

REGIONAL OFFICE FOR Europe

A report on the epidemiology of selected vaccine-preventable diseases in the European Region

No. 1/2015

This report provides an overview of selected epidemiological characteristics of measles and rubella in the WHO European Region. It is based on epidemiological data submitted to the centralized information system for infectious diseases.¹ The analyses of these data are performed on cases with disease onset dates during 2014. Where these dates were unavailable, cases with the date of notification reported during this period were included.

The data presented here are based on the measles and rubella datasets as reported by Member States as of 9 April 2015. The surveillance data, and the virus sequence data entered in the Measles Nucleotide Surveillance database (MeaNS)² and the Rubella Nucleotide Surveillance database (RubeNS)³ may be updated following the publication of this report.

Percentages and incidence rates were rounded up or down to the nearest whole number. The reader is referred to WHO EpiData no. 12/2014,⁴ which includes tabulated surveillance data by country for 2014 (published 9 April 2015).

This issue also reports on the measles situation in several countries experiencing outbreaks based on ongoing reporting: Bosnia and Herzegovina, Germany, Kyrgyzstan and Serbia.

Measles in 2014

Incidence – notifications and laboratory data

For 2014, 16 156 measles cases were reported in 40 countries of the WHO European Region among 50 (94%) countries that submitted measles data (including zero reporting). Three countries, namely Monaco, San Marino and Turkmenistan, did not submit reports.

Of the total, 91% of cases (n=14 657) were reported by 10 countries: Russian Federation (3257; 20%), Georgia (n=3190; 20%), Ukraine (2326; 14%), Bosnia and Herzegovina (2204; 14%), Italy (1687; 10%), Turkey (572; 4%), Germany (519; 3%), Kyrgyzstan (318; 2%), Kazakhstan (317; 2%) and France (267; 2%). With 3707 cases of measles, the European Union as a whole reported 23% of all cases in the Region. The highest incidence per million population for 2014 was

reported in Georgia (738) followed by Bosnia and Herzegovina (576).

Of the total, 8106 (50%) cases were laboratoryconfirmed and 1133 (7%) were epidemiologically linked cases. The remaining 6917 (43%) were classified as clinically compatible cases.

During 2014, 628 clinical specimens were sequenced (reported as of 9 April 2015). The sequence data were entered in MeaNS by national or reference laboratories of the WHO European Region. The genotypes identified in the Region comprised D8 (n=310), B3 (299), H1 (14), D9 (3), D4 (1) and G3 (1).

For 2014, 22 countries reported variants of measles virus genotype D8. The most prevalent genotype D8 variants were D8-Rostov On Don, D8-Tauton, D8-Frankfurt Main, D8-Hulu Langat and D8-Villipuram.

Most of the variants reported from Austria, Bosnia and Herzegovina, Serbia and Slovenia in 2014 were identical to D8-Rostov On Don that was first reported in the Russian Federation in late 2013. This variant was also reported to a lesser extent from Germany, Greece, Sweden and the United Kingdom.

The variant D8-Villupuram identified in Kazakhstan, Kyrgyzstan, the Russian Federation and Uzbekistan is one of the two predominant lineages that were also reported in the Russian Federation in 2013.

Measles virus genotype B3 variants were reported from 19 countries. Several countries, particularly Italy, Denmark and the United Kingdom reported variants of genotype B3 (B3-Harare and B3-Tonbridge) similar to those circulating in southeast Asia in 2013–2014.

Age distribution

The age group was known in almost all cases (n=16 152). Forty-one percent of cases (n=6566) were 20 years and older (Fig. 1, overleaf). Fig. 2 (page 3) shows the age distribution of measles cases in six countries that together reported 82% of cases in the Region.

Vaccination status

Vaccination status was known in 12 154 cases (75%). Of the 8592 unvaccinated cases (71%), all with the exception of two cases had data on age: 1478 cases

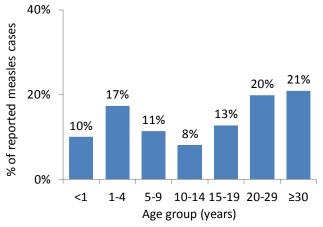
¹ World Health Organization. Centralized Information system for infectious diseases (CISID). Copenhagen. Regional Office for Europe. http://data.euro.who.int/CISID/ ² Measles Nucleotide Surveillance database (MeaNs) www.who-measles.org/

³Rubella Nucleotide Surveillance database (RubeNS) www.hpa-bioinformatics.org.uk/rubella

⁴ EpiData no. 12/2014, attached to this report and available at www.euro.who.int/__data/assets/pdf_file/0004/276115/EpiData-No12-2014.pdf?ua=1



Fig. 1. Age distribution of measles cases in the WHO European Region, 2014 (n=16 152)



N.B. Discarded cases are not included

(17%) were <1 year old, 1871 cases (22%) were 1–4 years old, 1031 cases (12%) were 5–9 years old, 1615 cases (19%) were 10–19 years old and 2595 cases (30%) were \geq 20 years old. The remaining 3562 cases (29%) were reportedly vaccinated with at least one measles-containing vaccine dose.

Hospitalization

Data on hospitalization status was available for 65% (n=10 485) of all reported measles cases. Of these, 6617 were hospitalized, amounting to 63% of all cases with known hospitalization status.

Imported cases

Importation status was known in 52% (n=8340) of cases. Of these, 381 were reported as imported cases, amounting to 5% of cases with a known importation status.

Measles outbreak in Bosnia and Herzegovina

A nationwide outbreak of measles is ongoing in Bosnia and Herzegovina (BiH) with more than 5000 cases reported since February 2014. All three entities of the country reported cases. The first cases were notified in February 2014 in the entity of the Federation of Bosnia and Herzegovina (Federation of BiH) and by 23 January 2015, 3426 cases were reported. In the entity of Republika Srpska, the first cases were reported in July 2014, in a Roma village bordering the Federation of BiH. As of 7 December 2014, 1876 cases were reported from this entity. Brcko District was the last entity to detect cases.

All age groups are affected, particularly the 15–19-year age group in the Federation of BiH and 20–25-year age

group in Republika Srpska. These include cohorts born during the conflict years and immediate post-war period (1990–2000). Most cases are among the unimmunized and persons with an unknown immunization status.

Data on hospitalization status of 1401 measles cases in the Federation of BiH showed that 157 cases (11.2%) required hospitalization. Measles virus genotype D8 was identified.

Outbreak response measures

In response to the outbreak, the combined measles, mumps and rubella (MMR) vaccine is being provided to children, adolescents and young adults who have come in contact with measles cases. Parents have been informed of the outbreak and the need to have their children vaccinated. Measles surveillance has been strengthened to detect and report every suspected case and contacts of cases. With support from WHO and the United Nations Children's Fund (UNICEF) health authorities in BiH implemented vaccine promotion activities within the scope of European Immunization Week 2015, including a ministerial conference focusing on vaccines.

Measles in Germany

Several outbreaks of measles have been reported in Germany. As of 20 April 2015, 1466 measles cases had been notified to the national public health authority (Robert Koch Institute) for the period 1 January to 31 March 2015. Most cases occurred in the capital, Berlin, and the federal state of Saxony (857 cases and 163 cases, respectively).

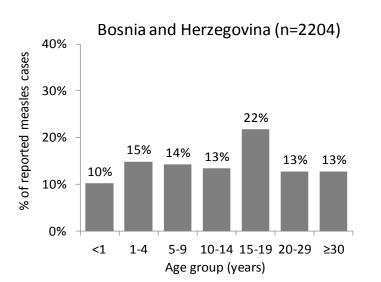
The following description refers to the outbreak in Berlin which is believed to have started in early October 2014 when a child asylum seeker from Bosnia and Herzegovina arrived in Berlin with the disease. The infection later spread to the city's resident population. As of 20 April 2015, a total of 978 cases had been reported for the period 6 October, 2014 to 31 March, 2015.

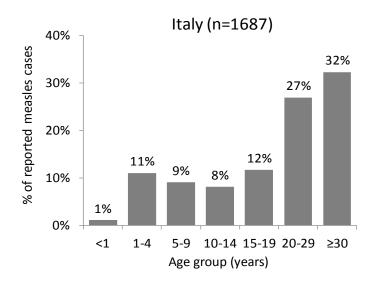
Of the 978 cases, 100 cases (10%) were infants <1 year, 178 cases (18%) were children 1–4 years of age and 93 cases (10%) were 5–9 years of age. 204 (21%) cases were aged 10–19 years and 403 cases (41%) were adults aged 20 years and older.

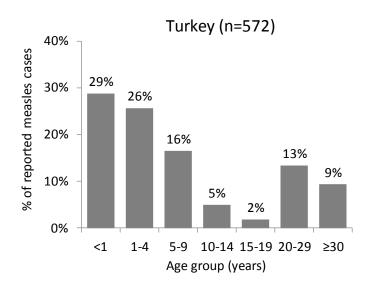
Of the total, 658 cases (67%) were laboratory confirmed, 215 cases (23%) were epidemiologically linked to laboratory-confirmed cases and 105 cases

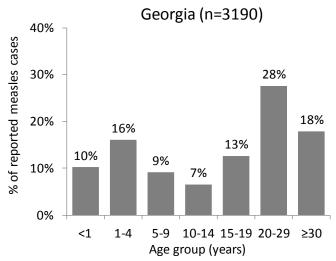


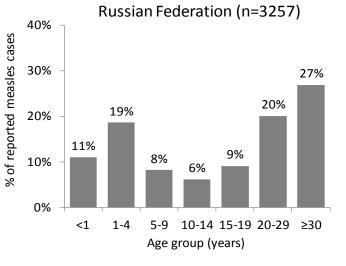
Fig. 2. Age distribution of measles cases in six countries that together reported most (82%) cases in the WHO European Region, 2014 (n=13 236)

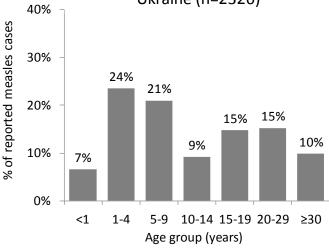












Ukraine (n=2326)



(10%) were clinically compatible to measles. An identical measles virus genotype D8 (Rostow-on-Don RUS/47.13/2) was identified in almost all investigated cases from Berlin, including the index case.

Hospitalization was reported for 239 cases (24%), of whom 134 (56%) were 20 years and older. One measles -related death was reported in an unvaccinated toddler. Cases with encephalitis have not been reported to date. The outbreak in Berlin is ongoing.

Outbreak response measures

The German health authorities in the affected areas have disseminated relevant information to health professionals, public facilities and the public and are providing post-exposure vaccinations in affected institutions such as asylum-seekers' shelters. The public is being strongly encouraged to receive free catch-up immunizations, particularly adults, as soon as possible according to official recommendations. Public health professionals are being reminded of the need to detect, investigate and report suspected cases as soon as possible and to identify chains of transmission. A press release was issued by Berlin's Ministry of Health in February to support measures to contain the outbreak.

Measles outbreak in Kyrgyzstan

An outbreak of measles is ongoing in Kyrgyzstan. Between 1 January and 23 April 2015, 18 463 suspected cases have been reported to the National Centre of Immunoprophylaxis. Fig. 3 shows the number of suspected measles cases reported during weeks 1–16. Of the total, 6214 were classified as laboratory-confirmed, epidemiologically linked or clinically compatible cases of measles. Most cases were reported in the capital city, Bishkek (n= 5425; 87%) and the surrounding oblast of Chui (n= 484; 8%). To date, two measles-related deaths were reported in Bishkek, both in children one year of age and with severe neonatal disorders.

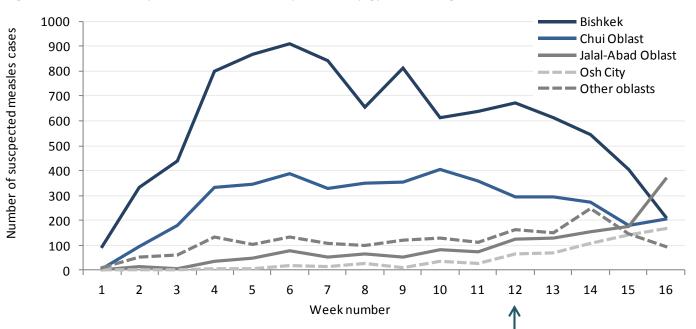
The first case was identified in Bishkek, with onset of rash on 3 May 2014. This was followed by a family cluster of four cases in Chui Oblast starting from 12 May 2014. These initial cases were laboratory confirmed. Epidemiologic investigation did not reveal the source of infection although the family of the first case had been visited by relatives from Kazakhstan.

The genotype of the measles virus was identified as D8-Villupuram. More samples are being tested in the Regional Reference Laboratory in Moscow, Russian Federation.

Outbreak response measures

The national health authorities are undertaking a nationwide supplementary vaccination campaign with measles-rubella vaccine in two phases while vaccination of close contacts of cases is ongoing. The total size of the target population in these two phases is 2 063 255 individuals. Intra-campaign monitoring and a post-campaign evaluation are included in the





Start of phase I of supplementary vaccination campaign

campaign plan.

The first phase started in March 2015 targeting 404 245 children and young adults 7–20 years of age in Bishkek and Chui Oblast, thereby including the most affected age groups in this outbreak. Within the period 16 March–10 April 2015, 361 514 individuals (89% of the total target population) were vaccinated: 183 694 (86%) individuals in Bishkek and 177 820 (94%) in Chui oblast. No serious reactions to the vaccines were observed. The second phase targeting the rest of the population aged 1–20 years nationwide commenced on 13 May 2015.

Comments

The most likely cause of this outbreak is the gradual accumulation of susceptible individuals born after measles and rubella supplementary immunization activity in 2001, in the presence of a sub-optimally performing immunization programme. Nosocomial transmission of measles in several major hospitals is believed to have contributed to the spread of the infection.

In Kyrgyzstan high routine vaccination coverage with both first and second dose of MMR vaccine has been reported for over a decade and no specific risk factors in particular districts or provinces (oblasts) have been However, there is extensive internal identified. migration to the capital region (Bishkek and Chui oblast), particularly during winter. Also, there is a high potential for nosocomial transmission given the practice of hospitalizing most measles cases regardless of severity of disease. Moreover, there is lack of appropriate isolation measures for suspected measles cases in basically all hospitals. Another challenge is the very high turnover and shortage of medical and other related staff, including epidemiologists, resulting in suboptimal quality of work and often delays in executing appropriate case investigations.

Although a significant reduction in the number of suspected cases has been observed in Bishkek and Chui Oblast since the start of the vaccination campaign, measles cases continue to be reported. This highlights the persistence of susceptible populations despite enhanced immunization activities. In the meantime, there has been an increase in reported suspected cases in Jalal-Abad Oblast and the city of Osh predominantly among unvaccinated individuals. Extension of the vaccination campaign to other territories during phase II and completion of the campaign in Bishkek and Chui Oblast is expected to hasten the cessation of the outbreak.

Measles outbreak in Serbia

An outbreak of measles is ongoing in Serbia. The first confirmed measles case was reported in Belgrade, with onset of rash on 28 October 2014. As of 13 February 2015, there were 228 reported measles cases, of which 95 were laboratory-confirmed cases. Measles virus genotype D8-Rostov On Don was identified. Most cases were reported in Belgrade, but there were also reports of cases from several districts including South Backa district, Macva district and Srem district.

Epidemiological investigations showed a connection with the ongoing measles outbreak in Bosnia and Herzegovina. One importation from southeast Asia and another from Germany have also been identified. Cases have been reported in educational settings (university and high schools) and among health care workers (13 cases: six in Belgrade, four in South Banat, and one in each of the districts of Srem, Macva and Jablanica).

The majority of confirmed cases have been among unvaccinated individuals or those with an unknown immunization status. Nine cases had been vaccinated with one measles-containing vaccine (MCV) dose and seven cases had received 2 doses of MCV. Most cases were 20–30 years old (37%), followed by 35–40-yearolds (24%). Those over the age of 40 years and 15–20 years contributed 15% and 8% of cases, respectively. Only two cases were <1 year old and two cases were 10–15 years old.

Outbreak response measures

Following the detection of the first measles case, the Institute of Public health of Serbia 'Dr Milan Jovanovic Batut' (IPH) alerted the national health authorities and requested strengthening of surveillance. Health care workers were reminded about standard protocols for investigating suspected measles cases. While addressing the current outbreak, the Ministry of Health and public health authorities are strongly advocating for immunization against measles. IPH has requested that public health institutes at district level review MMR vaccine registries and immunize eligible children who were not vaccinated according to the national vaccination schedule. Susceptible individuals in contact with cases are also being offered vaccination.

Rubella in 2014

Incidence – notifications and laboratory data

For 2014, 6516 rubella cases were reported in 20 countries of the WHO European Region among 42 (80%) countries submitting rubella data (including zero reporting). Most cases were reported by Poland (n=5899; 91%), which also had the highest incidence per million population (154), followed by Kazakhstan (152; 2%), Germany (151; 2%) and Georgia (150; 2%).

Of the total, 176 (3%) cases were laboratoryconfirmed, including 60 cases from the Russian Federation, 32 cases from Germany, 28 cases from Kyrgyzstan and 23 cases from Romania. Other countries reporting laboratory-confirmed cases included Austria (8), Belarus (1), Bulgaria (1), Georgia (2), Ireland (1), Kazakhstan (6), the Netherlands (2), Norway (2), Portugal (1), Spain (3), Sweden (1), Switzerland (4) and the United Kingdom (1). None of the cases reported by Poland were laboratory confirmed.

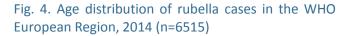
During 2014, three rubella virus sequences were entered in RubeNS. The identified genotypes comprised 1E (n=2) and 1G (1).

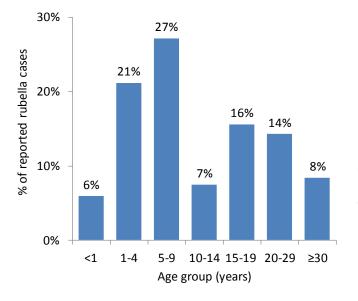
Age distribution

The age group was known in almost all cases (6515), of which 1015 cases (16%) were 15–19 years old and 1477 cases (23%) were \geq 20 years old (Fig. 4).

Vaccination status

Vaccination status was known in 5359 cases (82%).





N.B. Discarded cases are not included

2449 (46%) unvaccinated cases had data on age: 331 cases (14%) were <1 year old, 260 cases (11%) were 1–4 years old, 168 cases (7%) were 5–9 years, 781 (32%) were 10–19 years old and 909 cases (37%) were \geq 20 years old. The remaining 2909 cases (54%) were reportedly vaccinated with at least one rubella-containing vaccine dose.

Imported cases

Importation status was known in 6% (n=407) of rubella cases. Of these, 21 were reported as imported cases, amounting to 5% of cases with a known importation status.

Comments

Measles and rubella

With about 50% fewer measles cases reported to date for 2014 compared to the previous year (n=32 174) the number of cases in the Region appears to have dropped to the lowest level since 2010 (n=30 604).

The largest number of cases in 2014 was reported by the Russian Federation with 3257 cases and Georgia with 3190 cases. Based on population size, Georgia had the highest incidence of reported measles cases (738 per million inhabitants) followed by Bosnia and Herzegovina (576 per million inhabitants). Continuing transmission in the Region has been evidenced so far in 2015 with outbreaks currently reported in a number of countries including Bosnia and Herzegovina, Germany, Kyrgyzstan and Serbia.

Maintaining high vaccination coverage and closing immunity gaps in the population is the mainstay of preventing outbreaks from occurring. Countries that have been performing well in terms of high vaccination coverage and zero or low reported cases of measles need to remain vigilant to address any drops in coverage or growing immunity gaps in their populations.

Overall, during 2014, over 40% of measles cases were adults aged 20 years and older. The age distribution of cases varied in the different countries reflecting the timing of the implementation of measles vaccination programmes, strategies used and coverage achieved. The current standard routine immunization programmes alone are insufficient to close immunity gaps in the adult population. Therefore, innovative and effective ways need to be explored to reach out to adults who are still susceptible to measles.

Rubella continues to be reported in much fewer countries than measles. Although still too high, the number of reported cases in the European Region for 2014 is 84% lower than that reported for 2013 (n=39 554). This is primarily because the number of rubella cases reported in Poland dropped from 38 585 for 2013 to 5899 for 2014. Nevertheless, the lack of both a response measure to control the outbreak and laboratory confirmation of reported cases in Poland remain of concern in relation to the 2015 goal for eliminating the disease.

Not all countries respond adequately to outbreaks, thereby allowing extension of transmission for periods longer than a year in some cases. Countries with outbreaks affecting mostly older age groups have additional challenges as many are not equipped with an infrastructure to cater to the vaccination needs of adults. In addition, some countries are reluctant to undertake supplementary immunization activities due to lack of available resources, political commitment or secure vaccine supply. However, as Kyrgyzstan has demonstrated, with sufficient political will and adequate resources, a nationwide vaccination campaign including a wide age range can be implemented.

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Improvements are also needed in active case-finding, contact-tracing and in the laboratory component of surveillance, especially for rubella. Every Member State should develop a national plan of action for the elimination of measles and rubella. Such plans should include principles of large-scale response activities, including immediate initiation of an in-depth epidemiological investigation, implementation of local control measures as well as long-term responses to measles and rubella outbreaks (including supplementary immunization activities, where necessary). As of end-2014, 27 countries reported having such national plans of action in place.⁵

The epidemiological situation of measles and rubella in the Region during 2014 and continuing outbreaks in 2015 are of great concern. Although intensified efforts are being taken by many countries, commitment to eliminate these diseases needs to be enhanced and continued throughout the Region.

⁵ World Health Organization. Extraordinary meeting of the European Technical Advisory Group of Experts on Immunization (ETAGE). Copenhagen. Regional Office for Europe. 2015.

www.euro.who.int/__data/assets/pdf_file/0005/274640/Extraordinary-meeting-European-Technical-Advisory-Group-Experts-Immunization-ETAGEen.pdf?ua=1

A monthly summary of the epidemiological data on selected vaccine-preventable diseases in the European Region

Monthly summary table 1: Reported measles cases for the 12-month period Jan 2014 - Dec 2014 (data as of 09 Apr 2015)

Monthly Summa	Total	Incidence Rate														
Country	Population in	per 1 million	cases					``				, 				Month of last report
,	2014 ¹	population Jan 14-Dec 14	Jan 14- Dec 14	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	2014
Albania	3 185 413	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Andorra	80 151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Armenia	2 983 990	4.4	13	0	0	0	0	0	12	0	0	0	0	0	1	Dec
Austria	8 526 429	13.4	114	32	11	6	4	12	13	4	0	0	4	11	17	Dec
Azerbaijan	9 514 887	0.5	5	0	0	0	0	0	0	0	0	0	0	3	2	Dec
Belarus	9 307 609	6.9	64	0	0	1	23	23	16	1	0	0	0	0	0	Dec
Belgium	11 144 420	6.7	75	4	6	15	12	16	1	0	1	4	4	7	5	Dec
Bosnia and Herzegovina ^{\$}	3 824 746	576.2	2204	1	38	144	371	575	573	502	-	-	-	-	-	Jul
Bulgaria	7 167 998	0	0	0	0	0	0	0	0	0	0	0	-	0	0	Dec
Croatia	4 272 044	4.0	17	1	1	0	1	0	0	0	0	0	0	1	13	Dec
Cyprus	1 153 058	8.7	10	0	1	4	5	0	0	0	0	0	0	0	0	Dec
Czech Republic	10 740 468	20.8	223	1	52	66	34	30	25	12	2	0	0	0	1	Dec
Denmark	5 640 184	5.1	29	0	5	8	10	1	1	1	3	0	0	0	0	Dec
Estonia	1 283 771	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Finland	5 443 497	0.4	2	1	0	0	0	0	1	0	0	0	0	0	0	Dec
France	64 641 279	4.1	267	40	35	25	33	45	43	15	9	5	3	7	7	Dec
Georgia	4 322 842	737.9	3190	200	244	484	752	713	445	181	70	21	13	29	38	Dec
Germany	82 652 256	6.3	519	15	31	44	34	31	24	13	37	26	29	42	193	Dec
Greece	11 128 404	0.1	1	0	0	0	0	0	0	0	0	0	0	1	0	Dec
Hungary	9 933 173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Iceland	333 135	3.0	1	0	0	1	0	0	0	0	0	0	0	0	0	Dec
Ireland	4 677 340	7.5	35	3	4	20	2	0	0	1	1	1	0	2	1	Dec
Israel	7 822 107	0.4	3	1	0	0	0	0	1	0	0	1	0	2	0	Dec
	61 070 224	27.6	1687	319	203	303	268	195	96	92	74	45	46	- 29	17	Dec
Italy		19.1		12	203	47	200 56	27	43	92 12	13	45	27	29	22	
Kazakhstan	16 606 878		317				-									Dec
Kyrgyzstan	5 625 015	56.5	318	0	0	0	0	11	36	7	20	9	4	28	203	Dec
Latvia	2 041 111	17.6	36	0	0	8	24	2	1	1	0	0	0	0	0	Dec
Lithuania	3 008 287	3.7	11	0	0	3	0	5	3	0	0	0	0	0	0	Dec
Luxembourg	536 761	1.9	1	0	0	0	1	0	0	0	0	0	0	0	0	Dec
Malta	430 146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Monaco	38 064	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No Report
Montenegro	621 542	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Netherlands	16 802 463	8.6	144	46	24	42	21	5	1	1	2	2	-	0	0	Dec
Norway	5 091 924	0.6	3	0	0	0	2	1	0	-	0	0	0	0	0	Dec
Poland	38 220 543	2.9	109	28	25	15	22	4	1	7	1	2	1	1	2	Dec
Portugal	10 610 304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Republic of Moldova	3 461 380	0.6	2	0	0	0	0	0	2	0	0	0	0	0	0	Dec
Romania	21 640 168	2.7	59	25	17	5	3	5	0	2	0	1	0	0	1	Dec
Russian Federation [#]	142 467 651	22.9	3257	1170	733	540	357	184	58	74	30	51	19	15	26	Dec
San Marino	31 637	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No Report
Serbia	9 468 378	3.7	35	0	0	0	0	0	0	0	0	0	0	6	29	Dec
Slovakia	5 454 154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Slovenia	2 075 592	25.1	52	0	0	0	0	1	0	1	0	0	0	28	22	Dec
Spain	47 066 402	3.3	153	10	26	77	27	8	1	1	1	1	0	0	1	Dec
Sweden	9 631 261	2.7	26	5	4	0	1	2	3	3	2	0	4	1	1	Dec
Switzerland	8 157 896	2.9	24	5	5	3	1	1	1	1	4	1	0	0	2	Dec
Tajikistan	8 408 947	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
The former Yugoslav	2 108 434	50.7	107	6	6	34	48	12	1	0	0	0	0	0	0	Dec
Republic of Macedonia Turkey	75 837 020	7.5	572	95	158	120	77	49	40	22	8	0	1	0	2	Dec
Turkmenistan	5 307 171	-	-	-		-	-	-	- 40		-	-	-	-	-	No Report
Ukraine	44 941 303	- 51.8	2326	394	261	322	312	- 384	287	- 151	37	52	- 29	60	37	Dec
United Kingdom	63 489 234	2.2	137	394	201	26	13	2	4	20	37 1	1	29	2	0	Dec
-							-								-	
Uzbekistan	29 324 920	0.3	8	0	0	0	3	0	3	2	0	0	0	0	0	Dec
Total/Averages ¹ Source: "World Population Prospe	909 354 011	17.8	16156	2453	1942	2363	2517	2344	1736	1127	316	234	186	295	643	

¹ Source: "World Population Prospects: The 2012 Revision", New York, United Nations. # Since April 2014, Russian Federation data reported from an incomplete case-based data source.

\$ 2014 data only from Federation of Bosnia and Herzegovina.

For tables 1-4, the monthly distribution of cases was based on date of rash onset. These monthly reported numbers may differ from reports produced by national or partner agencies if other dates (e.g. date of case reporting) are used. Member States submitting aggregate data: Bosnia and Herzegovina, Kazakhstan, Montenegro, Republic of Moldova, Russian Federation, San Marino, Serbia, FYR Macedonia, Turkmenistan, Ukraine, Uzbekistan. Incidence not meeting the target is highlighted in red

Monthly summary table 2: Reported rubella cases for the 12-month period Jan 2014 - Dec 2014 (data as of 09 Apr 2015)

	Total	Incidence Rate	Total rubella			-	20)14 (Yea	ar and m	onth of r	ash onse	t)				Month of
Country	Population in 2014 ¹	1 million population Jan 14 -Dec 14	cases Jan 14 - Dec 14	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Νον	Dec	last report 2014
Albania	3 185 413	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Andorra	80 151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Armenia	2 983 990	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Austria	8 526 429	1.1	9	1	1	0	0	1	3	1	0	2	0	-	-	Oct
Azerbaijan	9 514 887	0.1	1	0	0	0	0	0	0	0	0	0	0	0	1	Dec
Belarus	9 307 609	0.1	1	0	0	0	0	0	0	0	1	0	0	0	0	Dec
Belgium	11 144 420		-	-	-	_	-	-	_	-	-	-	-	-	-	see footnote*
Bosnia and Herzegovina	3 824 746	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No Report
Bulgaria	7 167 998	1.0	7	3	3	0	0	0	1	0	0	0	-	0	0	Dec
Croatia	4 272 044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Cyprus	1 153 058	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Czech Republic	10 740 468	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Denmark [*]	5 640 184	-	-	-	-	-	-	-	-	-	-	-	-	-	-	see footnote*
Estonia	1 283 771	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Finland	5 443 497	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
France [*]	64 641 279	-	-	-	-	-	-	-	-	-	-	-	-	-	-	see footnote*
Georgia	4 322 842	34.7	150	6	19	11	24	29	15	6	8	0	10	10	12	Dec
Germany [*]	82 652 256	1.8	151	12	19	20	13	23	12	20	7	8	7	8	2	Dec
Greece	11 128 404	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Hungary	9 933 173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Iceland	333 135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Ireland	4 677 340	0.6	3	0	0	0	0	0	1	1	1	0	0	0	0	Dec
Israel	7 822 107	0	0	0	0	0	0	0	0	0	0	0	0	-	0	Dec
Italy	61 070 224	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No Report
Kazakhstan	16 606 878	9.2	152	2	26	42	29	25	13	12	3	0	0	0	0	Dec
Kyrgyzstan	5 625 015	5.0	28	0	3	0	2	6	2	7	6	0	0	2	0	Dec
Latvia	2 041 111	0.5	1	0	0	0	0	0	0	1	0	0	0	0	0	Dec
Lithuania	3 008 287	0	0	0	0	0	0	0	-	0	0	0	0	0	0	Dec
Luxembourg	536 761	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Malta	430 146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Monaco	38 064	_	-	-	-	_	-	-	-	-	_	-	-	-	-	No Report
Montenegro	621 542	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Netherlands	16 802 463	0.1	2	0	1	0	0	0	0	1	-	-	-	0	0	Dec
Norway	5 091 924	0.6	3	3	0	0	0	0	0	0	0	0	0	0	0	Dec
Poland	38 220 543	154.3	5899	770	672	913	837	822	493	410	157	159	201	226	239	Dec
Portugal	10 610 304		7	0	0	0	1	0	0	0	2	1	-	3	0	Dec
Republic of Moldova	3 461 380	0	0	0	0	0	0	0	-	-	-	-	-	0	0	Dec
Romania	21 640 168	-	30	10	0	9	3	2	1	1	2	0	0	1	1	Dec
Russian Federation [#]		0.4	61	14	11	12	9	6	4	-	-	-	0	0	5	Dec
San Marino	31 637	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No Report
Serbia	9 468 378	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No Report
Slovakia	5 454 154		0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Slovenia	2 075 592	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Spain	47 066 402		5	0	1	2	0	0	0	0	1	1	0	0	0	Dec
Sweden	9 631 261	0.1	1	0	0	1	0	0	0	0	0	0	0	0	0	Dec
Switzerland	8 157 896		4	0	0	1	0	0	1	1	0	0	0	0	1	Dec
Tajikistan	8 408 947	0	0	0	0	0	0	0	0	0	0	0	0	-	-	Oct
The former Yugoslav	2 108 434		0	0	0	0	-	-	0	0	0	0	0	0	0	Dec
Republic of Macedonia			-	-		-		-	-	-	-	-	-	0	-	
Turkey	75 837 020		-	-	-	-	-	-	-	-	-	-	-	-	-	No Report
Turkmenistan	5 307 171	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No Report
Ukraine	44 941 303		-	-	-	-	-	-	-	-	-	-	-	-	-	No Report
United Kingdom	63 489 234		1	0	0	0	0	0	1	0	0	0	0	0	0	Dec
Uzbekistan	29 324 920		0	0	0	0	0	0	0	0	0	0	0	0	0	Dec
Total/Averages	909 354 011	7.2	6516	821	756	1011	918	914	547	461	188	171	218	250	261	

¹ Source: "World Population Prospects: The 2012 Revision", New York, United Nations.

Since April 2014, Russian Federation data reported from an incomplete case-based data source.

*Belgium, Denmark, and France do not have comprehensive rubella surveillance systems. Germany's became operational for reporting in 2014.

Member States submitting aggregate data: Bosnia and Herzegovina, Greece, Iceland, Ireland, Kazakhstan, Lithuania, Luxembourg, Montenegro, Poland, Republic of Moldova, Russian Federation, San Marino, Serbia, FYR Macedonia, Turkmenistan, Ukraine, Uzbekistan.

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Summary table 3: Classification, reporting and performance of measles, January - Dec 2014 (data as of 09 Apr 2015)

		Incidence	Total measles cases ²	(Classifica	ation	S	es		Report	ing	Surveillance Indicators				
Country	Total Population ¹	per 1 million population (Jan 2014- Dec 2014)		Lab confirmed	Epi-Link	Clinically compatible ³	Discarded MEA	Imported cases	Complete- ness	Timeliness	Month of last report	Laboratory investigation rate	Rate of discarded cases	Origin of infection		
Albania	3 249 478	0	0	0	0	0	0	0	100%	100%	Dec	-	0	-		
Andorra	67 664	0	0	0	0	0	0	0	100%	25%	Dec	-	0	-		
Armenia	3 125 551	4.2	13	12	1	0	33	0	100%	83%	Dec	100%	1.06	100%		
Austria	8 448 081	12.5	114	93	19	2	0	8	100%	92%	Dec	98.9%	0	97.4%		
Azerbaijan	9 633 916	0.5	5	0	0	5	93	0	100%	92%	Dec	6.1%	0.97	22.4%		
Belarus	9 471 470	6.7	64	63	1	0	357	1	100%	92%	Dec	100%	3.77	10.5%		
Belgium	10 834 237	6.3	75	60	5	10	141	7	100%	92%	Dec	95.7%	1.30	89.8%		
Bosnia and Herzegovina*	3 725 925	591.5	2204	35	0	2169	0	0	58%	8%	Jul	1.6%	0	0		
Bulgaria	7 301 159	0	0	0	0	0	0	0	92%	83%	Dec	-	0	-		
Croatia	4 369 385	3.0	17	12	0	5	1	4	100%	75%	Dec	77.8%	0.02	66.7%		
Cyprus	1 152 528	8.7	10	8	2	0	0	0	100%	100%	Dec	100%	0	0		
Czech Republic	10 602 464	20.7	223	222	0	1	0	4	100%	100%	Dec	100%	0	87.0%		
Denmark	5 626 834	4.4	29	29	0	0	0	4	100%	92%	Dec	100%	0	100%		
Estonia	1 337 486	0	0	0	0	0	39	0	100%	100%	Dec	100%	2.92	0		
Finland	5 431 673	0	2	2	0	0	0	2	100%	100%	Dec	100%	0	100%		
France	64 082 436	3.9	267	137	52	78	0	18	100%	83%	Dec	74.9%	0	83.5%		
Georgia	4 251 853	749.1	3190	391	128	2671	51	5	100%	58%	Dec	14.0%	1.20	99.0%		
Germany	81 628 000	5.8	519	398	80	41	0	48	100%	92%	Dec	90.7%	0	100%		
Greece	11 465 810	0.1	1	1	0	0	0	0	100%	100%	Dec	100%	0	100%		
Hungary	9 918 162	0	0	0	0	0	0	0	100%	100%	Dec	-	0	-		
Iceland	335 344	0	1	1	0	0	0	1	100%	100%	Dec	100%	0	100%		
Ireland	4 679 050	7.1	35	17	5	13	0	2	100%	100%	Dec	86.7%	0	45.7%		
Israel	7 930 896	0.3	3	2	0	10	0	1	92%	75%	Dec	100%	0	66.7%		
Italy	61 108 864	24.8	1687	1002	393	292	124	170	100%	100%	Dec	78.5%	0.20	90.4%		
Kazakhstan*	16 708 134	19.0	317	247	27	43	0	0	100%	92%	Dec	85.2%	0.20	0		
Kyrgyzstan	5 568 088	55.5	318	318	0	0	0	9	100%	17%	Dec	0.0%	0	100%		
Latvia	2 217 993	16.2	36	35	0	1	0	0	100%	100%	Dec	100%	0	91.7%		
Lithuania	3 265 224	3.4	11	11	0	0	0	0	100%	92%	Dec	100%	0	100%		
Luxembourg	535 609	4.0	1	1	0	0	0	1	100%	100%	Dec	100%	0	100%		
Malta	421 705	0	0	0	0	0	0	0	100%	100%	Dec	100 /0	0	100 /0		
Monaco	39 105	-	-	-	-	-	-	-	-	-	No Report	_	-	-		
Montenegro*	633 615	0	0	0	- 0	0	0	0	- 100%	67%	Dec	-	0	-		
Netherlands	16 802 876	8.1	144	116	28	0	0	8	67%	67%	Dec	100%	0	95.1%		
	5 018 849	0	3	3	0	0	0	3	92%	92%	Dec	100%	0	100%		
Norway Poland	38 331 688		109	86	17	6	0	8	92% 100%	100%	Dec	94.6%	0	100%		
Portugal		2.6 0	0	0	0	0	6	0	100%	100%	Dec		0.06	100%		
	10 700 137 3 477 923	0.6	2	2	0	0	0	0	100%	58%	Dec	66.7% 100%	0.00	0		
Republic of Moldova* Romania	21 291 444	2.8	59	47	2	10	0	0	100%	100%	Dec	84.2%	0	100%		
						-	-									
Russian Federation* [#]	142 371 600	22.9	3257	2864	352	41	45	0	100%	100%	Dec No Decent	99.3%	0.03	47.0%		
San Marino	29 750		-	-	-	-	-	-	-	-	No Report	-	-	-		
Serbia*	9 819 308	3.6	35	35	0	0	0	0	100%	92%	Dec	100%	0	0		
Slovakia	5 495 762	0	0	0	0	0	0	0	100%	92%	Dec	-	0	-		
Slovenia	2 048 169	22.0	52	51	0	1	0	7	100%	100%	Dec	98.1%	0	55.8%		
Spain	47 243 756		153	148	1	4	110	10	100%	92%	Dec	96.2%	0.23	43.3%		
Sweden	9 589 153	2.1	26	26	0	0	2	6	100%	100%	Dec	100%	0.02	64.3%		
Switzerland	7 783 963	1.8	24	14	2	8	46	10	100%	100%	Dec	86.8%	0.59	32.9%		
Tajikistan The former Yugoslav Republic of Macedonia*	7 294 986 2 070 647	0 51.7	0 107	0 46	0 15	0 46	9 0	0	100% 100%	83% 33%	Dec Dec	100% 50.0%	0.12	11.1% 0		
	76 160 160	7.5	572	569	3	0	0	0	100%	75%	Dec	100%	0	0		
Turkey Turkmenistan*	76 169 160 5 300 285		- 572	- 569	-	-	0	-	100%	- 15%	No Report	100%	-	-		
					-		- 0	- 0	-			36.90/	0	0		
Ukraine*	44 464 092	52.3	2326	857	-	1469	-	-	100%	83%	Dec	36.8%				
United Kingdom	63 538 392	1.5	137	137	0	0	0	44	100%	100%	Dec	100%	0	80.3%		
Uzbekistan*	28 739 428	0.3	8	8	0	0	0	0	100%	67%	Dec	100%	0	0		
Total/Averages	906 749 107 gregated and case		16156	8106	1133	6917	1057	381	92.5%	80.0%		54.7%	0.12	51.0%		

¹ Source: "World Population Prospects: The 2010 Revision", New York, United Nations and updates provided by Member States.

 $^{\rm 2}$ Imported and import-related measles cases are included in the total.

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

* Member States submitting aggregate data: Bosnia and Herzegovina, Kazakhstan, Montenegro, Republic of Moldova, Russian Federation, San Marino, Serbia, FYR Macedonia, Turkmenistan, Ukraine, Uzbekistan. # As of April 2014, Russian Federation measles cases as reported to country-specific Mobile CISID system.

Indicators not meeting target and countries not reporting monthly measles data are highligted in red; "-" = data not submitted.

Summary table 4: Classification,	, reporting and performance of rubella,	January - Dec 2014 (data as of 09 Apr 2015)

Summary table											Surveillance Indicators					
	Total	Incidence per	Total		Classif	ication		cases		Reportir	ng	Surver		cators		
Country	Population ¹	1 million population (Jan 2014- Dec2014)	rubella cases ²	Lab confirmed	Epi-Link	Clinically compatible ³	Discarded RUB	Imported	Complete- ness	Timeliness	Month of last report	Laboratory investigation rate	Rate of discarded cases	Origin of infection		
Albania	3 249 478	0	0	0	0	0	0	0	100%	100%	Dec	-	0	-		
Andorra	67 664	0	0	0	0	0	0	0	100%	25%	Dec	-	0	-		
Armenia	3 125 551	0	0	0	0	0	32	0	83%	50%	Dec	100%	1.02	100%		
Austria	8 448 081	1.1	9	8	0	1	0	0	75%	75%	Oct	77.8%	0	88.9%		
Azerbaijan	9 633 916	0.1	1	0	0	1	34	0	100%	100%	Dec	11.4%	0.35	0		
Belarus	9 471 470	0.1	1	1	0	0	357	0	83%	83%	Dec	100%	3.77	0		
Belgium	10 834 237	-	-	-	-	-	-	-	-	-	see footnote**	-	-	-		
Bosnia and Herzegovina*	3 725 925		-	-	-	-	-	-	-	-	No Report	-	-	-		
Bulgaria	7 301 159		7	1	0	6	0	0	92%	83%	Dec	0	0	85.7%		
Croatia	4 369 385		0	0	0	0	0	0	100%	75%	Dec	-	0	-		
Cyprus	1 152 528		0	0	0	0	0	0	100%	100%	Dec	-	0	-		
Czech Republic	10 602 464		0	0	0	0	0	0	100%	100%	Dec	-	0	-		
Denmark	5 626 834		-	-	-	-	-	-	-	-	see footnote**	-	-	-		
Estonia	1 337 486		0	0	0	0	11	0	100%	100%	Dec	100%	0.82	100%		
Finland -	5 431 673		0	0	0	0	0	0	100%	100%	Dec	-	0	-		
France	64 082 436		-	-	-	-	-	-	-	-	see footnote**	-	-	-		
Georgia	4 251 853		150	2	0	148	28	0	100%	58%	Dec	15.2%	0.66	100%		
Germany	81 628 000		151	32	6	113	0	6	100%	100%	Dec	0	0	100%		
Greece*	11 465 810		0	0	0	0	0	0	100%	100%	Dec	-	0	-		
Hungary	9 918 162		0	0	0	0	5	0	100%	100%	Dec	100%	0.05	100%		
Iceland*	335 344		0	0	0	0	0	0	100%	100%	Dec	-	0	-		
Ireland*	4 679 050		3	1	0	2	0	1	100%	100%	Dec	33.3%	0	33.3%		
Israel	7 930 896		0	0	0	0	0	0	92%	83%	Dec	-	0	-		
Italy	61 108 864		-	-	-	-	-	-	-	-	No Report	-	-	-		
Kazakhstan*	16 708 134		152	6	3	143	0	0	100%	92%	Dec	0	0	0		
Kyrgyzstan	5 568 088		28	28	0	0	305	4	75%	67%	Dec	0	5.48	98.8%		
Latvia	2 217 993		1	0	1	0	0	0	100%	100%	Dec	-	0	100%		
Lithuania*	3 265 224		0	0	0	0	0	0	92%	83%	Dec	-	0	-		
Luxembourg*	535 609		0	0	0	0	0	0	100%	100%	Dec	-	0	-		
Malta	421 705		0	0	0	0	0	0	100%	100%	Dec	-	0	-		
Monaco	39 105		-	-	-	-	-	-	-	-	No Report	-	-	-		
Montenegro*	633 615		0	0	0	0	0	0	100%	83%	Dec	-	0	-		
Netherlands	16 802 876		2	2	0	0	0	1	75%	75%	Dec	0	0	100%		
Norway	5 018 849		3	2 0	1 0	0	0	3	100%	100%	Dec	100%	0	100%		
Poland*	38 331 688 10 700 137		5899 7	1	0	5899 6	4	0	100% 92%	83% 92%	Dec Dec	9.1%	0.04	0 100%		
Portugal Republic of Moldova*			0	0	0	0	4	0				9. 1%	0.04	-		
Romania	3 477 923 21 291 444		30	23	1	6	0	0	58% 92%	50% 92%	Dec Dec	- 86.2%	0	- 100%		
					0		0	0					0			
Russian Federation* [#] San Marino*	142 371 600 29 750		61	60 -	-	1	-	-	67%	67% _	Dec No Report	62.3%	-	21.3%		
Serbia*	9 819 308		-	-	-	-	-	-	-	-	· ·	-	-	-		
	9 819 308 5 495 762		- 0	- 0	- 0	- 0	- 0	- 0	- 100%	- 92%	No Report Dec	-	- 0	-		
Slovakia Slovenia	2 048 169		0	0	0	0	0	0	100%	92%	Dec	-	0	-		
Spain	47 243 756		5	3	0	2	16	3	100%	92%	Dec	- 81.0%	0.03	- 95.2%		
Sweden	9 589 153		1	1	0	0	0	1	100%	100%	Dec	100%	0.03	100%		
Switzerland	7 783 963		4	4	0	0	35	0	100%	100%	Dec	92.3%	0.45	7.7%		
Tajikistan	7 294 986		0	0	0	0	2	0	83%	50%	Oct	100%	0.03	100%		
The former Yugoslav Republic of Macedonia*	2 070 647	-	0	0	0	0	0	0	83%	33%	Dec	-	0	-		
Turkey	76 169 160	_	-	-	-	_	_	-	_	-	No Report	_	-	_		
Turkey Turkmenistan*	5 300 285		-	-	-	-	-	-	-	-	No Report	-	-	-		
Ukraine*	5 300 285		-	-	-	-	-	-	-	-	No Report		-	-		
United Kingdom	63 538 392		- 1	- 1	- 0	- 0	- 0	- 0	- 100%	- 83%	Dec	- 100%	-	- 100%		
Uzbekistan*	28 739 428		0	0	0	0	0	0	100%	67%	Dec	100%	0	100%		
	28 739 428 906 749 107		0 6516	176	12	6328	829	21			Dec	2 1 0/	0.09	11.0%		
Total/Averages Data source : Monthly aggr								- 21	74.4%	66.7%		3.1%	0.09	11.0%		

Data source : Monthly aggregated and case-based data reported by Member States to WHO/Europe and ECDC/TESSy

¹ Source: "World Population Prospects: The 2010 Revision", New York, United Nations and updates provided by Member States.

 $^{\rm 2}$ Imported and import-related measles cases are included in the total.

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

*Member States submitting aggregate data: Bosnia and Herzegovina, Greece, Iceland, Ireland, Kazakhstan, Lithuania, Luxembourg, Montenegro, Poland, Republic of Moldova, Russian Federation, San Marino, Serbia, FYR Macedonia, Turkmenistan, Ukraine, Uzbekistan.

**Belgium, Denmark, and France do not have comprehensive rubella surveillance systems.

As of April 2014, Russian Federation rubella cases as reported to country-specific Mobile CISID system.

Indicators not meeting target and countries not reporting monthly rubella data are highligted in red. "-" indicates data not submitted.

WHO EpiData

Summary table 5: Measles and rubella laboratory test results, January - Dec 2014 (data as of 09 Apr 2015)

		Specin		Reportir	Ig						
Country	Tested for measles	Positive for measles (%)	Measles Equivocal	Negative for measles	Tested for rubella	Positive for rubella (%)	Rubella Equivocal	Negative for rubella	% Complete ness	% Timeli ness	Month of last report
Albania	7	0 (0.0)	0	7	1	0 (0.0)	0	1	100%	91.7%	Dec
Andorra											No Lab
Armenia	90	12 (13.0)	0	78	90	0 (0.0)	0	90	100%	41.7%	Dec
Austria	1433	81 (6.0)	0	1352	5686	0 (0.0)	0	5686	100%	91.7%	Dec
Azerbaijan	-	0 (0.0)	-	-	-	0 (0.0)	-	-	-	-	Dec
Belarus	540	119 (22.0)	7	397	425	1 (0.0)	0	422	100%	91.7%	Dec
Belgium	332	60 (18.0)	11	261	74	15 (20.0)	6	53	100%	75.0%	Dec
Bosnia and Herzegovina**	69	41 (59.0)	2	26	57	0 (0.0)	2	55	-	-	Dec
Bulgaria	37	0 (0.0)	0	37	51	0 (0.0)	0	51	100%	91.7%	Dec
Croatia	13	11 (85.0)	0	2	4	0 (0.0)	0	4	91.7%	58.3%	Dec
Cyprus	145	8 (6.0)	0	137	568	0 (0.0)	2	566	100%	50.0%	Dec
Czech Republic	443	148 (33.0)	61	234	3	2 (67.0)	0	1	100%	91.7%	Dec
Denmark	819	65 (8.0)	4	750	410	2 (0.0)	11	397	100%	91.7%	Dec
Estonia	305	1 (0.0)	0	304	640	8 (1.0)	1	631	100%	91.7%	Dec
Finland	337	8 (2.0)	0	329	670	0 (0.0)	0	670	91.7%	83.3%	Dec
France	484	85 (18.0)	12	387	94	0 (0.0)	0	94	100%	58.3%	Dec
Georgia	-	339 (84.0)	-	-	-	0 (0.0)	-	-	-	-	Dec
Germany	402	177 (44.0)	4	221	91	4 (4.0)	1	86	91.7%	91.7%	Dec
Greece	24	2 (8.0)	0	21	159	38 (24.0)	13	108	100%	50.0%	Dec
Hungary	76	0 (0.0)	0	76	169	0 (0.0)	0	169	100%	91.7%	Dec
Iceland	31	2 (6.0)	0	29	30	0 (0.0)	0	30	25.0%	0	Mar
Ireland	344	37 (11.0)	8	299	1782	4 (0.0)	2	1776	100%	91.7%	Dec
Israel	498	45 (9.0)	0	453	470	168 (36.0)	0	302	100%	100%	Dec
Italy	201	133 (66.0)	10	58	42	2 (5.0)	0	40	91.7%	16.7%	Nov
Kazakhstan	594	275 (46.0)	0	319	531	9 (2.0)	0	522	100%	91.7%	Dec
Kyrgyzstan	656	319 (49.0)	28	309	377	25 (7.0)	2	341	100%	66.7%	Dec
Latvia	580	82 (14.0)	7	491	369	8 (2.0)	1	360	91.7%	75.0%	Dec
Lithuania	46	13 (28.0)	5	26	38	0 (0.0)	1	34	100%	91.7%	Dec
Luxembourg	77	5 (6.0)	1	71	26	0 (0.0)	0	26	100%	100%	Dec
Malta	28	0 (0.0)	0	28	1786	2 (0.0)	0	1784	100%	25.0%	Dec
Monaco											No Lab
Montenegro	00	F2 (60 0)	0	24	00	0 (0 0)	0	00	25.0%	8.3%	No Lab
Netherlands Norway	86 44	52 (60.0) 4 (9.0)	0	34 40	86 65	0 (0.0)	0	86 63	25.0%	91.7%	Mar Dec
Poland	343		2	40 157	99	2 (3.0) 18 (18.0)	1	80	100%	83.3%	Dec
Portugal	10	184 (54.0) 0 (0.0)	0	8	99 4	2 (50.0)	0	2	100%	100%	Dec
Republic of Moldova	47	2 (4.0)	0	45	47	0 (0.0)	0	47	91.7%	91.7%	Dec
Romania	248	18 (7.0)	2	228	287	15 (5.0)	3	269	100%	83.3%	Dec
Russian Federation	9345	4515 (48.0)	17	4813	5619	101 (2.0)	12	5504	100%	83.3%	Dec
San Marino	3343	+0.0)	17		3013	101 (2.0)	12	5504	10070	00.070	No Lab
Serbia	119	48 (40.0)	1	70	214	0 (0.0)	0	214	100%	75.0%	Dec
Slovakia	0	40 (40.0)	0	0	0	0 (0.0)	0	0	100%	91.7%	Dec
Slovenia	254	70 (28.0)	2	182	19	1 (5.0)	1	17	100%	91.7%	Dec
Spain	-		-	-	-	. (0.0)	-	-	-	-	No Report
Sweden [#]	-		-	-	-		-	-	-	-	No Report
Switzerland	71	47 (66.0)	1	22	13	13 (100.0)	0	0	100%	83.3%	Dec
Tajikistan	10	0 (0.0)	1	9	10	0 (0.0)	0	10	100%	-	Dec
The former Yugoslav Republic of Macedonia	119	50 (42.0)	5	64	66	0 (0.0)	0	66	100%	50.0%	Dec
Turkey	7329	801 (11.0)	96	6402	2586	68 (3.0)	38	2480	100%	33.3%	Dec
Turkmenistan [#]	-		-	-	-		-	-	-	-	No Report
Ukraine	539	214 (40.0)	3	322	450	145 (32.0)	0	305	100%	91.7%	Dec
United Kingdom	3922	203 (5.0)	0	3719	981	4 (0.0)	0	977	100%	75.0%	Dec
Uzbekistan	38	8 (21.0)	0	30	50	0 (0.0)	1	49	100%	83.3%	Dec
Total / Average	31135	8284 (26%)	290	22847	25239	657 (3%)	98	24468	77.4%	58.8%	

Data source: Aggregated monthly data provided by regional measles and rubella laboratory network (MR Labnet) to WHO/Europe. Bosnia and Herzegovina, Tajikistan and

Turkey are submitting lab data only to the WHO EURO specimen-based MR lab data management system (MR LDMS).

** Banja Luka Reference laboratory

#Lab data from Sweden and from Turkmenistan not displayed as lab reporting does not match the required format and frequency.

*Specimen based data are not population based, and should not be interpreted as indicators for epidemiological surveillance. 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



Summary table 6: Classification of AFP cases, surveillance performance and weekly reporting by country to WHO European Regional Office, 2014-2015 (data as of 09 Apr 2015)

					20	14(We	ek 1-52)											201	15 (We	ek 1-13)					
		15	~		Cla	ssificat	tion			Rates			😌 🧧 Classification Rates									F	Reporting		
Countries	AFP Cases ¹	AFP cases under year of age	Hot AFP Cases ²	Wild Polio cases	Discarded	VDPV/VAPP	Polio Compatible	Pending	Non polio AFP rate ³	Adequate Stool collection rate ⁴	Surv. Index ⁵	AFP Cases ¹	AFP cases under years of age	Hot AFP Cases ²	Wild Polio cases	Discarded	VDPV/VAPP	Polio Compatible	Pending	Non polio AFP rate ³	Adequate Stool collection rate ⁴	Surv. Index ⁵	% Completeness	% Timeliness	Week of last report
Albania	5	5	0	0	5	0	0	0	0.75	100.0	0.75	3	3	0	0	2	0	0	1	1.14	100.0	1.00	100.00	100.00	13
Andorra	0	0	0	0	0	0	0	0	0.00	0.0	0.00	0	0	0	0	0	0	0	0	0.00	0.0	0.00	100.00	100.00	14
Armenia	24	24	1	0	24	0	0	0	3.70	100.0	1.00	5	5	0	0	0	0	0	5	0.00	100.0	0.00	100.00	92.31	13
Austria	3	3	0	0	3	0	0	0	0.25	33.3	0.17	1	1	0	0	0	0	0	1	0.00	0.0	0.00	92.31	23.08	12
Azerbaijan	23	23	0	0	23	0	0	0	1.07	95.7	0.96	5	5	0	0	0	0	0	5	0.00	100.0	0.00	100.00	92.31	13
Belarus	45	45	1	0	39	0	0	6	2.64	93.3	0.93	15	14	1	0	0	0	0	15	0.00	85.7	0.00	30.77	30.77	13
Belgium	3	2	0	0	3	0	0	0	0.16	0.0	0.00	0	0	0	0	0	0	0	0	0.00	0.0	0.00	0.00	0.00	0
Bosnia and Herzegovina	4	2	0	0	3	0	0	1	0.59	100.0	0.29	2	2	0	0	0	0	0	2	0.00	50.0	0.00	100.00	23.08	13
Bulgaria	12	12	0	0	12	0	0	0	1.14	100.0	1.00	5	5	0	0	0	0	0	5	0.00	100.0	0.00	7.69	7.69	4
Croatia	3	3	0	0	2	0	0	1	0.31	33.3	0.10	0	0	0	0	0	0	0	0	0.00	0.0	0.00	100.00	100.00	14
Cyprus	1	1	0	0	0	0	0	1	0.00	100.0	0.00	1	1	0	0	0	0	0	1	0.00	100.0	0.00	100.00	84.62	14
Czech Republic	12	12	1	0	12	0	0	0	0.77	83.3	0.64	4	4	0	0	4	0	0	0	0.94	50.0	0.47	100.00	92.31	13
Estonia	0	0	0	0	0	0	0	0	0.00	0.0	0.00	0	0	0	0	0	0	0	0	0.00	0.0	0.00	100.00	100.00	14
Georgia	13	13	0	0	13	0	0	0	1.83	100.0	1.00	2	2	0	0	0	0	0	2	0.00	100.0	0.00	92.31	92.31	13
Greece	15	15	1	0	15	0	0	0	0.88	100.0	0.44	7	7	0	0	0	0	0	7	0.00	85.7	0.00	100.00	92.31	14
Hungary	13	13	0	0	13	0	0	0	0.88	84.6	0.75	1	1	0	0	1	0	0	0	0.25	100.0	0.25	100.00	100.00	15
Israel	27	27	3	0	27	0	0	0	1.25	81.5	0.81	5	5	0	0	3	0	0	2	0.51	20.0	0.10	100.00	92.31	14
Italy	63	63	0	0	63	0	0	0	0.73	74.6	0.57	18	18	0	0	9	0	0	9	0.39	50.0	0.19	100.00	100.00	14
Kazakhstan	98	98	0	0	74	0	0	24	1.71	100.0	1.00	14	14	0	0	0	0	0	14	0.00	100.0	0.00	100.00	100.00	13
Kyrgyzstan	49	43	0	0	34	0	0	15 0	2.05	83.7	0.84	7	7	0	0	1	0	0	6	0.22	100.0	0.22	100.00	61.54	14
Latvia Lithuania	1 7	1	0	0	1	0	0	0	0.30	100.0 100.0	0.30	0	0	0	0	0	0	0	0	0.00	0.0	0.00	100.00	100.00 100.00	14 14
Malta	0	0	0	0	0	0	0	0	0.00	0.0	0.00	0	0	0	0	0	0	0	0	0.00	0.0	0.00	69.23	7.69	9
Montenegro	0	0	0	0	0	0	0	0	0.00	0.0	0.00	1	1	0	0	0	0	0	1	0.00	100.0	0.00	100.00	84.62	13
Norway	18	16	0	0	1	0	0	17	0.11	50.0	0.05	1	1	0	0	0	0	0	1	0.00	0.0	0.00	69.23	69.23	12
Poland	56	56	0	0	49	0	0	7	0.86	78.6	0.71	7	7	0	0	0	0	0	7	0.00	42.9	0.00	100.00	92.31	14
Portugal	8	7	0	0	8	0	0	0	0.51	57.1	0.29	0	0	0	0	0	0	0	0	0.00	0.0	0.00	23.08	23.08	4
Republic of Moldova	5	5	0	0	5	0	0	0	0.86	80.0	0.86	1	1	0	0	0	0	0	1	0.00	100.0	0.00	100.00	100.00	14
Romania	26	25	0	0	26	0	0	0	0.81	100.0	0.40	5	5	0	0	1	0	0	4	0.12	100.0	0.06	76.92	53.85	14
Russian Federation	345	344	57	0	341	4	0	0	1.48	95.1	0.97	87	87	8	0	15	0	0	72	0.24	95.4	0.23	100.00	100.00	15
Serbia	16	16	5	0	16	0	0	0	0.94	93.8	0.88	3	3	0	0	0	0	0	3	0.00	66.7	0.00	100.00	100.00	13
Slovakia	2	2	0	0	2	0	0	0	0.24	100.0	0.24	1	1	0	0	0	0	0	1	0.00	0.0	0.00	92.31	92.31	14
Slovenia	0	0	0	0	0	0	0	0	0.00	0.0	0.00	0	0	0	0	0	0	0	0	0.00	0.0	0.00	100.00	100.00	14
Spain	41	41	1	0	41	0	0	0	0.56	41.5	0.29	9	9	0	0	8	0	0	1	0.40	55.6	0.22	92.31	76.92	12
Switzerland	13	9	0	0	13	0	0	0	1.13	11.1	0.22	0	0	0	0	0	0	0	0	0.00	0.0	0.00	100.00	61.54	14
Tajikistan	68	67	0	0	61	0	0	7	2.36	98.5	1.00	5	5	0	0	0	0	0	5	0.00	100.0	0.00	84.62	46.15	13
The former Yugoslav Republic of Macedonia	3	3	0	0	3	0	0	0	0.88	100.0	0.88	2	2	0	0	0	0	0	2	0.00	100.0	0.00	100.00	92.31	13
Turkey	292	289	11	0	287	0	0	5	1.52	76.8	0.81	81	81	3	0	55	0	0	26	1.08	87.7	0.89	100.00	100.00	14
Turkmenistan	32	32	0	0	10	0	0	22	0.67	100.0	0.67	5	5	0	0	0	0	0	5	0.00	100.0	0.00	76.92	53.85	12
Ukraine	133	131	22	0	130	1	0	2	1.95	96.9	0.95	48	47	10	0	0	0	0	48	0.00	100.0	0.00	100.00	100.00	13
Uzbekistan	173	161	0	0	173	0	0	0	2.17	100.0	1.00		25	0	0	11	0	0	16	0.51	100.0	0.51	100.00	84.62	
Average/Total	1652	1616	103	0	1539	5	0	108	1.25	87.00	0.91	378	374	22	0	110	0	0	268	0.57	90.00	0.56	88.0	76.2	

¹ AFP cases of all ages (Denmark, Germany, Finland, France, Ireland, Iceland, Luxembourg, Monaco, Netherlands, San Marino, Sweden and United Kingdom do not report AFP cases).

² Hot cases = AFP case reported with a priority code (e.g. less than three doses of polio vaccine/Clinically polio/Recent travel to endemic country/high risk group).

³ Non-polio AFP cases per 100 000 children under the age of 15 years (annualized for current year). Number of non-polio (discarded) AFP cases X 100000 / total population under 15 years.

⁴ two stool specimens collected 24-48 hours apart within 14 days of the onset of paralysis

⁵ Surveillance Index = non-polio AFP rate up to 1.0 x (% AFP cases with atleast two adequate specimens within 14 days of onset).

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