

Lymphogranuloma venereum

Annual Epidemiological Report for 2017

Key facts

- Lymphogranuloma venereum (LGV) is a systemic STI caused by *Chlamydia trachomatis* serovars L1, L2, or L3.
- In 2017, 1 989 cases of LGV were reported in 24 countries.
- Four countries (France, the Netherlands, Spain and the United Kingdom) accounted for 86% of all notified cases.
- Almost all cases in 2017 were reported among men who have sex with men; among the cases with known HIV status, 64% were HIV-positive.
- The number of reported cases decreased compared to 2016. This was the first reduction in the number of reported cases since 2009.

Methods

This report is based on data for 2017 retrieved from The European Surveillance System (TESSy) on 29 November 2018. 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, 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 2017, the majority of reporting countries (15) used the standard EU case definitions. Four countries reported using national case definitions and five did not report which case definition was in use. Surveillance systems for LGV in Europe vary: 17 countries reported having comprehensive surveillance systems. Four countries reported that they operate sentinel systems that only capture LGV diagnoses from a selection of healthcare providers and three did not report the type of surveillance system. Reporting of LGV infections is compulsory in 17 countries, all of which have comprehensive surveillance systems when coverage was reported. Countries with sentinel systems have voluntary reporting.

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.

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Epidemiology

In 2017, 24 countries provided LGV surveillance data. Fifteen countries reported a total of 1 989 cases, while the remaining nine reported no cases (Table 1). Spain reported LGV surveillance data for the first time in the 2018 data collection and provided data for 2016 and 2017. Four countries (France, the Netherlands, Spain and the United Kingdom) accounted for 86% of all notified cases. Croatia reported the first two LGV cases in 2017.

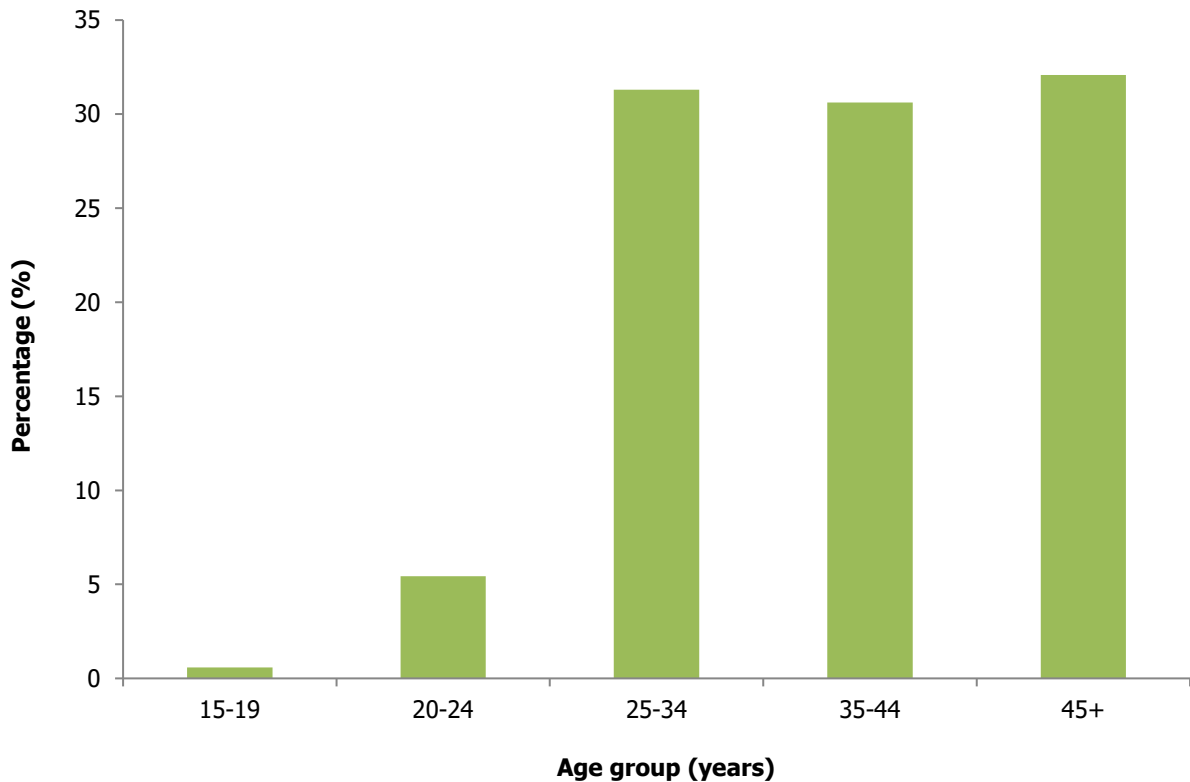
Compared with 2016, the number of cases reported in 2017 decreased by 13%. The largest decreases were reported by the two countries reporting the largest numbers of cases: the United Kingdom (-30%) and France (-23%), but Denmark, Finland, Ireland and Italy also reported fewer cases. On the other hand, increased numbers of cases were reported by eight countries, with increases of 50% or more in Hungary (57%), Norway (74%), Portugal (300%) and Slovenia (100%), although many of these countries reported small numbers of cases (Table 1).

Table 1. Distribution of confirmed lymphogranuloma venereum cases by country and year, EU/EEA, 2013–2017

Country	2013	2014	2015	2016	2017
	Confirmed cases	Confirmed cases	Confirmed cases	Confirmed cases	Confirmed cases
Austria	.	.	.	.	.
Belgium	48	60	62	80	88
Bulgaria	.	.	.	.	.
Croatia	0	0	0	0	2
Cyprus	0	0	0	0	0
Czech Republic	8	22	40	39	39
Denmark	32	36	26	44	41
Estonia	0	0	0	0	0
Finland	7	2	2	8	6
France	331	377	469	596	457
Germany	.	.	.	.	.
Greece	.	.	.	.	.
Hungary	2	3	3	14	22
Iceland	0	0	0	0	0
Ireland	5	35	22	47	19
Italy	21	12	3	24	20
Latvia	0	0	0	0	0
Liechtenstein	.	.	.	.	.
Lithuania	-	-	0	0	0
Luxembourg	0	0	0	0	0
Malta	1	0	0	0	0
Netherlands	112	172	181	245	273
Norway	0	21	13	19	33
Poland	0	0	0	0	0
Portugal	-	1	10	4	16
Romania	.	.	.	.	.
Slovakia	.	.	.	.	.
Slovenia	0	0	1	1	2
Spain	-	-	-	249	330
Sweden	0	0	0	20	0
United Kingdom	512	678	948	919	641
EU/EEA	1 079	1 419	1 780	2 309	1 989

Source: Country reports.

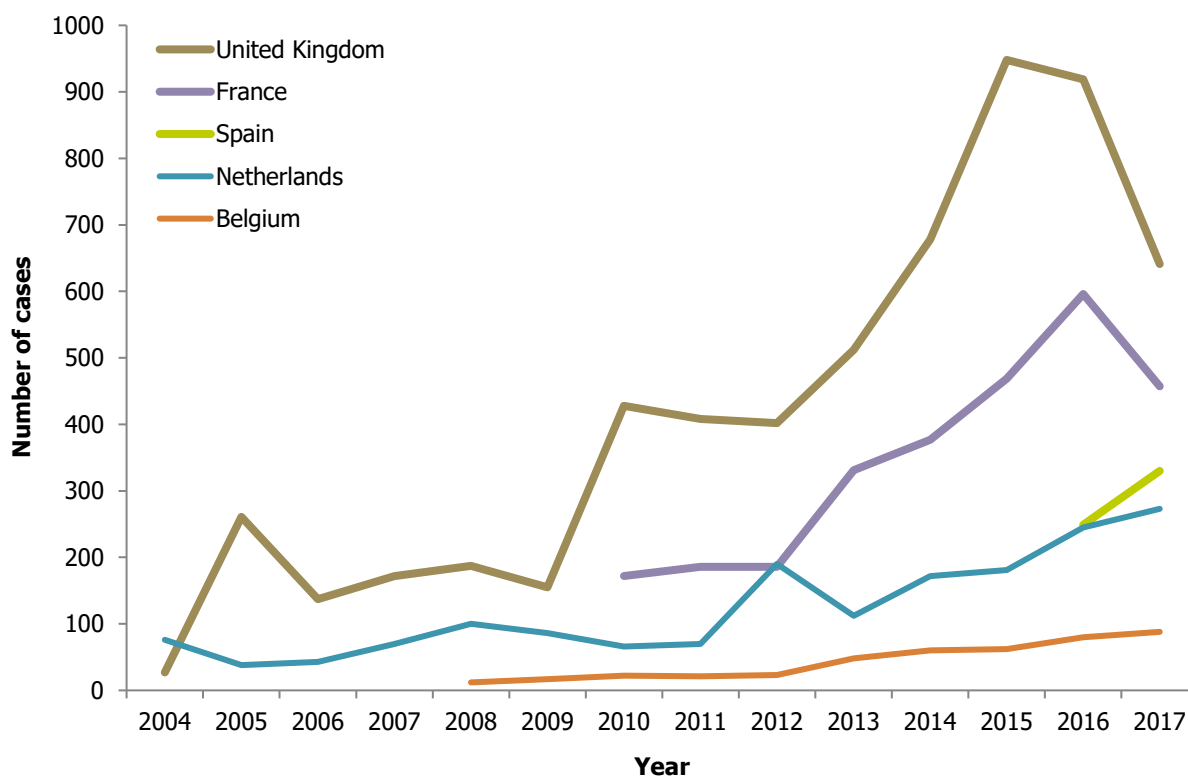
Transmission category was reported for 1 377 cases in 2017 (69% of all reported cases). All but 12 cases were reported among men who have sex with men (MSM). Age was reported for 95% of cases, with the large majority of cases distributed evenly among 25–34-year-olds (31%), 35–44-year-olds (31%) and those aged 45 years or over (32%; Figure 1).

Figure 1. Age distribution of confirmed LGV cases, EU/EEA, 2017

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

In 2017, information on HIV status was available for 43% of all reported LGV cases (851 cases). Among them, 64% were HIV-positive. Between 2004 and 2017, HIV status was reported and known for 6 180 cases (50% of all reported cases). Among them, 4 722 (76%) were HIV-positive. The proportion of LGV cases among HIV-positive persons has decreased since 2015 among countries reporting HIV status consistently from 70% to 64% in 2017.

Between 2004–2017, 12 360 cases of LGV were reported in 17 countries, with the majority of cases diagnosed and reported in the United Kingdom (48%), France (22%) and the Netherlands (14%). The overall increasing trend in reported cases of LGV between 2004–2016 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 2017, 2004–2017

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

Discussion

In 2017, the overall number of reported cases of LGV decreased for the first time since 2009. The decrease was a consequence of considerable drops in reported cases from the United Kingdom (-30%) and France (-23%). These are the two countries that have consistently reported the largest numbers of cases in the EU/EEA. The reduction in reported cases in the United Kingdom, which started in 2016 and was mostly observed in the London region, has been linked to changes in LGV testing rather than reduced transmission and is being investigated [4]. Another country that reported a large decrease in cases was Ireland, where cases reported in 2017 were less than half of those reported in 2016. The decrease in Ireland is linked to the control of an outbreak in the Greater Dublin area first reported in 2014 [5].

LGV notifications continued to increase in eight countries. One of the countries reporting an increase in cases in 2017 compared with 2016 was Spain. Spain reported LGV surveillance data for the first time in the 2018 data collection through a system that covered 78% of the population in 2016 and 2017 (personal communication by email with national focal point in Spain Ascunción Diaz Franco, September 2018). Reporting of Spanish LGV data is essential to have a more comprehensive picture of the epidemiology of LGV in Europe, as outbreaks of LGV have been reported from Madrid and Barcelona in recent years and Spain contributed the third largest number of cases in the EU/EEA in 2017 [6–8].

The decrease in the proportion of LGV cases among HIV-positive persons since 2015 has also been noted in other reports. For example, in Belgium, the number of cases among HIV-negative MSM increased between 2011–2017. The authors suggest that increased availability of HIV pre-exposure prophylaxis (PrEP) may lead to changes in sexual behaviour and increased transmission of LGV from HIV-positive to HIV-negative MSM [9]. As a consequence, increased testing of HIV-negative MSM for LGV might be warranted, particularly those on PrEP, as recommended by the draft IUSTI-Europe LGV guideline [10].

The number of cases described in this report is likely to be an underestimate because many countries do not have a national surveillance system for LGV. In addition, diagnosis of LGV requires confirmation through genotyping that is not widely available in certain countries. Varying testing strategies, for example testing only symptomatic cases, also mean that a substantial number of asymptomatic cases may be missed [11–13]. Consequently, little information is available on the true incidence of the infection.

Public health implications

Although the number of LGV cases decreased in 2017, the reasons for the decrease are under investigation and possibly linked to changing testing practice rather than decreased transmission. Increasing proportions of cases among HIV-negative MSM mean that case finding should also focus on this group, particularly those on PrEP. Effective interventions need to be identified and targeted at these groups of MSM with high levels of condomless sex. In addition, clinical suspicion and early diagnosis is essential in order to prevent severe complications. In many parts of Europe, surveillance for LGV is not well developed due to limited diagnostic capacity. Addressing this issue should facilitate control of LGV.

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