

# Measles and rubella elimination country profile

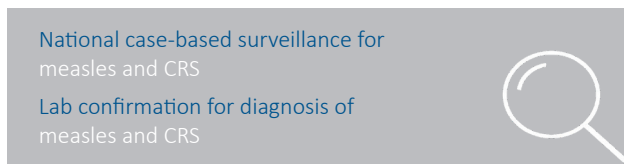
## Belgium

### Measles elimination status



Source: European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: [www.euro.who.int/7thrv](http://www.euro.who.int/7thrv)

### Measles and rubella surveillance



Source: WHO/UNICEF Joint Reporting Form on Immunization, 2017

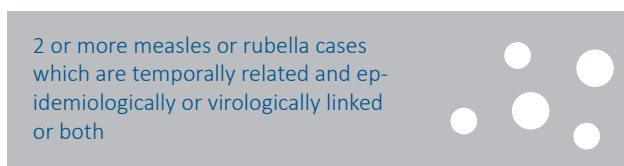
### Measles and rubella immunization schedule, 2017

|                               | Vaccine | Schedule     | Year of introduction |
|-------------------------------|---------|--------------|----------------------|
| MCV1                          | MMR     | 12 months    | MCV2 1994            |
| MCV2                          | MMR     | 11-12 years* | RCV 1985             |
| Measles vaccination in school |         |              | Yes                  |

Source: Immunization schedule, WHO, Data and Statistics, Immunization Monitoring and Surveillance ([http://www.who.int/immunization/monitoring\\_surveillance/data/en/](http://www.who.int/immunization/monitoring_surveillance/data/en/))

MMR = measles-mumps-rubella vaccine; MCV1 = first dose measles-containing vaccine; MCV2 = second dose measles-containing vaccine; RCV = rubella-containing vaccine  
\* only in Wallonia

### Definition used for an outbreak



Source: Measles and rubella elimination Annual Status Update report, 2017



### Rubella elimination status



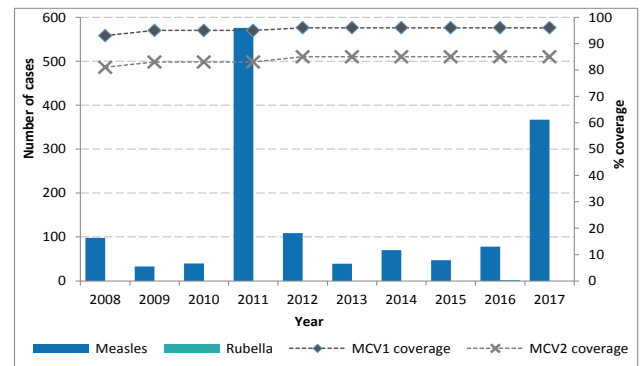
Source: European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: [www.euro.who.int/7thrv](http://www.euro.who.int/7thrv)

### Demographic information, 2017

|                  |            |
|------------------|------------|
| Total population | 11 429 336 |
| < 1 year old     | 127 289    |
| < 5 years old    | 646 514    |

Source: World Population Prospects: The 2017 Revision, New York, United Nations

### Measles and rubella cases and immunization coverage, 2008–2017

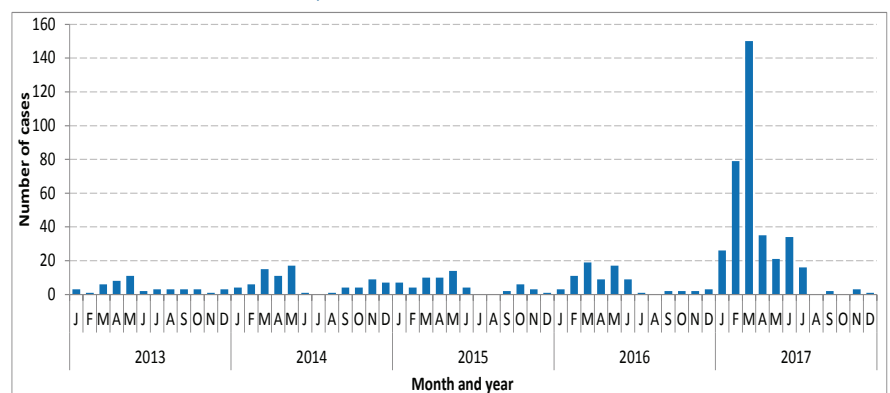


Source: Disease incidence and immunization coverage (WUENIC), WHO, Data and Statistics, Immunization Monitoring and Surveillance

([http://www.who.int/immunization/monitoring\\_surveillance/data/en/](http://www.who.int/immunization/monitoring_surveillance/data/en/))

MCV1 = first dose of measles-containing vaccine  
MCV2 = second dose of measles-containing vaccine

### Confirmed measles cases by month of onset, 2013-2017

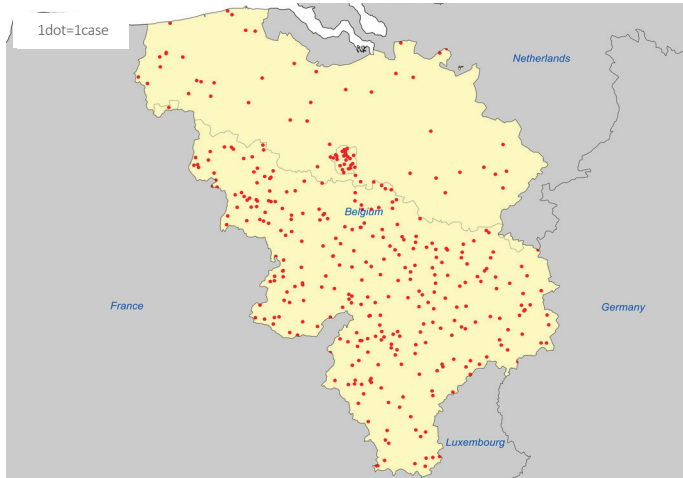


Source: CISD 2017

# Measles and rubella elimination country profile

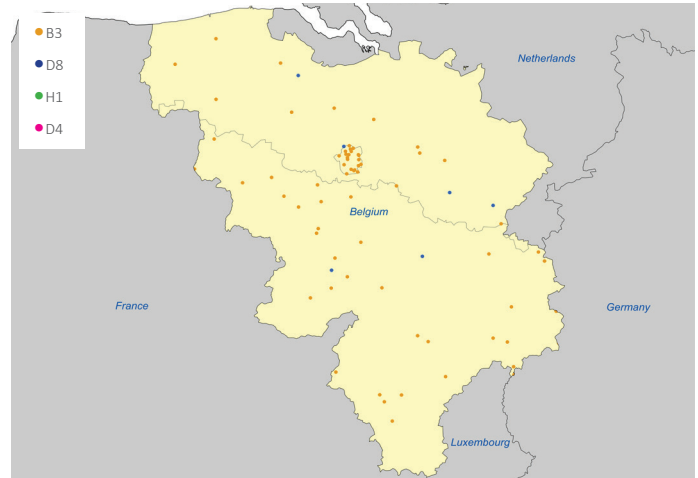
## Belgium

### Measles cases by first subnational level, 2017



Source: Measles and rubella elimination Annual Status Update report, 2017

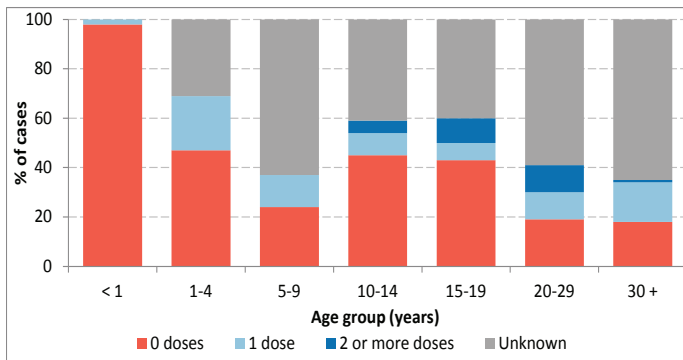
### Measles genotypes by first subnational level, 2017



Source: MeaNS 2017

Note: The dots in the maps are placed randomly within the administrative regions.  
Map disclaimer: The boundaries and names shown and the designations used on the maps do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

### Measles cases by age group and vaccination status, 2017



Source: Measles and rubella elimination Annual Status Update report, 2017  
Note: Excludes imported cases

### Sources of infection, 2017

|                       | Measles | Rubella |
|-----------------------|---------|---------|
| Imported              | 9       | 0       |
| Import-related        | 5       | 0       |
| Unknown/ Not reported | 207     | 0       |
| Endemic               | 146     | 0       |

Source: Measles and rubella elimination Annual Status Update report, 2017

### Information on CRS, 2017



Source: Measles and rubella elimination Annual Status Update report, 2017  
CRS = congenital rubella syndrome

### Supplementary immunization activities

| Year | Target age         | Vaccine used | % Coverage |
|------|--------------------|--------------|------------|
| 2017 | All asylum seekers | MMR          | ND         |
| 2017 | Adults in Flanders | MMR          | 100%       |
|      |                    |              |            |

Source: Supplementary immunization activities, WHO, Data and Statistics, Immunization Monitoring and Surveillance ([http://www.who.int/immunization/monitoring\\_surveillance/data/en/](http://www.who.int/immunization/monitoring_surveillance/data/en/))  
MMR = measles-mumps-rubella vaccine  
ND = Data not available

# Measles and rubella elimination country profile

## Belgium

### Measles incidence, epidemiologic and virologic characteristics, 2013-2017

|      | Suspected measles cases | Confirmed measles cases |            |            |       | Discarded as non-measles | Measles incidence | Genotypes detected |
|------|-------------------------|-------------------------|------------|------------|-------|--------------------------|-------------------|--------------------|
|      |                         | Laboratory              | Epi-linked | Clinically | Total |                          |                   |                    |
| 2013 | 118                     | 28                      | 6          | 9          | 43    | 75                       | 3.5               | D8                 |
| 2014 | 224                     | 58                      | 5          | 12         | 75    | 149                      | 6.1               | B3,D8              |
| 2015 | 145                     | 35                      | 8          | 3          | 46    | 99                       | 3.6               | B3,D4,D8           |
| 2016 | 247                     | 62                      | 9          | 7          | 78    | 169                      | 6.3               | B3, D8             |
| 2017 | 826                     | 243                     | 84         | 40         | 367   | 459                      | 31.6              | B3, D8             |

Source: Measles and rubella elimination Annual Status Update report, 2013-2017  
Incidence calculated per 1 million population  
ND = Data not available; NA= Not applicable

### Measles surveillance and laboratory performance indicators, 2013-2017

|      | Discarded non-measles rate | % 1st sub-national unit with ≥ 2 discarded cases | % cases with adequate laboratory investigation | % origin of infection known | # specimen tested for measles | % positive for measles | Rate of viral detection | % WHO and proficient labs |
|------|----------------------------|--|--|-----------------------------|-------------------------------|------------------------|-------------------------|---------------------------|
| 2013 | 0.7                        | 0%   | 76.7%  | 36%                         | 101                           | 27.7%                  | 17%                     | ND                        |
| 2014 | 1.3                        | 0%   | 96%  | 79%                         | 207                           | 28.0%                  | 50%                     | ND                        |
| 2015 | 0.8                        | 0%   | 93.4%  | 89.1%                       | 128                           | 27.3%                  | 85.7%                   | 100%                      |
| 2016 | 1.4                        | 0%   | 93.3%  | 80.8%                       | 222                           | 27.9%                  | 84.6%                   | 100%                      |
| 2017 | 4.1                        | 66.7%  | 84.9%  | 43.6%                       | 593                           | 61.9%                  | 75.0%                   | 84.6%                     |

Source: ASU 2013-2017  
ND = Data not available; NA= Not applicable  
A proficient laboratory is WHO accredited and/or has an established quality assurance programme with oversight by a WHO accredited laboratory

### Rubella incidence, epidemiologic and virologic characteristics, 2013-2017

|      | Suspected rubella cases | Confirmed rubella cases |            |            |       | Discarded as non-rubella | Rubella incidence | Genotypes detected |
|------|-------------------------|-------------------------|------------|------------|-------|--------------------------|-------------------|--------------------|
|      |                         | Laboratory              | Epi-linked | Clinically | Total |                          |                   |                    |
| 2013 | 0                       | 0                       | 0          | 0          | 0     | 0                        | NA                | NA                 |
| 2014 | 0                       | 0                       | 0          | 0          | 0     | 0                        | NA                | NA                 |
| 2015 | 0                       | 0                       | 0          | 0          | 0     | 0                        | NA                | NA                 |
| 2016 | 0                       | 0                       | 0          | 0          | 0     | 0                        | NA                | NA                 |
| 2017 | 28                      | 0                       | 0          | 0          | 0     | 28                       | NA                | NA                 |

Source: Measles and rubella elimination Annual Status Update report, 2013-2017  
Incidence calculated per 1 million population  
ND = Data not available; NA= Not applicable

### Rubella surveillance and laboratory performance indicators, 2013-2017

|      | Discarded non-rubella rate | % 1st sub-national unit with ≥ 2 discarded cases | % cases with adequate laboratory investigation | % origin of infection known | # specimen tested for rubella | % positive for rubella | Rate of viral detection | % WHO and proficient labs |
|------|----------------------------|--|--|-----------------------------|-------------------------------|------------------------|-------------------------|---------------------------|
| 2013 | NA                         | NA   | NA   | NA                          | ND                            | ND                     | NA                      | ND                        |
| 2014 | NA                         | NA   | NA   | NA                          | 67                            | 0%                     | NA                      | ND                        |
| 2015 | NA                         | NA   | NA   | NA                          | 45                            | 0%                     | NA                      | ND                        |
| 2016 | NA                         | NA   | NA   | NA                          | 55                            | 1.8%                   | NA                      | ND                        |
| 2017 | NA                         | NA   | NA   | NA                          | 28                            | 3.6%                   | NA                      | ND                        |

Source: ASU 2013-2017  
ND = Data not available; NA= Not applicable  
A proficient laboratory is WHO accredited and/or has an established quality assurance programme with oversight by a WHO accredited laboratory

### RVC comments, based on 2017 reporting

The Regional Verification Commission for Measles and Rubella Elimination (RVC) commends efforts being made by health authorities and the national verification committee for measles and rubella elimination (NVC), and continues to call for the implementation of WHO resolutions and guidelines recommending establishment of national rubella and CRS surveillance. The decision to maintain the non-notifiable status of rubella constitutes a major constraint to regional elimination. The low MRCV2 coverage remains of great concern. To document interruption of endemic measles transmission, the RVC strongly recommends inclusion of genotyping data on sporadic measles cases in future ASUs.

Source: European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: [www.euro.who.int/7thrv](http://www.euro.who.int/7thrv)

### Surveillance performance indicators and targets

- Rate of discarded cases: at least 2 discarded measles or rubella cases per 100 000 population
- % cases with adequate laboratory investigation: ≥ 80%
- % origin of infection known: ≥ 80%
- Rate of viral detection: ≥ 80%