

1.7 Rubella

Summary

Number of cases, 2011: 4
Number of confirmed cases, 2011: 0
Crude incidence rate, 2011: 0.1/100,000
Crude confirmed incidence rate, 2011: 0.0/100,000

In 2011, four cases (0.1/100,000) of rubella were notified in Ireland compared to 24 cases in 2010 (table 1).

All four cases in 2011 were classified as possible and the age profile of the cases ranged from one to six years of age, as shown in figure 1. The age specific incidence rates by case classification are shown in figure 2.

Of the four rubella cases, two (50%) were male and two (50%) were female.

Rubella vaccine in Ireland is available as part of the combined measles-mumps-rubella (MMR) vaccine. In Ireland, vaccination with the first dose of MMR is routinely recommended for all children at twelve months of age and the second dose at four to five years of age. Vaccination status was reported for all four (100%) of the rubella cases in 2011. Three cases (75%) were reported as completely vaccinated for their age, each having had

only one dose of MMR. All three were less than five years of age. One case was reported as incompletely vaccinated.

The diagnosis of rubella based solely on clinical signs and symptoms is often unreliable because there are many other causes of fever and rash illness which may resemble rubella infection. Therefore, diagnostic samples (serum, oral fluid, urine) should always be obtained from patients in order to accurately diagnose rubella. In 2011 the laboratory diagnosis of rubella required the identification of rubella IgM antibodies or IgG seroconversion or a fourfold or greater rise in titre to rubella virus in the absence of recent vaccination. Detection of rubella virus RNA in an appropriate specimen or a positive culture for rubella virus (not routinely performed) can also be done (following consultation with the laboratory). Vaccination with a rubella-containing vaccine eight days to eight weeks before sample collection makes interpretation of laboratory results difficult as vaccination induces similar serologic results. Therefore laboratory results always need to be interpreted according to vaccination status and history of recent vaccination.

In 2011 one case was serology positive for rubella, but had been vaccinated with one MMR dose just prior to

Table 1. Number of rubella cases notified and the crude incidence rate per 100,000 population (CIR) by HSE Area in 2011

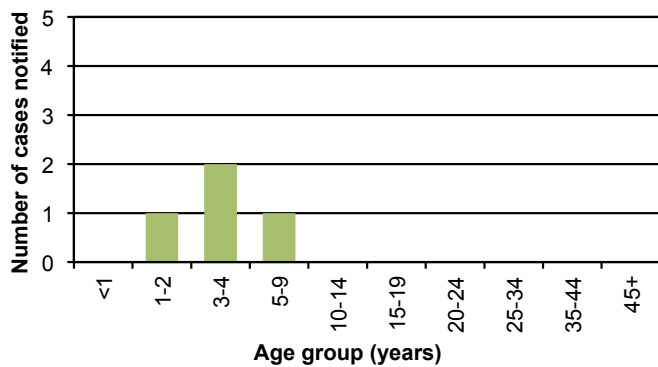
HSE Area	Number	CIR
HSE-E	1	0.1
HSE-M	0	0.0
HSE-MW	0	0.0
HSE-NE	1	0.2
HSE-NW	0	0.0
HSE-SE	2	0.4
HSE-S	0	0.0
HSE-W	0	0.0
Total	4	0.1

disease onset and as such could not be considered a confirmed case. Accurate information on vaccination dates in relation to disease onset is needed to accurately interpret serology test results.

Accurate and detailed information on all notified rubella cases is needed to monitor progress towards the WHO European Measles and Rubella Elimination Strategy (for 2015). HPSC is currently working with the HSE Areas to improve rubella surveillance data and is in the process of expanding the enhanced surveillance of this disease, recorded using the Computerised Infectious Disease Reporting (CIDR) system.

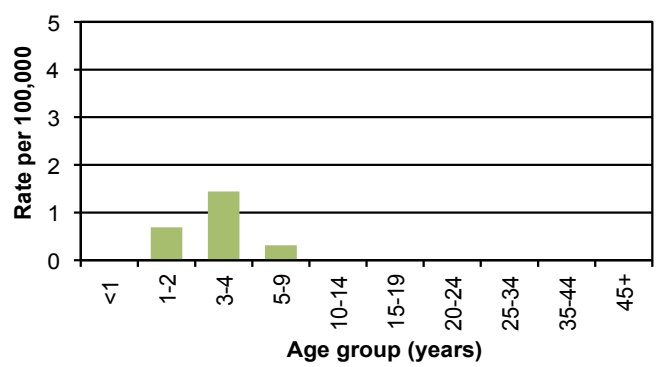
The figures presented in this summary are based on data extracted from CIDR on 14th September 2012. These figures may differ slightly from those published previously due to ongoing updating of notification data on CIDR.

Guidance on tests used to diagnose rubella is available on the NVRL website at <http://www.ucd.ie/nvrl> and on the HPSC website www.hpsc.ie/ under the disease name, see Topics A-Z.



Confirmed Probable Possible

Figure 1. Number of notified rubella cases in 2011 by age group and case classification



Confirmed Probable Possible

Figure 2. The age specific incidence rate (per 100,000 population) of notified rubella cases in 2011 by case classification