

3.2 Cryptosporidiosis

Summary

Number of cases, 2008: 416
 Number of cases, 2007: 609
 Crude incidence rate, 2008: 9.8/100,000

In 2008, 416 cases of cryptosporidiosis were notified in Ireland, a crude incidence rate of 9.8 per 100,000 population (Table 1). This was a 32% decrease on the number of cases notified in 2007, being similar to the reported incidence rates of 2004 and 2006. In the two years for which data are available for the incidence of cryptosporidiosis across European Member States (2005 and 2006), Ireland has had the highest incidence in both years. On average in these two years, the European Union had incidence rates of 2.8 and 2.2 per 100,000 population, respectively.

The crude incidence (CIR) and age standardised incidence (ASIR) rates by HSE area for 2008 are reported

in table 1. As before, there was a strong urban-rural divide, with the HSE-E having a much lower incidence rate than other HSE areas, and there was a peak in the reported number of cases in spring (Figure 1).

Typically, the highest reported incidence rates are in children under 5 years, and this year, the trend was similar, with almost 90 notifications per 100,000 children under the age of five. Overall, there were more males (n=239) than females (n=176) reported, particularly in younger age groups.

A crude indicator of disease severity can be obtained from reviewing rates of hospitalisation among cases. This information is available for cases reported in HSE-areas whose data was recorded live on CIDR during 2008. Using data from these 6 HSE-areas (258 notifications), 39% of cases were reported as hospital inpatients, 3% as hospital outpatients, 52% as GP patients, 1% as other, and this information was unknown or not specified for 5% of cases.

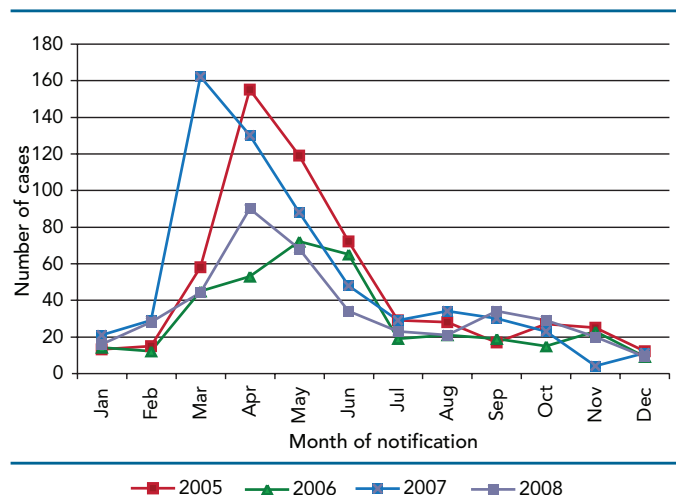


Figure 1. Seasonal distribution of cryptosporidiosis cases 2005-2008

Table 1. Number of notified cases, crude incidence rate and age-standardised incidence rate cryptosporidiosis by HSE area, 2008, and annual number of cryptosporidiosis notifications and crude incidence rate, Ireland 2004-2007

HSE area	Number of notifications	CIR (95% CI)*	ASIR (95% CI)*
E	12	0.8 (0.4-1.3)	0.8 (0.4-1.3)
M	32	12.7 (8.3-17.1)	11.6 (7.6-15.7)
MW	70	19.4 (14.9-23.9)	19.6 (15.0-24.2)
NE	33	8.4 (5.5-11.2)	7.4 (4.8-10.0)
NW	41	17.3 (12.0-22.6)	17.0 (11.8-22.2)
SE	66	14.3 (10.9-17.8)	14.1 (10.7-17.5)
S	74	11.9 (9.2-14.6)	12.2 (9.5-15.0)
W	88	21.2 (16.8-25.7)	21.9 (17.3-26.5)
Total 2008	416	9.8 (8.9-10.8)	-
Total 2007	609	14.4 (13.2-15.5)	-
Total 2006	367	8.7 (7.8-9.5)	-
Total 2005	570	13.4 (12.3-14.5)	-
Total 2004	431	10.2 (9.2-11.1)	-

*Rates calculations based on CSO census 2006, and may differ from rate published previously based on 2002 census

In 2008, around 35% of positive human *Cryptosporidium* specimens were referred for speciation to the UK *Cryptosporidium* Reference Unit in Swansea by a small number of hospital laboratories. The results of these studies provide evidence of the relative importance of different *Cryptosporidium* species here.

In 2008, information was available on species for 145 cases, largely from the HSE-SE, HSE-NW and HSE-W areas. There were 118 *C. parvum*, 22 *C. hominis*, two corvine, one felis, one rabbit, and one non-typeable infection reported, with the species not known/not reported for the remaining 271 cases. The seasonal distribution by species is presented in Figure 2. *C. parvum* was the most common species reported, in particular during the spring peak in incidence. In the United Kingdom, cases due to *C. parvum* have historically been more common in spring with those due to *C. hominis* more common in autumn months.

Eight outbreaks of cryptosporidiosis were reported in 2008: four general outbreaks and four family outbreaks (Table 2). All were small outbreaks, and between them accounted for 29 cases. Two small outbreaks occurred in crèches and were believed to be due to person-to-person spread, as was one of the family outbreaks. Water was suspected to have played a role in transmission for three of the family outbreaks. One of the two small general community outbreaks were reported as being due to person-to-person spread and animal contact, while the transmission route was not specified for the second community outbreak.

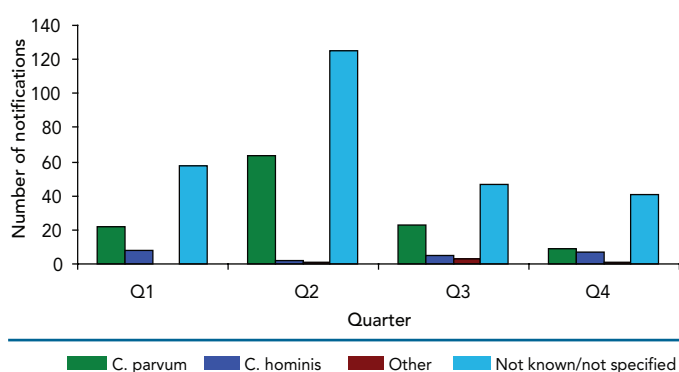


Figure 2: Seasonal distribution cryptosporidiosis by species, Ireland 2008

Table 2. *Cryptosporidium* outbreaks Ireland 2008

Month	HSE-area	Transmission route	Type	Location	No. ill
Jan	SE	Person-to-person	General	Crèche and household	3
Jan	W	Waterborne	Family	Private house	3
Feb	NE	Person-to-person	General	Crèche	5
Mar	MW	Not Specified	General	Community outbreak	3
Mar	S	P-P and WB	Family	Private house	2
Apr	SE	P-P and Animal	General	Community outbreak	7
Jul	SE	WB and Animal	Family	Private house	2
Sep	NW	Person-to-person	Family	Private house	4

P-P denoted person-to-person; WB denoted waterborne