Public Health England

Protecting and improving the nation's health

Recent trends in *Lymphogranuloma venereum* (LGV) diagnoses in the United Kingdom: 2003-2016

Health Protection Report
Volume 11 Number 37
20 October 2017

Recent trends in *Lymphogranuloma venereum* (LGV) diagnoses in the United Kingdom: 2003-2016

Key points

- In 2016, 919 LGV diagnoses were reported in the United Kingdom (UK), of which 864 (94.0%) were in England
- The number of LGV diagnoses reported in the UK declined by 2.5% from 2015
- 99.6% of UK LGV diagnoses were among men and the median age at diagnosis was 38 years
- Of LGV diagnoses made in England during 2016, 91.7% were among men who have sex with men (MSM)
    - 76.6% were white, 73.4% lived in London, and 50.9% were born in the UK
    - 67.5% were HIV-positive and 45.1% had a bacterial STI diagnosed within the past year
- A sharp decline in the number of diagnoses reported towards the end of 2016, predominantly in London, warrants further investigation.

Key messages and recommendations

- **Clinicians are advised to:**
    - Maintain a high index of suspicion for LGV and consider testing asymptomatic MSM with HIV

- **The general public are advised to:**
    - Use a condom correctly and consistently if having sex with a new or casual partner
    - Get tested regularly for HIV and STIs for good sexual health:
        - anyone under 25 who is sexually active should screen for chlamydia annually and on change of sexual partner
        - MSM should test annually for HIV and STIs and every three months if having condomless sex with new or casual partners
        - black ethnic minority men and women should have a regular STI screen, including an HIV test, if having condomless sex with new or casual partners

Background

Lymphogranuloma venereum (LGV) is a sexually transmitted infection caused by an invasive serovar of *Chlamydia trachomatis*. Since an outbreak of LGV was first reported among men who have sex with men (MSM) in the Netherlands in 2003 [1], there has been a rapid increase in LGV diagnoses in the United Kingdom (UK) [2, 3]. LGV diagnoses are made mainly among HIV-positive MSM [4]. Infections are normally rectal and can cause pain, discharge, bleeding and proctitis but can also be asymptomatic. Complications can be severe, especially in immunocompromised individuals, leading to genital ulcers, fistulas, rectal strictures or elephantiasis. Here we describe recent trends in LGV diagnoses in the UK from 2003 to 2016 and update the previous *HPR* report, and the associated data tables, published in July 2016 [5]. The report further describes characteristics of MSM diagnosed with LGV in 2015 and 2016 at sexual health services in England.

Recent trends in LGV diagnoses in the UK

In 2016, there were 919 LGV diagnoses made in the UK, a decline of 2.5% (from 943 diagnoses) in 2015 (figure 1; table 1); the majority (94.0%; n = 864) of diagnoses were seen in England. Almost all (915/919; 99.6%) diagnoses made in the UK in 2016 were in men and the median age at diagnosis was 38 years (range 16-76; figure 2).

The decrease in diagnoses reversed a sustained upward trend since 2012. There was a 6.7% decrease in diagnoses made in England (from 922 to 864 diagnoses). The decline was primarily in London, where diagnoses fell 9.1% (from 679 to 617 diagnoses); diagnoses increased in most other English PHE Centres (table 1). Conversely, there was a 61.8% increase in diagnoses in Scotland, Wales and Northern Ireland (from 21 to 55 diagnoses), which occurred mainly in Scotland. Overall, the total number of diagnoses was stable at the beginning of 2016 but sharply declined during quarter's three and four (figure 1).

Figure 1 Number of LGV diagnoses made at sexual health services, United Kingdom by quarter: 2003 to 2016

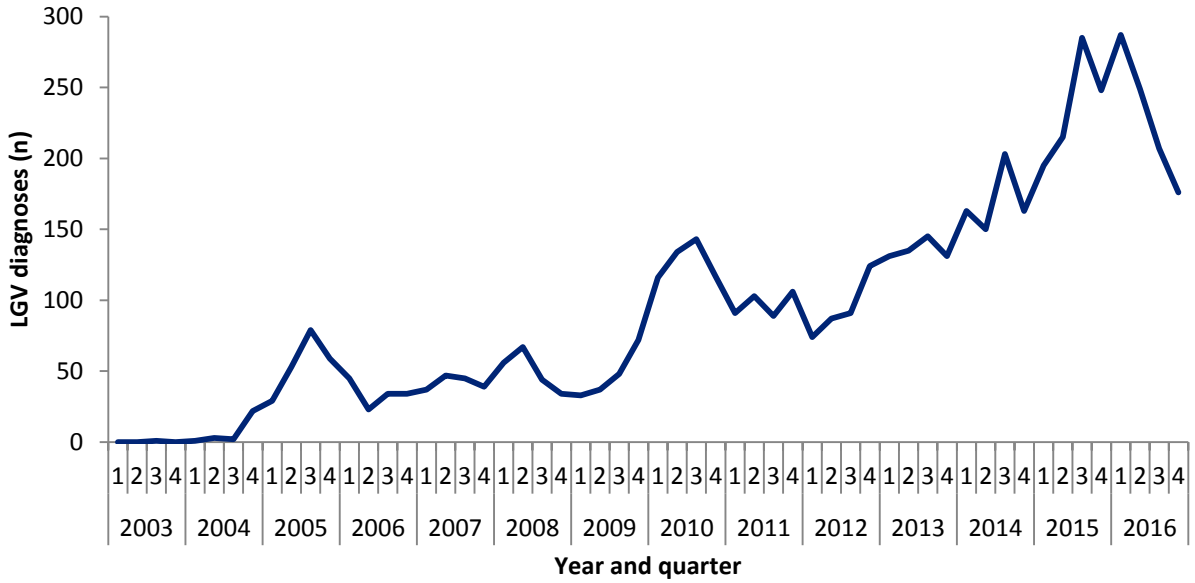
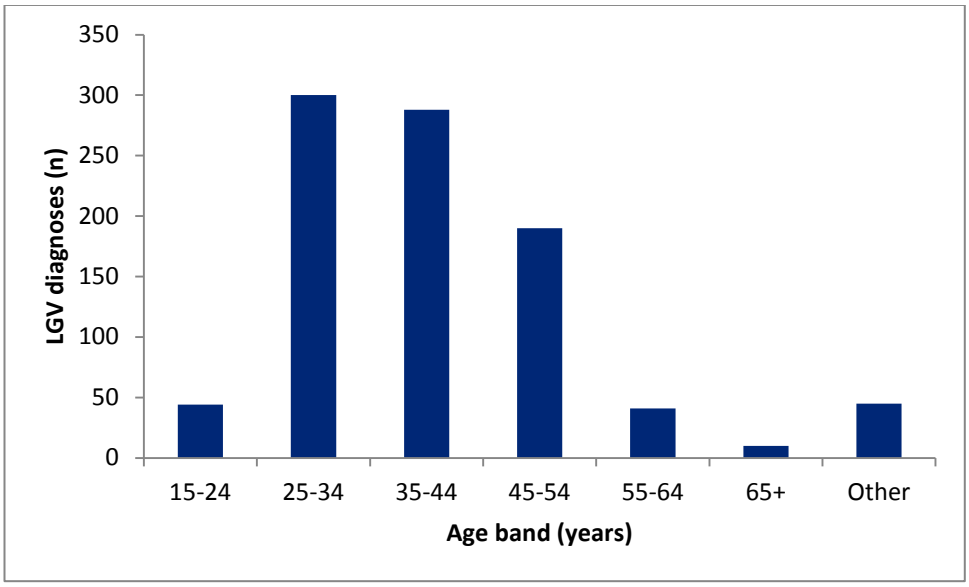


Table 1 Number of LGV diagnoses, UK country or Public Health England Centre by year: 2013 to 2016

UK Country and Public Health England Centre	Year				Total
	2013	2014	2015	2016	
East Midlands	7	11	5	10	**33**
East of England	10	20	8	10	**48**
London	354	488	679	617	**2,138**
North East	2	3	11	9	**25**
North West	53	29	89	90	**261**
South East	49	47	48	53	**197**
South West	9	9	25	17	**60**
Yorkshire & Humber	12	15	18	28	**73**
West Midlands	29	44	39	26	**138**
Scotland, Wales & Northern Ireland	17	13	21	55	**106**
Total	**542**	**679**	**943**	**919**	**3,083**

* Data sourced from STBRU, SBSTIRL and CTAD

Figure 2 Number of LGV diagnoses, United Kingdom by 5-year age band: 2016



Characteristics of MSM diagnosed with LGV in England: 2016

More detailed information on the characteristics of patients diagnosed by specialist sexual health services in England has been available since 2015 through the GUMCAD STI Surveillance System (see Methodology). There were 684 LGV diagnoses reported through GUMCAD in 2016, of which 97.4% were men (n = 666) and 91.7% were MSM (n = 627). Of the total diagnoses made, 5.0% (n = 49) of patients had been previously diagnosed with LGV (between 56 to 671 days apart) and 3.9% (n = 27) of diagnoses were made less than a year apart.

Among MSM diagnosed in 2016, the majority resided in London (73.4%), 50.9% were UK-born and 76.6% were white. The median age at LGV diagnosis was 36 years (range: 19-75). Two thirds (67.5%) of diagnoses were made in HIV-positive MSM. A bacterial STI had been diagnosed in the previous year in 45.1% of MSM. Overall, the characteristics of MSM diagnosed with LGV in England between 2015 and 2016 were similar.

There were 13,190 chlamydia diagnoses in 2016, of which 4.8% (n = 627) were confirmed as LGV positive, made among MSM in England (table 2) [6]. There was a 0.8% decrease in non-LGV chlamydia diagnoses (from 12,667 to 12,563) and a 6.6% decrease in LGV diagnoses (from 671 to 627) made among MSM in England between 2015 and 2016.

Table 2 Characteristics and demographics of MSM diagnosed with LGV at sexual health services, England by year: 2015 to 2016

Characteristic	Year	
	2015	2016
	n (% total)	
Total LGV diagnoses	671 (100)	627 (100)
Age group		
15-24	45 (6.7)	30 (4.8)
25-34	256 (38.2)	238 (38.0)
35-44	233 (34.7)	209 (33.3)
45-54	100 (14.9)	116 (18.5)
55-64	26 (3.9)	25 (4.0)
Above 65	5 (0.7)	6 (1.0)
Other**	6 (0.9)	3 (0.5)
HIV status		
Positive	464 (69.2)	423 (67.5)
Negative/undiagnosed	258 (38.5)	261 (41.6)
Diagnosed with a bacterial STI in the past year†		
Yes	320 (47.8)	290 (45.1)
Area of residence		
London	503 (75.0)	462 (73.7)
Outside London	168 (25.0)	165 (26.3)
Country of birth		
United Kingdom	336 (50.1)	319 (50.9)
Outside United Kingdom	282 (42.0)	261 (41.6)
Ethnicity		
White	511 (76.2)	480 (76.6)
Asian	28 (4.2)	26 (4.1)
Black	33 (4.9)	29 (4.6)
Mixed	29 (4.3)	30 (4.8)
Other	33 (4.9)	39 (6.2)

* Data sourced from GUMCAD

** Those < 15 years of age or age unknown

† Gonorrhoea, chlamydia, infectious syphilis, NSGI, LGV, chancroid or donovanosis

Discussion

Further investigation is needed to establish whether the fall in diagnoses in 2016, particularly in the last two quarters, represents interrupted transmission. The stable number of chlamydia diagnoses in MSM over the same period suggests that other factors, such as changes in LGV testing referrals or service commissioning, may play a role. LGV continues to present a major sexual health issue, and clinicians should maintain a high index of suspicion for LGV and consider testing, including asymptomatic MSM with HIV, according to the national testing guideline [7].

Methodology

Clinicians submit rectal, genital or urine specimens from patients diagnosed with chlamydia that have symptoms compatible with LGV for confirmation testing. Specimens from sexual contacts diagnosed with chlamydia are also sent for LGV confirmation testing. In England, testing is done through the PHE National Reference Laboratory, the Sexually Transmitted Bacterial Reference Unit (STBRU). However, some laboratories have begun their own LGV testing and submit data to PHE through the Chlamydia Testing Activity Dataset (CTAD). In Scotland, specimens are submitted to the Scottish Bacterial Sexually Transmitted Infections Reference Laboratory (SBSTIRL). Diagnoses were restricted so that a patient could only receive one LGV diagnosis within a 42 day period.

Specimens from asymptomatic HIV-positive MSM diagnosed with chlamydia have been sent to the STBRU since 2004 and the SBSTIRL since 2007. Since 2011, England has collected LGV diagnoses made in sexual health services through an electronic routine surveillance database (GUMCAD) which contains information on patient demographics and characteristics [8].

References

1. Nieuwenhuis RF, Ossewaarde JM, Gotz HM, Dees J, Thio HB, Thomeer MG, *et al* (2004). Resurgence of *Lymphogranuloma venereum* in Western Europe: an outbreak of *Chlamydia trachomatis* serovar l2 proctitis in The Netherlands among men who have sex with men. *Clin Infect Dis*. **39**(7):996-1003.

2. Ward H, Martin I, Macdonald N, Alexander S, Simms I, Fenton K, *et al* (2007). *Lymphogranuloma venereum* in the United kingdom. *Clin Infect Dis*. **44**(1):26-32.

3. Childs T, Simms I, Alexander S, Eastick K, Hughes G, Field N (2015). Rapid increase in *Lymphogranuloma venereum* in men who have sex with men, United Kingdom, 2003 to September 2015. *Euro Surveill*. **20**(48):30076.

4. Saxon C, Hughes G, Ison C, Group ULC-F (2016). Asymptomatic *Lymphogranuloma* venereum in men who have sex with men, United Kingdom. *Emerg Infect Dis*. **22**(1):112-6.

5. PHE (2016). *Lymphogranuloma venereum* infections in England 2004 to 2016. *Health Protection Report* **10**(22).

6. PHE (2016). England STI Annual Tables.

7. Nwokolo NC, Dragovic B, Patel S, Tong CY, Barker G, Radcliffe K PHE (2016). 2015 UK national guideline for the management of infection with *Chlamydia trachomatis*. *Int J STD AIDS*. **27**(4): 251-67.

8. Savage EJ, Mohammed H, Leong G, Duffell S, Hughes G PHE (2014). Improving surveillance of sexually transmitted infections using mandatory electronic clinical reporting: the genitourinary medicine clinic activity dataset, England, 2009 to 2013. *Euro Surveill*. **19**(48): 20981.

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health, and are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner.

About Health Protection Report

Health Protection Report is a national public health bulletin for England and Wales, published by Public Health England. It is PHE's principal channel for the dissemination of laboratory data relating to pathogens and infections/communicable diseases of public health significance and of reports on outbreaks, incidents and ongoing investigations.

Public Health England, Wellington House, 133-155 Waterloo Road, London SE1 8UG
Tel: 020 7654 8000 www.gov.uk/phe
Twitter: @PHE_uk Facebook: www.facebook.com/PublicHealthEngland

Queries relating to this document should be directed to:
HIV/STI Department, National Infection Service, PHE Colindale, 61 Colindale Avenue, London NW9 5EQ
GUMCAD@phe.gov.uk

Published: October 2017
PHE publications gateway number: 2017489

PHE supports the UN Sustainable Development Goals