Measles and rubella elimination country profile
Russian Federation

World Health Organization
REGIONAL OFFICE FOR Europe

Measles elimination status

2016 interrupted

2017 endemic

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

Rubella elimination status

2016 interrupted

2017 eliminated

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

Measles and rubella surveillance

National case-based surveillance for measles, rubella and CRS

Lab confirmation for diagnosis of measles, rubella and CRS

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

Demographic information, 2017

Total population	143 989 754
< 1 year old	1 870 408
< 5 years old	9 527 025

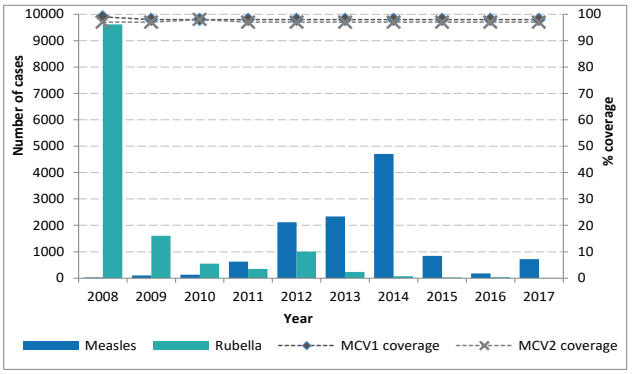
Source: World Population Prospects: The 2017 Revision, New York, United Nations

Measles and rubella immunization schedule*, 2017

	Vaccine	Schedule	Year of introduction	
MCV1	MMR	12 months	MCV2	1987
MCV2	MMR	6 years	RCV	2000
Measles vaccination in school				Yes

Source: Immunization schedule, WHO, Data and Statistics, Immunization Monitoring and Surveillance (http://www.who.int/immunization/monitoring_surveillance/data/en/)
MMR = measles-mumps-rubella vaccine; MCV1 = first dose measles-containing vaccine; MCV2 = second dose measles-containing vaccine; RCV = rubella-containing vaccine
* Measles vaccine provided to 18 to 55 year olds

Measles and rubella cases and immunization coverage, 2008–2017



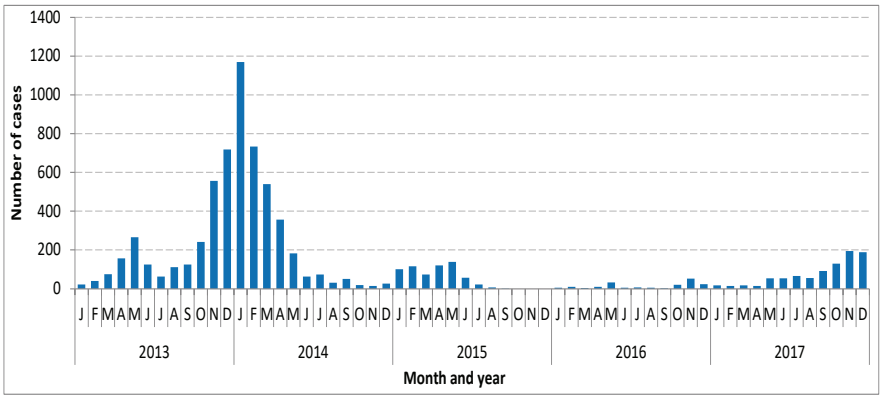
Source: Disease incidence and immunization coverage (WUENIC), WHO, Data and Statistics, Immunization Monitoring and Surveillance (http://www.who.int/immunization/monitoring_surveillance/data/en/)
MCV1 = first dose of measles-containing vaccine
MCV2= second dose of measles-containing vaccine

Definition used for an outbreak

Minimum two cases of measles or rubella including epidemiologically linked cases

Source: Measles and rubella elimination Annual Status Update report, 2017 and prior communication with the country

Confirmed measles cases by month of onset, 2013-2017



Source: CISID 2017

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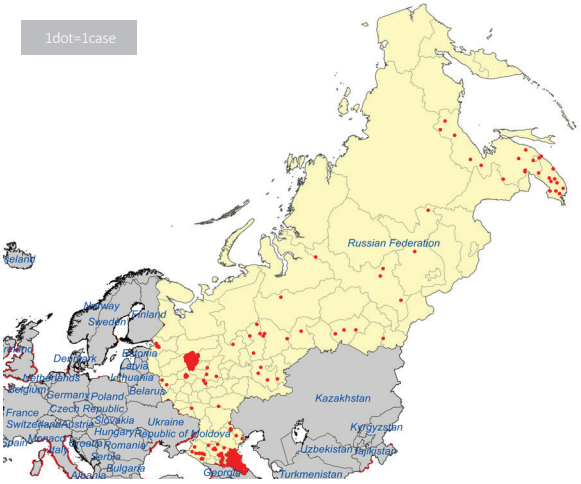
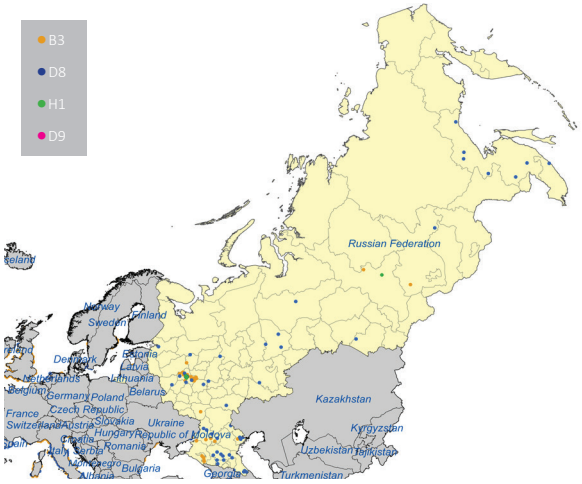
Measles cases by first subnational level, 2017



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

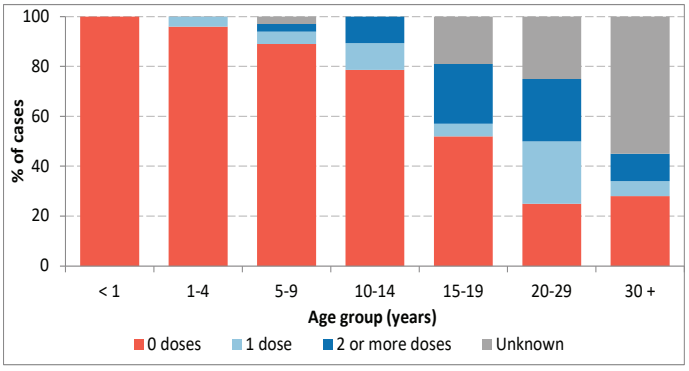
Measles genotypes by first subnational level, 2017



Source: MeaNS 2017

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

Measles cases by age group and vaccination status, 2017



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

Sources of infection, 2017

	Measles	Rubella
Imported	22	1
Import-related	481	4
Unknown/ Not reported	43	0
Endemic	175	0

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

Information on CRS, 2017

No cases reported

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

Supplementary immunization activities

Year	Target age	Vaccine used	% Coverage
2017	18-55Y	MCV	82.1-92.5%
2017	18-25Y	RCV	42.4-92.4%

Source: Supplementary immunization activities, WHO, Data and Statistics, Immunization Monitoring and Surveillance (http://www.who.int/immunization/monitoring_surveillance/data/en/)
MCV = measles-containing vaccine; RCV = rubella-containing vaccine
ND = Data not available

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Measles incidence, epidemiologic and virologic characteristics, 2013-2017

	Suspected measles cases	Confirmed measles cases				Discarded as non-measles	Measles incidence	Genotypes detected
		Laboratory	Epi- linked	Clinically	Total			
2013	6297	2237	95	7	2339	3958	16.3	B3,D4,D8
2014	8856	4241	470	0	4711	4145	32.3	B3,D4,D8
2015	4192	804	39	0	843	3349	5.8	B3,D8,H1
2016	3306	173	5	0	178	3128	1.2	D8, H1
2017	4395	689	31	1	21	3674	4.9	B3,D8,H1

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

Measles surveillance and laboratory performance indicators, 2013-2017

	Discarded non-measles rate	% 1st sub-national unit with ≥ 2 discarded cases	% cases with adequate laboratory investigation	% origin of infection known	# specimen tested for measles	% positive for measles	Rate of viral detection	% WHO and proficient labs
2013	2.8	68.7%	98.5%	100%	6463	34.9%	66%	100%
2014	2.8	100%	98.9%	100%	9162	48.3%	65.5%	100%
2015	2.3	100%	99.0%	100%	4727	18.1%	73.5%	100%
2016	2.1	100%	99.0%	100%	3772	6.1%	83.3%	100%
2017	2.5	84.2%	97.3%	94%	4364	18.5%	95.2%	100%

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

Rubella incidence, epidemiologic and virologic characteristics, 2013-2017

	Suspected rubella cases	Confirmed rubella cases				Discarded as non-rubella	Rubella incidence	Genotypes detected
		Laboratory	Epi- linked	Clinically	Total			
2013	5050	190	43	0	233	4817	1.6	2B
2014	5481	57	15	0	72	5409	0.5	2B, 1E
2015	3310	25	0	0	25	3285	0.2	2B
2016	3214	34	4	0	38	3176	0.3	2B
2017	4290	5	0	0	5	4285	0	1H

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

Rubella surveillance and laboratory performance indicators, 2013-2017

	Discarded non-rubella rate	% 1st sub-national unit with ≥ 2 discarded cases	% cases with adequate laboratory investigtion	% origin of infection known	# specimen tested for rubella	% positive for rubella	Rate of viral detection	% WHO and proficient labs
2013	3.4	68.7%	98.5%	100%	4125	4.2%	12.5%	100%
2014	2.3	100%	98.9%	100%	5481	1.9%	100%	100%
2015	2.2	100%	99.0%	100%	4327	1.0%	100%	100%
2016	2.1	100%	99.0%	100%	3713	1.5%	33.3%	100%
2017	2.9	99.9%	97.2%	100%	4290	0.8%	ND	100%

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

RVC comments, based on 2017 reporting

The Regional Verification Commission for Measles and Rubella Elimination (RVC) commends the national verification committee for measles and rubella elimination (NVC), national health authorities and public health system on achieving rubella elimination. The RVC repeatedly commends a high quality of ASU, including comprehensive analysis and detailed laboratory information provided. The RVC agrees with the NVC conclusion that measles endemic transmission was re-established in 2017, and is looking forward to learn about activities and steps taken to address measles immunity challenges.

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

Surveillance performance indicators and targets

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