

6.2 Viral Meningitis

Summary

Number of cases, 2006: 148

Number of cases, 2005: 35

Crude incidence rate, 2006: 3.5/100,000

In 2006, 148 cases (3.5/100,000 total population) of viral meningitis were notified in Ireland. The majority of cases were classified as confirmed (82%, n=121), 17 as probable and for 10 the case classification was not specified. More cases occurred in males (n=90) than in females (n=58) giving a ratio of 1.6:1.0. No deaths due to viral meningitis were notified in 2006.

Cases ranged in age from one month to 58 years with a median age of 15 years. Eighty eight percent of all cases were <35 years of age. Children <1 year of age had the highest incidence rate - 50.8 per 100,000, followed by the 15-19 year olds, 7.9/100,000 (table 1). The causative agent was identified as echovirus for two of the cases, varicella zoster for two, enterovirus for 117 and for 27 cases the causative agent was unknown (table 1).

In Ireland, viral meningitis activity tends to be highest from June to November, peaking between July and September. In 2006, viral meningitis was low between January and June with on average 2.7 cases being notified per month. Activity increased in July when 27 cases were notified. This activity peaked in August with 67 cases, this month alone accounted for 45% of the total notifications for the year. By December activity had returned to low levels (n=3).

The number of cases notified in 2006 represents a substantial increase compared with 2005 (n=35) and 2004 (n=23). Over the 10 year period from 1997–2006, the annual number of notifications ranged from 23-161 (figure 1).

A high number of cases occurred in 2000 (n=98), while the highest number occurred in 2001 (n=161). These upsurges in notifications coincided with an increase in reports by the National Virus Reference Laboratory (NVRL) of laboratory confirmed non-polio enterovirus isolates. The predominant strains were echovirus type 13 in 2000 and echovirus type 30 in 2001.

The increase in viral meningitis notifications in 2006 also coincided with a rise in the number of enteroviral

Table 1. Number and age specific incidence rates of viral meningitis notifications, 2006

	Echovirus	Varicella zoster	Enterovirus	Unknown	Total	ASIR
<1	0	0	30	1	31	50.8
1-4	0	0	1	3	4	1.7
5-9	0	0	15	5	20	6.9
10-14	0	1	10	4	15	5.5
15-19	0	0	18	5	23	7.9
20-24	0	0	9	3	12	3.5
25-34	1	0	22	2	25	3.5
35-44	1	0	11	3	15	2.4
45+	0	1	1	1	3	0.2
All ages	2	2	117	27	148	3.5

ASIR, age specific incidence rate

isolates seen by NVRL. No one strain dominated. Echovirus type 6 and 13 were the strains most commonly isolated. Towards the end of 2005 NVRL introduced PCR testing of CSF samples for enteroviral nucleic acid. This was in addition to the routine method of viral isolation from stool samples. The use of more sensitive detection methods may also have contributed to the increase in viral meningitis notifications seen in 2006.

The figures presented in this summary are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on 18th July 2007.

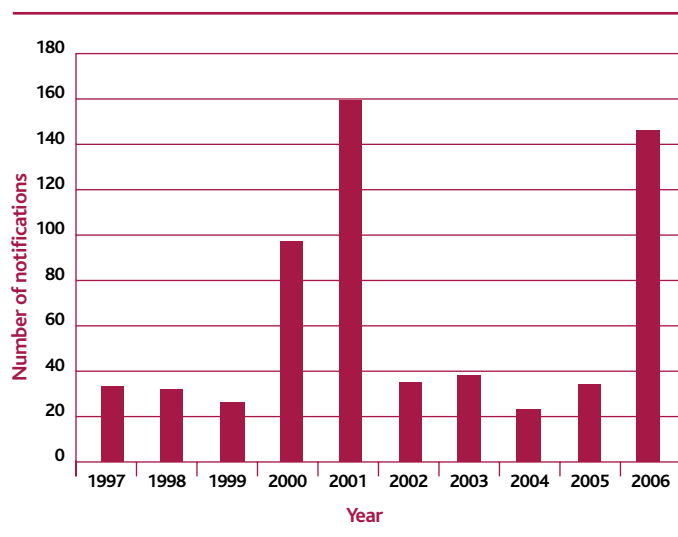


Figure 1. Annual number of viral meningitis notifications in Ireland, 1997-2006