

1.7 Rubella

Summary

Number of cases, 2012: 9
Number of confirmed cases, 2012: 0
Crude incidence rate, 2012: 0.2/100,000
Crude confirmed incidence rate, 2012: 0.0/100,000

In 2012, nine cases (0.2/100,000) of rubella were notified in Ireland (table 1) compared to four cases in 2011.

In 2012, new case definitions were introduced in Ireland. Changes to the rubella case definition included changes to the definition of probable and confirmed cases. Under the previous case definition a rubella case classified as probable was a clinically compatible case with an epidemiological link to a laboratory confirmed rubella case while a case classified as confirmed was a clinically compatible case that was laboratory confirmed. Under the new 2012 rubella case definition a rubella case classified as probable is any person meeting the clinical criteria and with an epidemiological link to a laboratory confirmed rubella case and/or with a rubella virus specific antibody response (IgM) identified. Under the new 2012 rubella case definition a case classified as confirmed is any person not recently vaccinated and

meeting the laboratory criteria for case confirmation and in the case of recent vaccination, a person with detection of wild-type rubella virus strain. Under both case definitions laboratory results were interpreted according to the vaccination status and history of recent vaccination. The case definitions are available at www.hpsc.ie.

One of the cases in 2012 was classified as probable (figure 1). This case was serum IgM positive and probable country of infection was recorded as the United Kingdom. Eight cases in 2012 were classified as possible; half of these were less than three years of age (figure 1). The age specific incidence rates by case classification are shown in figure 2.

Of the nine rubella cases five (56%) were male and four (44%) 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 seven (78%)

Table 1. Number of rubella cases notified and the crude incidence rate per 100,000 population (CIR) by HSE Area in 2012

HSE Area	Number	CIR
HSE-E	5	0.3
HSE-M	1	0.4
HSE-MW	0	0.0
HSE-NE	0	0.0
HSE-NW	0	0.0
HSE-SE	0	0.0
HSE-S	1	0.2
HSE-W	2	0.4
Total	9	0.2

of the rubella cases in 2012. Four cases (n=4/9, 44%) were unvaccinated; one of these was aged less than 12 months of age. Two cases (n=2/9, 22%) were reported as completely vaccinated for their age, both of these were aged less than or equal to two years of age. One case was reported as incompletely vaccinated for their age as this case was aged greater than five years but had only received one dose of MMR. The probable case (adult) had no history of MMR vaccination and was of an age when a rubella containing vaccine was unlikely to have been administered.

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 2012 the laboratory criteria for case confirmation of rubella required the identification of rubella virus specific antibody response (IgG) in serum or saliva virus or detection of rubella virus nucleic acid in a clinical specimen or isolation of rubella virus from a clinical specimen. Isolation of rubella virus is not routinely performed in Ireland but can be done following consultation with the laboratory. Laboratory results always need to be interpreted according to the vaccination status and history of recent vaccination. In 2012 the laboratory criteria for a probable case required the identification of rubella virus specific antibody response (IgM); again laboratory results

need to be interpreted according to the vaccination status. When rubella in pregnancy is suspected, further confirmation of a positive rubella IgM results is required (e.g. a rubella specific IgG avidity test showing a low avidity). In certain situations, such as confirmed rubella outbreaks detection of rubella virus IgM can be considered confirmatory in non-pregnant cases.

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 during 2013 implemented enhanced surveillance of this disease using the Computerised Infectious Disease Reporting (CIDR) system.

The figures presented in this summary are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on 25th July 2013. These figures may differ slightly from those published previously due to ongoing updating of notification data on CIDR.

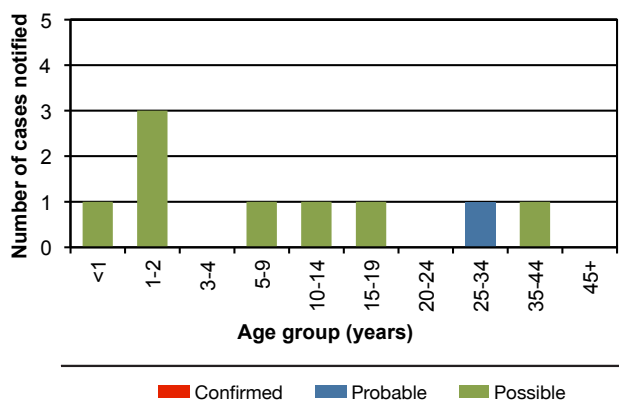


Figure 1. Number of notified rubella cases in 2012 by age group and case classification

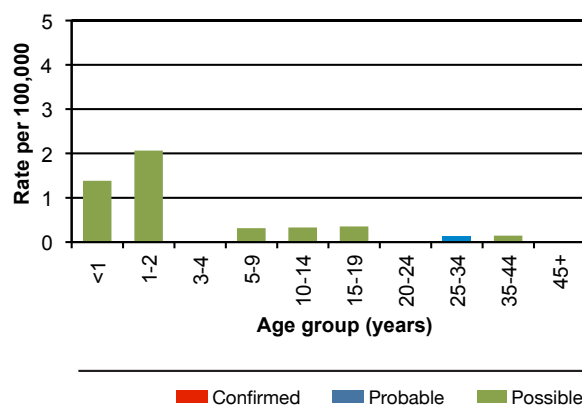


Figure 2. The age specific incidence rate (per 100,000 population) of notified rubella cases in 2012 by case classification