



## SURVEILLANCE REPORT

# Monthly measles and rubella monitoring report

October 2017

## Measles

ECDC publishes routine measles surveillance data submitted by the 30 EU/EEA countries to the European Surveillance System (TESSy) on a monthly basis. In addition, ECDC monitors European and worldwide measles outbreaks through epidemic intelligence (data not reported to TESSy) and publishes information about them in the [Communicable Disease Threats Report](#) (CDTR) on a monthly basis.

In the period from 1 January 2016, to 31 August 2017, more than 18 000 measles cases were reported, with 42 deaths attributed to measles. These numbers are from both TESSy and epidemic intelligence. In the first eight months of 2017, a total of 10 298 cases were reported. This is over four times more than in the same months of 2016, when 2 263 cases had been reported. The countries reporting most cases were Italy (4 509), Romania (3 217) and Germany (878).

In the 12-month period between 1 September 2016 and 31 August 2017, 30 EU/EEA Member States reported 12 680 cases of measles to TESSy. Twenty-nine Member States reported consistently throughout the 12-month period. Finland did not report data for August 2017. The highest number of cases were reported by Romania (4 982), Italy (4 814) and Germany (967), accounting for 39%, 38% and 8% respectively of all EU/EEA cases. The diagnosis of measles was confirmed by positive laboratory results (serology, virus detection or isolation) in 62% of all EU/EEA cases.

Over the 12-month period, the measles notification rate was below one case per million population in 8 of the 30 reporting countries. Two of these countries, Latvia and Malta, reported no cases. The highest notification rates were observed in Romania (252.1 per million), Italy (79.4 per million) and Belgium (32.6 per million).

Of the 12 678 cases with known age, 4 572 (36%) were children less than 5 years of age, while 5 844 (46%) were aged 15 years or older. The highest incidence was reported in children below one year of age (299.9 per million) and children from 1 to 4 years of age (13.6 per million).

Measles continues to spread across Europe because the vaccination coverage in many EU/EEA countries is suboptimal. The latest available figures on [vaccination coverage collected by WHO \(2016\)](#) show that the vaccination coverage for the first dose of measles was below 95% in 18 of 30 EU/EEA countries. The vaccination coverage for the second dose of measles was below 95% in 20 of 27 EU/EEA countries reporting second dose coverage data. If the elimination goal is to be reached, the vaccination coverage rates for children targeted by routine vaccination programmes should increase in a number of countries, as the vaccination coverage of the second dose must be at least 95% to interrupt measles circulation.

Of the 11 892 cases with known vaccination status, 87% were unvaccinated, 8% were vaccinated with one dose, 3% were vaccinated with two or more doses, and 2% were vaccinated with an unknown number of doses.

The proportion of unvaccinated cases was highest among children below one year of age (95%). This is expected as these children are too young to have received the first dose of measles vaccine. Infants below the age of one year are particularly vulnerable to complications of measles and are best protected by herd immunity, which is achieved when population coverage for the second dose of a measles-containing vaccine is at least 95%.

Of all cases, 6% had an unknown vaccination status. The proportion of cases with unknown vaccination status was highest in adults aged 25–29 year-old and 30 years and over, reaching 13% and 11% respectively in these two age groups.

In the target group for the first dose of routine childhood MMR vaccination (1–4 year-old), 85% of the cases were unvaccinated, 12% were vaccinated with one dose, 0% with two doses or more, 1% with an unknown number of doses and 2% had an unknown vaccination status.

Twenty-seven deaths due to measles were reported during the 12-month period; with 19 in Romania, three in Italy, and one in Bulgaria, France, Germany, Spain and Portugal.

For Romania, the number of measles cases reported to ECDC is different from the number regularly published by the [National Institute of Public Health in Romania](#) due to the delay in case-based reporting to ECDC. ECDC has published a [Rapid Risk Assessment](#) on current outbreak in Romania.

Measles outbreaks are also ongoing in other EU countries. See more information in the latest [CDTR](#).

## Rubella

Between 1 September 2016 and 31 August 2017, 28 EU/EEA Member States reported 799 cases of rubella. Two EU countries – Belgium and France – do not operate rubella surveillance systems with national coverage and do not report to the EU/EEA enhanced rubella surveillance. Of the 28 reporting Member States, 26 reported rubella cases to ECDC consistently throughout the 12-month period. Finland and Portugal did not report for August 2017.

Rubella is a target for elimination in Europe. The rubella notification rate was lower than the elimination target (one case per million population) in 25 of the 28 countries. Seventeen of these 25 countries reported no cases. The highest reporting rate was by Poland (16.2 cases per million population) and Austria (3.0 cases per million population). Italy's notification rate was 1.1 cases per million population.

Poland accounted for 77% of all rubella cases in the period (n=615). Data from Poland were reported in an aggregated format and need to be interpreted with caution as only six cases were confirmed through laboratory testing. The highest number of cases in Poland was observed in children, with 46% of cases in those less than 5 years of age and 26% in those aged from five to nine years of age.

ECDC monitors European rubella outbreaks on a monthly basis through epidemic intelligence. No new rubella outbreaks were detected by epidemic intelligence in the EU/EEA since the last monthly update. See more information in the [CDTR](#).