

4.3 Leptospirosis

Summary

Number of cases, 2008: 30
Number of cases, 2007: 22
Crude incidence rate, 2008: 0.71/100,000

Thirty cases of leptospirosis were notified in Ireland in 2008, compared to 22 in 2007 and 20 in 2006. Figure 1 shows the rise in the reported number of notifications in Ireland over the last number of years. The crude incidence rate for Ireland now stands at 0.71 per 100,000 (95% CI 0.45-0.96). The last year for which data is available across the EU is 2006. At that time, Ireland had the third highest incidence among those countries for whom data was available. The incidence in the EU as a whole was 0.18 per 100,000 (Figure 2).

The leptospirosis notification dataset is typically dominated by adult males, and this year is no exception. Ninety per cent of cases this year was male and the age range was 13-85 (mean age =45 years, median age=37 years). Figure 3 shows the age-sex distribution of notifications in 2008. This is consistent with the exposures most commonly associated with leptospirosis

in temperate regions, e.g. occupational contact with farm animals and watersports.

Seventeen cases required hospitalization, two were reported as GP patients, and patient type was not available for the remaining 11 patients. One elderly patient died as a result of their illness.

Ten cases were believed to have acquired their illness occupationally –five of these were farmers. Nine cases reported recent watersports activity including six canoeists, two swimming outdoors and one triathlete. For three of these cases, these activities occurred outside of Ireland –two in Asia and one in the United Kingdom. For six cases, their infections were reported to have been possibly due to engaging in more common outdoor activities such as gardening, spending time by a river bank, or holidaying in a tropical destination. No risk factor information was available for the remaining five 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

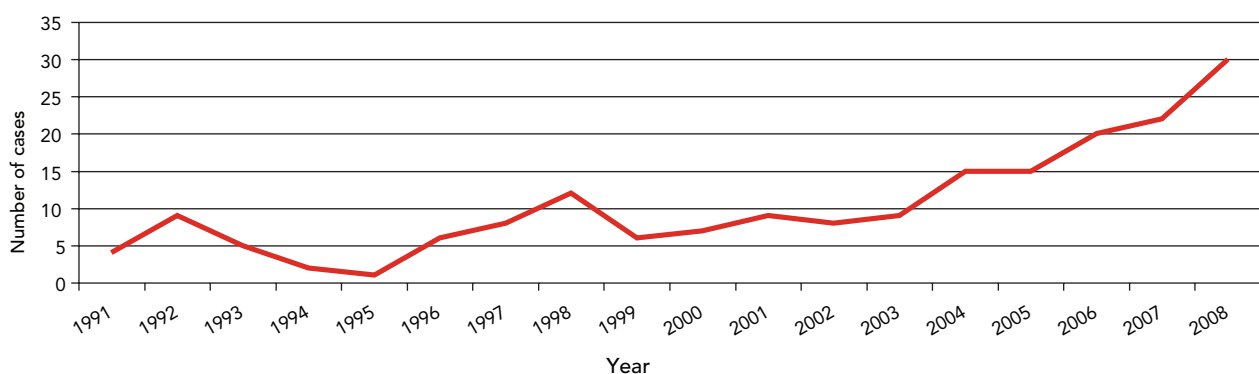


Figure 1 : Annual number of leptospirosis notifications, Ireland 1991-2008
(data source: CIDR)

confirmation and for typing where possible. Overall, species information was available for seven cases in 2008 –two cases were infected with *Leptospira interrogans hardjo*, both of which were farming-related cases. There were five cases reported as *Leptospira interrogans icterohaemorrhagiae*, three of whom reported river water contact. Species was not reported for the remaining 23 cases.

activities such as water sports, and flooding. In the last few years, travel to Asia has emerged as a risk factor for leptospirosis in Ireland. In general the incidence of leptospirosis is higher in tropical climates than in temperate areas like Ireland.

Activities that have been associated with leptospirosis risk include farming, occupations that involve contact with wet rodent-infested environments, recreational

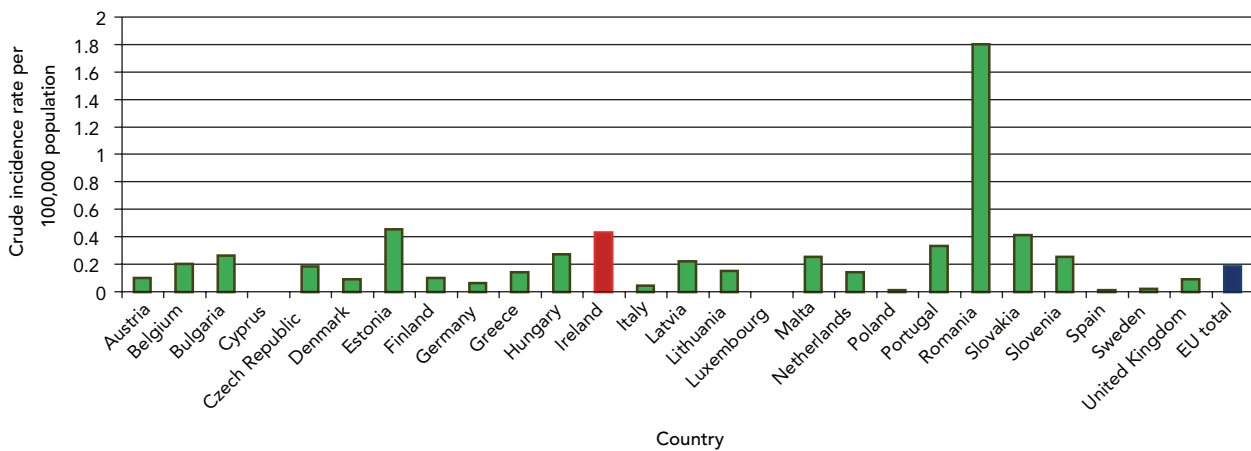


Figure 2: Crude incidence rate leptospirosis in EU member states, 2006
(Data source: ECDC - note excludes France which did not provide data to ECDC in 2006)

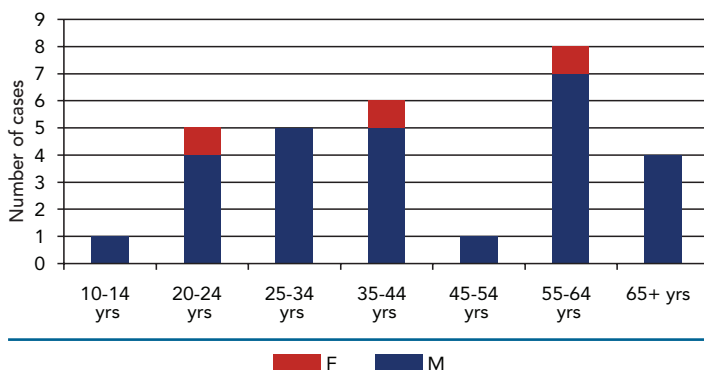


Figure 3. Age-sex distribution leptospirosis cases, Ireland 2008
(Data source: CIDR)