This issue of WHO EpiBrief provides an overview of selected epidemiological characteristics of measles and rubella in the WHO European Region based on monthly surveillance data for the first half of 2019.

The surveillance data presented in this issue were reported by Member States and are incorporated in the Centralized information system for infectious diseases.[1] Tabulated surveillance data by country for the first half of 2019 (as of 30 July 2019) are annexed to this issue. They are also published in WHO EpiData no. 7/2019.[2]

The analyses of these data are performed on cases with disease onset dates during January–June 2019. Where these dates were unavailable, cases with the date of notification reported during this period were included. If different dates are used the numbers of cases in a specified time period may differ from reports produced by national or partner agencies. Percentages in this report were rounded to the nearest whole number.

## Measles in the WHO European Region January–June 2019

### Notifications and laboratory data

For the first half of 2019, 89 994 measles cases were reported by 48 countries of the WHO European Region among all 53 Member States that submitted measles data (including zero reporting) (Table 1 in annex).

Of the total cases in the Region, 78% (n=69 877) were reported by 4 countries: Ukraine (60%; n=54 246), Kazakhstan (10%; 8855), Georgia (4%; 3874) and Russian Federation (3%; 2902).

Of the total, 30 018 cases (34%) were laboratory confirmed and 6088 cases (5%) were epidemiologically linked. The remaining 53 888 cases (61%) were classified as clinically compatible. For the first half of 2019, 43 (90%) of the 48 countries in the Region notifying measles cases submitted 2397 genomic sequence information to the Measles Nucleotide Surveillance database (MeaNS)[3] through WHO-accredited reference laboratories (as of 15 August 2019). The genotypes identified in the Region comprised D8 (n=1962), B3 (432) and H1 (3). Of the measles virus genotype D8 variants 83% were the named strain Gir Somnath.IND/42.16/ and of the measles virus genotype B3 variants 20% were the named strain Dublin.IRL/8.16/. The number of sequences of measles

virus in the WHO European Region reported to MeaNS by genotype from week 1 of 2017 to week 27 of 2019 (as of 30 July 2019) is shown in Fig. 1 (page 2).

### Age distribution

Of the total cases, the age group was known in 88 919 cases: 8878 (10%) were <1 year old, 15 356 (17%) were 1–4 years old, 27 875 (31%) were 5–19 years old and 36 810 (41%) were ≥20 years old (Fig. 2). The age distribution varied between countries. Fig. 3 shows the age distribution of measles cases in the 4 countries reporting the largest number of cases. Among these 4 countries, the largest proportion of cases in adults aged ≥20 years was reported in Georgia (56%; n=2158). By contrast, the largest proportion of cases in children 1–4 years old was reported in Kazakhstan (32%; 2825).

### Vaccination status

Vaccination status was known for 63 380 cases (70%). Of the 39 210 cases (62%) that were unvaccinated: 8373 (21%) were <1 year old, 10 858 (28%) were 1–4 years old, 6687 (17%) were 5–9 years old, 5434 (14%) were 10–19 years old and 7851 (20%) were ≥20 years old. Age was unknown for 7 unvaccinated cases (0.02%). The remaining 24 170 cases (38%) were reportedly vaccinated with at least one dose of measles-containing vaccine (MCV).

### Hospitalization

Data on hospitalization status was available for 69% (n=62 319) of all reported measles cases. Of these, 54 801 cases (88%) were hospitalized. 62% of hospitalized cases (n=33 725) were reported in Ukraine.

### Measles-related deaths

There were 37 reported measles-related deaths in 11 countries: Albania (2 deaths), Georgia (2), Italy (1), Kyrgyzstan (1), North Macedonia (5), Romania (1), Russian Federation (2), Spain (1), Switzerland (1), Turkey (3) and Ukraine (18). This corresponded to a death rate per 1000 measles cases of 0.41.

20 deaths (54%) occurred in children under 10 years of age: 8 cases were <1 year old, 12 cases were 1–9 years old. Of the remaining 17 deaths, 2 cases were 10–19 years old and 15 cases were ≥25 years old with the oldest being 69 years of age. 36 of the 37 deaths were

Fig. 1. The number of sequences of measles virus in the WHO European Region reported to MeaNS by genotype, week 1, 2017 to week 27, 2019 (as of 30 July 2019)
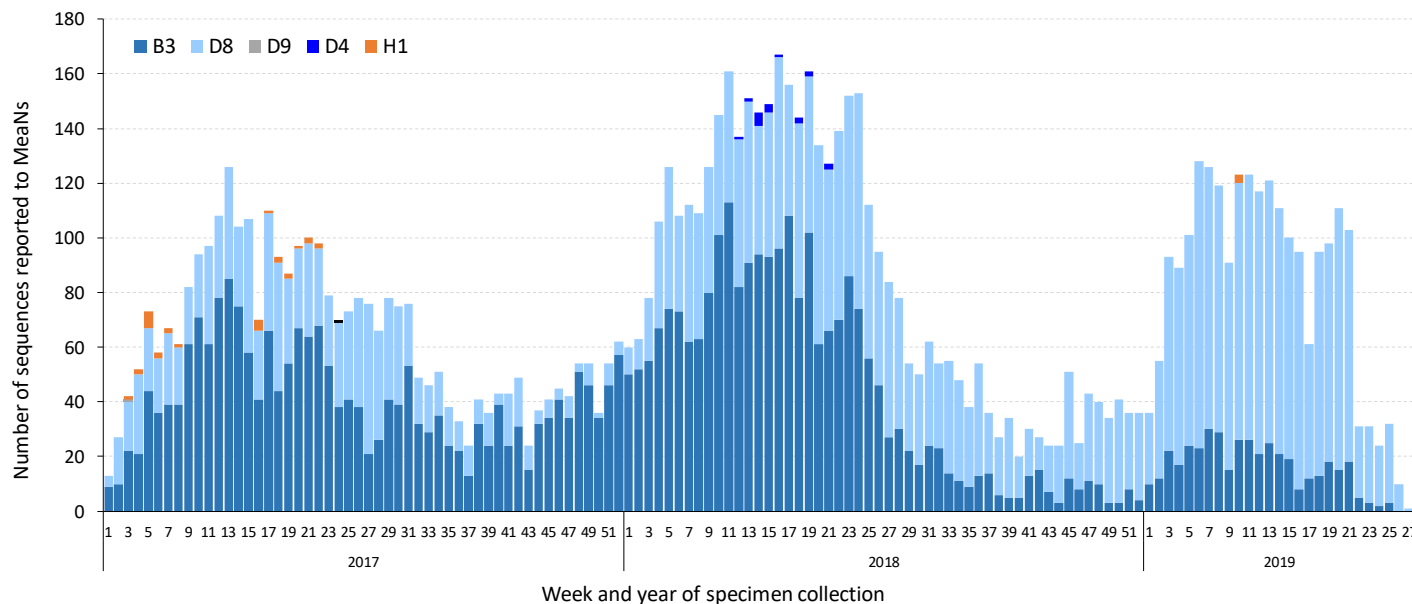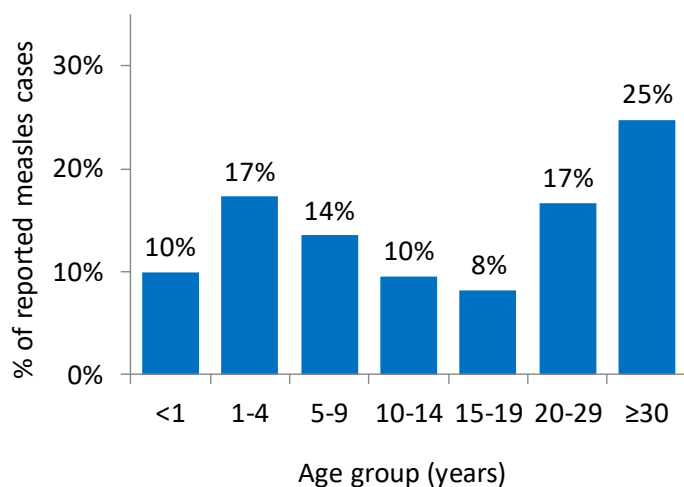


Fig. 2. Age distribution of measles cases in the WHO European Region, January–June 2019 (n=88 919)*



N.B. Discarded cases are not included.
*For 1075 cases the age group was not reported.

laboratory-confirmed cases of measles. 31 fatal cases were unvaccinated, 1 case had received one MCV dose. In the remaining 5 cases the vaccination status was unknown.

### Imported cases

Importation status was known for 19% (n=16 926) of cases. Of these, 747 (4%) cases were imported. Most imported cases (67%; n=501) were reported by Russian Federation (n=170), France (128), United Kingdom (69), Italy (62) and Germany (55) (Table 1 in annex).

### Rubella in the WHO European Region January–June 2019

#### Notifications and laboratory data

For the first half of 2019, 410 rubella cases were reported by 16 countries of the WHO European Region among 49 countries (92% of the 53 Member States) submitting rubella data (including zero reporting) (Table 2 in annex). 90% of cases (n=367) were reported by Poland (48%; n=198), followed by Ukraine (23%; 94), Germany (7%; 28), Turkey (6%; 26) and Russian Federation (5%; 21).

Of the total, 96 cases (12%) were laboratory confirmed, most of which were reported by Turkey (n=26), Russian Federation (21), Germany (16) and Ukraine (13). 7 cases were classified as epidemiologically linked and 307 were clinically compatible. Of the latter, most (90%) were reported by Poland (n=193) and Ukraine (81).

During the first half of 2019, 12 rubella virus sequences were entered in the Rubella Nucleotide Surveillance database (RubeNS)[4] (as of 15 August 2019). The identified genotypes comprised 2B (n=7) and 1E (5).

#### Age distribution

The age group was known in all 410 cases: 30 (7%) were <1 year old, 106 (26%) were 1–4 years old, 142 (35%) were 5–19 years old and 132 (32%) were ≥20 years old (Fig. 4). Of the 96 laboratory-confirmed cases, 4 were <1 year, 23 were 1–4 years, 19 were 15–19 years, 50 were ≥20 years. The age distribution of the

Fig. 3. Age distribution of measles cases in the four countries with the largest number of cases in the WHO European Region, January–June 2019 (n=69 877)

## Ukraine (n=54 246)



## Kazakhstan (n=8855)



## Georgia (n=3874)



## Russian Federation (n=2902)
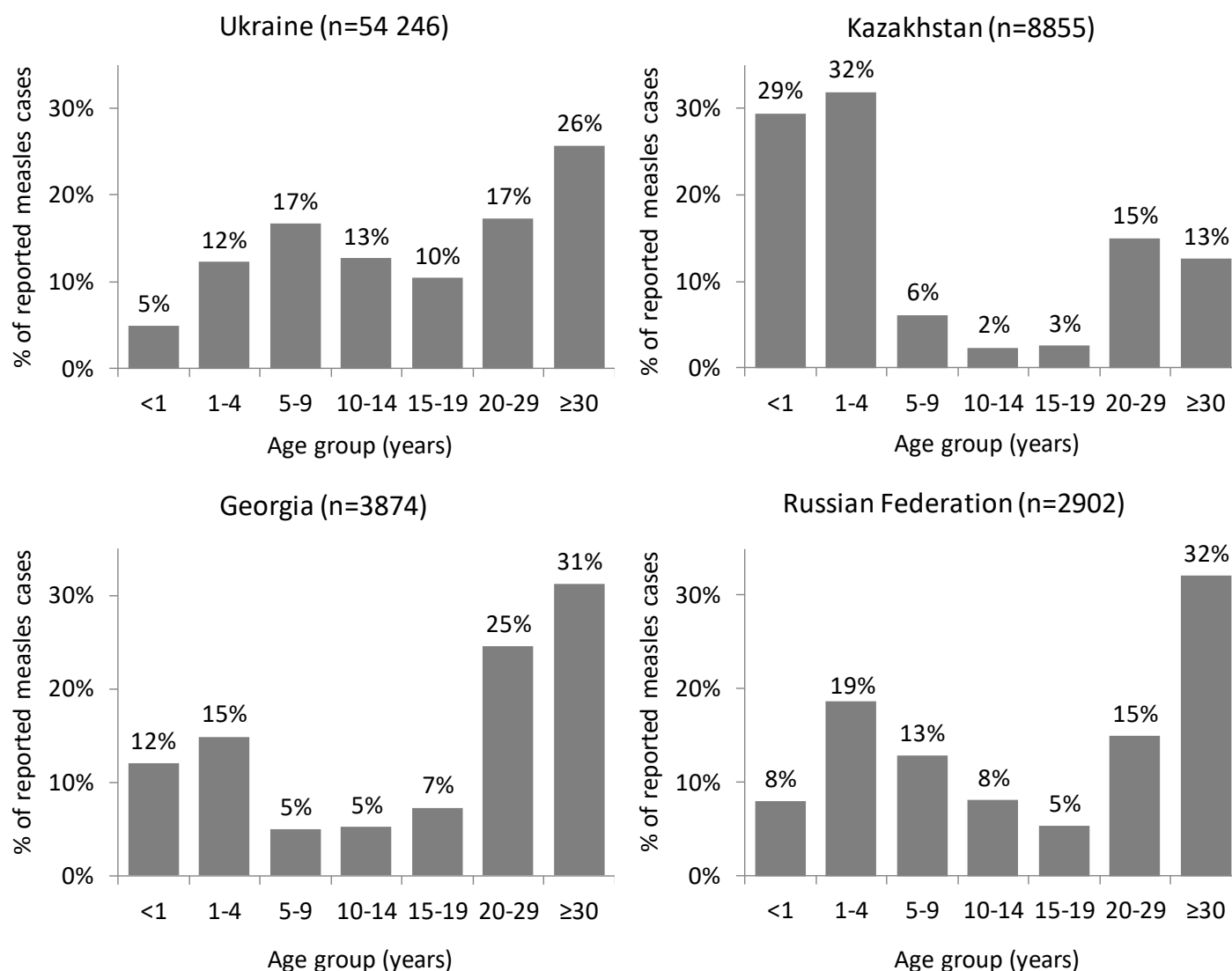


two countries with the largest number of laboratory-confirmed rubella cases is shown in Fig 5.

### *Vaccination status*

Vaccination status was known in 79% of cases (n=324). Of the 135 (42%) unvaccinated cases: 29 (21%) were <1 year old, 38 (28%) were 1–4 years old, 18 (13%) were 5–19 years old and 50 (37%) were ≥20 years old. The remaining 189 cases (58%) were reportedly vaccinated with at least one rubella-containing vaccine dose.

### *Imported cases*

Importation status was known in 19% (n=76) of rubella cases. Of these, 13 cases (17%) were imported cases. Imported cases were reported by Russian Federation (n=4), Italy (3), Germany (2), Latvia (1), Switzerland (1), Turkey (1) and Uzbekistan (1).

Fig. 4. Age distribution of rubella cases in the WHO European Region, January–June 2019 (n=410)
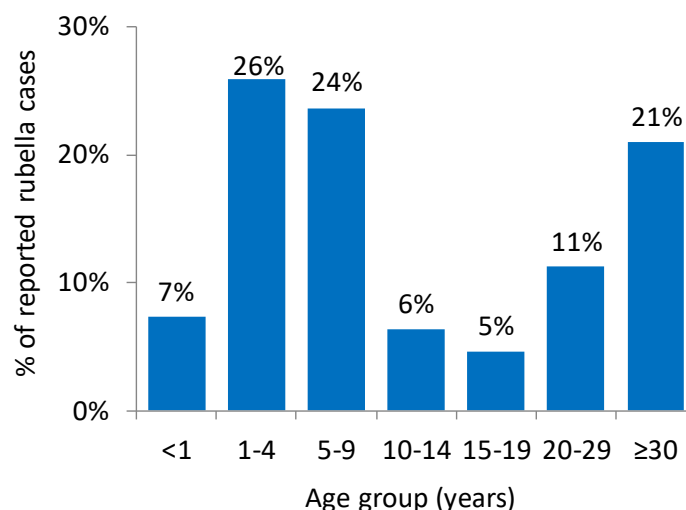


N.B. Discarded cases are not included.

Fig. 5. Age distribution of laboratory confirmed rubella cases in the two countries with the largest number of cases in the WHO European Region, January–June 2019 (n=47)



Turkey (n=26)

Russian Federation (n=21)

## Comments

### *Measles and rubella in the WHO European Region*

The number of reported measles cases in the Region for the first half of 2019 (n=89 994) is twice that reported for the first half of 2018 (44 175) and even exceeds that reported for the whole of 2018 (84 462). This reflects the challenges that several countries continue to experience in attaining the optimal immunization coverage[5] at all subnational levels (provinces, regions and districts), closing immunity gaps in adolescent and adults and achieving equ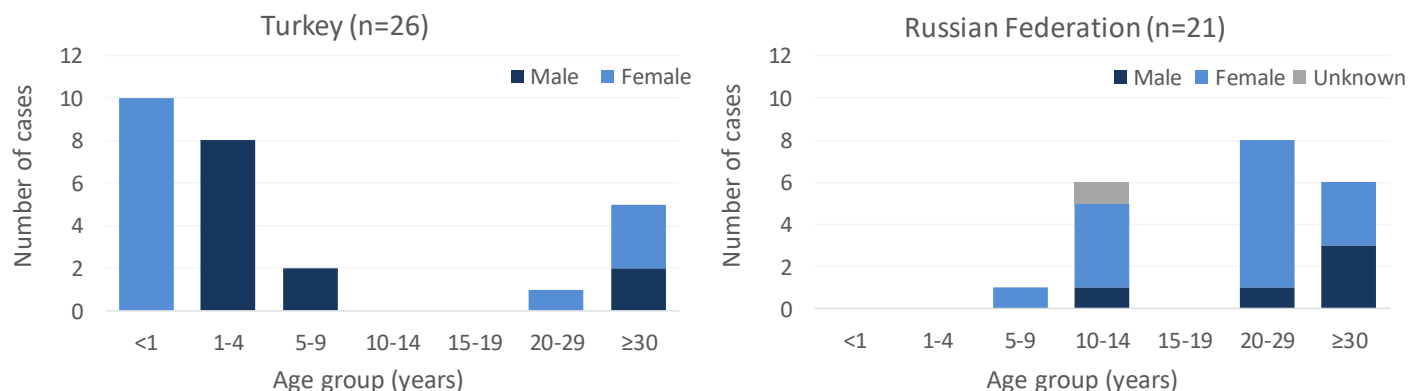al coverage among all population groups.[6,7] The resulting accumulation over time of persons susceptible to measles forms the basis of widespread outbreaks in the Region. Delayed or inadequate outbreak response can allow these outbreaks to continue for long periods. An adequate outbreak response encompasses timely detection and adequate investigation of cases and a tailored immunization campaign to reduce the pool of susceptible individuals, followed by active case finding, contact tracing for targeted immunization, if required, and enhanced laboratory surveillance.

Rubella continues to be reported in fewer countries than measles. The number of reported cases for the first half of 2019 (n=410) was lower than that reported for 2018 (522) largely due to a decline in cases reported in Poland. However, the number of laboratory-confirmed cases was higher (n=96) compared with the same period in 2018 (54). This was due to a rise in cases reported from the Russian Federation (from 2 cases to 21), Turkey (from 13 to 26) and Ukraine (from 0 to 18). The occurrence of laboratory-confirmed rubella in women of childbearing age is concerning.

Elimination of both measles and rubella is a priority goal that all countries of the WHO European Region have firmly committed to. To attain and sustain elimination in the Region, immunization coverage of at least 95% needs to be reached and maintained at national level and in all subnational areas through routine immunization. At the same time those who have missed vaccinations in the past need to be identified and reached with vaccination services to close immunity gaps in the population. Every opportunity should be used to reach children with routine vaccination and to present adolescents and adults with the option of checking their vaccination status and receiving vaccinations that they may have missed. In addition, all countries are urged to ensure that their surveillance systems are sensitive and specific enough to detect, confirm and classify all suspected cases.[8]

## References

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6. Godefroy R, Chaud P, Ninove L, et al (2019). Measles outbreak in a French Roma community in the Provence-Alpes-Côte d'Azur region, France, May to July 2017 Int J Infect Dis. 76:97-101

7. Georgakopoulou T, Horefti E, Vernardaki A et al (2019). Ongoing measles outbreak in Greece related to the recent European-wide epidemic. Epidemiol Infect 146:1692-1698

8. World Health Organization Regional Office for Europe (2012). Surveillance Guidelines for Measles, Rubella and Congenital Rubella Syndrome in the WHO European Region. Copenhagen. www.euro.who.int/__data/assets/pdf_file/0018/79020/e93035-2013.pdf?ua=1

## Annex

### Table 1. Measles cases in the WHO European Region: classification, reporting and surveillance performance, January–June 2019 (as of 30 July 2019)

| Country | Total Population in 2018[1] | 2018 (as of 30 July 2019) Incidence Rate (per 1 million population) | Total measles cases[2] | Total measles death | 2019 Incidence Rate (per 1 million population) | Total measles cases[2] | Lab confirmed | Epi-Link | Clinically compatible[3] | Discarded Measles | Imported cases | Measles Death | Completeness[4] | Timeliness[4] | Month & year of last report | Laboratory investigation rate[4] | Rate of discarded cases[5] | Origin of infection[4] | Timeliness of investigation[4] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Albania[7] | 2 934 363 | 499.60 | 1466 | 3 | 161.87 | 475 | 374 | 0 | 101 | 318 | 22 | 2 | 100% | 100% | Jun-19 | 87% | 10.8 | 100% | 99% |
| Andorra | 76 953 | 0.00 | 0 | - | 0.00 | 0 | 0 | 0 | 0 | 0 | - | - | 100% | 100% | Jun-19 | - | 0.0 | - | - |
| Armenia | 2 934 152 | 6.48 | 19 | 0 | 1.36 | 4 | 4 | 0 | 0 | 83 | 3 | 0 | 100% | 100% | Jun-19 | 100% | 2.8 | 100% | 100% |
| Austria | 8 751 820 | 8.80 | 77 | 0 | 15.08 | 132 | 121 | 11 | 0 | 53 | 11 | 0 | 100% | 100% | Jun-19 | 83% | 0.6 | 99% | 8% |
| Azerbaijan | 9 923 914 | 7.15 | 71 | 0 | 26.20 | 260 | 238 | 21 | 1 | 43 | 1 | 0 | 100% | 100% | Jun-19 | 98% | 0.4 | 99% | 98% |
| Belarus[7] | 9 452 113 | 24.97 | 236 | 0 | 16.61 | 157 | 157 | 0 | 0 | 202 | 0 | 0 | 100% | 100% | Jun-19 | 100% | 2.1 | 0% | 0% |
| Belgium | 11 498 519 | 10.44 | 120 | 0 | 31.40 | 361 | 273 | 45 | 43 | - | 0 | 0 | 100% | 100% | Jun-19 | - | - | - | - |
| Bosnia and Herzegovina | 3 503 554 | 25.40 | 89 | 0 | 376.47 | 1319 | 160 | 0 | 1159 | - | 0 | 0 | 100% | 50% | Jun-19 | - | - | - | - |
| Bulgaria | 7 036 848 | 1.85 | 13 | 0 | 146.66 | 1032 | 933 | 62 | 37 | - | 6 | 0 | 100% | 100% | Jun-19 | 96% | - | 1% | 100% |
| Croatia | 4 164 783 | 5.52 | 23 | 0 | 2.40 | 10 | 10 | 0 | 0 | 0 | 5 | 0 | 100% | 100% | Jun-19 | 100% | 0.0 | 90% | 0% |
| Cyprus | 1 189 085 | 11.77 | 14 | 0 | 5.05 | 6 | 5 | 1 | 0 | - | 1 | 0 | 100% | 100% | Jun-19 | 100% | - | 100% | 0% |
| Czech Republic | 10 625 250 | 20.42 | 217 | 0 | 52.89 | 562 | 481 | 40 | 41 | - | 1 | 0 | 100% | 100% | Jun-19 | 94% | - | 82% | 0% |
| Denmark | 5 754 356 | 1.39 | 8 | 0 | 2.61 | 15 | 15 | 0 | 0 | - | 4 | 0 | 100% | 100% | Jun-19 | 100% | - | 93% | 0% |
| Estonia | 1 306 788 | 7.65 | 10 | 0 | 18.37 | 24 | 24 | 0 | 0 | 61 | 11 | 0 | 100% | 100% | Jun-19 | 100% | 4.7 | 100% | 100% |
| Finland | 5 542 517 | 2.71 | 15 | 0 | 1.44 | 8 | 8 | 0 | 0 | - | 3 | 0 | 83% | 83% | May-19 | 100% | - | 38% | 0% |
| France | 65 233 271 | 44.66 | 2913 | 3 | 31.10 | 2029 | 1149 | 329 | 551 | - | 128 | 0 | 100% | 100% | Jun-19 | 88% | - | 86% | 0% |
| Georgia | 3 907 131 | 563.84 | 2203 | 3 | 991.52 | 3874 | 2526 | 123 | 1225 | 403 | 3 | 2 | 100% | 0% | Jun-19 | 71% | 10.3 | 99% | 96% |
| Germany | 82 293 457 | 6.59 | 542 | 0 | 5.26 | 433 | 336 | 74 | 23 | - | 55 | 0 | 100% | 83% | Jun-19 | 93% | - | 64% | 0% |
| Greece | 11 142 161 | 196.82 | 2193 | 2 | 2.51 | 28 | 15 | 1 | 12 | 2 | 17 | 0 | 100% | 100% | Jun-19 | 59% | 0.0 | 100% | 0% |
| Hungary | 9 688 847 | 1.44 | 14 | 0 | 2.27 | 22 | 22 | 0 | 0 | 0 | 9 | 0 | 100% | 100% | Jun-19 | 100% | 0.0 | 77% | 100% |
| Iceland | 337 780 | 0.00 | 0 | - | 20.72 | 7 | 7 | 0 | 0 | - | 1 | 0 | 100% | 100% | Jun-19 | 100% | - | 100% | 100% |
| Ireland | 4 803 748 | 16.24 | 78 | 0 | 12.49 | 60 | 30 | 6 | 24 | - | 6 | 0 | 100% | 100% | Jun-19 | 87% | - | 65% | 67% |
| Israel | 8 452 841 | 373.72 | 3159 | 0 | 116.06 | 981 | 597 | 296 | 88 | - | 0 | 0 | 100% | 67% | Jun-19 | 87% | - | 0% | 50% |
| Italy | 59 290 969 | 45.30 | 2686 | 9 | 22.47 | 1332 | 1143 | 70 | 119 | 177 | 62 | 1 | 100% | 83% | Jun-19 | 93% | 0.3 | 84% | 0% |
| Kazakhstan | 18 403 860 | 31.30 | 576 | 0 | 481.15 | 8855 | 6275 | 2088 | 492 | - | 0 | 0 | 100% | 100% | Jun-19 | - | - | - | - |
| Kyrgyzstan[7] | 6 132 932 | 180.01 | 1104 | 2 | 350.73 | 2151 | 35 | 1216 | 900 | 497 | 0 | 1 | 100% | 100% | Jun-19 | 3% | 8.1 | 99% | 99% |
| Latvia | 1 929 938 | 10.88 | 21 | 0 | 0.52 | 1 | 1 | 0 | 0 | - | 1 | 0 | 100% | 100% | Jun-19 | 100% | - | 100% | 100% |
| Lithuania | 2 876 475 | 11.47 | 33 | 0 | 253.44 | 729 | 729 | 0 | 0 | - | 11 | 0 | 100% | 83% | Jun-19 | 100% | - | 100% | 68% |
| Luxembourg | 590 321 | 6.78 | 4 | 0 | 38.96 | 23 | 23 | 0 | 0 | 21 | 3 | 0 | 100% | 100% | Jun-19 | 100% | 3.6 | 96% | 100% |
| Malta | 432 089 | 11.57 | 5 | 0 | 69.43 | 30 | 30 | 0 | 0 | - | 1 | 0 | 100% | 100% | Jun-19 | 100% | - | 100% | 0% |
| Monaco | 38 897 | 0.00 | 0 | - | 0.00 | 0 | 0 | 0 | 0 | 0 | - | - | 100% | 100% | Jun-19 | - | 0.0 | - | - |
| Montenegro | 629 219 | 322.62 | 203 | 0 | 0.00 | 0 | 0 | 0 | 0 | 19 | - | 0 | 100% | 50% | Jun-19 | 100% | 3.0 | - | 95% |
| Netherlands | 17 084 459 | 1.40 | 24 | 0 | 2.40 | 41 | 40 | 1 | 0 | - | 12 | 0 | 100% | 100% | Jun-19 | 75% | - | 95% | 0% |
| North Macedonia | 2 085 051 | 30.69 | 64 | 0 | 879.12 | 1833 | 626 | 679 | 528 | - | 0 | 5 | 100% | 50% | Jun-19 | - | - | - | - |
| Norway | 5 353 363 | 2.24 | 12 | 0 | 2.62 | 14 | 11 | 3 | 0 | - | 7 | 0 | 83% | 67% | May-19 | 100% | - | 93% | 100% |
| Poland | 38 104 832 | 9.89 | 377 | 0 | 30.13 | 1148 | 766 | 88 | 294 | - | 0 | 0 | 100% | 100% | Jun-19 | - | - | - | - |
| Portugal | 10 291 196 | 16.62 | 171 | 0 | 0.97 | 10 | 9 | 0 | 1 | 46 | 5 | 0 | 100% | 100% | Jun-19 | 96% | 0.4 | 50% | 96% |
| Republic of Moldova | 4 041 065 | 84.14 | 340 | 0 | 11.14 | 45 | 39 | 6 | 0 | 18 | 19 | 0 | 100% | 100% | Jun-19 | 100% | 0.4 | 98% | 97% |
| Romania | 19 580 634 | 111.85 | 2190 | 22 | 46.12 | 903 | 721 | 163 | 19 | - | 2 | 1 | 100% | 100% | Jun-19 | 98% | - | 100% | 98% |
| Russian Federation | 143 964 709 | 15.91 | 2290 | 1 | 20.16 | 2902 | 2720 | 178 | 4 | 1620 | 170 | 2 | 100% | 100% | Jun-19 | 100% | 1.1 | 100% | 54% |
| San Marino | 33 557 | 0.00 | 0 | - | 0.00 | 0 | 0 | 0 | 0 | - | 0 | - | 100% | 100% | Jun-19 | - | 0.0 | - | - |
| Serbia | 8 762 027 | 579.32 | 5076 | 14 | 1.71 | 15 | 13 | 0 | 2 | - | 0 | 0 | 100% | 83% | Jun-19 | - | - | - | - |
| Slovakia | 5 449 816 | 104.96 | 572 | 0 | 55.05 | 300 | 255 | 41 | 4 | 13 | 5 | 0 | 100% | 100% | Jun-19 | 100% | 0.2 | 100% | 100% |
| Slovenia | 2 081 260 | 4.32 | 9 | 0 | 8.17 | 17 | 17 | 0 | 0 | - | 12 | 0 | 100% | 100% | Jun-19 | 100% | - | 94% | 100% |
| Spain | 46 397 452 | 4.87 | 226 | 0 | 4.40 | 204 | 183 | 12 | 9 | 148 | 22 | 1 | 100% | 100% | Jun-19 | 100% | 0.3 | 85% | 93% |
| Sweden | 9 982 709 | 3.81 | 38 | 0 | 1.70 | 17 | 16 | 1 | 0 | - | 9 | 0 | 100% | 100% | Jun-19 | 100% | - | 94% | 0% |
| Switzerland | 8 544 034 | 5.97 | 51 | 0 | 24.11 | 206 | 158 | 44 | 4 | 216 | 36 | 1 | 100% | 100% | Jun-19 | 99% | 2.5 | 86% | 45% |
| Tajikistan | 9 107 211 | 0.00 | 0 | - | 0.66 | 6 | 6 | 0 | 0 | 52 | 0 | 0 | 100% | 100% | Jun-19 | 100% | 0.6 | 100% | 97% |
| Turkey[7] | 81 916 871 | 8.74 | 716 | 0 | 29.19 | 2391 | 1903 | 488 | 0 | 3548 | 15 | 3 | 100% | 50% | Jun-19 | 100% | 4.3 | 8% | 96% |
| Turkmenistan | 5 851 466 | 0.00 | 0 | - | 0.00 | 0 | 0 | 0 | 0 | 18 | - | - | 100% | 100% | Jun-19 | 100% | 0.3 | - | 100% |
| Ukraine | 44 009 214 | 1209.25 | 53218 | 15 | 1232.61 | 54246 | 6039 | 0 | 48207 | - | 0 | 18 | 100% | 100% | Jun-19 | - | - | - | - |
| United Kingdom | 66 573 504 | 14.32 | 953 | 0 | 7.35 | 489 | 488 | 1 | 0 | - | 69 | 0 | 100% | 100% | Jun-19 | 100% | - | 99% | 2% |
| Uzbekistan | 32 364 996 | 0.71 | 23 | 0 | 8.87 | 287 | 287 | 0 | 0 | 186 | 0 | 0 | 100% | 100% | Jun-19 | 100% | 0.6 | 100% | 100% |
| **Region** | **922 458 377** | **91.56** | **84462** | **74** | **97.56** | **89994** | **30018** | **6088** | **53888** | **7744** | **747** | **37** | **99%** | **92%** | | **88%** | **1.6** | **76%** | **69%** |

Data source: Monthly aggregated and case-based data reported by Member States to WHO/Europe directly or via ECDC/TESSy. Member States submitting aggregate data: Belgium, Bosnia and Herzegovina, Kazakhstan, North Macedonia, Poland (since Feb 2019), Serbia and Ukraine.

[1] Population source: United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2017 Revision.

[2] All confirmed measles cases regardless of origin.

[3] Unless specified as laboratory confirmed or epi-linked, cases are classified as clinically compatible.

[4] Target (>=80%) not achieving the target are highlighted in red.

[5] Rate of discarded cases not achieving the target (>=2 discarded cases per 100 000) are highlighted in red. Rate of discarded cases is not calculated for the countries submitting only confirmed measles cases.

[6] Surveillance indicators can not be calculated for Member States submitting aggregate data.

[7] Country classifies discard cases as "discarded, not measles, not rubella".

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## Table 2. Rubella cases in the WHO European Region: classification, reporting and surveillance performance January–June 2019 (as of 30 July 2019)

| Country | Total Population in 2018[1] | 2018 (as of 30 July 2019) | | 2019 | | | | | | | | | | | | | |
| | | Incidence Rate (per 1 million population) | Total rubella cases[2] | Total rubella cases[2] | Classification | | | Discarded Rubella | Imported cases | Report | | | Surveillance Indicators[6] | | | |
| | | | | | Lab confirmed | Epi-Link | Clinically compatible[3] | | | Completeness[4] | Timeliness[4] | Month & year of last report | Laboratory investigation rate[4] | Rate of discarded cases[5] | Origin of infection[4] | Timeliness of investigation[4] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Albania[7] | 2 934 363 | 0.00 | 0 | 0 | 0 | 0 | 0 | 318 | - | 100% | 100% | Jun-19 | 99% | 10.8 | - | 99% |
| Andorra | 76 953 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | - | 100% | 100% | Jun-19 | - | 0.0 | - | - |
| Armenia | 2 934 152 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | - | 100% | 100% | Jun-19 | - | 0.0 | - | - |
| Austria | 8 751 820 | 0.69 | 6 | 2 | 1 | 1 | 0 | - | 0 | 100% | 100% | Jun-19 | 100% | - | 100% | 0% |
| Azerbaijan | 9 923 914 | 0.00 | 0 | 0 | 0 | 0 | 0 | 3 | - | 100% | 100% | Jun-19 | 100% | 0.0 | - | 100% |
| Belarus[7] | 9 452 113 | 0.21 | 2 | 0 | 0 | 0 | 0 | 202 | - | 100% | 100% | Jun-19 | 100% | 2.1 | - | 0% |
| Belgium[8] | 11 498 519 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Bosnia and Herzegovina | 3 503 554 | 0.86 | 3 | 2 | 0 | 0 | 2 | - | 0 | 100% | 50% | Jun-19 | - | - | - | - |
| Bulgaria | 7 036 848 | 0.14 | 1 | 0 | 0 | 0 | 0 | - | - | 100% | 100% | Jun-19 | - | - | - | - |
| Croatia | 4 164 783 | 0.00 | 0 | 0 | 0 | 0 | 0 | - | - | 100% | 83% | Jun-19 | - | - | - | - |
| Cyprus | 1 189 085 | 0.00 | 0 | 0 | 0 | 0 | 0 | - | - | 100% | 100% | Jun-19 | - | - | - | - |
| Czech Republic | 10 625 250 | 0.19 | 2 | 0 | 0 | 0 | 0 | - | - | 100% | 50% | Jun-19 | - | - | - | - |
| Denmark[8] | 5 754 356 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Estonia | 1 306 788 | 0.00 | 0 | 0 | 0 | 0 | 0 | 7 | - | 100% | 100% | Jun-19 | 100% | 0.5 | - | 100% |
| Finland | 5 542 517 | 0.00 | 0 | 0 | 0 | 0 | 0 | - | - | 83% | 83% | May-19 | - | - | - | - |
| France[8] | 65 233 271 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Georgia | 3 907 131 | 0.00 | 0 | 6 | 4 | 0 | 2 | 11 | 0 | 100% | 50% | Jun-19 | 76% | 0.3 | 100% | 100% |
| Germany | 82 293 457 | 0.70 | 58 | 28 | 9 | 2 | 17 | - | 2 | 100% | 83% | Jun-19 | 35% | - | 61% | 0% |
| Greece | 11 142 161 | 0.00 | 0 | 0 | 0 | 0 | 0 | - | - | 100% | 100% | Jun-19 | - | - | - | - |
| Hungary | 9 688 847 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | - | 100% | 83% | Jun-19 | - | 0.0 | - | - |
| Iceland | 337 780 | 0.00 | 0 | 0 | 0 | 0 | 0 | - | - | 100% | 67% | Jun-19 | - | - | - | - |
| Ireland | 4 803 748 | 0.00 | 0 | 3 | 0 | 0 | 3 | - | 0 | 100% | 100% | Jun-19 | 67% | - | 67% | 67% |
| Israel | 8 452 841 | 0.24 | 2 | 0 | 0 | 0 | 0 | - | - | 100% | 67% | Jun-19 | - | - | - | - |
| Italy | 59 290 969 | 0.35 | 21 | 16 | 8 | 1 | 7 | 10 | 3 | 100% | 83% | Jun-19 | 84% | 0.0 | 94% | 0% |
| Kazakhstan | 18 403 860 | 0.05 | 1 | 2 | 2 | 0 | 0 | - | 0 | 100% | 100% | Jun-19 | - | - | - | - |
| Kyrgyzstan[7] | 6 132 932 | 1.30 | 8 | 3 | 3 | 0 | 0 | 497 | 0 | 100% | 100% | Jun-19 | 2% | 8.1 | 100% | 99% |
| Latvia | 1 929 938 | 2.07 | 4 | 2 | 1 | 0 | 1 | - | 1 | 100% | 100% | Jun-19 | 100% | - | 100% | 100% |
| Lithuania | 2 876 475 | 0.35 | 1 | 0 | 0 | 0 | 0 | - | - | 100% | 83% | Jun-19 | - | - | - | - |
| Luxembourg | 590 321 | 0.00 | 0 | 0 | 0 | 0 | 0 | - | - | 100% | 100% | Jun-19 | 100% | - | - | 100% |
| Malta | 432 089 | 0.00 | 0 | 0 | 0 | 0 | 0 | - | - | 100% | 100% | Jun-19 | - | - | - | - |
| Monaco | 38 897 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | - | 100% | 100% | Jun-19 | - | 0.0 | - | - |
| Montenegro | 629 219 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | - | 100% | 50% | Jun-19 | - | 0.0 | - | - |
| Netherlands | 17 084 459 | 0.00 | 0 | 0 | 0 | 0 | 0 | - | - | 100% | 100% | Jun-19 | - | - | - | - |
| North Macedonia | 2 085 051 | 0.00 | 0 | 0 | 0 | 0 | 0 | - | - | 100% | 50% | Jun-19 | - | - | - | - |
| Norway | 5 353 363 | 0.00 | 0 | 0 | 0 | 0 | 0 | - | - | 100% | 50% | Jun-19 | - | - | - | - |
| Poland | 38 104 832 | 11.81 | 450 | 198 | 3 | 2 | 193 | - | 0 | 100% | 100% | Jun-19 | - | - | - | - |
| Portugal | 10 291 196 | 0.49 | 5 | 1 | 0 | 0 | 1 | 6 | 0 | 100% | 100% | Jun-19 | 71% | 0.1 | 100% | 100% |
| Republic of Moldova | 4 041 065 | 0.00 | 0 | 0 | 0 | 0 | 0 | 1 | - | 100% | 100% | Jun-19 | 100% | 0.0 | - | 100% |
| Romania | 19 580 634 | 0.46 | 9 | 0 | 0 | 0 | 0 | - | - | 100% | 83% | Jun-19 | - | - | - | - |
| Russian Federation | 143 964 709 | 0.04 | 6 | 21 | 21 | 0 | 0 | - | 4 | 100% | 100% | Jun-19 | 100% | 0.0 | 100% | 38% |
| San Marino | 33 557 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | - | 100% | 100% | Jun-19 | - | 0.0 | - | - |
| Serbia | 8 762 027 | - | - | - | - | - | - | - | - | - | - | No report | - | - | - | - |
| Slovakia | 5 449 816 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | - | 100% | 100% | Jun-19 | - | 0.0 | - | - |
| Slovenia | 2 081 260 | 0.00 | 0 | 0 | 0 | 0 | 0 | - | - | 100% | 100% | Jun-19 | - | - | - | - |
| Spain | 46 397 452 | 0.26 | 12 | 3 | 2 | 1 | 0 | 6 | 0 | 100% | 100% | Jun-19 | 100% | 0.0 | 0% | 100% |
| Sweden | 9 982 709 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | - | 100% | 100% | Jun-19 | - | 0.0 | - | - |
| Switzerland | 8 544 034 | 0.23 | 2 | 1 | 1 | 0 | 0 | 13 | 1 | 100% | 100% | Jun-19 | 100% | 0.2 | 100% | 14% |
| Tajikistan | 9 107 211 | 0.00 | 0 | 0 | 0 | 0 | 0 | 23 | - | 100% | 100% | Jun-19 | 100% | 0.3 | - | 91% |
| Turkey[7] | 81 916 871 | 0.27 | 22 | 26 | 26 | 0 | 0 | 3548 | 1 | 100% | 50% | Jun-19 | 89% | 4.3 | 15% | 96% |
| Turkmenistan | 5 851 466 | 0.00 | 0 | 0 | 0 | 0 | 0 | 28 | - | 100% | 100% | Jun-19 | 100% | 0.5 | - | 100% |
| Ukraine | 44 009 214 | 5.34 | 235 | 94 | 13 | 0 | 81 | - | 0 | 100% | 100% | Jun-19 | - | - | - | - |
| United Kingdom | 66 573 504 | 0.03 | 2 | 1 | 1 | 0 | 0 | - | 0 | 100% | 100% | Jun-19 | 100% | - | 100% | 0% |
| Uzbekistan | 32 364 996 | 0.00 | 0 | 1 | 1 | 0 | 0 | - | 1 | 0% | 100% | Jun-19 | 100% | 0.0 | 100% | 100% |
| **Region** | **922 458 377** | **0.92** | **852** | **410.00** | **96** | **7** | **307** | **4673** | **13** | **92%** | **82%** | | **81%** | **1.0** | **67%** | **91%** |

Data source: Monthly aggregated and case-based data reported by Member States to WHO/Europe directly or via ECDC/TESSy. Member States submitting aggregate data: Bosnia and Herzegovina, Kazakhstan, North Macedonia , Poland and Ukraine.

[1] Population source: United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2017 Revision.

[2] All confirmed rubella cases regardless of origin.

[3] Unless specified as laboratory confirmed or epi-linked, cases are classified as clinically compatible.

[4] Target (>=80%) not achieving are highlighted in red.

[5] Rate of discarded cases not achieving the target (>=2 discarded cases per 100 000) are highlighted in red. Rate of discarded cases is not calculated for the countries submitting only confirmed rubella cases.

[6] Surveillance indicators can not be calculated for Member States submitting aggregate data.

[7] Country classifies discard cases as "discarded, not measles, not rubella".

[8] Country does not have a comprehensive rubella surveillance system.