

3.1 Campylobacter

Summary

Number of campylobacteriosis cases: 2,451
Campylobacteriosis crude incidence rate (CIR): 53.4/100,000

Campylobacteriosis became a notifiable disease in Ireland in 2004 under the Infectious Diseases (Amendment) Regulations. Prior to this, data on laboratory-confirmed cases of *Campylobacter* infection in humans were collected nationally as part of the EU Zoonoses Regulations (while some cases were included in the former category of "Food Poisoning (bacterial other than *Salmonella*)"). It is an acute zoonotic bacterial disease characterised by diarrhoea, abdominal pain, malaise, fever, nausea and vomiting. Symptoms generally last for only a few days. Campylobacteriosis is the commonest bacterial cause of gastroenteritis in Ireland and Europe.¹

Although levels of campylobacteriosis remained elevated during 2015 for the fifth consecutive year, a decrease of 6.1% was observed in comparison with 2014. During 2015, 2,451 notifications were reported to HPSC, corresponding to a crude incidence rate of 53.4/100,000 population, which is

lower than the 2014 European crude incidence rate of 71.0 per 100,000 population.¹

Historically, variation in campylobacteriosis crude incidence rates (CIRs) has been reported between HSE areas. During 2015, the highest CIRs occurred in HSE-SE (72.6) and HSE-M (72.6). The lowest CIR was reported by HSE-NW (29.8) and -NE (36.3).

Campylobacteriosis occurs in all age groups with the highest rate of notification reported in the 0-4 year age group. This preponderance in younger children is a well described characteristic of the disease and is also observed at European level. A comparison of the mean age-specific incidence rate between 2004-2014 and the age-specific rate in 2015 showed an increase of >40% in those aged 65 years and older. This is the fourth consecutive year that the CIR has been markedly above the mean rate in this age group. Figure 1 compares the campylobacteriosis age specific rates (ASIR) for 2015 with the mean campylobacteriosis ASIR for 2004 to 2014.

Campylobacteriosis has a well-documented seasonal distribution with a peak in summer. In Ireland, notifications typically peak during May to July. During 2015, notifications

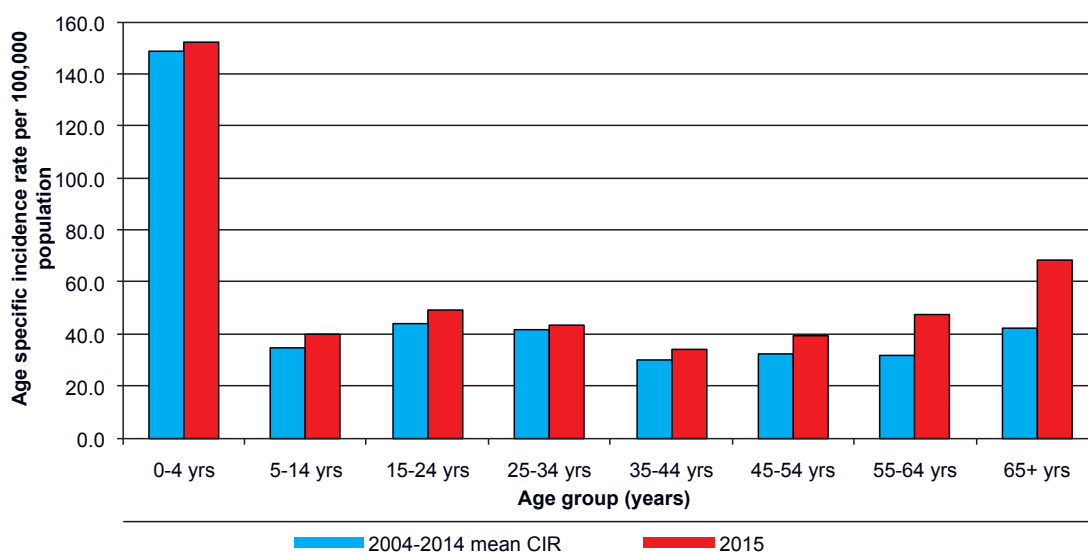


Figure 1: Campylobacteriosis ASIR 2015 compared to 2004-2014 mean ASIR (CIDR)

¹Rates are calculated per 100,000 population

peaked during May, with two smaller secondary peaks also observed during July and September. Figure 2 compares the monthly number of campylobacteriosis notifications for 2015 to the mean monthly number of campylobacteriosis notifications between 2004 and 2014.

All but one of the cases notified in Ireland during 2015 were laboratory confirmed. However, as there is currently no national reference facility for routine typing of *Campylobacter* isolates, information on *Campylobacter* species is strikingly incomplete. In 2015, 21.1% (n=518) of isolates were speciated. Of the 518 speciated isolates, 89.8% (n=465) of isolates were *C. jejuni* and 10.2% (n=53) were *C. coli*.

During 2015, there were six outbreaks of campylobacteriosis reported to HPSC as described in Table 1.

References:

1. European Food Safety Authority (EFSA), European Centre for Disease Prevention and Control (ECDC). The Community summary report on trends and sources of zoonoses, zoonotic agents and food-borne outbreaks in the European Union in 2014. The EFSA Journal (2015); 11(4):3129 Available at: <https://www.efsa.europa.eu/en/efsajournal/pub/4329>

Table 1: Campylobacteriosis outbreaks summary, 2015 (CIDR)

Outbreak location	Mode of transmission	Number outbreaks	Number ill	Number hospitalised	Number dead
Private house	P-P - Person-to-person	2	3	0	0
	Unknown	1	2		
Childcare facility	P-P and Animal	1	2	0	
Residential institution	Unknown	1	3	1	0
Workplace	Animal contact	1	5	0	
Total		6	15	1	

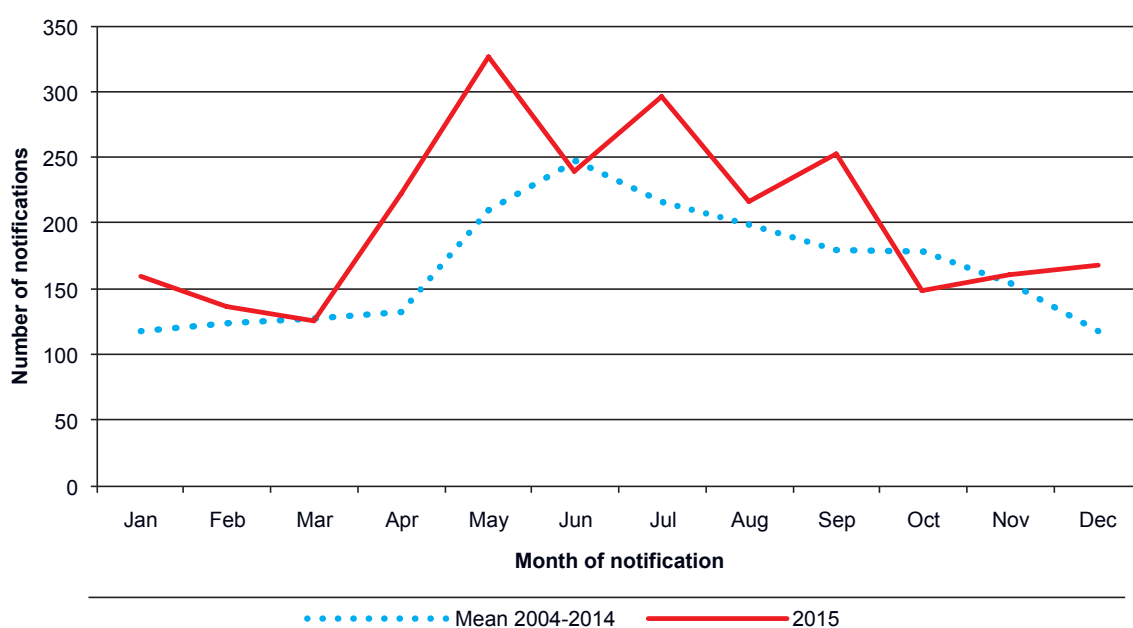


Figure 2: Campylobacteriosis notifications by month during 2015 compared to mean monthly notifications 2004-2014 (CIDR)