

3.7 Less common gastroenteric infections

Listeriosis

Eleven cases of human listeriosis were notified in 2012, higher than the seven cases reported in 2011. This equates to a crude incidence rate of 0.24 (95% CI 0.10-0.28) per 100,000, below the EU average of 0.32 per 100,000 in 2011.

Among these, there were one pregnancy-related and two neonatal cases. This is one less than the number of pregnancy-associated cases reported in 2011 (Figure 1). Both infants developed bloodstream infections. The pregnancy-related case resulted in miscarriage.

The number of adult/juvenile cases was higher than last year, but similar to the numbers reported in the previous five years. Seven of the eight adult/juvenile cases were

more than 65 years of age, with the eighth being in the 55-64 years age group. Half were male. Four developed bloodstream infection, two developed meningitis, while the clinical presentation was described as 'other' for the remaining two adult cases. The outcome was reported as recovered/recovering for three cases, while the outcome was unknown or not specified for the remaining five adult cases.

Since 2007, the National *Salmonella*, *Shigella* and *Listeria* Reference Laboratory in Galway has offered a national service for typing of *Listeria* strains. In 2012, isolates from nine of the eleven notified cases were referred. The serotypes for these nine cases are listed in table 1 below.

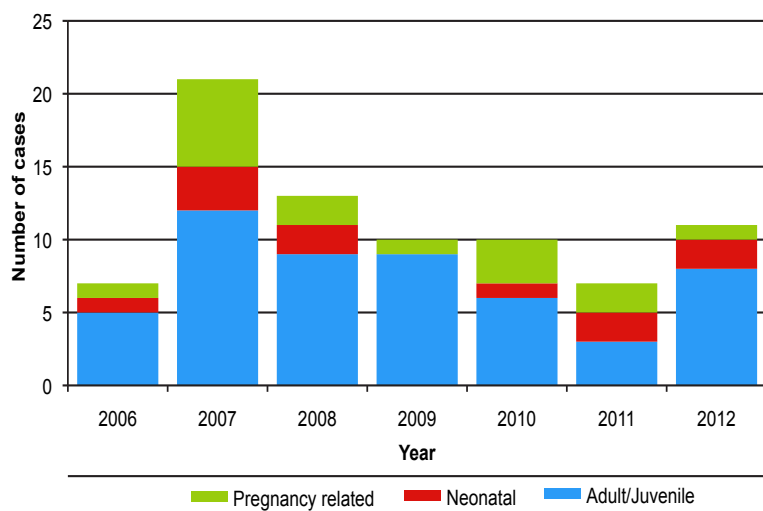


Figure 1: Number listeriosis notifications by case type, Ireland 2006-2012

Table 1. Listeriosis notifications by case type and serotype, Ireland 2012 -typing data provided courtesy of Prof Martin Cormican and staff at the NSSLRL

Type	Serotype 1/2a	Serotype 1/2b	Serotype 4b	Not referred for serotyping	Total
Adult or juvenile	2	0	4	2	8
Pregnancy-related	0	0	1	0	1
Neonatal	0	2	0	0	2
Total	2	2	5	2	11

Listeria in Ireland remains a hazard for the elderly, persons with underlying illness, and other vulnerable groups such as pregnant women and neonates.

Giardiasis

In 2012, there were 54 cases of giardiasis notified; slightly lower than the 57 cases notified in 2011. This equates to a crude incidence rate of 1.18 (95% CI 0.86-1.49) per 100,000.

Cases ranged in age from 1-83 years (median age=33 years) with only 13 cases reported in children under 15 years of age. According to CDC, *Giardia* infects nearly 2% of adults and 6% to 8% of children in developed countries worldwide so it is likely that there is a high degree of underreporting of the illness in Ireland¹. Lower numbers of females (n=23) were affected than males (n=31), which differs from the three previous years when females were more numerous than males. Hospitalization rates were low with nine cases admitted out of 50 (18%) for which this information was available.

The number of cases for which travel status was reported has improved markedly over the last five years from 11% of cases in 2006 to 66% of cases this year (Figure 2). Twenty-seven cases (50% of all cases; 75% of those with known travel status) were reported as being associated with foreign travel: the countries of infection reported were India (n=11), Ethiopia (n=3), Nepal (n=3), South Africa (n=2), and there was one case each reported associated with travel to Afghanistan, Cuba, Kenya, Mexico, Spain, Pakistan, Poland, and Sudan. Nine cases were reported as being acquired in Ireland, and for the remaining 18 cases, country of infection was unknown or not specified.

No outbreaks of giardiasis were notified in 2012. Giardiasis in Ireland is mainly identified among adults, unlike countries such as the United States, Australia and the United Kingdom where children are mainly affected. And if the travel histories of those with known Country of infection are representative of all reported giardiasis cases in Ireland, then as many as three-quarters may be related to foreign travel. Among these cases, Asia and Africa figure most prominently as reported travel destinations.

¹ <http://www.cdc.gov/parasites/giardia/epi.html>

Yersiniosis

In 2012, there were two cases of yersiniosis. Both were female, and included one adult and one paediatric case. One was reported as being infected with *Y. enterocolitica* and one with *Y. spp.* The reported incidence of yersiniosis in Ireland is low relative to the EU as a whole, and to Northern Europe in particular.

Yersiniosis is commonly associated with consumption of pork products however, in Spring 2011, an outbreak was reported in Norway associated with salad leaves.¹

¹ E MacDonald et al. 2011. *Yersinia enterocolitica* O:9 infections associated with bagged salad mix in Norway, February to April 2011. *Eurosurveillance*, Volume 16, Issue 19, 12 May 2011

Foodborne intoxications

Notifications of foodborne intoxications in Ireland are uncommon. In 2012, there were no cases or outbreaks of *Clostridium perfringens* (type A) food-borne disease, staphylococcal food poisoning, botulism or *Bacillus cereus* food-borne infection/intoxication notified.

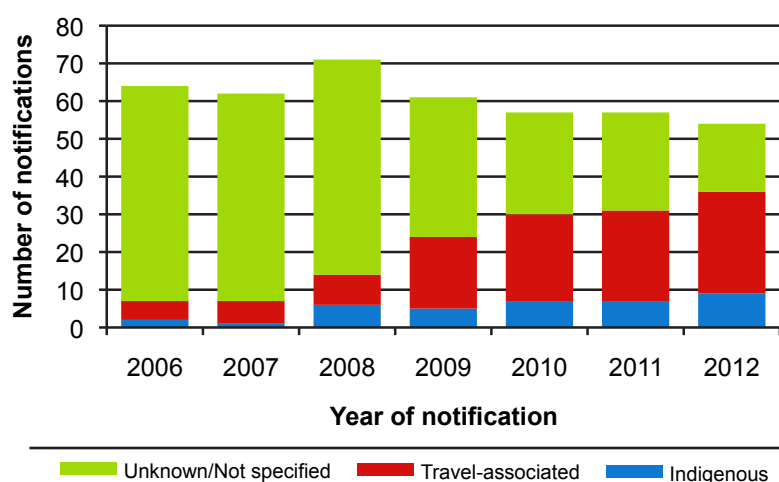


Figure 2: Number Giardiasis Notifications by Travel Status, Ireland 2006-2012

Note: Travel status is inferred from Country of Infection variable on CIDR