## Measles and rubella elimination country profile Lithuania



#### 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	15-16 months	MCV2	1992			
MCV2	MMR	6-7 years	RCV	1992			
Ν	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



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



#### Rubella elimination status



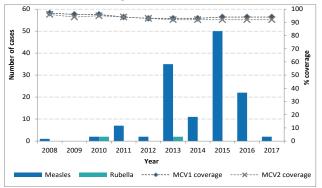
Source:European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: www.euro.who.int/7thrvc

#### Demographic information, 2017

Total population	2 890 297
< 1 year old	29 885
< 5 years old	151 913

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

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

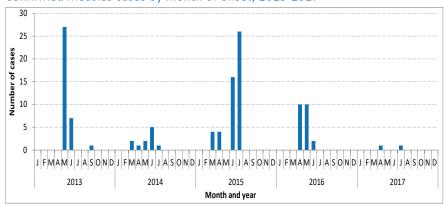


Source: Disease incidence and immunization coverage (WUENIC), WHO, Data and Statistics, Immunization Monitoring and Surveillance (http://www.who.int/immunization/monitoring\_surveillance/data/en/)

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





Measles genotypes 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.

#### Information on CRS, 2017



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

#### Sources of infection, 2017

	Measles	Rubella
Imported	2	0
Import-related	0	0
Unknown/ Not reported	0	0
Endemic	0	0

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

#### 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 Lithuania in 2017 and confirmed that measles and rubella elimination has been sustained. Surveillance performance and sensitivity need to be strengthened and better documented. The RVC strongly recommends inclusion of measles genotyping data in future ASUs together with all other requested information.

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

## Measles and rubella elimination country profile Lithuania



## Measles incidence, epidemiologic and virologic characteristics, 2013-2017

	Suspected measles		Confirmed m	neasles cases		Discarded as	Measles	Genotypes
	cases	Laboratory	Epi- linked	non-	non- measles	incidence	detected	
2013	65	27	3	5	35	30	11.1	D8
2014	23	11	0	0	11	14	2.4	D8
2015	169	45	5	0	50	128	16.9	D8
2016	100	21	1	0	22	80	7.6	ND
2017	28	2	0	0	2	26	0	ND

ource: 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 rubella		Confirmed r	ubella cases		Discarded as	Rubella incidence	Genotypes detected
	cases	Laboratory	Epi- linked	Clinically	Total	non- rubella		
2013	33	0	0	2	2	31	0.7	ND
2014	15	0	0	0	0	15	0	NA
2015	100	0	0	0	0	99	0	NA
2016	14	0	0	0	0	11	0	NA
2017	16	0	0	0	0	16	0	NA

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

## 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:  $\geq 80\%$
- c. % origin of infection known: ≥ 80%
- d. Rate of viral detection:  $\geq 80\%$

#### 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	10%	100%	91.4%	ND	ND	51.9%	ND
2014	0.5	0%	100%	100%	33	36.4%	88.8%	ND
2015	4.1	80%	100%	100%	169	26.6%	66.7%	100%
2016	2.7	50%	98.8%	100%	99	17.2%	66.7%	100%
2017	0.9	10%	85.7%	100%	24	8.3%	ND	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	1.0	20%	100%	0%	ND	ND	0	ND
2014	0.5	0%	93.3%	NA	24	0%	NA	ND
2015	4.2	80%	100%	NA	118	0%	NA	100%
2016	0.2	0%	45.5%	NA	5	0%	NA	100%
2017	0.6	0%	81.3%	NA	13	0%	NA	100%

Source: ASU 2013-2017

Sulle: NOC 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