3.7 Less common gastroenteric infections

Listeriosis

Seven cases of human listeriosis were notified in 2011, lower that the ten cases reported in 2010. This equates to a crude incidence rate of 0.15 (95% CI 0.04-0.27) per 100,000, below the EU average of 0.35 per 100,000 in 2010.

Among these, there were two pregnancy-related and two neonatal cases. This is equivalent to the number of pregnancy-associated cases reported in 2010 (Figure 1).

There were also three adult cases, one female and two males, with ages ranging from 62 to 80 years. All three cases were reported as suffering from an underlying illness that predisposed them to listeriosis.

There was one miscarriage and one adult death reported in 2011, although it was not known if the adult death was due to listeriosis.

One case was reported as being acquired abroad.

Since 2007, the National *Salmonella, Shigella* and *Listeria* Reference Laboratory in Galway has offered a national service for typing of *Listeria* strains. In 2011, isolates from six of the seven notified cases were referred. The serotypes for these six cases are listed in table 1 below.

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

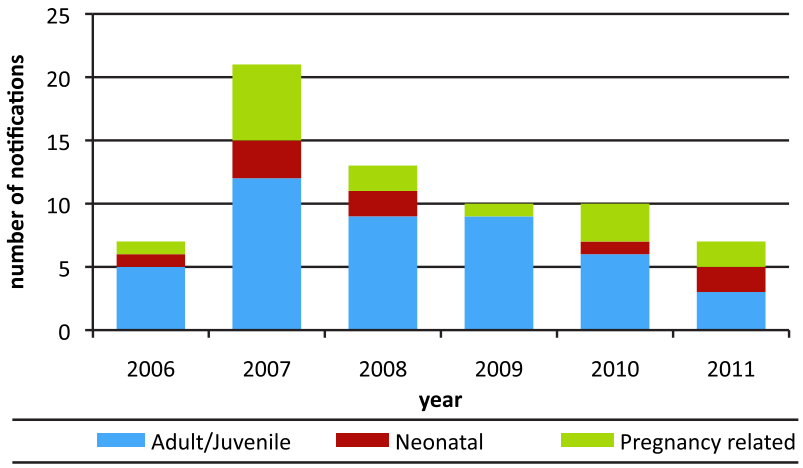

Figure 1: Number listeriosis notifications by case type, Ireland 2006-2011

Table 1. Listeriosis notifications by case type and serotype, Ireland 2011 -typing data provided courtesy of Prof Martin Cormican and staff at the NSSLRL

Type	Serotype 1/2	Serotype 4b	Not referred for serotyping	Total
Adult or juvenile	2	1	0	**3**
Pregnancy-related	0	1	1	**2**
Neonatal	1	1	0	**2**
Total	**3**	**3**	**1**	**7**

Giardiasis

In 2011, there were 57 cases of giardiasis notified; the same number as was notified in 2010. This equates to a crude incidence rate of 1.24 (95% CI 0.92-1.56) per 100,000.

Cases ranged in age from 0-84 years (median age=32 years) with only 12 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 Ireland [1]. Lower numbers of males (n=21) were affected than females (n=35) –sex was unknown for one case. Hospitalization rates were low with five cases admitted out of 46 (11%) for which this information was available.

The number of cases for which travel status was reported has increased markedly over the last five years from 11% of cases in 2006 to 54% of cases this year (Figure 2). Twenty-four cases (42%) were reported as being associated with foreign travel: the countries of infection reported were India (n=14), Ethiopia (n=3), Nepal (n=2), and there was one case each reported associated with travel to Spain, Turkey, Morocco, Mauritius and Chile. Seven cases were reported as being acquired in Ireland, and for the remaining 26 cases, country of infection was unknown or not specified.

In 2011, there were three small family outbreaks with eight persons ill; exposure abroad was reported for some or all of the cases in all three outbreaks.

Giardiasis in Ireland is mainly identified among adults, unlike countries such as the US, Australia and the UK 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 figures most prominently as a travel destination.

[1] http://www.cdc.gov/parasites/giardia/epi.html

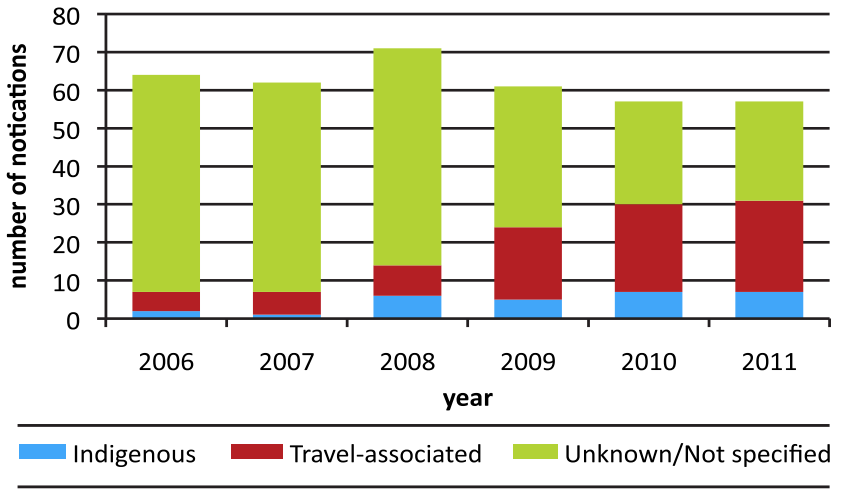

Figure 2: Number Giardiasis Notifications by Travel Status, Ireland 2006-2011
Note: Travel status is inferred from Country of Infection variable on CIDR

Yersiniosis

In 2011, there were six cases of yersiniosis, double the number in 2010 and 2009. Three were male and three were female, and four were less than 15 years of age. All were reported as *Y. enterocolitica*. 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 2011, there were no cases or outbreaks of *Clostridium perfringens* (type A) food-borne disease, staphylococcal food poisoning or *Bacillus cereus* food-borne infection/intoxication notified.

There was one case of infant botulism notified in Ireland in 2011; exposure to turtles or to turtle feed was identified as being the most likely source in this case of infant botulism. http://www.hpsc.ie/hpsc/A-Z/Zoonotic/ReptilesandRisksofInfectiousDiseases/