

6.1 Viral Encephalitis

Summary

Number of cases 2011: 23
 Number of cases 2010: 22
 Number of cases 2009: 5
 Crude incidence rate, 2011: 0.5/100,000

Encephalitis 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 encephalitis. (Details of viral encephalitis cases caused by other notifiable diseases are presented in other chapters in this report). Clinicians and laboratories (the latter since 2004) are legally obliged to notify all cases of viral encephalitis.

In 2011, 23 cases of viral encephalitis (NOS) were notified in Ireland (0.5/100,000 population). This was just one case more than that reported in the previous year (2010) which was substantially more than the five cases reported in both 2008 and 2009 (figure 1).

Fewer viral encephalitis (NOS) cases occurred in males (n=9) than females (n=14), giving a male to female ratio of 1.0:1.6. Cases ranged in age from 21 to 84

years with a median age of 58 years. The majority of the notifications occurred in the elderly aged 65 years and over (48%; n=11; 2.1/100,000 population) followed by the 25-44 years age group (30%; n=7; 0.5/100,000 population) (table 1).

In 2011, six HSE areas notified cases of viral encephalitis (NOS) (range 1-12), with HSE-E accounting for 52% (n=12/23) of cases. The national crude incidence rate in 2011 was 0.5 (95% CI 0.3–0.7) cases per 100,000 population with the rate in HSE-E being 6.7 (95%CI 0.3–1.1) cases/100,000 population.

Of the 23 cases reported in 2011, 21 were confirmed (91.3%) and one each was classified as probable and as possible (4.3%).

In recent years herpes simplex virus and varicella virus have been the two main causative agents of viral encephalitis notifications in Ireland (figure 2). Notifications due to herpes simplex virus have doubled between 2010 and 2011, but in contrast, only one varicella virus-related case was reported in 2011 compared to 11 in 2010. Of the 20 herpes simplex virus (HSV) encephalitis cases notified in 2011, 13 were reported as HSV type 1, six were type 2 and the typing

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

Age Group	Causative pathogen			Total	ASIR	% Proportion
	Herpes simplex virus	Unknown	Varicella virus			
<1	0	0	0	0	0.00	0.0
1-4	0	0	0	0	0.00	0.0
5-14	0	0	0	0	0.00	0.0
15-24	1	0	0	1	0.17	4.3
25-44	6	1	0	7	0.48	30.4
45-64	3	0	0	3	0.29	13.0
65+	9	1	1	11	2.05	47.8
All ages	20	2	1	23	0.50	100
% total cases	87.0	8.7	4.3	100.0	138.1	

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

details of the remaining case was not reported.

One patient with viral encephalitis in 2011 died with the cause of death not specified.

In summary the numbers of viral encephalitis notifications in Ireland in 2011 were similar to 2010. There was a marked decline in viral encephalitis notifications associated with varicella virus but a marked increase in those caused by HSV.

The figures presented in this report are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on 29th August, 2011. These figures may differ from those published previously due to ongoing updating of notification data in CIDR.

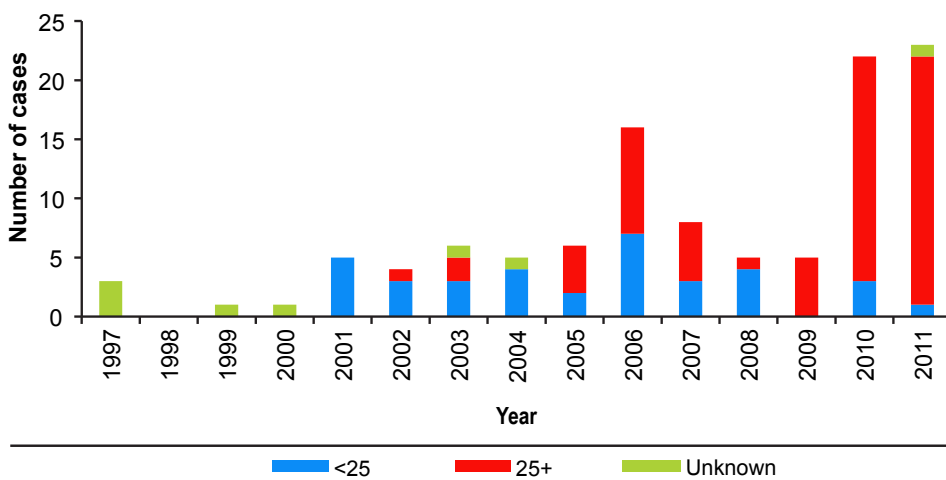


Figure 1. Annual number of viral encephalitis (NOS) cases by age group, 1997-2011

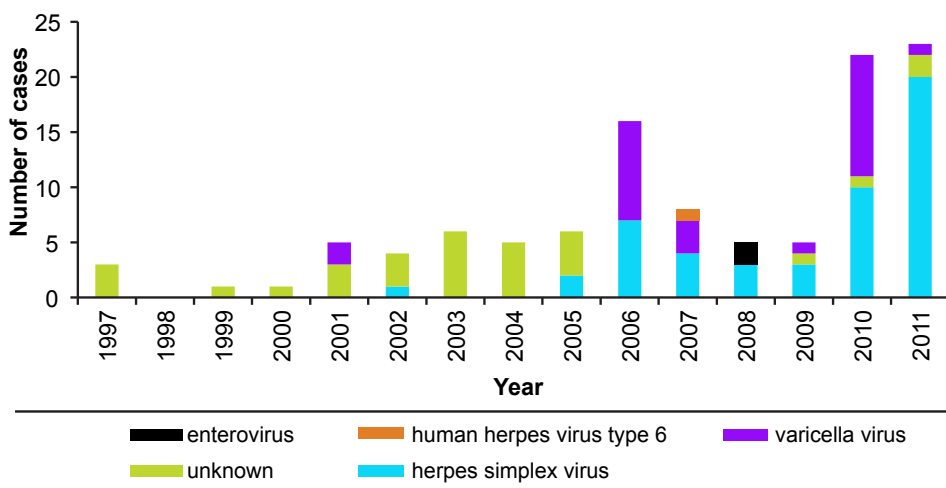


Figure 2. Annual number of viral encephalitis (NOS) cases by causative pathogen, 1997-2011