

# 6.1 Viral Encephalitis

## Summary

Number of cases, 2015: 47  
 Number of cases, 2014: 68  
 Number of cases, 2013: 6  
 Crude incidence rate, 2015: 1.02/100,000

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 2015, 47 cases of viral encephalitis (NOS) (VE) were notified in Ireland (1.02/100,000 population) compared to 68 (1.48/100,000) in the previous year (Figure 1). One contributing factor to the decline 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 for the decline in the reported number of VE cases is the fall in varicella/herpes zoster virus (VZV) cases in 2015 (n=22) compared to 33 in the previous year.

The number of VE cases among males (n=21) and females (n=25) was similar, with one case remaining not attributed to either sex. The median age of cases was 52 years (range three weeks to 94 years); 15 (31.9%) cases occurred in those aged 65 or more years. There were four cases of VE in children under five years of age in 2015 and 10 of the 15 VE cases in those aged >65 years were associated with VZV (Figure 1, Table 1).

Of the 47 VE cases, all but one were laboratory tested positive and case classified as confirmed. All but two had a causative pathogen identified: VZV (n=22; 46.8%), herpes simplex virus (HSV) (n=20; 42.6%), human herpes virus type 6 (HHV 6) (n=2; 4.3%), enterovirus (2.1%) and not specified (n=2; 4.3%) (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 three months as HHV 6 DNA can be chromosomally integrated as it may not be clinically relevant. Both cases of HHV 6-related encephalitis in 2015 however, occurred in patients greater than three months of age.

There were no reported deaths or imported cases associated with VE in 2015.

Table 1. Number, age-specific incidence rates and proportion of viral encephalitis (NOS) cases by age group, Ireland, 2015

Age Group	Causative pathogen						Total	ASIR	% Proportion
	herpes simplex virus	varicella / herpes zoster virus	human herpes virus type 6	enterovirus	parechovirus	not specified			
<1	1	0	0	0	0	1	2	2.76	4.3
1-4	1	1	0	0	0	0	2	0.70	4.3
5-14	0	0	1	0	0	0	1	0.16	2.1
15-24	0	3	0	0	0	0	3	0.52	6.4
25-44	7	2	0	1	0	0	10	0.83	21.3
45-64	7	6	1	0	0	0	14	1.34	29.8
65+	4	10	0	0	0	1	15	2.80	31.9
All ages	20	22	2	1	0	2	47	1.02	100
% total cases	42.6	46.8	4.3	2.1	0.0	4.3	100		

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

The figures presented in this report are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on 8<sup>th</sup> August, 2016. These figures may differ from those published previously due to on-going updating of notification data in CIDR.

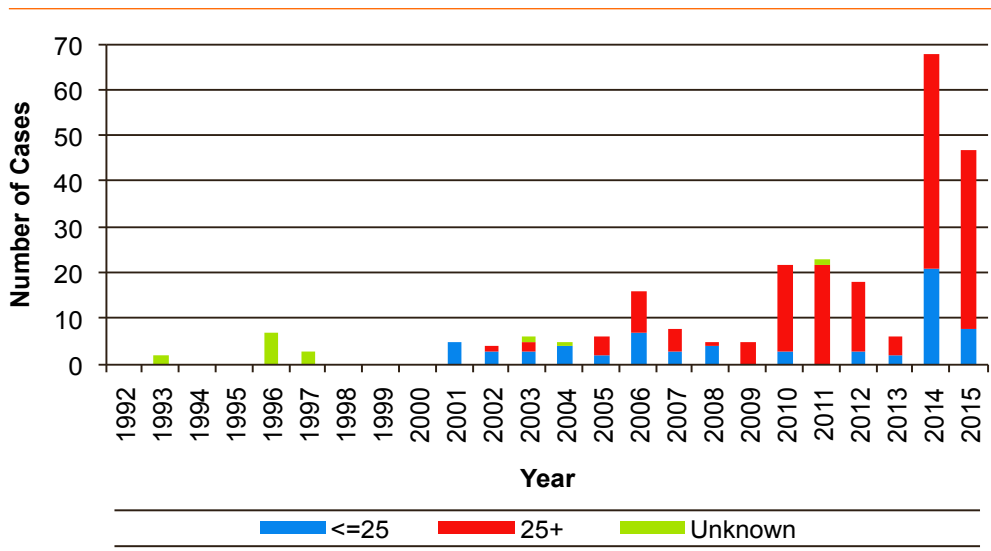


Figure 1. Number of viral encephalitis (NOS) cases by age group and year, Ireland, 1992-2015\*  
\* includes the late notification of 15 cases in 2013 reported in early 2014

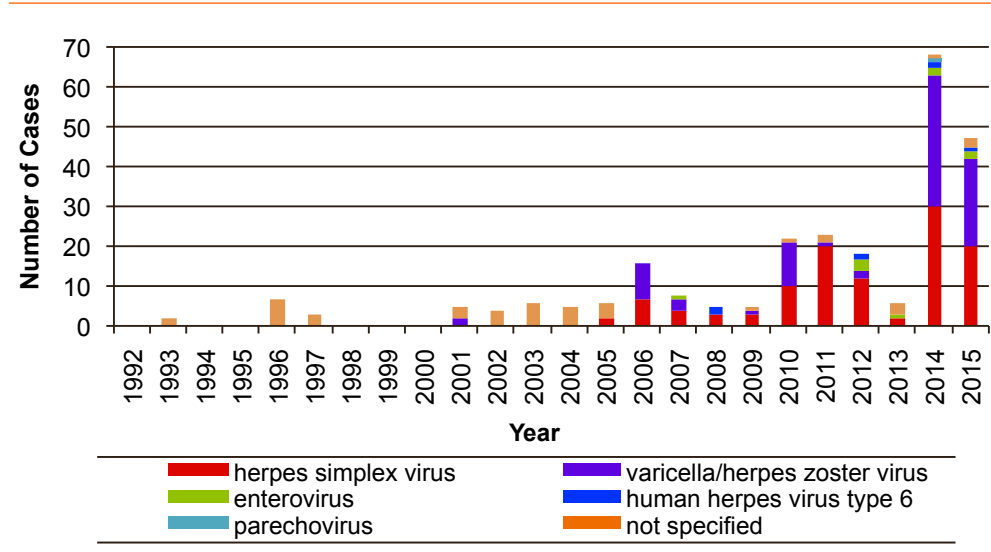


Figure 2. Number of viral encephalitis (NOS) cases by causative pathogen and year, Ireland, 1992-2015\*  
\* includes the late notification of 15 cases in 2013 reported in early 2014