

# Lymphogranuloma venereum

## Annual Epidemiological Report for 2019

### Key facts

- Lymphogranuloma venereum (LGV) is a systemic sexually-transmitted infection (STI) caused by *Chlamydia trachomatis* serovars L1, L2, or L3.
- In 2019, 3 112 cases of LGV were reported in 23 countries in the European Union/European Economic Area (EU/EEA).
- Four countries (France, the Netherlands, Spain, and the United Kingdom) accounted for 87% of all notified cases.
- Almost all cases in 2019 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 in 2019 is the highest since 2004 and represents a 30% increase compared with 2018 and 75% increase compared with 2015.

### Methods

This report is based on data for 2019 retrieved from The European Surveillance System (TESSy) on 9 September 2021. 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 of ECDC's Annual epidemiological report for 2019 [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 2019, the majority of reporting countries (15) used the standard EU case definitions [4]. Four countries reported using national case definitions, and four did not report which case definition was in use. Surveillance systems for lymphogranuloma venereum (LGV) in Europe vary: 16 countries reported having comprehensive surveillance systems. Four countries reported that they operate sentinel systems that only capture LGV diagnoses reported by a selection of healthcare providers, and three did not report the type of surveillance system. Reporting of LGV infections is compulsory in 16 countries, 15 of which have comprehensive surveillance systems; one country with compulsory reporting did not specify the coverage of the surveillance system. In the four countries that have sentinel systems, reporting is voluntary. Three countries did not specify whether reporting of LGV is compulsory or not.

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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 2019, 23 countries provided LGV surveillance data. Sixteen countries reported a total of 3 112 cases, while the remaining seven reported no cases (Table 1). Four countries (France, the Netherlands, Spain, and the United Kingdom) accounted for 87% of all notified cases.

Compared with 2018, the number of cases reported in 2019 increased by 30%, with increases between 4% and 133% reported by nine countries. The largest increases in terms of number of cases were reported by the United Kingdom (+397 cases) and Spain (+131 cases). The largest proportional increases were observed in Slovenia (+131%), Belgium (+67%), the Netherlands (+50%), and the United Kingdom (+49%). Decreases in the number of reported cases were reported by five countries: Italy (-62%), Finland (-53%), Czechia (-44%) Norway (-39%), and Portugal (-12%) (Table 1).

**Table 1. Distribution of confirmed lymphogranuloma venereum cases by country and year, European Union/European Economic Area (EU/EEA), 2015–2019**

Country	2015	2016	2017	2018	2019
Austria	.	.	.	.	.
Belgium	62	80	88	87	145
Bulgaria	.	.	.	.	.
Croatia	0	0	2	0	0
Cyprus	0	0	0	0	0
Czechia	40	39	39	25	14
Denmark	26	44	41	63	70
Estonia	0	0	0	0	0
Finland	2	8	6	17	8
France	469	596	457	694	721
Germany	.	.	.	.	.
Greece	.	.	.	.	.
Hungary	3	14	22	41	49
Iceland	0	0	0	0	0
Ireland	22	47	19	29	38
Italy	3	24	20	21	8
Latvia	0	0	0	0	0
Liechtenstein	.	.	.	.	.
Lithuania	0	0	0	0	0
Luxembourg	0	0	0	0	0
Malta	0	0	0	0	6
Netherlands	181	245	273	235	353
Norway	13	19	33	44	27
Poland	0	0	0	0	2
Portugal	10	5	31	43	38
Romania	.	.	.	.	.
Slovakia	.	.	.	.	.
Slovenia	1	1	2	6	14
Spain	.	248	328	286	417
Sweden	0	20	0	.	.
United Kingdom	948	919	641	805	1 202
<b>EU/EEA</b>	<b>1 780</b>	<b>2 309</b>	<b>2 002</b>	<b>2 396</b>	<b>3 112</b>

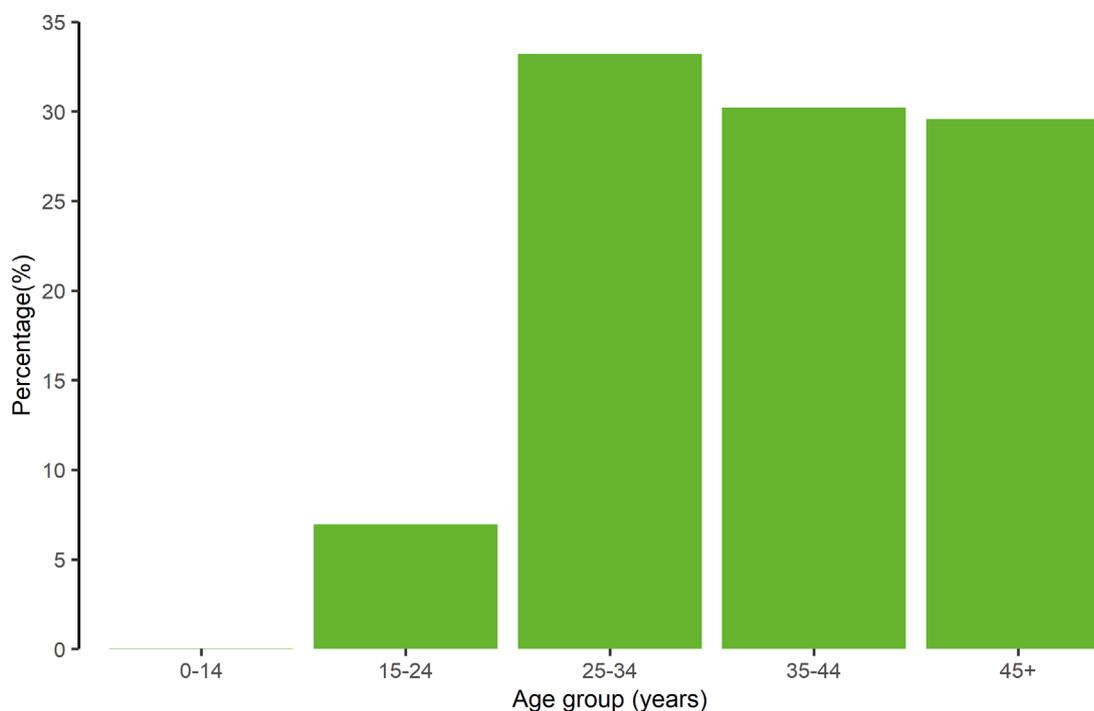
Sources: Country reports.

∴ no data reported.

Sex was reported for 3 082 cases (99%). Most LGV cases reported in 2019 were among men, with only 10 cases reported among women.

The transmission category was reported for 1 483 cases in 2019 (48% of all reported cases). All but 14 cases (0.95%) 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 (33%), 35–44-year-olds (30%) and those aged 45 years or above (30%; Figure 1).

**Figure 1. Distribution of confirmed lymphogranuloma venereum cases by age group, EU/EEA, 2019**

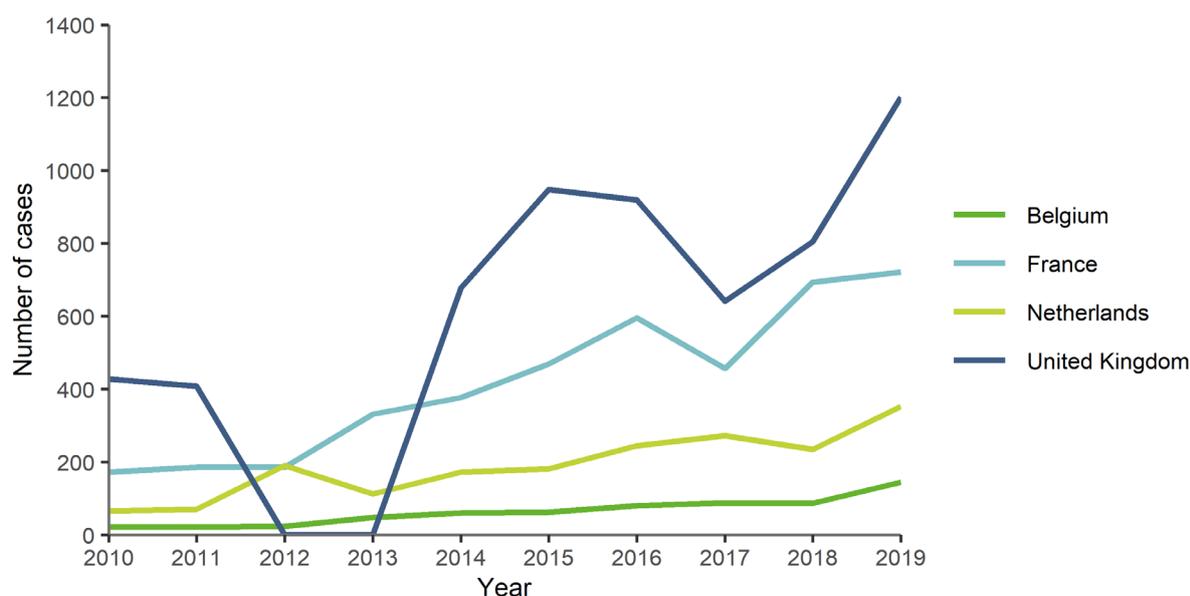


Sources: Country reports from EU/EEA.

In 2019, information on HIV status was available for 44% of all reported LGV cases (1 358 cases). Of these cases, 64% were HIV-positive. Between 2010 and 2019, HIV status was reported and known for 7 450 cases (48% of all reported cases). Of these cases, 5 259 (71%) were HIV-positive. In countries reporting HIV status consistently, the proportion of LGV cases with HIV-positive status has decreased from 70% in 2015 to 64% in 2019.

Between 2010 and 2019, 15 503 cases of LGV were reported in 18 countries, with most cases diagnosed and reported in the United Kingdom (39%), France (27%), and the Netherlands (12%). The trend in the number of reported cases during this time has been consistently increasing, with the exception of a reduction in the number of cases in 2017. The overall increasing trend 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. In four countries with high number of cases that reported consistently between 2010 and 2019, LGV cases reported in 2019 have reached an all-time high (Figure 2). In Spain, a country that reported data for 2016-2019, the number of reported cases increased by 68%, from 248 in 2016 to 417 in 2019.

**Figure 2. Number of confirmed lymphogranuloma venereum cases during the period 2010-2019 in the four EU/EEA Member States with the highest number of cases in 2019**



## Discussion

Following a temporary decline in 2017, the overall number of reported LGV cases reached an all-time high in 2019. The increase was driven by large increases in the number of reported cases in the United Kingdom and France, both of which have reported the largest number of cases over the last 10 years. In addition, several other countries also experienced considerable increases in reported cases.

Expanded testing in MSM regardless of HIV status and irrespective of experiencing symptoms of proctitis or not, as an outcome of changes in national chlamydia testing guidelines in the UK [5] was followed by increases in LGV diagnoses among HIV-negative MSM and asymptomatic MSM, in addition to the high number of LGV diagnoses among HIV-positive MSM [6]. Increasing trends of LGV among HIV-negative and asymptomatic MSM in the Netherlands were also related to changes in testing recommendations in 2015, from selective to universal rectal chlamydia testing for all MSM and universal LGV testing in all rectal *C. trachomatis*-positive MSM [7]. A similar rise in LGV diagnoses among HIV-negative and/or asymptomatic MSM was reported from Belgium where testing for LGV on all chlamydia-positive samples from MSM, irrespective of their HIV status was indicated as a public health response measure to control an LGV outbreak [8].

In line with changes in testing practices in European countries, in 2019, the updated European guideline on the management of LGV recommended that all MSM with anorectal samples positive for *C. trachomatis* should be tested for LGV irrespective of symptoms, and HIV-positive MSM and those who are eligible for HIV pre-exposure prophylaxis (PrEP) should be considered a priority for testing [9].

While reaching a historical peak in 2019, the number of cases described in this report is likely to be an underestimate as many countries do not have a national surveillance system for LGV and confirmation of LGV infection through molecular diagnostics is not widely available in some countries. Substantial underdiagnosis of LGV was identified by an ECDC-funded pilot study in the participating countries: Austria, Croatia, and Slovenia [10]. The updated European guideline on the management of LGV published in 2019 highlighted the need for appropriate LGV molecular diagnostics in all European countries [9]. The lack of appropriate diagnostics means that it is impossible to conduct effective surveillance, provide effective treatment, and implement adequate prevention activities.

## Public health implications

Increasing proportions of LGV cases among HIV-negative MSM mean that case finding should also focus on this group, particularly among those eligible for, or on, PrEP. Effective interventions need to be identified and targeted at groups of MSM with high levels of practising condomless sex. In addition, clinical suspicion and early diagnosis is essential in order to prevent severe complications. There continues to be limited diagnostic capacity for LGV infection in many parts of the EU/EEA, which makes control of the infection difficult and limits the availability of surveillance data.

## References

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