

6.2 Viral Meningitis

Summary

Number of cases, 2010: 169
 Number of cases, 2009: 142
 Number of cases, 2008: 97
 Crude incidence rate, 2010: 4.0/100,000

Meningitis due to viruses not otherwise specified in the Irish Infectious Disease (Amendment) (No. 3) Regulations 2003 (SI No. 707 of 2003) are notifiable under the disease viral meningitis. Clinicians and laboratories (the latter since 2004) are legally obliged to notify all cases of viral meningitis.

In 2010, 169 cases of viral meningitis were notified in Ireland (4.0/100,000). This was a 16% increase compared with 2009 when 142 cases were notified (3.3/100,000). As in previous years there was a seasonal peak in 2010 with notifications at their highest during July and August. However, the distinct seasonal peak seen particularly in 2006 and also in 2008 and 2009 was not as pronounced in 2010; instead the summer upsurge of cases was more prolonged, spanning a four-month period (figure 1).

Of the 169 cases notified, 149 were classified as confirmed (88.2%), eight as probable (4.7%), 11 as possible (6.5%) and for one the case classification was

not reported (0.6%). A similar number of cases occurred in males (n=82) and as in females (n=87), giving a male to female ratio of 1.0:1.06. Cases ranged in age from 2 weeks to 81 years with both an average and a median age of 16 years. Unlike viral encephalitis where the highest proportion of cases occurred in those aged 45 years of age and older (see previous chapter), the majority of viral meningitis cases occurred in children and young adults. Over two-thirds (67%) of the cases occurred in those 25 years of age and younger (table 1). The highest age specific incidence rate was by far in infants <1 year of age at 86.8 per 100,000 total population. For all other age groups the age specific incidence rates ranged between 0.2 and 5.2 per 100,000 population (table 1).

In 2010, enterovirus was the most common pathogen associated with viral meningitis, accounting for 64% (n=108) of the notifications. Herpes simplex virus (HSV) was the causative pathogen for 11% of the notifications (n=19), with HSV type 6 accounting for 12 of these 19 notifications (table 1).

In 2010, the incidence of viral meningitis in HSE areas ranged between 1.2 per 100,000 population in HSE-M and 9.7 per 100,000 population in HSE-NW. Incidence in HSE-NW (9.7/100,000; 95% CI 5.7-13.6/100,000) was significantly higher than the national rate (4.0/100,000;

Table 1. Number, age-specific incidence rates and proportion of viral meningitis notifications by age group, 2010

Age group (years)	Number by causative pathogen						ASIR	Proportion (%)
	Enterovirus	Herpes simplex	Parechovirus	Varicella zoster	Unknown	Total		
<1	39	9	1	0	4	53	86.8	31.4
1-4	3	3	0	0	2	8	3.3	4.7
5-14	15	1	0	1	2	19	3.4	11.2
15-24	15	2	0	6	10	33	5.2	19.5
25-44	35	2	0	4	10	51	3.8	30.2
45-64	1	1	0	1	1	4	0.4	2.4
65+	0	1	0	0	0	1	0.2	0.6
All ages	108	19	1	12	29	169	4.0	100
% of total cases	63.9	11.2	0.6	7.1	17.2	100		

ASIR, age specific incidence rate per 100,000 population of total cases

95% CI 3.4-4.6/100,000), while in HSE-M (1.2/100,000; 95% CI -0.16-2.5/100,000) it was significantly lower than the national rate (figure 2). For all other HSE areas the incidence rate was not considered statistically different from the national rate.

Two viral meningitis deaths relating to 2010 notifications were reported through the notification system. One was in an adult with HSV and the other in an infant with enterovirus. However, information is not available as to whether viral meningitis was the primary cause of death or not in these two cases.

The figures presented in this report are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on 30th August 2010. These figures may differ from those published previously due to ongoing updating of notification data in CIDR.

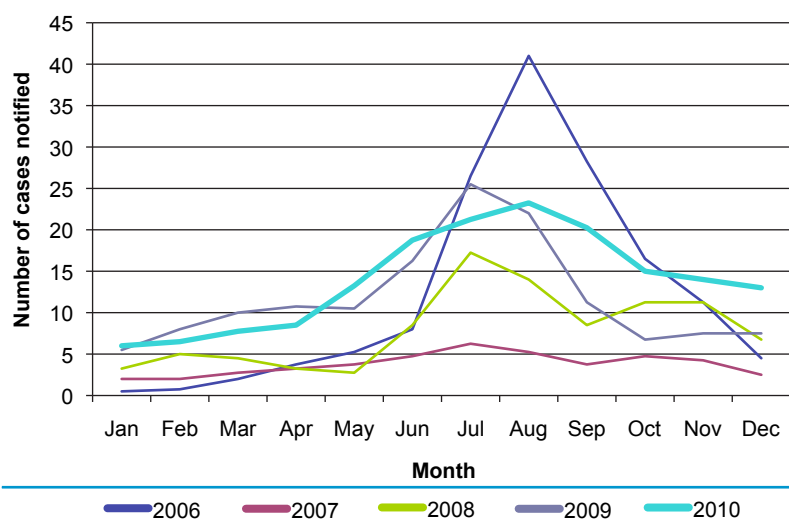


Figure 1. Three-month moving average of the number of viral meningitis notifications, 2006-2010

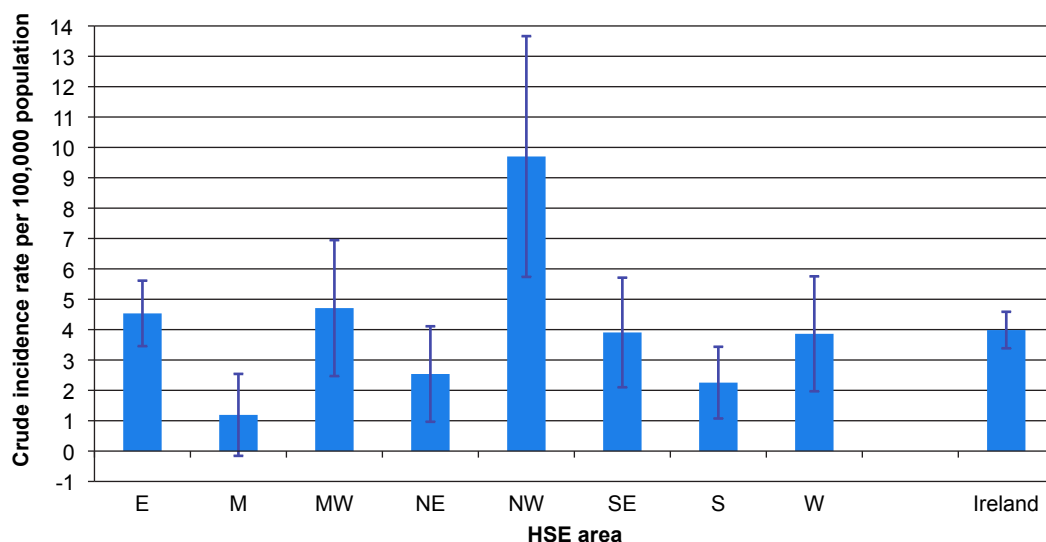


Figure 2. Crude incidence rates per 100,000 population with 95% confidence intervals for viral meningitis notifications by HSE area, 2010