

# 6.1 Viral Encephalitis

## Summary

Number of cases, 2014: 68  
 Number of cases, 2013: 6  
 Number of cases, 2012: 18  
 Crude incidence rate, 2014: 1.5/100,000

Encephalitis due to viruses not otherwise specified (NOS) are notifiable under the disease category 'viral encephalitis'. Details of viral encephalitis cases caused by other notifiable diseases, if any, are presented in other chapters in this report.

In 2014, 68 cases of viral encephalitis (NOS) were notified in Ireland (1.5/100,000 population) compared to six (0.1/100,000) in the previous year (figure 1). One contributing factor for the sharp increase in numbers can be attributable to the late notification of 15 cases from 2013 (based on their specimen dates) reported during weeks 4 to 7 in 2014. Another reason can be attributable to the 33 reported cases of varicella zoster virus in 2014 compared to none in the previous year;

improved notification and investigation (with laboratory confirmation) may be the reason for this.

The number of viral encephalitis (NOS) cases among males (n=35) and females (n=33) was similar. The median age of cases was 48 years (range two weeks to 91 years); 26 (42%) cases occurred in those aged 65 or more years. Most infant VE was caused by HSV and most VE in elderly (> 65 years) was associated with VZV and HSV (14 and 12 cases respectively) (figure 1, table 1).

Of the 68 cases, all were laboratory tested positive and case classified as confirmed. All but one had a causative pathogen identified: varicella virus & varicella zoster virus (n=33; 48.5%), herpes simplex virus (n=30; 44.1%), human herpes virus type 6 (HHV 6) (n=2; 2.9%), and one each of parechovirus, enterovirus and not specified (n=1; 1.8%) (figure 2).

Caution is advised regarding the detection of HHV 6 DNA in cerebral spinal fluid (CSF) specimens, especially in those cases aged less than 3 months as HHV 6 DNA can be chromosomally integrated as it may not be clinically relevant. Both cases of HHV 6-related

Table 1. Number, age-specific incidence rates and proportion of viral encephalitis (NOS) cases by age group, Ireland, 2014\*  
 \* includes the late notification of 15 cases in 2013 reported in early 2014

Age Group	Causative pathogen						Total	ASIR	% Proportion
	herpes simplex virus	varicella virus & varicella zoster virus	human herpes virus type 6	enterovirus	parechovirus	not specified			
<1	4	0	0	0	1	0	5	6.91	7.4
1-4	4	1	1	0	0	0	6	2.11	8.8
5-14	1	1	0	0	0	0	2	0.32	2.9
15-24	1	6	0	0	0	1	8	1.38	11.8
25-44	4	7	0	1	0	0	12	1.17	17.6
45-64	4	4	1	0	0	0	9	0.86	13.2
65+	12	14	0	0	0	0	26	4.86	38.2
All ages	30	33	2	1	1	1	68	1.48	100
% total cases	44.1	48.5	2.9	1.5	1.5	1.5	100		

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

encephalitis in 2014 occurred in patients greater than three months of age.

There were no reported deaths associated with viral encephalitis (NOS) in 2014. There was one imported case (caused by herpes simplex virus type 1); it is not clear if the patient was a visitor to Ireland or if the patient was an Irish resident returning from abroad.

The figures presented in this report are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on 13<sup>th</sup> August, 2015. These figures may differ from those published previously due to on-going updating of notification data in CIDR.

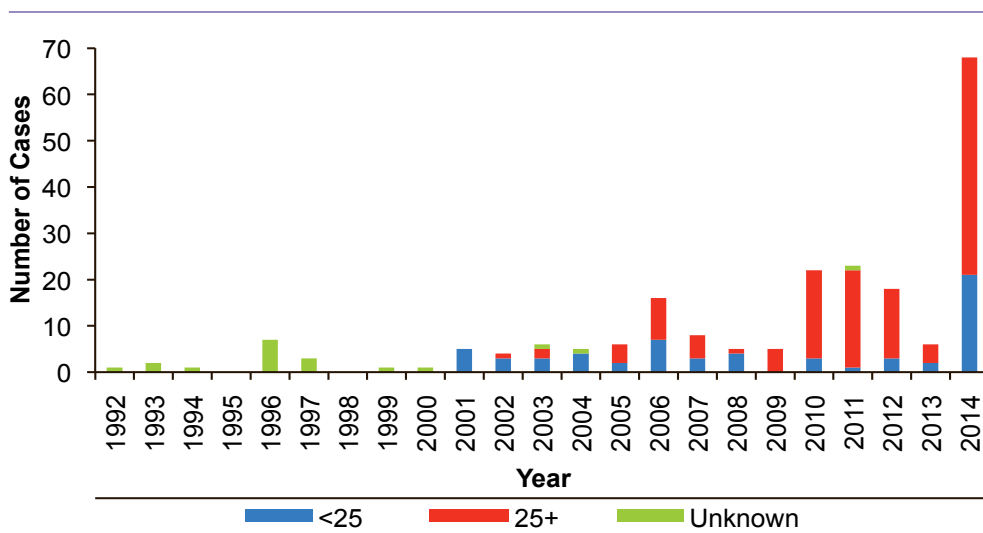


Figure 1. Number of viral encephalitis (NOS) cases by age group and year, Ireland, 1992-2014\*

\* includes the late notification of 15 cases in 2013 reported in early 2014

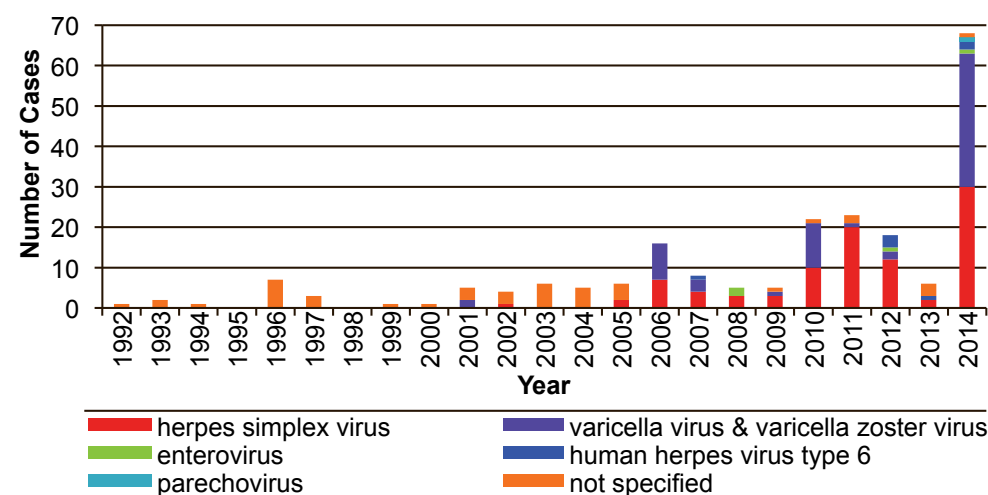


Figure 2. Number of viral encephalitis (NOS) cases by causative pathogen and year, Ireland, 1992-2014\*

\* includes the late notification of 15 cases in 2013 reported in early 2014