

4.3 Leptospirosis

Summary

Number of cases, 2010: 17
 Number of cases, 2009: 24
 Crude incidence rate, 2010: 0.4/100,000

Seventeen cases of leptospirosis were notified in Ireland in 2010, a 29% reduction compared to the 24 cases notified in 2009 (Figure 1). This equates to a crude incidence rate of 0.40 per 100,000 (95% CI 0.21-0.59). The last year for which data is available across the European Union is 2008. Among the 25 countries that reported on leptospirosis incidence at that time, Ireland reported the second highest incidence rate. The incidence in the EU as a whole was 0.15 per 100,000.

The leptospirosis notification dataset is typically dominated by adult males, and this year is no exception (Table 1). Sixteen cases (94%) were male and the age range was 19-82 (mean age =41 years, median age=37 years). This is consistent with the exposures most commonly associated with leptospirosis in temperate regions, e.g. occupational contact with farm animals and watersports.

Among the 16 cases for which hospital admission status was reported, 15 (94%) required hospitalization. No deaths were reported.

Table 1. Leptospirosis notifications by age and sex, Ireland 2010

Age group	Male	Female	Total
<5 yr	0	0	0
5-14 yrs	0	0	0
15-24 yrs	5	0	5
25-44 yrs	4	1	5
45-64 yrs	5	0	5
65+ yrs	2	0	2
Total	16	1	17

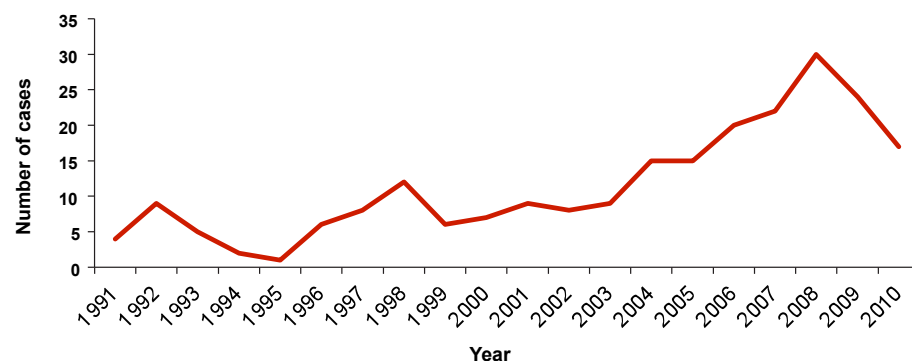


Figure 1. Annual number of leptospirosis notifications, Ireland 1991-2010 (data source: CIDR)

Six cases (35%) were believed to have acquired their illness occupationally –all were either farmers or reported contact with farm environments. Five (29%) cases were reported as being associated with recreational activities: two with travel to a tropical destination, and one each with kayaking, diving and fishing. No risk factor information was available for the remaining six (35%) cases.

While a number of regional hospital laboratories offer a diagnostic service for leptospirosis, annually around two thirds of cases are diagnosed by the National Virus Reference Laboratory. Positive specimens are generally referred to the UK Leptospirosis Reference Unit for confirmation and for typing where possible. Species information was available on CIDR for only two cases in 2010—one each *Leptospira interrogans hardjo* and *Leptospira interrogans icterohaemorrhagiae*. Both were reported as occupationally acquired. Species was not reported for the remaining 15 cases.

Activities that continue to be associated with leptospirosis risk in Ireland include farming and recreational activities such as water sports. In the last few years, travel to Asia and other tropical destinations has emerged as a risk factor for leptospirosis. In general the incidence of leptospirosis is much higher in tropical climates than in temperate areas like Ireland.