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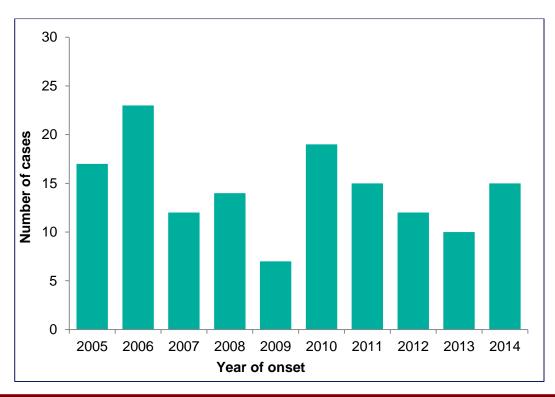
## Local Summary of Legionnaires' disease in Residents of England and Wales, 2014

## **North East**

This report provides a short summary of Legionella activity in residents of North East, with particular emphasis on cases with onset of symptoms during 2014. Data for years 2012 and 2013 and in some tables and graphs, for years 2005 to 2013, are presented for comparative purposes.

For wider analysis of Legionella activity across England and Wales along with case definitions and a detailed methodology, please refer to the annual report, Legionnaires' disease in England and Wales; 2014, available on the Public Health England website at; <a href="https://www.gov.uk/government/statistics/legionnaires-disease-in-england-and-wales-2014">https://www.gov.uk/government/statistics/legionnaires-disease-in-england-and-wales-2014</a>

**Figure 1:** Number of cases of legionellosis (confirmed and presumptive) in residents of North East by year of onset of symptoms; 2005 – 2014



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**Table 1:** Number of cases of legionellosis (confirmed and presumptive) in residents of North East by disease type and year of onset; 2012 – 2014

|                                | Number o | Number of confirmed (presumptive*) cases |      |                            |  |  |  |  |
|--------------------------------|----------|--|------|----------------------------|--|--|--|--|
|                                | 2012     | 2013                                     | 2014 | <b>Total</b> (2012 - 2014) |  |  |  |  |
| Legionnaires' disease          | 12       | 10                                       | 15   | 37                         |  |  |  |  |
| Non-pneumonic<br>Legionellosis | -        | -  | -    | 0                          |  |  |  |  |
| Pontiac fever                  | -        | -  | -    | 0                          |  |  |  |  |
| Total                          | 12       | 10                                       | 15   | 37                         |  |  |  |  |

<sup>\*</sup> 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 North East by year of onset; 2012 – 2014

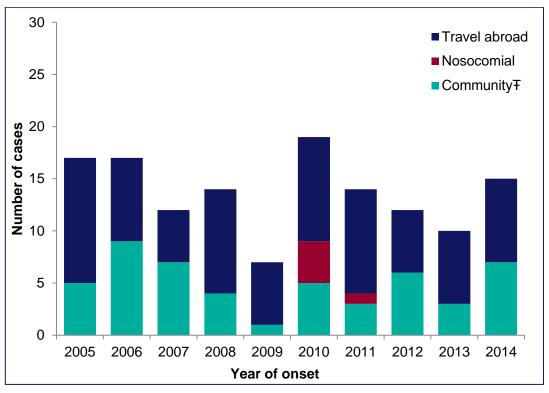
| Region     | 20  | )12  | 20  | )13  | 2014 |      | <b>Total</b> (2012 - 2014) |      |
|------------|-----|------|-----|------|------|------|----------------------------|------|
| J          | n   | Rate | n   | Rate | n    | Rate | n                          | Rate |
| North East | 12  | 4.60 | 10  | 3.83 | 15   | 5.75 | 37                         | 4.72 |
| National   | 306 | 5.40 | 285 | 5.03 | 331  | 5.84 | 922                        | 5.42 |

**Table 3:** Number and proportion of confirmed Legionnaires' disease cases in residents of North East by likely exposure category; 2012 – 2014

| Category               | 2012     | 2013     | 2014     | Total     | National<br>Total<br>(2012 - 2014) |
|------------------------|----------|----------|----------|-----------|------------------------------------|
| Community <sup>∓</sup> | 6 (50.0) | 3 (30.0) | 7 (46.7) | 16 (43.2) | 546 (59.2)                         |
| Nosocomial             | -        | -        | -        | 0         | 22 (2.4)                           |
| Travel abroad          | 6 (50.0) | 7 (70.0) | 8 (53.3) | 21 (56.8) | 354 (38.4)                         |
| Total                  | 12       | 10       | 15       | 37        | 922                                |

Ŧ includes travel UK cases

**Figure 2:** Number of confirmed Legionnaires' disease cases<sup>°</sup> in residents of North East by year of onset and category; 2005 – 2014



Ŧ includes travel UK cases

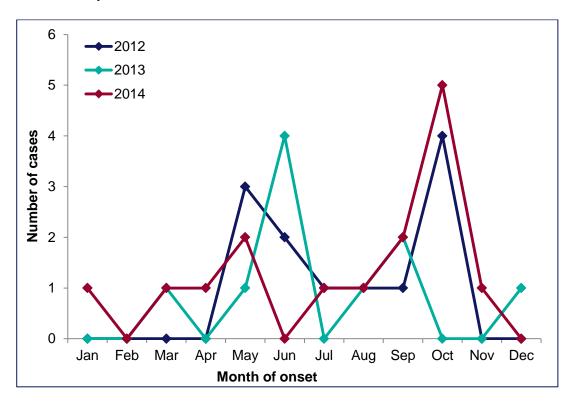
**Table 4:** Number and proportion of confirmed Legionnaires' disease cases in residents of North East by age group and gender, with age specific case-fatality rates; 2012 – 2014

|                 | Num       | nber (%) of | cases                    | No.    | Age Specific                   |
|-----------------|-----------|-------------|--------------------------|--------|--------------------------------|
| Age Groups      | Female    | Male        | <b>Total</b> (2012-2014) | Deaths | <b>CFR</b> (95%CI)             |
| Under 50 years  | 5 (71.4)  | 2 (28.6)    | 7 (18.9)                 | 1      | 14.3 (0.4 - 57.9)              |
| 50-59 years     | 3 (25.0)  | 9 (75.0)    | 12 (32.4)                | -      | 0.0 (0.0 - 26.5 <sup>‡</sup> ) |
| 60-69 years     | 2 (28.6)  | 5 (71.4)    | 7 (18.9)                 | 2      | 28.6 (3.7 - 71.0)              |
| 70 years & over | 5 (45.5)  | 6 (54.5)    | 11 (29.7)                | 1      | 9.1 (0.2 - 41.3)               |
| Total           | 15 (40.5) | 22 (59.5)   | 37 (100.0)               | 4      | 10.8 (3.0 - 25.4)              |

<sup>‡</sup> one-sided, 97.5% confidence interval

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

**Figure 3:** Number of confirmed Legionnaires' disease cases in residents of North East by month and year of onset; 2012 – 2014



**Table 5:** Legionnaires' disease cases in residents of North East by diagnostic test and year of onset; 2012 - 2014~

|                           | 2012       | 2013       | 2014      | <b>Total</b> (2012 - 2014) | National<br>Total<br>(2012 - 2014) |
|---------------------------|------------|------------|-----------|----------------------------|------------------------------------|
| Case Numbers <sup>†</sup> | 14         | 12         | 10        | 37                         | 922                                |
| Culture                   | 2 (16.7)   | 3 (30.0)   | 6 (40.0)  | 11 (29.7)                  | 211 (22.9)                         |
| Urine                     | 12 (100.0) | 10 (100.0) | 14 (93.3) | 36 (97.3)                  | 905 (98.2)                         |
| Serology (SHT)            | -          | -          | -         | -                          | -                                  |
| Serology (FFR)            | -          | -          | -         | -                          | -                                  |
| PCR                       | 3 (25.0)   | 5 (50.0)   | 6 (40.0)  | 14 (37.8)                  | 246 (26.7)                         |

<sup>~</sup> this table shows the investigations carried out on each confirmed case

<sup>&</sup>lt;sup>†</sup> please note that some cases have more than one 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 North East by Local Authority (Upper-Tier) and year of onset; 2012 – 2014

| Local Authority      | 2012 | 2013 | 2014 | <b>Total</b> (2012 - 2014) |
|----------------------|------|------|------|----------------------------|
| County Durham UA     | 1    | 1    | 3    | 5                          |
| Gateshead            | -    | 1    | 2    | 3                          |
| Hartlepool           | 3    | 1    | 1    | 5                          |
| Middlesbrough        | 1    | 2    | 2    | 5                          |
| Newcastle upon Tyne  | 1    | -    | 1    | 2                          |
| North Tyneside       | 2    | -    | -    | 2                          |
| Northumberland UA    | 1    | 2    | 2    | 5                          |
| Redcar and Cleveland | 1    | 1    | -    | 2                          |
| South Tyneside       | -    | -    | 3    | 3                          |
| Stockton on Tees     | -    | 2    | -    | 2                          |
| Sunderland           | 2    | -    | 1    | 3                          |
| Total                | 12   | 10   | 15   | 37                         |

**Table 7:** Number and type of outbreaks/clusters with associated number of North East cases of Legionnaires' disease; 2012 – 2014

|            | 20 | 2012  |    | 013   | 2014 |       | <b>Total</b> (2012 - 2014) |       |
|------------|----|-------|----|-------|------|-------|----------------------------|-------|
|            | ОВ | Cases | ОВ | Cases | ОВ   | Cases | ОВ                         | Cases |
| Community  | 1  | 3     | -  | -     | -    | -     | 1                          | 3     |
| Nosocomial | -  | -     | -  | -     | -    | -     | 0                          | 0     |
| Travel UK  | -  | -     | -  | -     | -    | -     | 0                          | 0     |
| Total      | 1  | 3     | 0  | 0     | 0    | 0     | 1                          | 3     |

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