



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



Campylobacter, 2014

2014 Summary

Number of cases:	2,615
Crude incidence rate:	57.0/100,000

Campylobacteriosis became a notifiable disease in Ireland in 2004 under the Infectious Diseases 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

During 2014, levels of campylobacteriosis remained elevated for the fourth consecutive with 2,615 notifications reported to HPSC, an increase of 25.6% compared to 2013. This corresponded to a crude incidence rate of 57.0/100,000 population, which is comparable with the 2013 European crude incidence rate of 64.8 per 100,000 population.⁷

Historically, variation in campylobacteriosis crude incidence rates (CIRs) has been reported between HSE areas. During 2014, the highest CIRs occurred in HSE-SE (78.6/100,000 population) and HSE-M (76.1/100,000 population). Both HSE areas also had the highest increases in CIR during 2014 compared to the mean CIR during 2004-2013 (HSE-M 52.1% and HSE-SE 47.7%). The lowest CIR was reported by HSE-NE (43.8/100,000 population).

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 2004-2013 and the age-specific rate in 2014 showed an increase of >45% in those aged 65 years and older (46.6%). This is the third consecutive year that the CIR has increased in this age group. Figure 1 compares the campylobacteriosis age specific rates (ASIR) for 2014 with the mean campylobacteriosis ASIR for 2004 to 2013.

Campylobacteriosis has a well documented seasonal distribution with a peak in summer. In Ireland, notifications typically peak during May to July. While this typical warm-season peak was observed during May to July 2014, levels of campylobacteriosis notifications were also elevated during January 2014 with an increase of 38.3% reported compared to the mean number of notifications during January in 2004-2013. Figure 2 compares the monthly number of campylobacteriosis notifications for 2014 to the mean monthly number of campylobacteriosis notifications between 2004 and 2013.

All but two of the cases notified in Ireland during 2014 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 2014, 29.9% (n=781) of isolates were speciated. Of the 781 speciated isolates, 93.2% of isolates were *C. jejuni*, 6.5% were *C. coli*, while *C. fetus* and *C. sputorum* each accounted for 0.1%. The remaining 70.1% (n=1,834) of *Campylobacter* isolates identified were not further speciated.

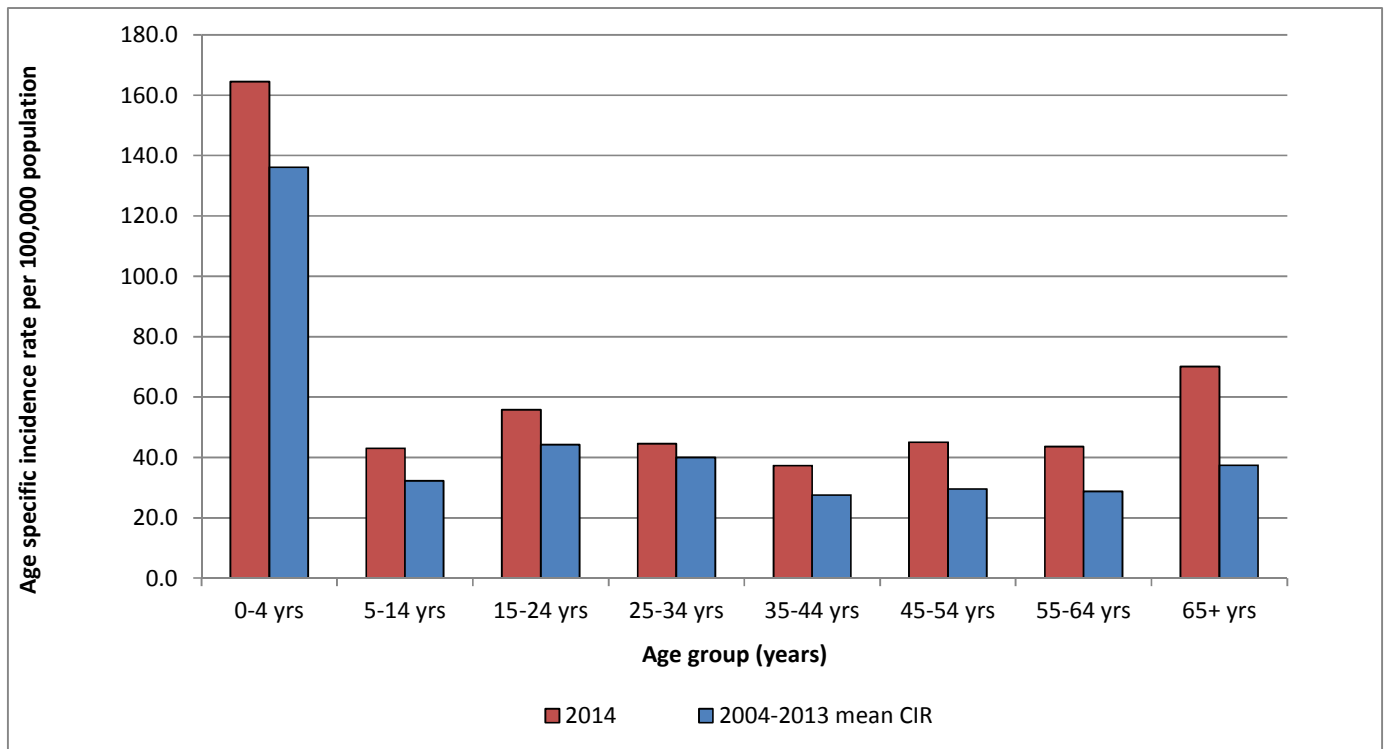


Figure 1: Campylobacteriosis ASIR 2014 compared to 2004-2013 mean ASIR (CIDR)

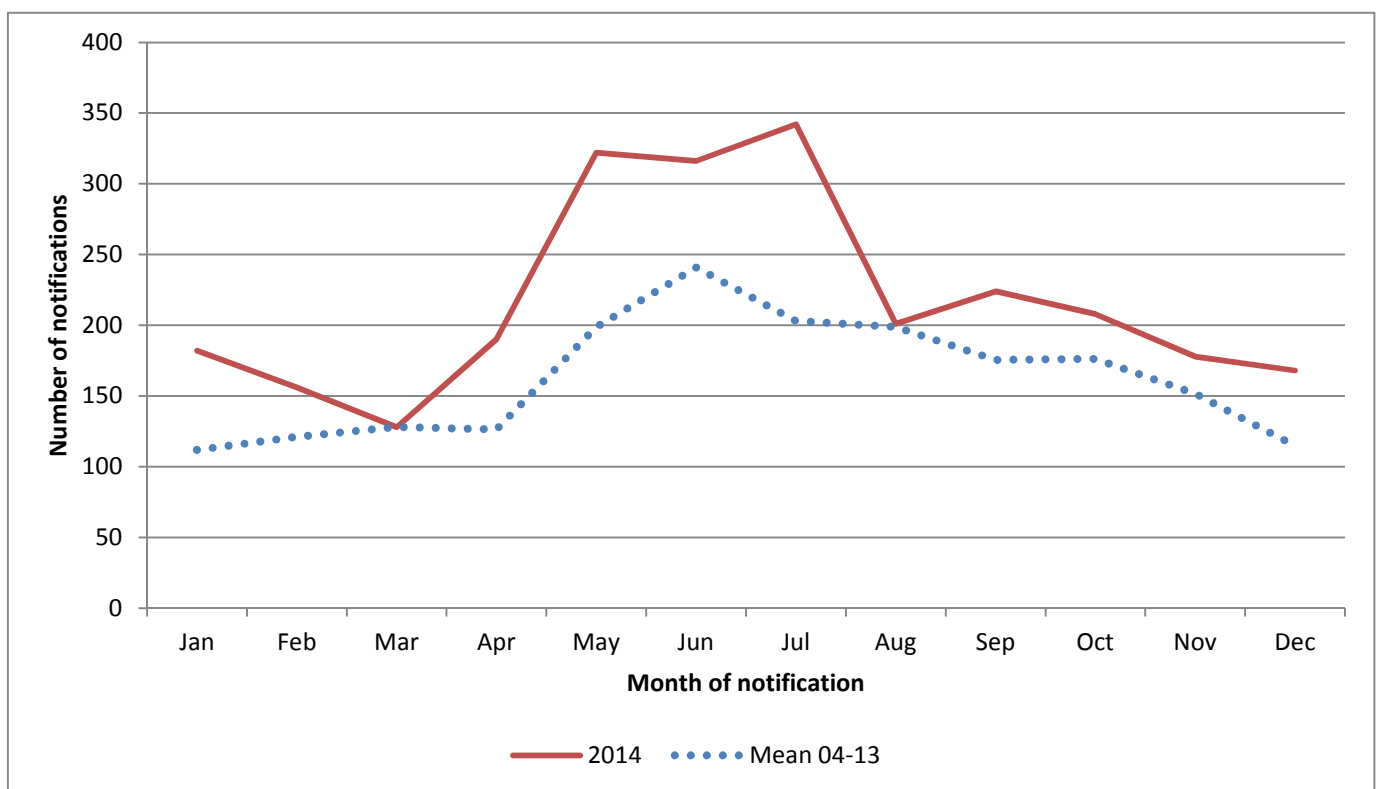


Figure 2: Campylobacteriosis notifications by month during 2014 compared to mean monthly notifications 2004-2013 (CIDR)

During 2014, there were 10 outbreaks of campylobacteriosis reported to HPSC with 68 associated cases of illness. Six outbreaks were family outbreaks occurring in private houses. Four reported mode of transmission as person to person, while mode of transmission was unknown for the remaining two outbreaks. Four general outbreaks were also reported, two in nursing homes and two in community settings. Mode of transmission was foodborne for one and unknown for the remaining three outbreaks. During 2013, 16 European countries reported 414 food-borne outbreaks of campylobacteriosis which accounted for 8.0% of the total food-borne outbreaks reported to EFSA. ¹

Table 1: Campylobacteriosis outbreaks summary, 2013 (CIDR)

Outbreak location	Mode of transmission	Number outbreaks	Number ill	Number hospitalised	Number dead
Nursing home	Foodborne	1	9	0	0
Nursing home	Unknown	1	9	0	0
Other	Unknown	2	37	4	0
Private house	Unknown	2	5	0	0
Private house	Person to person	4	8	0	0
Total		10	68	4	0

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 2013*. The EFSA Journal (2015); 11(4):3129 Available at: <http://www.efsa.europa.eu/en/efsajournal/doc/3547.pdf>