

3.5 Rotavirus

Summary

Number of cases: 2,061
Crude incidence rate: 44.9/100,000 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 old, 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 2014, there were 2,061 cases of rotavirus notified in Ireland, corresponding to a national crude incidence rate (CIR) of 44.9 per 100,000 population and representing a decrease of 11.9% compared to the mean CIR during 2004-2013.

Significant geographical variation was observed in regional rotavirus CIR. The highest regional CIRs were observed in HSE-W (73.9/100,000 population) and in HSE-M (73.7/100,000 population). The lowest regional CIR was observed in HSE-E (25.4 per 100,000 population) and HSE-MW (30.3 per 100,000 population).

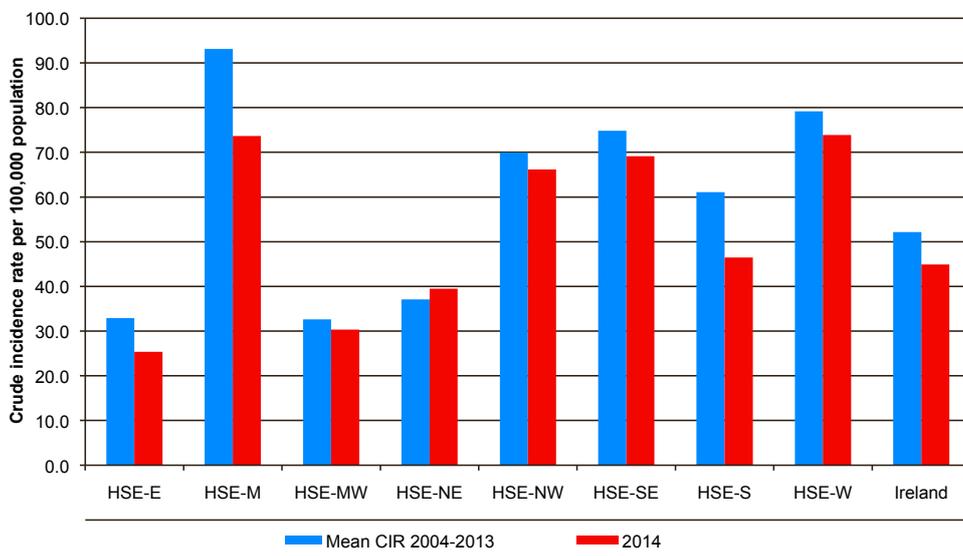


Figure 1: Rotavirus 2014 CIR compared to 2004-2013 mean CIR by HSE area (CIDR)

Figure 1 illustrates the rotavirus CIR by HSE area for 2014 compared to the mean CIR during 2004-2013.

Rotavirus infection has a well documented seasonal pattern in Ireland with the number of cases typically peaking during March to May. During 2014, rotavirus notifications peaked during April (n=421) and May (n=368). Figure 2 illustrates the seasonal variation in rotavirus cases by month of notification for 2014 compared to the mean monthly number of notifications reported during 2004 to 2013.

During 2014, 1,103 cases (53.5%) were male and 957 (46.4%) were female. Sex was not reported for the remaining case. This represented a ratio of females: males of 1.0:1.2, which was similar to the ratio observed in previous years.

Four outbreaks of rotavirus were notified during 2014 with 36 cases of associated illness, two of whom were hospitalised. Three general outbreaks occurred across two child-care facilities and one hospital. The remaining outbreak was a family outbreak that occurred in a private home. All outbreaks reported mode of transmission as person to person spread.

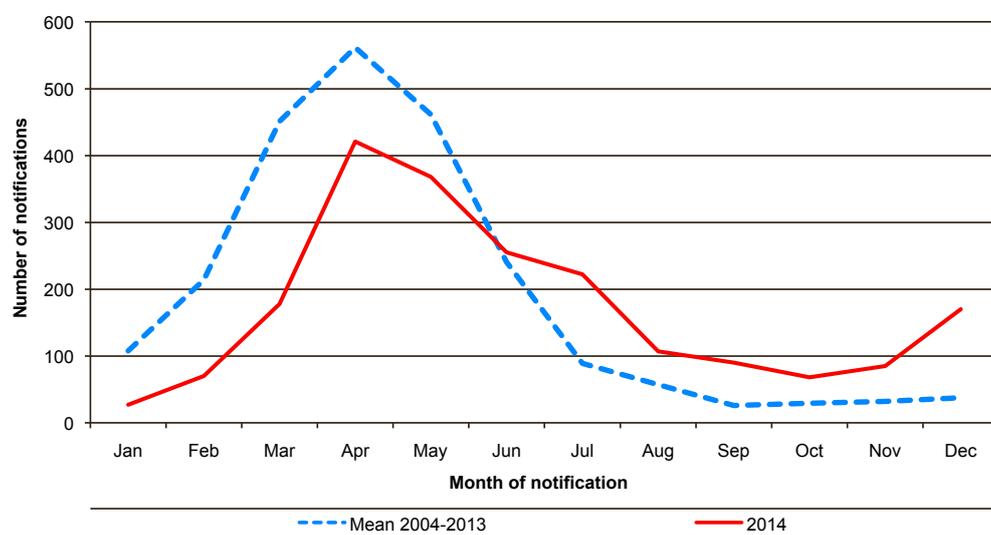


Figure 2: Number of rotavirus notifications by month, 2014 compared to mean monthly number of notifications 2004-2013 (CIDR)