

3.6 Rotavirus

Summary

Number of cases: 2,372
Crude incidence rate: 51.7/100,000 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.

Rotarix™ vaccine was introduced in Ireland in December 2016 for all babies born from 1st October 2016 onwards. Rotarix™ is a live attenuated monovalent vaccine. Vaccine is administered orally in two doses at 2 months and 4 months. Both doses must be administered by 8 months old.

During 2016, there were 2,372 cases of rotavirus notified in Ireland, corresponding to a national crude incidence rate (CIR) of 51.7 per 100,000 population (figure 1).^{*} This is a marked decrease of 43% compared to 2015 (90.6) and a decrease of 6.7% compared to the mean CIR during 2006-2015 (56.7).

Significant geographical variation was observed in regional

* All rates are per 100,000 population

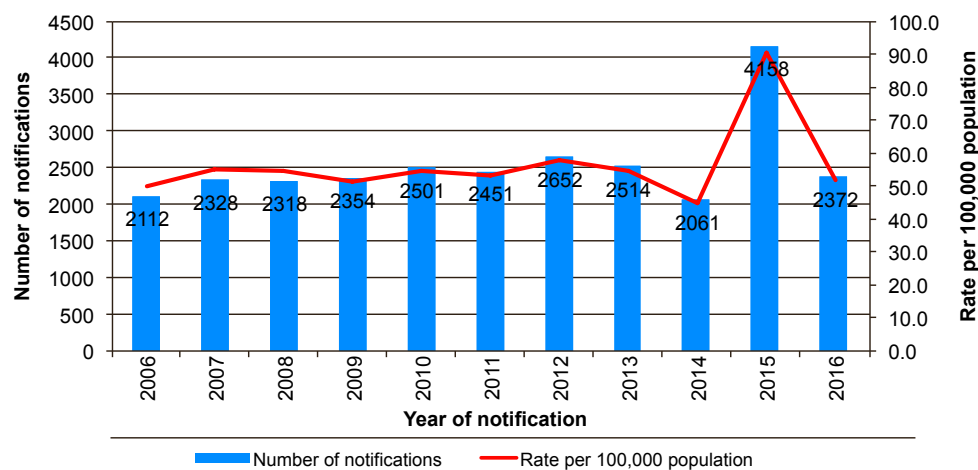


Figure 1: Number of rotavirus notifications and crude incidence rate per 100,000 population by year (CIDR)

rotavirus CIR. The highest regional CIRs were observed in HSE-M (73.3), -SE (58.3) and -W (54.8). The lowest regional CIR was observed in HSE-NW (38.3) and HSE-NE (44.5).

Rotavirus infection has a well-documented seasonal pattern in Ireland with the number of cases typically peaking during March to May. During 2016, rotavirus notifications peaked during May (n=594) and June (n=476). Figure 2 illustrates the seasonal variation in rotavirus cases by month of notification for 2016 compared to the mean monthly number of notifications reported during 2006 to 2015.

During 2016, 1,100 cases (46.4%) were female and 1,269 (53.5%) were male. Sex was not reported for the remaining three cases.

Seven outbreaks of rotavirus were notified during 2016 with 55 cases of associated illness, five of whom were hospitalised. Five general outbreaks occurred, two in child-care facilities, two in nursing homes and one in a hospital. The remaining two outbreaks were family outbreaks that occurred in private homes. Six outbreaks reported mode of transmission as person to person or airborne spread while mode of transmission was unknown for the remaining outbreak.

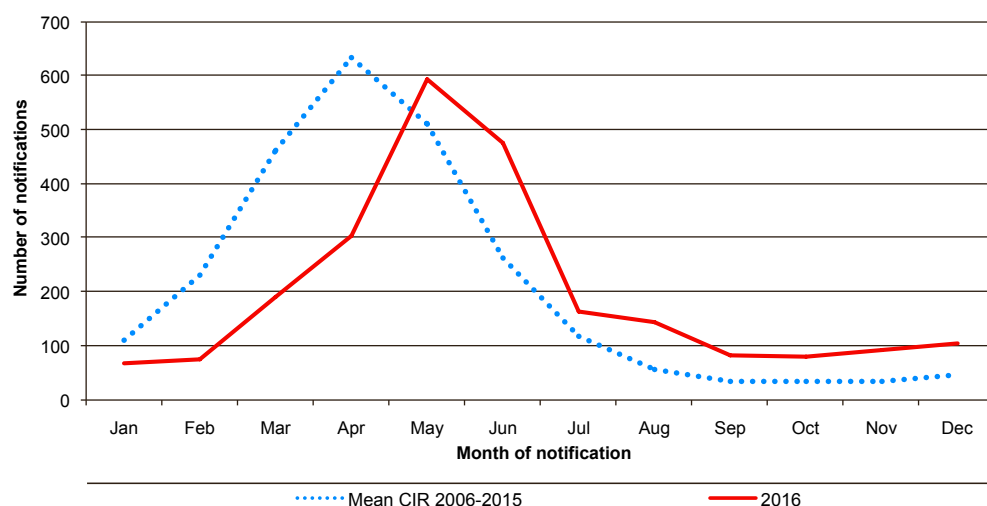


Figure 2: Number of rotavirus notifications by month, 2016 compared to mean monthly number of notifications 2006-2015 (CIR)