4.2 Leptospirosis

Summary

Number of cases: 16 Crude incidence rate: 0.3/100,000 population

Sixteen cases of leptospirosis were notified in Ireland in 2015. This represents a decrease compared to 23 cases notified in 2014 (Figure 1). This equates to a crude incidence rate (CIR) of 0.3 per 100,000 population in 2015. The EU crude incidence rate was 0.2 per 100,000 in 2014, latest year for which data was available for. Among the countries that reported leptospirosis incidence in 2014, Ireland reported the fifth highest incidence rate after Croatia, Slovenia, Portugal and the Netherlands.

The age range of cases was 29-72 (mean age =50 years, median age=51 years). Cases in the younger age groups are more likely to be associated with recreational exposure and history of foreign travel while older cases are mainly indigenous and associated with occupational exposure. Figure 1 illustrates the annual trend by travel history. The leptospirosis notification dataset is typically dominated by adult males, and this year was no exception with male cases accounting for 75% of cases (Table 1).

Five cases (31.3%) were believed to have acquired their illness occupationally, four of whom were either farmers or reported contact with farm environments while the remaining occupationally acquired case reported contact with rat's urine. Two cases (12.5%) reported accidental exposure to potentially contaminated environments while one case (6.3%) was reported as being associated with recreational activities, including river water exposure in Columbia. No risk factors were reported for the remaining

Table 1: Leptospirosis notifications by age and sex, 2015			
Age group (years)	Female	Male	Total
25-34 yrs	1	2	3
35-44 yrs		2	2
45-54 yrs	1	3	4
55-64 yrs	2	4	6
65+ yrs		1	1
Total	4	12	16

eight cases (50.0%). Figure 2 shows the trend in notifications by exposure group and year.

Among the 13 cases for which hospital admission status was reported, 10 (77%) required hospitalisation. One death was reported but the cause of death was not leptospirosis.

Activities that continue to be associated with leptospirosis risk in Ireland include recreational activities such as water sports, and farming. In recent years, travel to Asia and other tropical destinations has emerged as a risk factor for leptospirosis.



Figure 1: Annual number of leptospirosis notifications by year and travel history (Data source: CIDR)



Figure 2: Annual number of leptospirosis notifications by exposure group by year (Data source: CIDR)