

6.1 Viral Encephalitis

Summary

Number of cases, 2010: 22
 Number of cases, 2009: 5
 Number of cases, 2008: 5
 Crude incidence rate, 2010: 0.5/100,000

Encephalitis due to viruses not otherwise specified in the Irish Infectious Disease (Amendment) (No. 3) Regulations 2003 (SI No. 707 of 2003) are notifiable under the disease viral encephalitis. Clinicians and laboratories (the latter since 2004) are legally obliged to notify all cases of viral encephalitis.

In 2010, 22 cases of viral encephalitis were notified in Ireland (0.5/100,000 population). This was the highest annual number of cases to be notified since 2006 when 16 cases (0.4/100,000) were reported (figure 1). Compared with 2008 or 2009 (5 cases each, 0.1/100,000) there was over a four-fold increase in viral encephalitis notifications in 2010.

Varicella zoster virus and herpes simplex virus tend to be the two main causative agents of viral encephalitis notifications in Ireland. Notifications due to both

of these pathogens increased in 2010, 11 cases of varicella zoster virus and 10 of herpes simplex virus were notified, accounting for 50% and 45% of the cases, respectively. Of the 10 herpes simplex virus (HSV) encephalitis cases notified, seven were reported as HSV type 1, for the remaining three cases HSV type was not reported.

In 2010, all eight HSE areas notified cases of viral encephalitis (range 1-5 cases per area), indicating that cases were geographically distributed. More viral encephalitis cases occurred in females (n=13) than males (n=9), giving a male to female ratio of 1.0:1.4. Cases ranged in age from 1 week to 86 years. The majority of the notifications occurred in the elderly aged 65 years and over (41%; n=9) followed by the 45-64 years age group (27%; n=6) (table 1). However, the highest age specific incidence rate was in infants < 1 year of age (3.3 cases per 100,000 population) where two cases due to herpes simplex virus were notified.

No viral encephalitis deaths relating to 2010 notifications were reported via the notification system. However, since this system does not have a process in place to actively follow up on the outcome of all viral encephalitis notifications, the true mortality rate due

Table 1. Number, age-specific incidence rates and proportion of viral encephalitis notifications by age group, 2010

Age group (years)	Number by causative pathogen				ASIR	Proportion (%)
	Herpes simplex	Varicella zoster	Unknown	Total		
<1	2	0	0	2	3.3	9.1
1-4	0	0	0	0	-	-
5-14	0	1	0	1	0.2	4.5
15-24	0	0	0	0	-	-
25-44	1	3	0	4	0.3	18.2
45-64	4	1	1	6	0.6	27.3
65+	3	6	0	9	1.9	40.9
All ages	10	11	1	22	0.5	100

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

to this disease cannot be determined from notification data.

In summary there was an increase in viral encephalitis notifications in Ireland in 2010. Improved and more consistent reporting by the laboratories are considered to be the main contributory factors for this increase.

The figures presented in this report are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on 30th August 2010. These figures may differ from those published previously due to ongoing updating of notification data in CIDR.

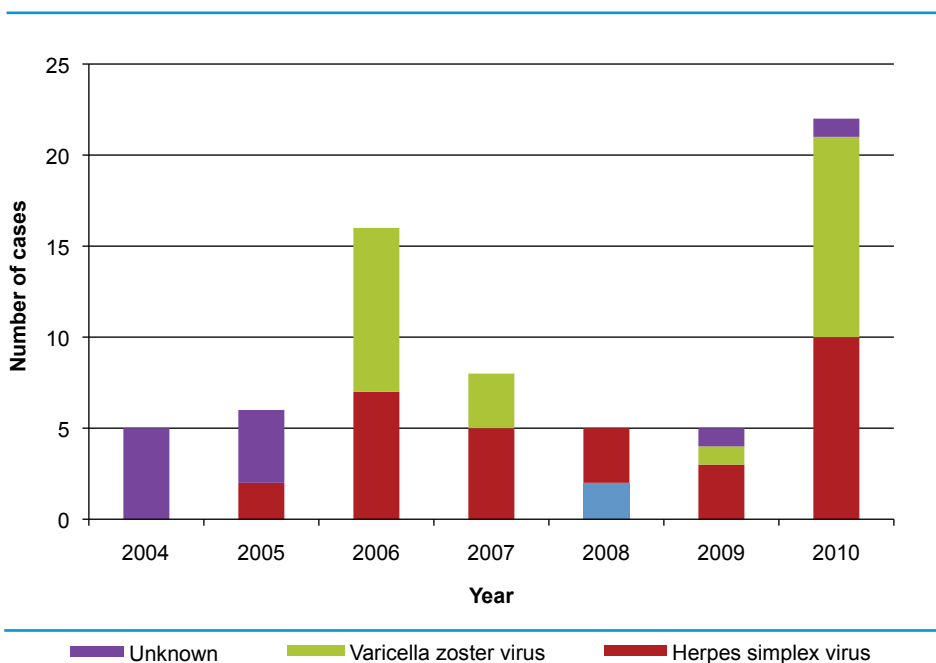


Figure 1. Annual number of viral encephalitis notifications by causative pathogen, 2004-2010