# Measles and Rubella Surveillance Bulletin 

Monthly surveillance update on measles and rubella surveillance in WHO European Region Communicable Diseases (CDS), World Health Organization,

Regional Office for Europe, Copenhagen, Denmark Issue: 31 Aug 2008 (data for Jan-July 2008)

Remarkable progress has been achieved within the Region in the control of measles. Reported measles incidence in the Region in 2007 ( 6923 cases to date) dropped almost $90 \%$ from 2006 levels; the number of countries reporting measles incidence of $<1$ per 1000000 population (elimination target) increased to 29 from 19 in 2007 (map).

However, there are still challenges in reaching the measles elimination goal. As of September, over 6762 measles cases have been reported in the European Region in 2008; six western EU countries (Austria, Germany, Italy, Spain, Switzerland, the United Kingdom), and Israel accounted for $92 \%$ of the cases. Three of these countries (Italy, Switzerland, and the United Kingdom) have reported $62 \%$ measles cases in the European Region. These measles cases have both public health and economic impact on individual countries.

Measles outbreaks are occurring mainly due to clustering of susceptible individuals in specific high-risk groups (underserved minorities or unimmunized individuals based on religious or philosophical beliefs), and the failure to secure sufficient uptake of measles-containing vaccine in selected countries. The challenges are fed by a combination of public and political complacency regarding the importance of immunization, and by a disturbing rise in the influence of anti-vaccination groups and their dangerously misleading advocacy campaigns. The WHO Regional Office for Europe recommends targeting the general population at risk, as well as health care professionals for communication on the need for immunization and increasing the immunization coverage rates.

Last 12 month Measles Incidence and Outbreaks
Jul-2007 to Jun-2008


Table 1：Classification of suspected measles and rubella cases，Jan－Jul， 2008

| Country | Measles |  |  |  |  |  |  |  | Rubella |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total suspected | Total measles（\％） | Classification |  |  |  | Monthly Reporting |  | Total suspected | Total Rubella（\％） | Classification |  |  |  | Monthly Reporting |  |
|  |  |  | م |  | $\begin{aligned} & \overline{\bar{\omega}} \\ & \text { تِ } \end{aligned}$ |  | \％ Complete－ ness | $\begin{gathered} \% \\ \text { Timeli- } \\ \text { ness } \end{gathered}$ |  |  | 芫 |  |  | $\begin{aligned} & \text { סे } \\ & \stackrel{\rightharpoonup}{0} \\ & \overleftarrow{W} \\ & \ddot{0} \end{aligned}$ | \％ <br> Complete－ ness | $\%$ Timeli－ ness |
| Albania | 1 | 0 | 0 | 0 | 0 | 1 | 100\％ | 100\％ | 0 | 0 | 0 | 0 | 0 | 0 | 100\％ | 71\％ |
| Andorra | 0 | 0 | 0 | 0 | 0 | 0 | 100\％ | 100\％ | 0 | 0 | 0 | 0 | 0 | 0 | 100\％ | 100\％ |
| Armenia | 0 | 0 | 0 | 0 | 0 | 0 | 100\％ | 71\％ | 3 | 3 （100\％） | 0 | 0 | 3 | 0 | 100\％ | 71\％ |
| Austria ${ }^{2}$ | 375 | 375 （100．0） | 125 | 3 | 247 | 0 | 57\％ | 14\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Azerbaijan | 1 | 1 （100．0） | 0 | 0 | 1 | 0 | 85\％ | 85\％ | 0 | 0 | 0 | 0 | 0 | 0 | 57\％ | 57\％ |
| Belarus | 0 | 0 | 0 | 0 | 0 | 0 | 85\％ | 85\％ | 1 | 1 （100\％） | 1 | 0 | 0 | 0 | 100\％ | 100\％ |
| Belgium ${ }^{2}$ | 95 | 94 （99．0） | 33 | 56 | 5 | 1 | 85\％ | 28\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Bosnia and Herzegovina | No Report | － | － | － | － | － | 0\％ | 0\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Bulgaria | 0 | 0 | 0 | 0 | 0 | 0 | 71\％ | 42\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Croatia ${ }^{2}$ | 71 | 51 （72．0） | 39 | 6 | 6 | 20 | 85\％ | 57\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Cyprus | 0 | 0 | 0 | 0 | 0 | 0 | 100\％ | 85\％ | 0 | 0 | 0 | 0 | 0 | 0 | 100\％ | 100\％ |
| Czech Republic | 0 | 0 | 0 | 0 | 0 | 0 | 100\％ | 85\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Denmark ${ }^{2}$ | 10 | 10 （100．0） | 10 | 0 | 0 | 0 | 100\％ | 57\％ | 9 | 9 （100\％） | 0 | 0 | 9 | 0 | 14\％ | 0\％ |
| Estonia | 2 | 0 | 0 | 0 | 0 | 0 | 100\％ | 42\％ | 0 | 0 | 2 | 0 | 0 | 0 | 85\％ | 28\％ |
| Finland ${ }^{2}$ | 2 | 2 （100．0） | 2 | 0 | 0 | 0 | 100\％ | 85\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| France ${ }^{2}$ | 129 | 124 （96．0） | 91 | 5 | 28 | 5 | 71\％ | 42\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Georgia | 28 | 28 （100．0） | 2 | 0 | 26 | 0 | 100\％ | 71\％ | 99 | 99 （100\％） | 6 | 0 | 93 | 0 | 100\％ | 71\％ |
| Germany ${ }^{2}$ | 886 | 877 （99．0） | 350 | 396 | 131 | 9 | 85\％ | 57\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Greece | 0 | 0 | 0 | 0 | 0 | 0 | 57\％ | 28\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Hungary | 0 | 0 | 0 | 0 | 0 | 0 | 100\％ | 57\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Iceland | 0 | 0 | 0 | 0 | 0 | 0 | 100\％ | 42\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Ireland ${ }^{2}$ | 47 | 47 （100．0） | 5 | 3 | 39 | 0 | 71\％ | 28\％ | 28 | 28 （100\％） | 1 | 0 | 27 | 0 | 100\％ | 100\％ |
| Israel | 595 | 595 （100．0） | 69 | 0 | 526 | 0 | 42\％ | 0\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Italy | 1209 | 1209 （100．0） | 257 | 144 | 808 | 0 | 42\％ | 14\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Kazakhstan | 24 | 24 （100．0） | 19 | 5 | 0 | 0 | 100\％ | 42\％ | 3227 | 3227 （100\％） | 887 | 1375 | 965 | 0 | 100\％ | 28\％ |
| Kyrgyzstan | 6 | 1 （17．0） | 1 | 0 | 0 | 5 | 100\％ | 85\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Latvia | 2 | 2 （100．0） | 2 | 0 | 0 | 0 | 100\％ | 57\％ | 4 | 4 （100\％） | 3 | 0 | 1 | 0 | 85\％ | 42\％ |
| Lithuania | 1 | 1 （100．0） | 1 | 0 | 0 | 0 | 85\％ | 42\％ | 0 | 0 | 0 | 0 | 0 | 0 | 71\％ | 71\％ |
| Luxembourg | 0 | 0 | 0 | 0 | 0 | 0 | 42\％ | 14\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Malta | 1 | 1 （100．0） | 1 | 0 | 0 | 0 | 100\％ | 71\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Moldova | 0 | 0 | 0 | 0 | 0 | 0 | 100\％ | 42\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Monaco | No Report | － | － | － | － | － | 0\％ | 0\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Montenegro | 0 | 0 | 0 | 0 | 0 | 0 | 100\％ | 42\％ | 0 | 0 | 0 | 0 | 0 | 0 | 100\％ | 42\％ |
| Netherlands ${ }^{2}$ | 8 | 8 （100．0） | 8 | 0 | 0 | 0 | 28\％ | 0\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Norway | 0 | 0 | 0 | 0 | 0 | 0 | 85\％ | 71\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Poland ${ }^{2}$ | 84 | 19 （23．0） | 3 | 0 | 16 | 65 | 100\％ | 14\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Portugal | 0 | 0 | 0 | 0 | 0 | 0 | 85\％ | 28\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Romania ${ }^{2}$ | 303 | 23 （8．0） | 21 | 0 | 2 | 279 | 100\％ | 0\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Russian Federation | 21 | 21 （100．0） | 21 | 0 | 0 | 0 | 100\％ | 100\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| San Marino | No Report | － | － | － | － | － | 0\％ | 0\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Serbia | 0 | 0 | 0 | 0 | 0 | 0 | 85\％ | 57\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Slovakia | 2 | 0 | 0 | 0 | 0 | 2 | 100\％ | 85\％ | 1 | 0 （0\％） | 0 | 0 | 0 | 1 | 85\％ | 42\％ |
| Slovenia | 0 | 0 | 0 | 0 | 0 | 0 | 100\％ | 85\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Spain ${ }^{2}$ | 198 | 198 （100．0） | 162 | 27 | 9 | 0 | 71\％ | 28\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Sweden ${ }^{2}$ | 26 | 26 （100．0） | 19 | 5 | 2 | 0 | 85\％ | 57\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Switzerland ${ }^{2}$ | 2247 | 2040 （91．0） | 776 | 144 | 1120 | 207 | 71\％ | 14\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Tajikistan | 0 | 0 | 0 | 0 | 0 | 0 | 42\％ | 14\％ | 16 | 16 （100\％） | 0 | 0 | 16 | 0 | 42\％ | 14\％ |
| The former Yugoslav Republic of Macedonia | 5 | 5 （100．0） | 0 | 0 | 5 | 0 | 100\％ | 100\％ | 1 | 1 （100\％） | 0 | 0 | 1 | 0 | 42\％ | 28\％ |
| Turkey | 3 | 3 （100．0） | 3 | 0 | 0 | 0 | 57\％ | 0\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Turkmenistan | 0 | 0 | 0 | 0 | 0 | 0 | 100\％ | 71\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Ukraine | 36 | 36 （100．0） | 5 | 0 | 31 | 0 | 85\％ | 71\％ | 0 | 0 | 0 | 0 | 0 | 0 | 14\％ | 14\％ |
| United Kingdom ${ }^{2}$ | 939 | 939 （100．0） | 918 | 21 | 0 | 0 | 85\％ | 28\％ | － | － | － | － | － | － | 0\％ | 0\％ |
| Uzbekistan | 2 | 2 （100．0） | 1 | 0 | 1 | 0 | 100\％ | 85\％ | 17 | 17 （100\％） | 11 | 0 | 6 | 0 | 100\％ | 71\％ |
| Total／Averages | 7359 | 6762 （92．0） | 2944 | 815 | 3003 | 594 | 80\％ | 49\％ | 3406 | 3407 （100．0） | 911 | 1375 | 1121 | 1 | 28\％ | 19\％ |

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${ }^{2}$ Importation of measles cases（included in total cases）：Austria＝13；Belgium＝1；Croatia＝2；Denmark＝4；Finland＝1；France＝7；Germany＝63；Ireland＝3；Netherlands＝4；Poland $=3$ ；Romania $=12$ （including 4 import related cases）；Spain＝3，Sweden＝11；Switzerland＝9，UK＝9．

Table 2: Measles and rubella laboratory test results, Jan-Jul, 2008

| Country | Specimen* (Serum, Oral Fluid, Swab, Urine and other) |  |  |  |  |  |  |  |  | Reporting |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Collected | Tested for measles | Positive for measles (\%) | Measles <br> Equivocal | Negative for measles | Tested for rubella | Positive for rubella (\%) | Rubella <br> Equivocal | Negative for rubella | \% Completeness | $\left\|\begin{array}{c} \% \text { Timeli } \\ \text { ness } \end{array}\right\|$ |
| Albania | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 86.0 | 71.0 |
| Andorra | No Lab |  |  |  |  |  |  |  |  |  |  |
| Armenia | 22 | 22 | 1 (5.0) | 0 | 20 | 22 | 0 (0.0) | 3 | 18 | 86.0 | 43.0 |
| Austria | 0 | 1240 | 137 (11.0) | 17 | 1086 | 3332 | 5 (0.0) | 0 | 3327 | 100.0 | 100.0 |
| Azerbaijan | 19 | 12 | 2 (17.0) | 1 | 9 | 8 | 0 (0.0) | 0 | 8 | 86.0 | 43.0 |
| Belarus | 98 | 90 | 0 (0.0) | 0 | 90 | 96 | 1 (1.0) | 0 | 95 | 100.0 | 86.0 |
| Belgium | 122 | 116 | 40 (34.0) | 5 | 67 | 38 | 5 (13.0) | 1 | 28 | 100.0 | 100.0 |
| Bosnia and Herzegovina | No Report |  |  |  |  |  |  |  |  |  |  |
| Bulgaria | 45 | 45 | 1 (2.0) | 0 | 44 | 45 | 1 (2.0) | 0 | 44 | 100.0 | 86.0 |
| Croatia | 59 | 59 | 20 (34.0) | 1 | 38 | 20 | 0 (0.0) | 0 | 20 | 71.0 | 43.0 |
| Cyprus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 86.0 | 86.0 |
| Czech Republic | 39 | 25 | 4 (16.0) | 2 | 19 | 38 | 0 (0.0) | 0 | 38 | 100.0 | 100.0 |
| Denmark | No Report |  |  |  |  |  |  |  |  |  |  |
| Estonia | 469 | 136 | 1 (1.0) | 0 | 134 | 407 | 4 (1.0) | 0 | 402 | 100.0 | 100.0 |
| Finland | 355 | 90 | 4 (4.0) | 0 | 86 | 269 | 0 (0.0) | 0 | 269 | 86.0 | 71.0 |
| France | No Report |  |  |  |  |  |  |  |  |  |  |
| Georgia | 56 | 29 | 0 (0.0) | 0 | 29 | 28 | 5 (18.0) | 1 | 22 | 57.0 | 14.0 |
| Germany | 1084 | 1076 | 487 (45.0) | 12 | 577 | 10 | 3 (30.0) | 2 | 5 | 100.0 | 43.0 |
| Greece | No Report |  |  |  |  |  |  |  |  |  |  |
| Hungary | 859 | 50 | 0 (0.0) | 0 | 50 | 88 | 0 (0.0) | 0 | 88 | 100.0 | 100.0 |
| Iceland | No Report |  |  |  |  |  |  |  |  | 0.0 | 0.0 |
| Ireland | 1082 | 186 | 7 (4.0) | 1 | 178 | 919 | 0 (0.0) | 0 | 919 | 100.0 | 71.0 |
| Israel | 1348 | 529 | 203 (38.0) | 0 | 326 | 368 | 90 (24.0) | 0 | 278 | 100.0 | 100.0 |
| Italy | No Report |  |  |  |  |  |  |  |  |  |  |
| Kazakhstan | 315 | 137 | 20 (15.0) | 5 | 112 | 291 | 170 (58.0) | 8 | 113 | 100.0 | 86.0 |
| Kyrgyzstan | 156 | 156 | 13 (8.0) | 6 | 137 | 156 | 8 (5.0) | 5 | 143 | 100.0 | 71.0 |
| Latvia | 140 | 124 | 2 (2.0) | 0 | 122 | 138 | 0 (0.0) | 0 | 138 | 100.0 | 100.0 |
| Lithuania | 7 | 6 | 1 (17.0) | 0 | 4 | 7 | 0 (0.0) | 0 | 6 | 100.0 | 100.0 |
| Luxembourg | 124 | 61 | 0 (0.0) | 1 | 60 | 63 | 10 (16.0) | 12 | 41 | 100.0 | 100.0 |
| Malta | No Report |  |  |  |  |  |  |  |  |  |  |
| Moldova | 20 | 20 | 0 (0.0) | 0 | 20 | 20 | 0 (0.0) | 0 | 20 | 100.0 | 86.0 |
| Monaco | No Lab |  |  |  |  |  |  |  |  |  |  |
| Montenegro | No Lab |  |  |  |  |  |  |  |  |  |  |
| Netherlands | 65 | 63 | 32 (51.0) | 1 | 30 | 48 | 0 (0.0) | 0 | 48 | 100.0 | 0.0 |
| Norway | 75 | 61 | 4 (7.0) | 0 | 57 | 25 | 5 (20.0) | 0 | 20 | 100.0 | 100.0 |
| Poland | 54 | 54 | 1 (2.0) | 1 | 52 | 54 | 19 (35.0) | 1 | 34 | 100.0 | 71.0 |
| Portugal | 34 | 7 | 0 (0.0) | 0 | 7 | 0 | 0 | 0 | 0 | 100.0 | 100.0 |
| Romania | 276 | 232 | 17 (7.0) | 2 | 213 | 259 | 4 (2.0) | 1 | 254 | 86.0 | 86.0 |
| Russian Federation | 1893 | 1837 | 31 (2.0) | 9 | 1779 | 1039 | 171 (16.0) | 9 | 809 | 100.0 | 100.0 |
| San Marino | No Lab |  |  |  |  |  |  |  |  |  |  |
| Serbia | 118 | 17 | 0 (0.0) | 0 | 17 | 101 | 2 (2.0) | 0 | 99 | 86.0 | 14.0 |
| Slovakia | 12 | 13 | 1 (8.0) | 0 | 12 | 0 | 0 | 0 | 0 | 100.0 | 86.0 |
| Slovenia | 177 | 39 | 0 (0.0) | 1 | 38 | 143 | 20 (14.0) | 0 | 123 | 100.0 | 100.0 |
| Spain | 586 | 818 | 312 (38.0) | 16 | 388 | 360 | 28 (8.0) | 0 | 299 | 100.0 | 57.0 |
| Sweden | No Report |  |  |  |  |  |  |  |  |  |  |
| Switzerland | No Lab |  |  |  |  |  |  |  |  |  |  |
| Tajikistan | 3 | 2 | 0 (0.0) | 0 | 2 | 3 | 1 (33.0) | 0 | 2 | 57.0 | 29.0 |
| The former Yugoslav Republic of Macedonia | No Report |  |  |  |  |  |  |  |  |  |  |
| Turkey | 420 | 417 | 4 (1.0) | 0 | 413 | 417 | 25 (6.0) | 1 | 391 | 86.0 | 0.0 |
| Turkmenistan | 92 | 92 | 0 (0.0) | 0 | 87 | 92 | 2 (2.0) | 0 | 85 | 100.0 | 100.0 |
| Ukraine | 315 | 302 | 10 (3.0) | 2 | 290 | 310 | 14 (5.0) | 0 | 296 | 100.0 | 100.0 |
| United Kingdom | 1953 | 1354 | 365 (27.0) | 39 | 950 | 330 | 7 (2.0) | 19 | 304 | 43.0 | 14.0 |
| Uzbekistan | 34 | 24 | 1 (4.0) | 0 | 23 | 34 | 24 (71.0) | 1 | 9 | 100.0 | 86.0 |
| Total / Average | 12526 | 9541 | 1721 (18\%) | 122 | 7566 | 9578 | 624 (7\%) | 64 | 8795 | 68.0 | 53.0 |

*Laboratories may have received more than 1 clinical sample or may have conducted more than 1 test for a given case reported in Table 1
Data source: Aggregated monthly lab data provided by laboratories of the regional measles and rubella lab network.

[^1]
[^0]:    Data source：Monthly aggregate and case－based data reported by Member States to WHO／Europe and／or EUVAC．NET．

[^1]:    Monthly newsletter published by Communicable Diseases unit (CDS) of WHO/EUROPE using monthly measles rubella surveillance data submitted by Member States and EUVAC.NET Editorial team: Rebecca Martin, David Mercer, Jason Hoggan and Ajay Goel. Queries regarding this newsletter should be addressed to measles@euro.who.int All issues of this newsletter can be accessed at: http://www.euro.who.int/vaccine/publications/20080401_1; CISID: http://data.euro.who.int/cisid WHO Regional Office for Europe, Scherfigsvej 8, 2100 Copenhagen, Denmark Tel.: +45 391713 75. Fax: +45 3917 18 63; website: http://www.euro.who.int/vaccine

