Measles and rubella elimination country profile Iceland



Measles elimination status

2016 eliminated 2017 eliminated

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

Measles and rubella surveillance

National case-based surveillance for Lab confirmation for diagnosis of

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

Measles and rubella immunization schedule, 2017

	Vaccine	Schedule	Year of introduction	
MCV1	MMR	18 months	MCV2	1976
MCV2	MMR	12 years	RCV	1979
N	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; MCVI = first dose measles-containing vaccine;

MCV2 = second dose measles-containing vaccine; RCV = rubella-containing vaccir

Definition used for an outbreak

One case of measles/rubella which is not imported

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



Rubella elimination status

2016 eliminated 2017 eliminated

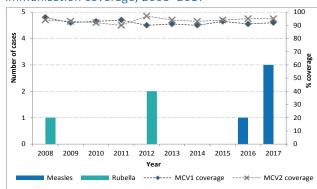
Source: European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: www.euro.who.int/7thrvo

Demographic information, 2017

Total population	335 025 4217 21 880		
< 1 year old	4217		
< 5 years old	21 880		

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,

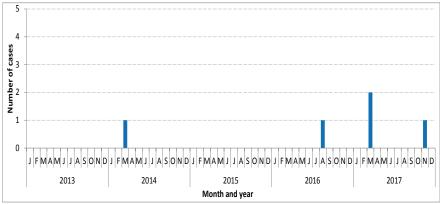
Immunization Monitoring and Surveillance

(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

Measles and rubella elimination country profile Iceland



Measles cases by first subnational level, 2017



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

Measles genotypes by first subnational level, 2017

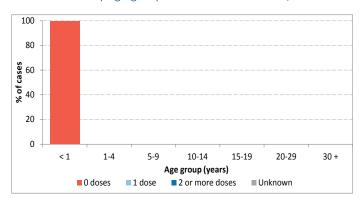


Source: MeaNS 2017
(Note: no subnational genotype information available

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

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	1	0
Unknown/ Not reported	0	0
Endemic	0	0

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

Measles and rubella elimination country profile Iceland



Measles incidence, epidemiologic and virologic characteristics, 2013-2017

	Suspected measles		Confirmed m	neasles cases		Discarded as	Measles incidence	Genotypes detected
	cases	Laboratory	Epi- linked	Clinically	Total	non- measles		
2013	ND	0	0	0	0	ND	0	NA
2014	ND	1	0	0	1	ND	3	ND
2015	ND	0	0	0	0	ND	0	NA
2016	32	1	0	0	1	31	3	ND
2017	55	3	0	0	3	52	3	ND

Source: Measles and rubella elimination Annual Status Update report, 2013-2017

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	3	0	0	0	0	3	0	NA
2014	ND	0	0	0	0	ND	0	NA
2015	ND	0	0	0	0	ND	0	NA
2016	104	0	0	0	0	104	0	NA
2017	81	0	0	0	0	81	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

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	ND	ND	NA	NA	ND	ND	0%	ND
2014	ND	ND	ND	100%	61	1.6%	0%	ND
2015	ND	ND	NA	NA	39	0%	0%	100%
2016	9.3	ND	ND	100%	32	3.1%	100%	100%
2017	0	NA	100%	100%	55	5.5%	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

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
201		ND	ND	NA	NA	ND	ND	0%	ND
201	4	ND	ND	NA	NA	120	0%	0%	ND
201	5	ND	ND	NA	NA	91	0%	0%	100%
201	6	31.3	ND	NA	NA	104	0%	100%	100%
201	7	0	NA	100%	NA	81	0%	NA	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 Regional Verification Commission for Measles and Rubella Elimination (RVC) concluded that endemic transmission of both measles and rubella remained interrupted in Iceland in 2017 and confirmed that measles and rubella elimination has been sustained. Recognizing low incidence of imported cases, the RVC nevertheless recommends genotyping of cases and inclusion of measles genotyping data in future ASUs.

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%

