## Measles and rubella elimination country profile Slovenia



#### Measles elimination status



Source:European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: www.euro.who.int/6thRVC

#### National plan of action



Source: Measles and rubella elimination Annual Status Update report, 2016 ND= Data not available

## Measles and rubella immunization schedule, 2016

	Vaccine	Schedule	Year of introduction		
MCV1	MMR	12 months	MCV2	1974	
MCV2	MMR	5 years	RCV	1972	
Me	No				

 $Source: Immunization schedule, WHO, Data and Statistics, Immunization Monitoring and Surveillance (http://www.who.int/immunization/monitoring_surveillance/data/en/)$ 

 $\label{eq:MMR} MMR = measles-mumps-rubella-containing vaccine; MCV1 = first dose measles-containing vaccine; MCV2 = second dose measles-containing vaccine; RCV = rubella-containing vaccine$ 

#### Definition used for an outbreak



Source: Measles and rubella elimination Annual Status Update report, 2016

## Rubella elimination status



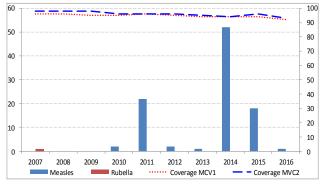
Source:European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: www.euro.who.int/6thRVC  $\,$ 

## Demographic information, 2016

Total population	2 069 362		
< 1 year old	21 465		
< 5 years old	110 252		

Source: World Population Prospects: The 2015 Revision, New York, United Nations

# Measles and rubella cases and immunization coverage, 2007–2016

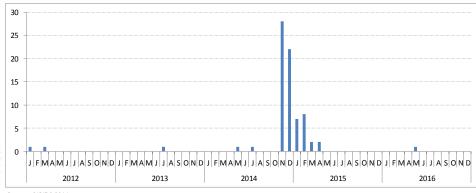


Source: Disease incidence and immunization coverage, WHO, Data and Statistics, Immunization Monitoring and Surveilance

[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, 2012-2016

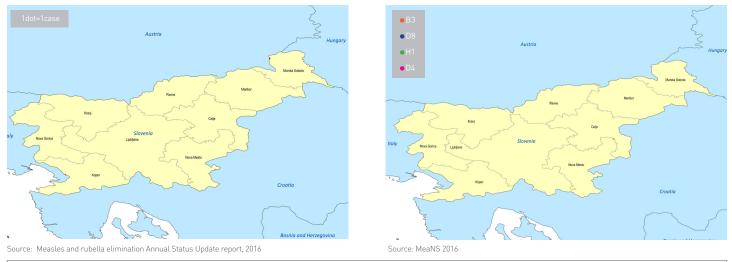


Source: CISID2 2016



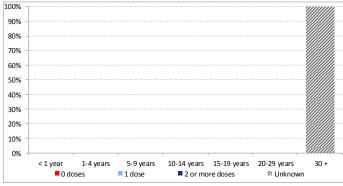
#### Measles cases by first subnational level, 2016

#### Measles genotypes by first subnational level, 2016



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, 2016



Source: Measles and rubella elimination Annual Status Update report, 2016

## Sources of infection, 2016

	Measles	Rubella
Imported	1	0
Import-related	0	0
Unknown/ Not reported	0	0
Endemic	0	0

Source: Measles and rubella elimination Annual Status Update report, 2016

#### Information on CRS, 2016



Source: Measles and rubella elimination Annual Status Update report, 2016 CRS = congenital rubella syndrome



### Measles incidence, epidemiologic and virologic characteristics. 2012-2016

		Suspected measles	C	Confirmed m	ieasles case	Discarded as	Measles	Genotypes	
		cases	Labora- tory	Epi- linked	Clincally	Total	non- measles	incidence	detected
	2012	9	2	0	0	02	7	0	D4
	2013	13	1	0	0	1	12	0	D8
	2014	113	51	1	0	52	61	21.8	D8
	2015	86	17	1	0	18	68	4.4	D8
	2016	15	1	0	0	1	14	0	B3

ource: Measles and rubella elimination Annual Status Update report, 2012-2016, and internal communication from country Incidence calculated per 1 million population ND = Data not available: NA= Not applicable

#### Rubella incidence, epidemiologic and virologic characteristics. 2012-2016

	Suspected rubella		Confirmed measles cases				Rubella	Genotypes
	cases	Laboratory	Epi- linked	Clincally	Total	non- rubella	incidence	detected
2012	0	0	0	0	0	0	0	NA
2013	11	0	0	0	0	11	0	NA
2014	12	0	0	0	0	12	0	NA
2015	1	0	0	0	0	1	0	NA
2016	6	0	0	0	0	6	0	NA

ource: Measles and rubella elimination Annual Status Update report, 2012-2016 Incidence calculated per 1 million population ND = Data not available; NA= Not applicable

#### Measles surveillance and laboratory performance indicators, 2012-2016

	Discarded non- measles rate	% 1st sub- national unit with ≥ 2 discarded cases	% cases with adequate laboratory investiga- tion	% origin of infection known	# specimen tested for measles	% positive for measles	Rate of viral detection	% WHO and proficient labs
2012	2	ND	100%	100%	7	28.6%	100%	100%
2013	0.6	ND	100%	100%	13	77.7%	100%	100%
2014	3	55%	99%	100%	100	6%	100%	100%
2015	3.6	55%	93%	66%	1	0%	100%	100%
2016	0.7	66.7%	100%	100%	15	6.7%	100%	100%

Source: ASU 2012-2016, MeaNS 2012-2016 and laboratory accreditation results 2012-2016, and internal communication from 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 surveillance and laboratory performance indicators, 2012-2016

	Discarded non- rubella rate	% 1st sub- national unit with ≥ 2 discarded cases	% cases with adequate laboratory investiga- tion	% origin of infection known	# specimen tested for rubella	% positive for rubella	Rate of viral detection	% WHO and proficient labs
2012	1.5	ND	100%	NA	ND	NA	ND	100%
2013	0.6	ND	100%	NA	ND	0%	NA	100%
2014	0.6	0%	100%	NA	12	0%	NA	100%
2015	0.1	0%	100%	NA	86	0%	NA	100%
2016	0.3	11.1%	100%	NA	6	0%	NA	100%

Source: ASU 2012-2016, RubeNS 2012-2016 and laboratory accreditation results 2012-2016, and internal communication from 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 2016 reporting

The Regional Verification Commission for Measles and Rubella Elimination (RVC) concluded that endemic transmission of both measles and rubella remained interrupted in Slovenia in 2016, and confirmed that measles and rubella elimination has been sustained. The RVC commends the National Verification Commission (NVC), national health authorities and public health system on this achievement but would appreciate further clarification from the NVC and national health authorities on surveillance performance indicators, with an explanation of how they document the presence of high-quality surveillance in the next ASU. The RVC also requests from the NVC an update on immunization coverage among the identified underimmunized subpopulation. The RVC encourages the national health authorities and public health system to consider activities that will ensure timely collection of routine immunization coverage data.

Source: Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report (www.euro.who.int/6thRVC)

## 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%