

## 6.2 Viral Meningitis

### Summary

Number of cases 2011: 220  
 Number of cases 2010: 168  
 Number of cases 2009: 142  
 Crude incidence rate, 2011: 4.8/100,000

Meningitis due to viruses not otherwise specified (NOS) in the Irish Infectious Disease (Amendment) (No. 3) Regulations 2003 (SI No. 707 of 2003) are notifiable under the disease viral meningitis. (Details of viral meningitis cases caused by other notifiable diseases

are presented in other separate chapters in this report). Clinicians and laboratories (the latter since 2004) are legally obliged to notify all cases of viral meningitis.

In 2011, 220 cases of viral meningitis (NOS) were notified in Ireland, the highest number recorded since 1997 (figure 1). No deaths as a direct cause by viral meningitis (NOS) were reported in 2011.

Of the 220 cases notified, 207 were classified as confirmed (94.1%), ten as probable (4.5%) and three as possible (1.4%). A similar number of cases occurred in males (n=114) as in females (n=105), giving a male to

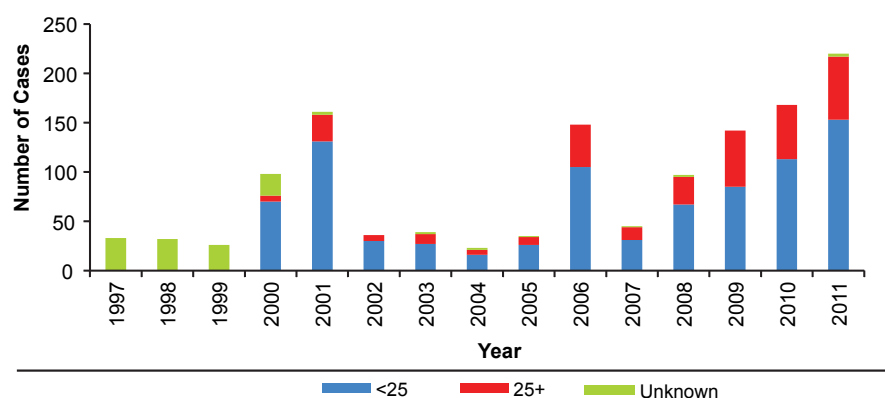


Figure 1. Number of viral meningitis (NOS) cases by age group and year, 1997-2012

Table 1. Number, age-specific incidence rates and proportion of viral meningitis (NOS) notifications by age group and type, 2011

Age Group	Causative pathogen						Total	ASIR	% Proportion
	Enterovirus	Human Herpes virus type 6	Unknown	Herpes Simplex virus	Varicella zoster virus	Echovirus			
<1	68	22	3	1	0	1	94	129.8	42.7
1-4	5	4	0	0	0	0	9	12.4	4.1
5-14	13	1	0	1	0	0	15	20.7	6.8
15-24	26	0	2	2	3	1	34	47.0	15.5
25-44	44	0	6	3	1	0	54	74.6	24.5
45-64	3	0	1	1	0	0	5	6.9	2.3
65+	3	0	1	1	0	0	5	6.9	2.3
<b>All ages*</b>	<b>164</b>	<b>28</b>	<b>13</b>	<b>9</b>	<b>4</b>	<b>2</b>	<b>220</b>	<b>303.8</b>	<b>100</b>
<b>% total cases</b>	<b>74.5</b>	<b>12.7</b>	<b>5.9</b>	<b>4.1</b>	<b>1.8</b>	<b>0.9</b>	<b>100.0</b>	<b>138.1</b>	

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

\* Includes three cases with unknown age details

female ratio of 1.0:1.09. One case was reported with unknown gender details.

Children and young adults were most commonly affected with a median age of seven years (range one week to 72 years). Nearly 70% of cases occurred in those age under 25 years of age (figure 1, table 1).

The highest age specific incidence rate (ASIR) was in infants <1 year of age (129.8/100,000; n=94). The next highest ASIR was in the 25-44 years age group (74.6/100,000; n=54). Lowest rates were reported in the older age groups (2.3/100,000; n=5 each) (table 1).

The national crude incidence rate in 2011 was 4.8 (95% CI 4.2 – 5.4) cases per 100,000 population. This was a 24% increase compared with 2010 when 168 cases were

notified (3.7/100,000). The incidence rate in 2011 was highest in HSE-E at 6.7/100,000 (95%CI 5.5–7.9) cases and lowest in HSE-W at 2.9/100,000 (95%CI 1.3-4.5) (figure 2).

In 2011, enterovirus was the most common pathogen associated with viral meningitis, accounting for nearly 75% (n=164/220) of all notifications (figure 3, table 1). Human herpes virus 6 (HHV6) was the causative pathogen for 12.7% (n=28) notifications; herpes simplex virus (HSV) accounted for 4.1% (n=9) of notifications (figure 3, table 1).

Enterovirus meningitis was also most common in infants under one year of age with 68 of the 94 viral meningitis (NOS) cases in this age group in 2011 caused by this pathogen (72%) (figure 4). Between 2007 and 2011

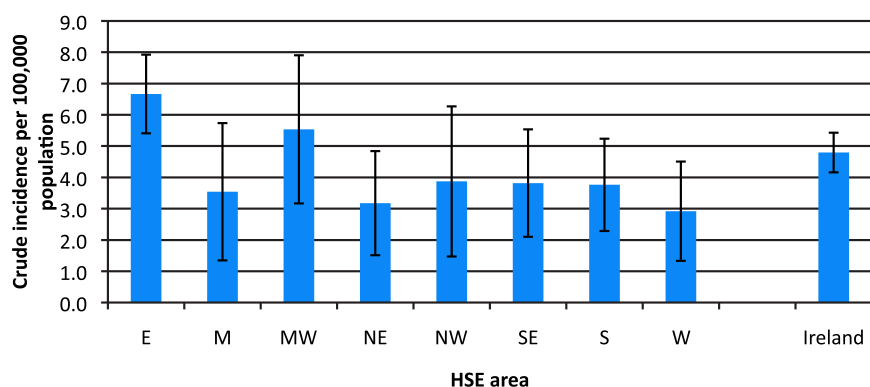


Figure 2. Crude incidence rates per 100,000 population with 95% confidence intervals for viral meningitis (NOS) cases by HSE area, 2011

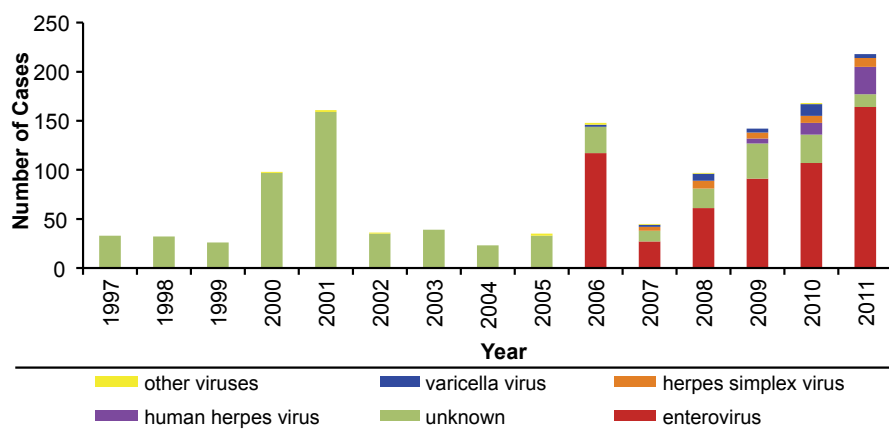


Figure 3. Number of viral meningitis (NOS) cases by organism type and year, 1997-2011

enteroviruses have accounted for 67% (n=450/672) of all viral meningitis (NOS) cases, with a distinct seasonal peak observed in the period June to August (figure 5).

The figures presented in this report are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on 29<sup>th</sup> August, 2012. These figures may differ from those published previously due to ongoing updating of notification data in CIDR.

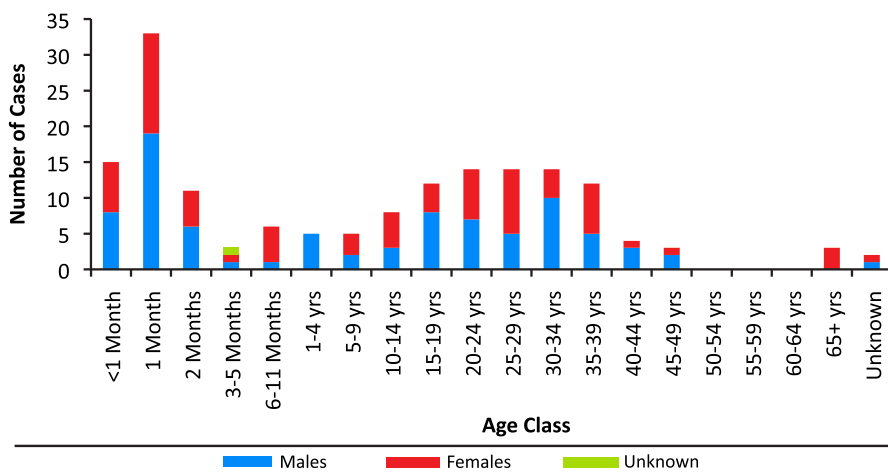


Figure 4. Number of enterovirus cases notified by age group and gender, 2011

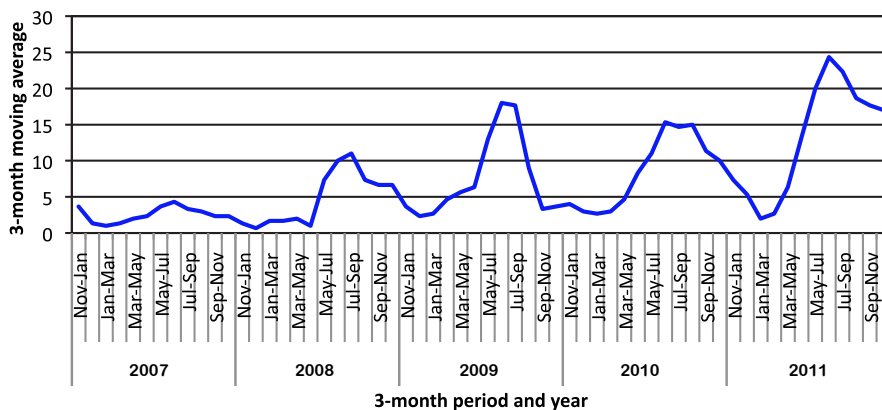


Figure 5. Three-month moving average of the annual number of enterovirus notifications, 2007-2011