4.2 Leptospirosis

Summary

Number of cases: 26 Crude incidence rate: 0.6/ 100,000 population

During 2016, 26 cases of leptospirosis were notified in Ireland, corresponding to a crude incidence rate (CIR) of 0.6 per 100,000 population. This represents an increase compared to 16 cases notified in 2015 (Figure 1). The EU crude incidence rate was 0.2 per 100,000 in 2015, latest year for which data was available. Among the countries that reported leptospirosis incidence in 2015, Ireland reported the fifth highest incidence rate after Croatia, Slovenia, Portugal and the Netherlands.

The age range of cases was 9-67 years (mean age=39.5 years, median age=39 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 80.8% of cases (Table 1).

Of the 23 cases who reported details of potential exposures, 11 cases (47.8%) were believed to have acquired their illness occupationally. Of the occupationally exposed cases, five were farmers, two had animal contact, two had river water contact and two had exposure to contaminated environments. Six cases (26.1%) were reported as being associated with recreational activities, including river water exposure. Five cases (21.7%) reported residential exposure and one case reported accidental exposure to potentially contaminated environments. Exposure details were not

| Table 1: Leptospirosis notifications by age and sex, 2016 | | | |
|---|--------|------|-------|
| Age group (years) | Female | Male | Total |
| 5-9 yrs | 1 | | 1 |
| 15-19 yrs | 1 | 1 | 2 |
| 20-24 yrs | 1 | 1 | 2 |
| 25-34 yrs | 1 | 3 | 4 |
| 35-44 yrs | 1 | 5 | 6 |
| 45-54 yrs | | 6 | 6 |
| 55-64 yrs | | 3 | 3 |
| 65+ yrs | | 2 | 2 |
| Total | 5 | 21 | 26 |

reported for the remaining three cases (11.5%). Figure 2 shows the trend in notifications by exposure group and year.

Among the 21 cases for which hospital admission status was reported, 16 (76%) required hospitalisation.

Activities that continue to be associated with leptospirosis risk in Ireland include farming and recreational activities such as water sports. 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)