

2.2 Legionellosis

Summary

Number of cases in 2016: 10
Crude incidence rate: 2.1 per million

In 2016, there were 10 cases of Legionnaires' disease notified in Ireland, a rate of 2.1 per million population, which is a slight decrease from the rate of 2.5 per million observed in 2015. One death due to Legionnaires' disease was reported among the 10 cases, giving a case fatality rate of 10%.

The HSE areas who reported the cases in 2016 are shown in Table 1.

The majority of cases were male (60%). The median age for all cases was 62 years with a range from 28 to 82 years.

Table 1. Number of Legionnaires' disease cases by HSE area of reporting in Ireland, 2016

Area of Reporting	No. of Cases
HSE-East	3
HSE-North East	3
HSE-Midlands	2
HSE-North West	1
HSE-West	1
Ireland	10

All ten cases were classified as confirmed. The organism involved in all confirmed cases, which was detected by urinary antigen test, was *Legionella pneumophila* serogroup 1. One case also had a confirmatory sputum sample culture of *Legionella pneumophila* serogroup 1. Monoclonal subtyping was not performed on the cultured isolate and was not available for any of the remaining cases because cultures were not available.

Seven cases were travel-associated. Countries of travel included Estonia (1), Hungary (1), Lithuania (2), Singapore (1) and Spain (2). Two of these travel-associated cases were linked to international travel related clusters. The remaining three cases were assumed to be community acquired.

No seasonality was evident in the cases in 2016, as described in Figure 1. The number of cases of Legionnaires' disease

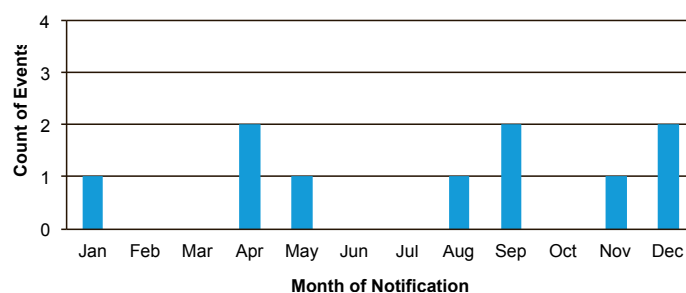


Figure 1. Number of Legionnaires' disease cases by month of notification in Ireland, 2016

Table 2. Number of Legionnaires' disease cases per million population in Ireland, 2009-2016

Legionnaires' events excluding Pontiac Fever cases

Age Group (years)	2009	2010	2011	2012	2013	2014	2015	2016
<30	0	1	0	0	0	0	0	1
30-39	0	0	0	1	1	1	1	1
40-49	0	2	0	1	3	1	1	1
50-59	2	1	1	1	4	2	3	1
60-69	3	3	4	6	1	3	1	2
70+	2	4	2	6	5	1	6	4
Total	7	11	7	15	14	8	12	10
Total CIR per million	1.5	2.4	1.5	3.3	3.1	1.7	2.5	2.1

To calculate the crude incidence rate (CIR), Census of the Population data was used as the denominator with Census 2016 for the analysis of 2014-2016 data and Census 2011 for the analysis of 2009-2013 data.

by month of notification between 2013 and 2016 is given in Figure 2. The annual trend over the past four years indicates that the number of notifications has been decreasing over time.

When the numbers of cases in 2016 were compared with the mean for the previous five years (see Figure 3), numbers were within historical limits.

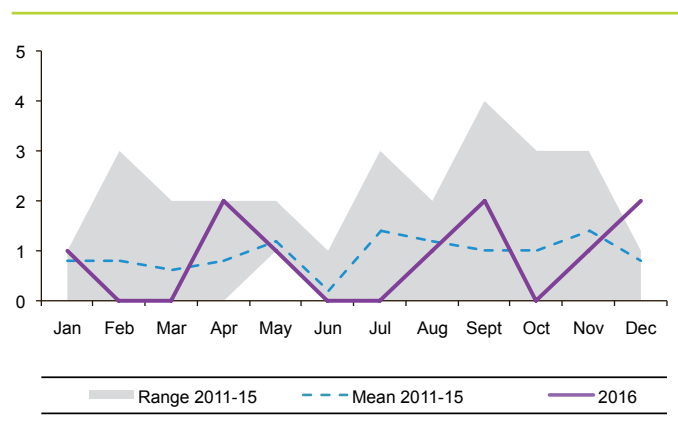
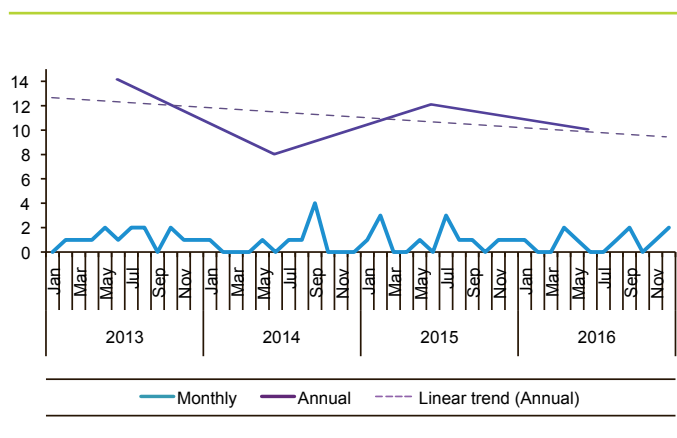


Figure 2. Number of Legionnaires' disease cases by month of notification and annually, 2013-2016

Figure 3. Number of Legionnaires' disease cases by month of notification in 2016 compared to the mean and range for the years 2011-2015

Figures for the year 2016 presented in this report were extracted from the computerised infectious disease reporting (CIDR) system on the 22nd August, 2017.