

3.5 Rotavirus

Summary

Number of cases: 4,158
 Crude incidence rate: 90.6/100,000 population

Rotavirus is the commonest global cause of paediatric gastrointestinal infection and causes sporadic, seasonal and occasionally severe gastroenteritis of infants and young children, characterised by vomiting, fever and watery diarrhoea. Transmission is usually person-to-person, mainly via the faecal-oral route. Children less than two years of age are most susceptible to infection, although cases are often seen in elderly and immunocompromised adults, particularly in institutional settings. By the age of six years, virtually all children will have had at least one episode of rotavirus infection. Symptoms usually last for only a few days but in severe cases hospitalisation may be required due to dehydration.

Prior to 2004, rotavirus cases were notified under the "Gastroenteritis in children under two years" disease category. From 2004 to 2010, rotavirus was notifiable in

all age groups under the "Acute Infectious Gastroenteritis" (AIG) disease category, until it became notifiable as a disease in its own right under the Infectious Diseases (Amendment) Regulations 2011 (S.I. No. 452 of 2011). Since March 2013, rotavirus notifications from HSE-East are based on laboratory testing results rather than patient episodes. Notifications from HSE-E may also refer to area of laboratory testing rather than area of patient residence.

During 2015, there were 4,158 cases of rotavirus notified in Ireland, corresponding to a national crude incidence rate (CIR) of 90.6 per 100,000 population (figure 1)*. This is the highest number of cases reported since surveillance began in 2004, and represents an increase of 75.9% compared to the mean CIR during 2004-2014 (51.5).

Significant geographical variation was observed in regional rotavirus CIR. The highest regional CIRs were observed in HSE-M (120.0), -W (114.5) and -SE (112.7). The lowest regional CIR was observed in HSE-MW (65.1) and HSE-NW (76.3).

* All rates are per 100,000 population

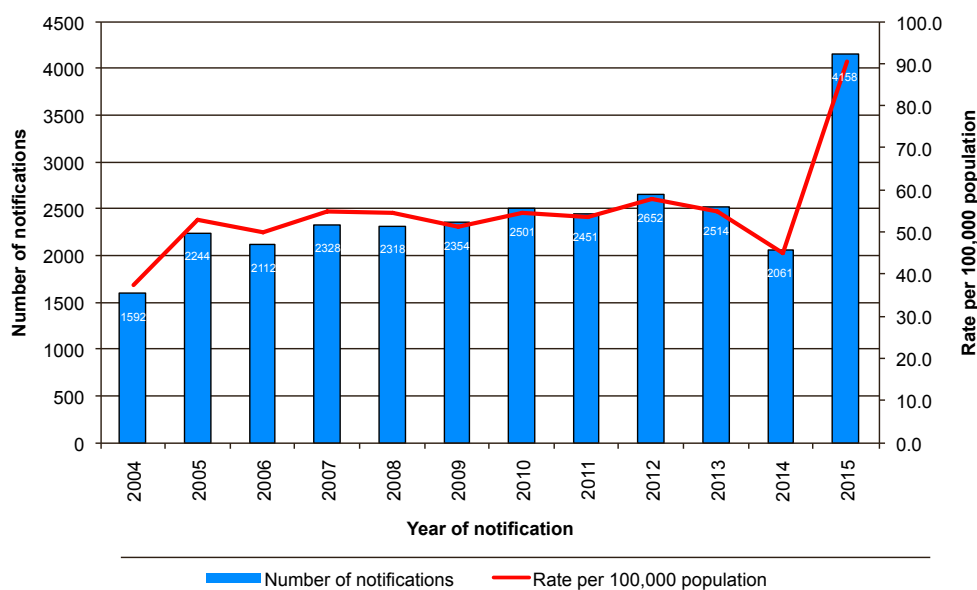


Figure 1: Number of rotavirus notifications and crude incidence rate per 100,000 population by year (CIR)

Rotavirus infection has a well-documented seasonal pattern in Ireland with the number of cases typically peaking during March to May. During 2015, rotavirus notifications peaked during March (n=847) and April (n=987). Figure 2 illustrates the seasonal variation in rotavirus cases by month of notification for 2015 compared to the mean monthly number of notifications reported during 2004 to 2014.

During 2015, 1,962 cases (47.2%) were female and 2,192 (52.7%) were male. Sex was not reported for the remaining four cases.

Six outbreaks of rotavirus were notified during 2015 with 42 cases of associated illness, eight of whom were hospitalised. Two general outbreaks occurred in child-care facilities. The remaining four outbreaks were family outbreaks that occurred in private homes. All outbreaks reported mode of transmission as person to person spread.

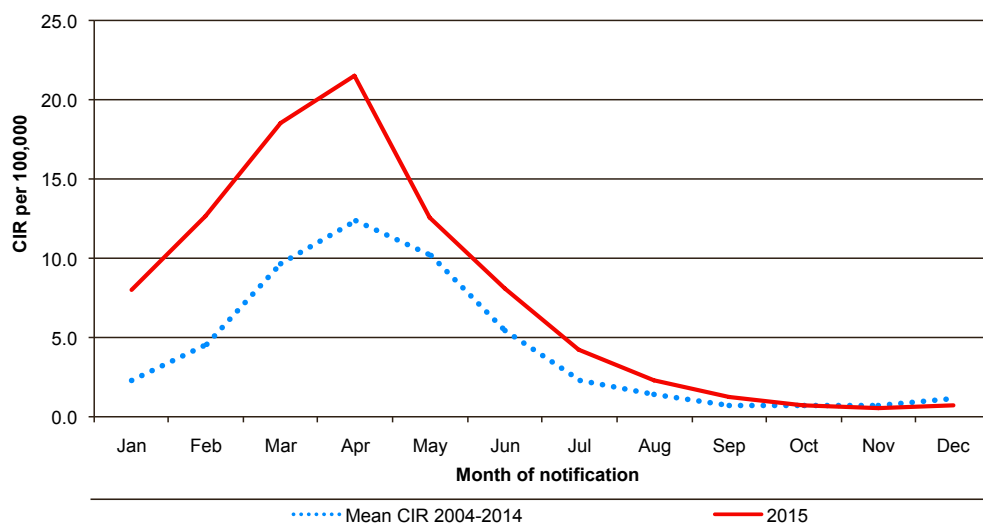


Figure 2: Rotavirus CIR by month (CIDR)