

2.2 Legionellosis

Summary

Number of cases in 2015: 12
Crude incidence rate: 2.6 per million

In 2015, there were 12 cases of Legionnaires' disease notified in Ireland, a rate of 2.6 per million population which is an increase from the rate of 1.7 per million observed in 2014. Three deaths due to Legionnaires' disease were reported among the 12 cases, giving a case fatality rate of 25%.

Eight cases were reported from HSE East, one from HSE Mid-West, one from HSE North West and two from HSE South.

Males and females were equally affected by Legionnaires' disease with half of all cases occurring in males and half in females. This was the second consecutive year since the reporting of cases to the national infectious disease surveillance system, CIDR that the majority of cases did not occur in males. The median age for all cases was 66 years with a range from 36 to 83 years.

Eleven cases were classified as confirmed and one case as probable. The organism involved in the 11 confirmed cases, which was detected by urinary antigen test, was *Legionella pneumophila* serogroup 1. The diagnosis in one of the 11 cases also included the use of the laboratory method nucleic acid amplification (PCR). Further sequence analysis of the clinical isolate determined it to be sequence type 42. As none of the

cases had the specimen cultured, monoclonal subtyping was not available. Nucleic acid amplification was the diagnostic method used for the probable case.

Six cases were travel-associated. Countries of travel included Dominican Republic (1), Ireland (2), South Africa (1), United Arab Emirates (1) and United States (1). Two cases were linked to travel related clusters. The remaining six cases were assumed to be community acquired.

No seasonality was evident in the cases in 2015, as described in Figure 1.

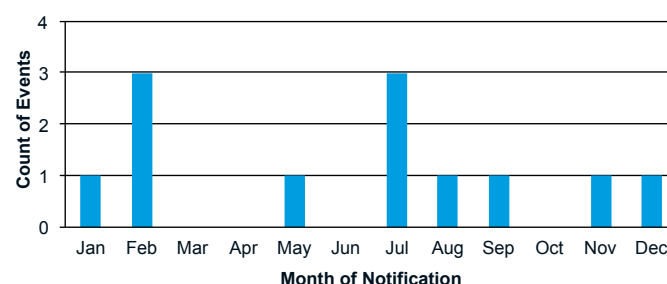


Figure 1. Number of Legionnaires' disease cases by month of notification in Ireland, 2015

Figures for the year 2015 presented in this report were extracted from the computerised infectious disease reporting (CIDR) system on the 4th May, 2016.

Table 1. Number of Legionnaires' disease cases per million population in Ireland, 2008-2015

Age group (years)	2008	2009	2010	2011	2012	2013	2014	2015
<30	0	0	1	0	0	0	0	0
30-39	0	0	0	0	1	1	1	1
40-49	2	0	2	0	1	3	1	1
50-59	3	2	1	1	1	4	2	3
60-69	4	3	3	4	6	1	3	1
70+	2	2	4	2	6	5	1	6
Total	11	7	11	7	15	14	8	12
CIR	2.6	1.5	2.4	1.5	3.3	3.1	1.7	2.6

For details of denominator data used, please see Explanatory Notes section at the end of the HPSC annual epidemiological report