Measles and rubella elimination country profile
Romania

World Health Organization
REGIONAL OFFICE FOR **Europe**

Measles elimination status

2016 endemic
2017 endemic

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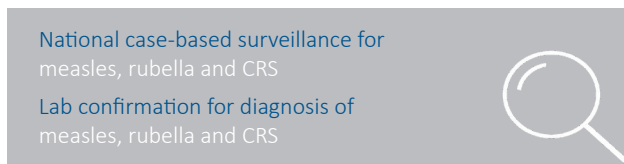
Rubella elimination status

2016 endemic
2017 endemic

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

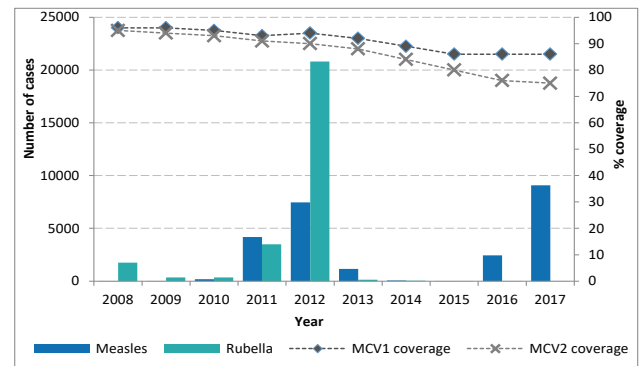| Total population	19 679 306
< 1 year old	180 292
< 5 years old	931 821

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

Measles and rubella immunization schedule, 2017

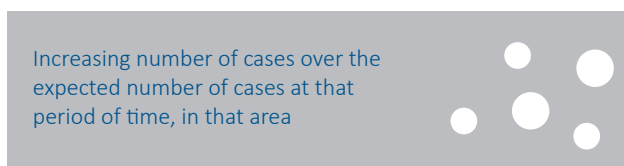|	Vaccine	Schedule	Year of introduction	
MCV1	MMR	12 months	MCV2	1979
MCV2	MMR	5 years	RCV	2002
Measles vaccination in school			No	

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

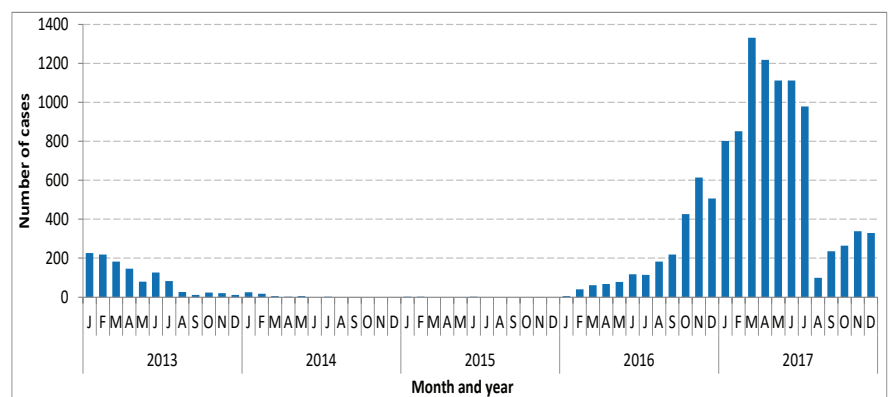## Measles and rubella cases and immunization coverage, 2008–2017

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

Increasing number of cases over the expected number of cases at that period of time, in that area

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

Confirmed measles cases by month of onset, 2013-2017

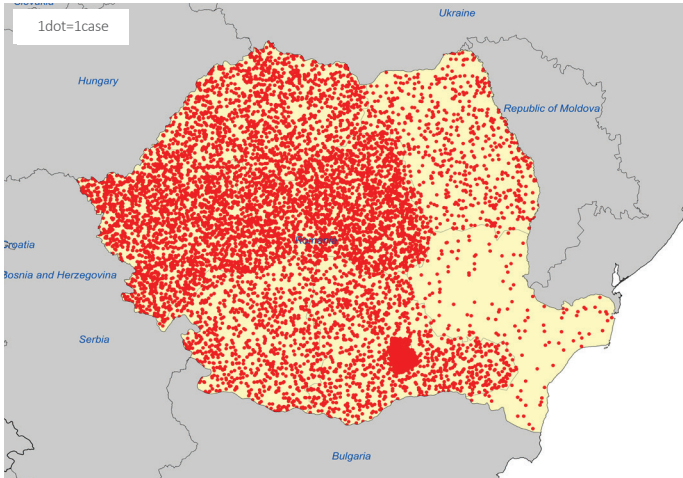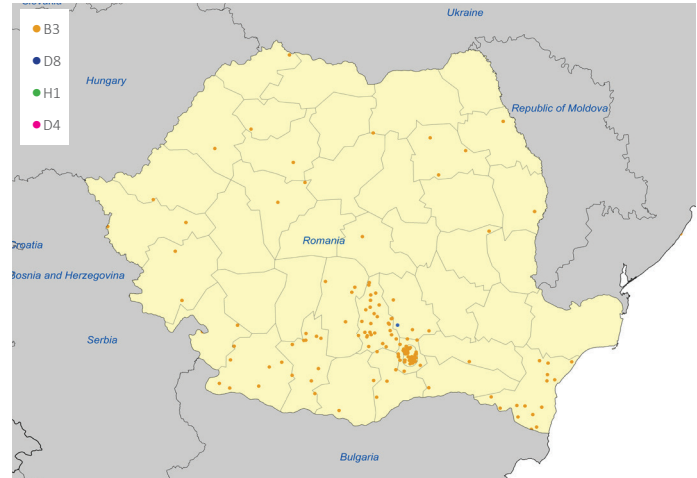Source: CISID 2017

Measles cases by first subnational level, 2017

1dot=1case

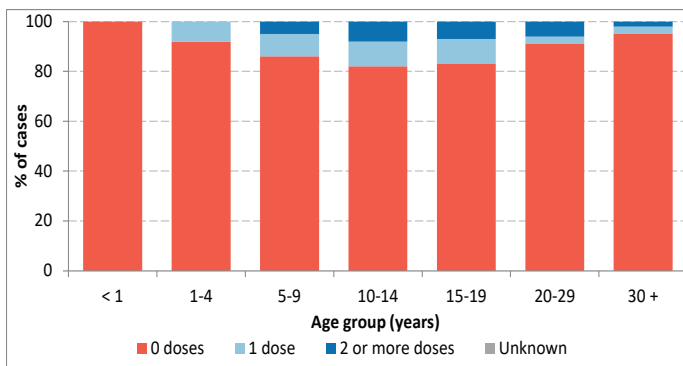Source: Measles and rubella elimination Annual Status Update report, 2017

Measles genotypes by first subnational level, 2017

- B3
- D8
- H1
- D4

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	0	0
Import-related	0	0
Unknown/ Not reported	0	0
Endemic	9076	9

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

Information on CRS, 2017

4 endemic cases, clinically compatable

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

Supplementary immunization activities

Year	Target age	Vaccine used	% Coverage
2017	9M-9Y	MMR	30%
2016	9M-9Y	MMR	46%
2016	1-15Y	MMR	ND

Source: Supplementary immunization activities, WHO, Data and Statistics, Immunization Monitoring and Surveillance (http://www.who.int/immunization/monitoring_surveillance/data/en/) and communication with the country
MMR = measles-mumps-rubella 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	1391	884	247	28	1159	281	53.5	D4,D8
2014	164	49	3	7	59	106	2.8	ND
2015	55	4	0	3	7	48	0.3	B3
2016	2493	1363	1058	14	2435	65	123.2	B3
2017	10 278	3887	5080	109	9076	1202	459.4	B3

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	1.2	40.5%	80.2%	100%	ND	ND	76.7%	100%
2014	0.5	14.3%	14.3%	88.1%	133	27.8%	0	100%
2015	0.3	0%	94.5%	100%	52	7.7%	0	100%
2016	0.3	0%	57%	ND	1 572	85.4%	72.5%	100%
2017	25.9	0%	41.7%	100%	8089	48.1%	0%	66.3%

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

Rubella incidence, epidemiologic and virologic characteristics, 2013-2017

	Suspected rubella cases	Confirmed rubella cases				Discarded as non-rubella	Rubella incidence	Genotypes detected
		Laboratory	Epi- linked	Clinically	Total			
2013	461	105	11	29	145	334	6.6	ND
2014	182	22	1	7	30	158	1.4	ND
2015	108	0	0	8	8	100	0.4	ND
2016	229	12	0	1	13	218	0.7	ND
2017	248	6	0	3	9	239	0.5	ND

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	1.3	40.5%	91.3%	100%	ND	ND	33.3%	100%
2014	0.7	25%	95.6%	0	190	7.4%	0	100%
2015	0.5	11.9%	92.5%	0	100	0%	0	100%
2016	1.1	14.3%	93.4%	ND	226	5.3%	ND	100%
2017	1.2	19%	99.6%	0%	247	2.4%	0%	100%

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

RVC comments, based on 2017 reporting

The suboptimal MRCV coverage and immunity remains of great concern. The Regional Verification Commission for Measles and Rubella Elimination (RVC) urges national health authorities to consider comprehensive response to the measles outbreak, followed with SIA to close the population immunity gaps nationwide. The RVC commends the commitment to initiate laboratory-based rubella surveillance from 2018.

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%