

Measles elimination status

2016 eliminated 2017 eliminated



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

Measles and rubella surveillance



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

Measles and rubella immunization schedule, 2017

	Vaccine	Schedule	Year of introduction				
MCV1	MMR	14 months	MCV2	1977			
MCV2	MMR	10 years RCV		1985			
٦	Measles vaccination in school						

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

Definition used for an outbreak

An epidemic is the occurrence of at least three cases of disease that are epidemiologically linked

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



Rubella elimination status



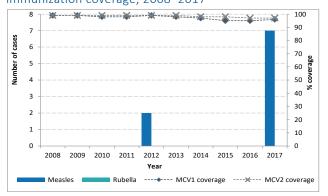
Source:European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: www.euro.who.int/7thrvc

Demographic information, 2017

Total population	5 447 662
< 1 year old	54 438
< 5 years old	280 142

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

Measles and rubella cases and immunization coverage, 2008–2017

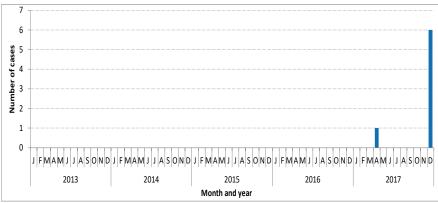


Source: Disease incidence and immunization coverage (WUENIC), WHO, Data and Statistics, Immunization Monitoring and Surveillance (http://www.who.int/immunization/monitoring_surveillance/data/en/)

MCV1 = first dose of measles-containing vaccine

MCV2= second dose of measles-containing vaccine

Confirmed measles cases by month of onset, 2013-2017



Source: CISID 2017 and communication with the country



Measles cases by first subnational level, 2017

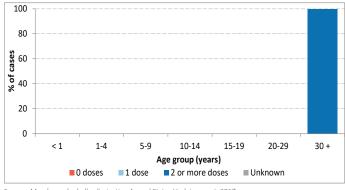




Source: Measles and rubella elimination Annual Status Update report, 2017

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

Information on CRS, 2017



CRS = congenital rubella syndrome

Sources of infection, 2017

	Measles	Rubella
Imported	4	0
Import-related	3	0
Unknown/ Not reported	0	0
Endemic	0	0

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

Measles genotypes by first subnational level, 2017



Measles incidence, epidemiologic and virologic characteristics, 2013-2017

	Suspected measles		Confirmed m	neasles cases	Discarded as	Measles	Genotypes	
	cases	Laboratory	Epi- linked	Clinically	Total	non- measles	incidence	detected
2013	0	0	0	0	0	0	0	NA
2014	0	0	0	0	0	0	0	NA
2015	1	0	0	0	0	1	0	NA
2016	2	0	0	0	0	2	0	NA
2017	12	7	0	0	7	5	0.9	B3,D8

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 incidence, epidemiologic and virologic characteristics, 2013-2017

		Suspected		Confirmed r	ubella cases		Discarded as	Rubella	Genotypes
		rubella cases	Laboratory	Epi- linked	Clinically	Total	non- rubella	incidence	detected
	2013	0	0	0	0	0	0	0	NA
	2014	0	0	0	0	0	0	0	NA
	2015	0	0	0	0	0	0	0	NA
	2016	0	0	0	0	0	0	0	NA
	2017	1	0	0	0	0	1	0	NA
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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	NA	NA	NA	NA	ND	0%	ND	ND
2014	NA	NA	NA	NA	61	0%	ND	ND
2015	100%	NA	NA	NA	1	0%	ND	100%
2016	100%	ND	NA	NA	2	0%	ND	100%
2017	0	0%	100%	100%	12	58.3%	100%	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

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	NA	NA	NA	NA	ND	0%	ND	ND
2014	NA	NA	NA	NA	144	0%	ND	ND
2015	NA	NA	NA	NA	0	0%	ND	100%
2016	NA	NA	NA	NA	0	0%	ND	100%
2017	0	0%	ND	ND	0	NA	ND	NA

Source: ASU 2013-2017 ND = Data not available; NA= Not applicable

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RVC comments, based on 2017 reporting

The Regional Verification Commission for Measles and Rubella Elimination (RVC) concluded that endemic transmission of both measles and rubella remained interrupted in Slovakia in 2017 and confirmed that measles and rubella elimination has been sustained. Surveillance performance and sensitivity need to be strengthened and better documented.

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: $\ge 80\%$

c. % origin of infection known: $\geq 80\%$

d. Rate of viral detection: $\geq 80\%$