers of gonorrhoea and HIV cases, particularly among MSM mostly in London in 2016 [5,6]. The reasons for these decreases are being assessed and should inform control activities elsewhere in Europe. Sweden reported LGV cases to ECDC for the first time in 2016. A recent publication has highlighted an increasing trend in cases in Sweden, with transmission mostly within the country [7].

The number of reported cases is likely to be an underestimate because many countries do not have a national surveillance system for LGV. In addition, the diagnosis of LGV requires confirmation through genotyping, which in some countries is not widely available. The increase in reported cases indicates that LGV transmission continues; surveillance and other epidemiological investigations suggest that transmission is mainly among HIV-positive MSM engaging in high-risk practices [8-10]. Different, and at times insufficient, testing strategies are believed to be failing to detect a substantial number of asymptomatic cases [11,12].

Public health implications

The increasing number of cases of LGV in Europe mirrors the trend seen for other sexually transmitted diseases, with increases predominantly due to transmission between MSM. Effective interventions need to be identified and targeted at the group of predominantly HIV-positive MSM with high levels of condomless sex. In addition, clinical suspicion and early diagnosis is essential in order to prevent complications which may include chronic colorectal fistulas and strictures [13]. In many parts of Europe, surveillance for LGV is not well developed due to limited diagnostic capacity, an issue that should be addressed by the public health authorities. Consequently, little information is available on the true incidence of the infection.

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