

Protecting and improving the nation's health

Local Summary of Legionnaires' disease in Residents of England and Wales, 2016

London

This report provides a short summary of Legionella activity in residents of London, amongst individuals with onset of symptoms during 2016. It is recommended that this report be read in conjunction with either the 2016 official statistics which provides statistics on Legionella activity across the whole of England and Wales during 2016 and can be found on the Public Health England (PHE) website at the following address:

www.gov.uk/government/statistics/legionnaires-disease-in-england-and-wales-2016 Alternatively, the annual report: Legionnaires' disease in residents of England and Wales: 2016 can be referred to and is located at: www.gov.uk/government/publications/legionnaires-disease-in-residents-of-england-and-wales-2016

The annual report provides wider analysis of Legionella activity across England and Wales along with case definitions, detailed methodology and discussion on key aspects of Legionella activity in England and Wales during 2016.

The data in this report primarily focuses on cases with onset of symptoms during 2016 but data for years 2014 and 2015 and in some tables and figures, for years 2007 to 2015, are presented for comparative purposes.

Data presented in this report are based on cases of Legionellosis reported to the National surveillance scheme for Legionnaires' disease in residents of England and Wales that is managed by the Respiratory diseases department, National Infection Service, PHE.

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Figure 1: Number of cases of legionellosis (confirmed and presumptive) in residents of London by year of onset of symptoms: 2007 – 2016

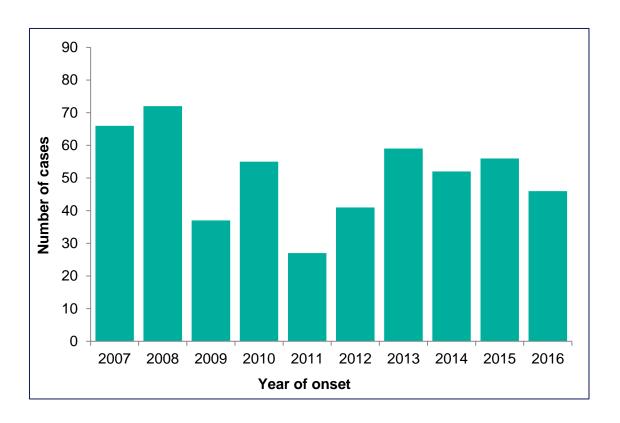


Table 1: Number of cases of legionellosis (confirmed and presumptive) in residents of London by disease type and year of onset: 2014 - 2016

| | Number of confirmed (presumptive*) cases | | | | | | | |
|--------------------------------|--|-----------|--|--|--|--|--|--|
| | 2014 | 2015 2016 | | Total (2014 - 2016) | | | | |
| Legionnaires' disease | 48 (4) | 56 | 45 (1) | 149 (5) | | | | |
| Non-pneumonic Legionellosis | - | - | - | 0 | | | | |
| Pontiac fever | - | - | - | 0 | | | | |
| Total | 48 (48 confirmed, 4 presumptive) | 56 | 45 (45 confirmed, 1 presumptive) | 149 (149 confirmed, 5 presumptive) | | | | |

^{*} presumptive cases with only a single high titre or PCR result

Table 2: Number and population rate^{*} per million of confirmed cases of Legionnaires' disease in residents of London by year of onset: 2014 - 2016

| Region | 2014 | | 2015 | | 2016 | | Total (2014 - 2016) | |
|----------|------|------|------|------|------|------|-------------------------------|------|
| | n | Rate | n | Rate | n | Rate | n | Rate |
| London | 48 | 5.46 | 56 | 6.37 | 45 | 5.12 | 149 | 5.65 |
| National | 331 | 5.67 | 384 | 6.58 | 355 | 6.08 | 1070 | 6.11 |

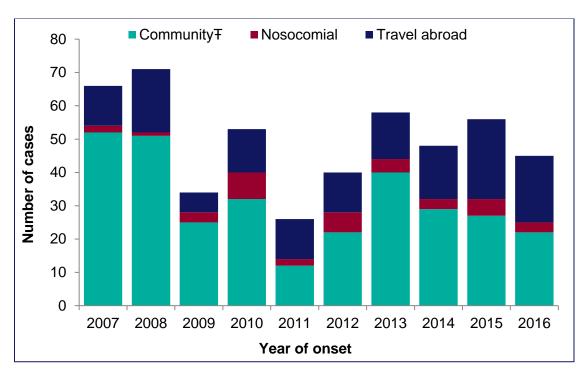
[¥] Rate calculated using mid-2016 population estimates for England and Wales from office of national statistics

Table 3: Number and proportion of confirmed Legionnaires' disease cases in residents of London by likely exposure category: 2014 - 2016

| Category | 2014 (%) | 2015 (%) | 2016 (%) | Total (%) | National Total (%) (2014 - 2016) |
|------------------------|-----------------|-----------------|-----------------|--------------|--|
| Community [∓] | 29 (60.4) | 27 (48.2) | 22 (48.9) | 78 (52.3) | 580 (54.2) |
| Nosocomial | 3 (6.3) | 5 (8.9) | 3 (6.7) | 11 (7.4) | 27 (2.5) |
| Travel abroad | 16 (33.3) | 24 (42.9) | 20 (44.4) | 60 (40.3) | 463 (43.3) |
| Total | 48 | 56 | 45 | 149 | 1070 (100.0) |

Ŧ includes travel UK cases

Figure 2: Number of confirmed Legionnaires' disease cases in residents of London by year of onset and category: 2007 – 2016



Ŧ includes travel UK cases

confirmed LD case: diagnosis by culture, urinary antigen or serology with a four-fold rise (FFR) and evidence of pneumonia

Table 4: Number and proportion of confirmed Legionnaires' disease cases in residents of London by age group and gender, with age specific case-fatality rates: 2014 – 2016

| | Nu | mber (%) of o | No. | Age Specific | |
|-----------------|-----------|---------------|--------------------------|--------------|--------------------|
| Age Groups | Female | Male | Total (2014-2016) | Deaths | CFR (95%CI) |
| Under 50 years | 8 (21.1) | 30 (78.9) | 38 (25.5) | 3 | 7.9 (1.7 - 21.4) |
| 50-59 years | 12 (30.0) | 28 (70.0) | 40 (26.8) | 1 | 2.5 (0.06 - 13.2) |
| 60-69 years | 7 (20.0) | 28 (80.0) | 35 (23.5) | 2 | 5.7 (0.7 - 19.2) |
| 70 years & over | 9 (25.0) | 27 (75.0) | 36 (24.2) | 6 | 16.7 (6.4 - 32.8) |
| Total | 36 (24.2) | 113 (75.8) | 149 (100.0) | 12 | 8.1 (4.2 - 13.6) |

[‡] one-sided, 97.5% confidence interval

Figure 3: Number of confirmed Legionnaires' disease cases in residents of London by month and year of onset: 2014 – 2016

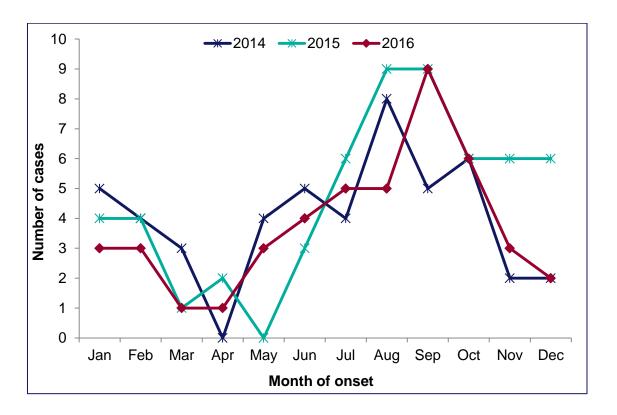


Table 5: Legionnaires' disease cases in residents of London by diagnostic test and year of onset: 2014 - 2016~

| | 2014 (%) | 2015 (%) | 2016 (%) | Total (%) (2014 - 2016) | National Total (%) (2014 - 2016) |
|---------------------------|-----------------|-----------------|-----------------|--------------------------------|--|
| Case Numbers [†] | 48 | 56 | 45 | 149 | 1070 |
| Culture | 11 (22.9) | 19 (33.9) | 8 (17.8) | 38 (25.5) | 241 (22.5) |
| Urine | 47 (97.9) | 56 (98.2) | 44 (97.8) | 146 (98.0) | 1044 (97.6) |
| Serology (SHT) | - | - | - | - | 0 |
| Serology (FFR) | - | - | - | - | 0 |
| PCR | 14 (29.2) | 27 (48.2) | 12 (26.7) | 53 (35.6) | 306 (28.6) |

[~] this table shows the investigations carried out on each confirmed case

[†] please note that some cases have more than 1 diagnostic test carried out, therefore the sum of diagnostic tests does not equal the annual 'case number'.

Table 6: Number of confirmed Legionnaires' disease cases in residents of London by Local Authority and year of onset: 2014 – 2016

| Local Authority | 2014 | 2015 | 2016 | Total (2014 - 2016) |
|------------------------|------|------|------|----------------------------|
| Barking and Dagenham | 1 | - | 1 | 2 |
| Barnet | 4 | 3 | 2 | 9 |
| Bexley | 1 | 2 | 2 | 5 |
| Brent | 5 | 3 | 1 | 9 |
| Bromley | 3 | 1 | 1 | 5 |
| Camden | 3 | - | - | 3 |
| Croydon | 3 | 8 | - | 11 |
| Ealing | 3 | 5 | 2 | 10 |
| Enfield | 1 | 2 | 1 | 4 |
| Greenwich | - | 2 | 1 | 3 |
| Hammersmith and Fulham | - | 3 | 2 | 5 |
| Haringey | - | - | 2 | 2 |
| Harrow | - | 1 | 2 | 3 |
| Havering | - | 2 | 4 | 6 |
| Hillingdon | 3 | - | 1 | 4 |
| Hounslow | - | 2 | 2 | 4 |
| Islington | - | 2 | 2 | 4 |
| Kingston upon Thames | - | - | 2 | 2 |
| Lambeth | 1 | 2 | 1 | 4 |
| Lewisham | 3 | 4 | 1 | 8 |
| Merton | - | - | 1 | 1 |
| Newham | 1 | 1 | 2 | 4 |
| Redbridge | - | 1 | 1 | 2 |
| Richmond upon Thames | 2 | 1 | 3 | 6 |

| Southwark | 2 | 2 | 1 | 5 |
|----------------|----|----|----|-----|
| Sutton | 3 | 1 | 1 | 5 |
| Tower Hamlets | - | 2 | 1 | 3 |
| Waltham Forest | 3 | - | 1 | 4 |
| Wandsworth | 2 | 4 | 1 | 7 |
| Westminster | 3 | 2 | 3 | 8 |
| No fixed abode | 1 | - | - | 1 |
| Total | 48 | 56 | 45 | 149 |

Table 7: Number and type of outbreaks/clusters with associated number of London cases of Legionnaires' disease: 2014 – 2016

| | 2014 | | 2015 | | 2016 | | Total (2014 - 2016) | |
|------------|------|-------|------|--------|------|-------|----------------------------|--------|
| | ОВ | Cases | ОВ | Cases | ОВ | Cases | ОВ | Cases |
| Community | - | - | 3 | 12 | - | - | 3 | 12 |
| Nosocomial | - | - | 2 | 11 (7) | 1 | 2 | 3 | 13 (7) |
| Travel UK | ı | - | - | - | - | - | 0 | 0 |
| Total | 0 | 0 | 5 | 23 (7) | 1 | 2 | 6 | 25 (7) |

^() cases with onset of symptoms in other years that are included in the cluster/outbreak

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