

# 1.7 Rubella

## Summary

Number of cases, 2010: 24  
Number of confirmed cases, 2010: 1  
Crude incidence rate, 2010: 0.6/100,000  
Crude confirmed incidence rate, 2010: 0.02/100,000

In 2010, 24 cases (0.6/100,000) of rubella were notified in Ireland compared to 19 cases in 2009. Thirteen cases (54%) were notified in the HSE-E (table 1).

One of the cases in 2010 was classified as confirmed (based on specific antibody response and compatible clinical presentation) giving a crude confirmed incidence rate of 0.02 per 100,000 total population. The confirmed case was in the age group 1-2 years (figure 1). Twenty-three cases in 2010 were classified as possible; the majority (n=18/23, 78%) 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 24 rubella cases 11 (46%) were male and 13 (54%) were female. The confirmed case was 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 22 (92%) of the rubella cases in 2010. Thirteen cases (n=13/24, 54%) were unvaccinated; eight of these were <12 months of age. Nine cases (n=9/24, 38%) were reported as completely vaccinated for their age, only two of these were greater than five years of age (neither of these cases were confirmed). The confirmed case was reported as completely vaccinated for their age.

The diagnosis of rubella based solely on clinical signs and symptoms is unreliable because there are many other causes of rash that may mimic rubella infection and up to 50% of rubella infections may be subclinical. Therefore, samples should always be obtained for the accurate diagnosis of rubella. Serology tests are routinely carried out in Ireland (rubella IgM antibodies or IgG seroconversion or a fourfold or greater rise in titre to rubella virus) except if the individual has received a rubella-containing vaccine eight days to eight weeks before sample collection. 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).

Table 1. Number of rubella cases notified and the crude incidence rate per 100,000 population (CIR) by HSE Area in 2010

HSE Area	Number	CIR
HSE-E	13	0.9
HSE-M	0	0.0
HSE-MW	1	0.3
HSE-NE	0	0.0
HSE-NW	1	0.4
HSE-SE	5	1.1
HSE-S	2	0.3
HSE-W	2	0.5
<b>Total</b>	<b>24</b>	<b>0.6</b>

The only confirmed case reported in 2010 was laboratory confirmed based on serological response. This case was reported to have received one MMR dose, but the date of vaccination could not be obtained. 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.

The figures presented in this summary are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) system on 3rd November 2011. 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/](http://www.hpsc.ie/) under the disease name, see Topics A-Z.

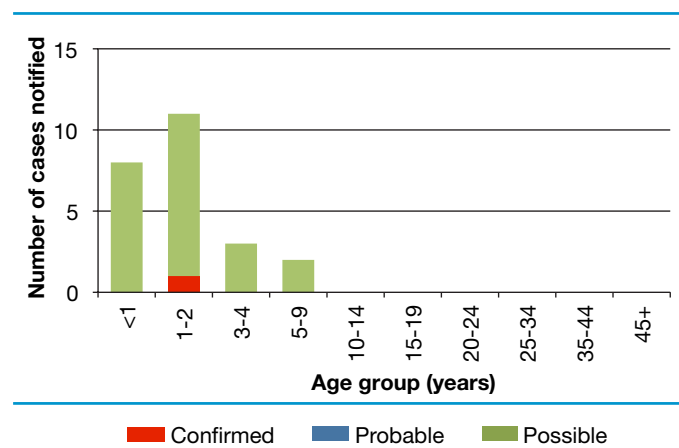


Figure 1. Number of notified rubella cases in 2010 by age group and case classification

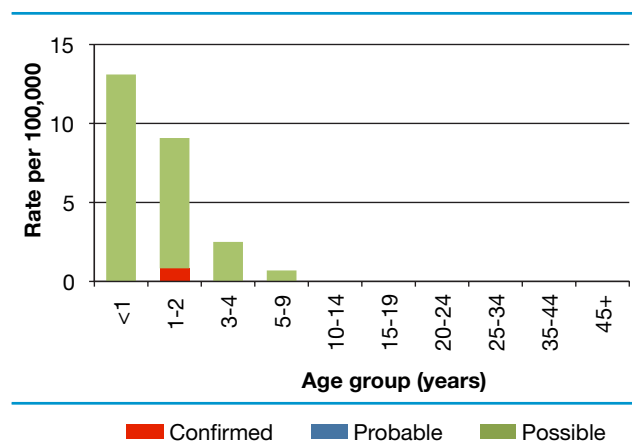


Figure 2. The age specific incidence rate (per 100,000 population) of notified rubella cases in 2010 by case classification