


Measles and rubella elimination country profile

Greece

Measles elimination status


2016 eliminated
2017 eliminated



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

Rubella elimination status

2016 eliminated
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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	11 159 773
< 1 year old	82 222
< 5 years old	457 990

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

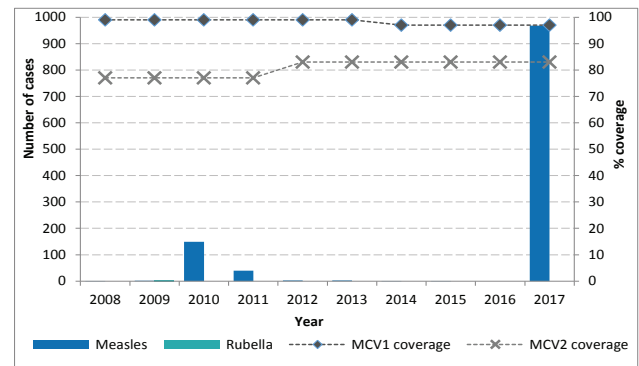
Measles and rubella immunization schedule, 2017

	Vaccine	Schedule	Year of introduction	
MCV1	MMR	12-15 months	MCV2	Prior to 1995
MCV2	MMR	4-6 years	RCV	Prior to 1995
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

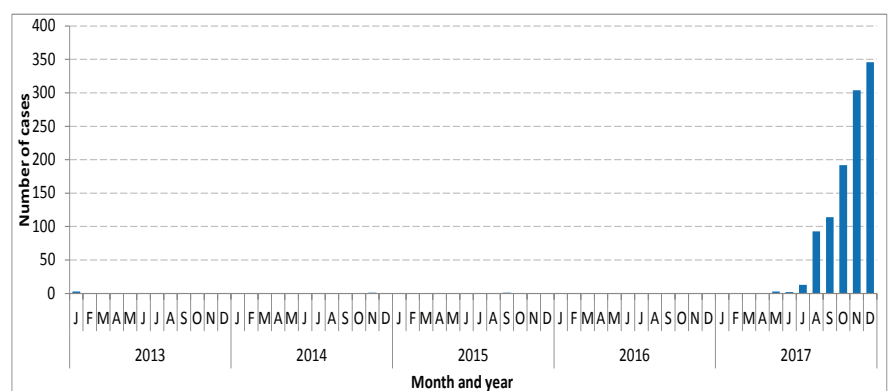
Definition used for an outbreak

At least two measles or rubella cases including cases with epidemiological links



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

Confirmed measles cases by month of onset, 2013-2017



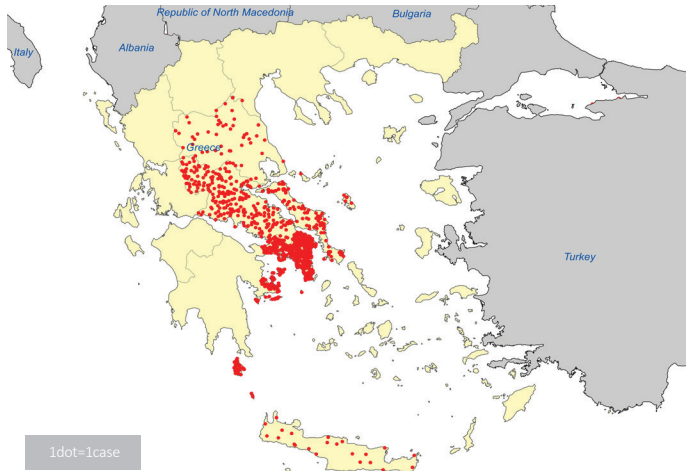
Source: CSISD 2017



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Measles cases by first subnational level, 2017



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

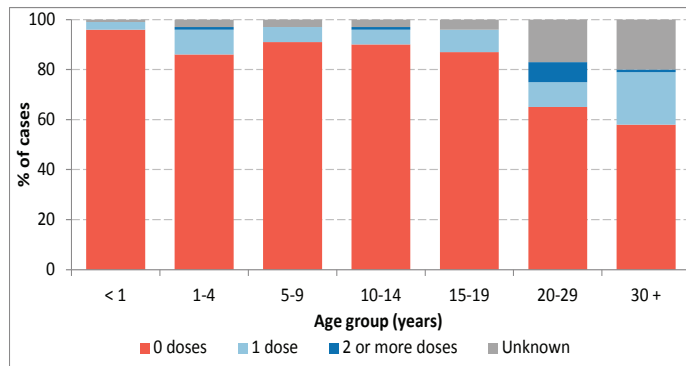
Measles genotypes by first subnational level, 2017



Source: MeaNS 2017

Note: 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



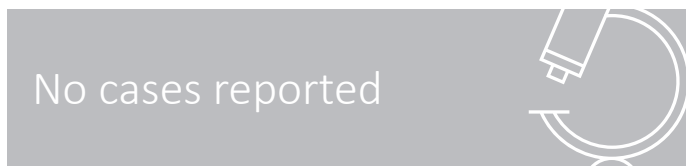
Source: Measles and rubella elimination Annual Status Update report, 2017
Note: Excludes imported cases

Sources of infection, 2017

	Measles	Rubella
Imported	3	0
Import-related	965	0
Unknown/ Not reported	0	0
Endemic	0	0

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

Supplementary immunization activities

Year	Target age	Vaccine used	% Coverage
2017	9M-18Y	MMR	ND
2016	1-<15Y	MMR	83%

Source: Supplementary immunization activities, WHO, Data and Statistics, Immunization Monitoring and Surveillance (http://www.who.int/immunization/monitoring_surveillance/data/en/)
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	0	4	0	0	4	0	0.4	ND
2014	238	1	0	0	1	237	0.1	D8
2015	252	0	0	1	1	251	0.1	ND
2016	339	0	0	0	0	339	0	NA
2017	1411	574	328	66	968	443	89.6	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	ND	ND	100%	ND	ND	ND	ND	ND
2014	2.2	ND	100%	100%	238	0.4%	ND	ND
2015	2.3	ND	99.6%	100%	251	0%	ND	0%
2016	3.1	ND	100%	NA	339	0%	ND	0.5%
2017	4.1	100%	73%	100%	1030	55.7%	100%	49.9%

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	0	0	0	0	0	0	0	NA
2014	679	0	0	0	0	679	0	NA
2015	633	0	0	0	0	633	0	NA
2016	828	0	0	0	0	828	0	NA
2017	265	0	0	0	0	265	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

Rubella surveillance and laboratory performance indicators, 2013-2017

	Discarded non-rubella rate	% 1st sub-national unit with ≥ 2 discarded cases	% cases with adequate laboratory investigation	% origin of infection known	# specimen tested for rubella	% positive for rubella	Rate of viral detection	% WHO and proficient labs
2013	ND	ND	100%	NA	ND	0%	ND	ND
2014	6.3	ND	100%	NA	679	0%	ND	ND
2015	5.9	ND	100%	NA	633	0%	ND	0%
2016	7.7	ND	100%	NA	828	0%	ND	0%
2017	2.5	100%	100%	NA	265	0%	ND	0%

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 Greece in 2017 and confirmed that measles and rubella elimination has been sustained. The RVC notes the national verification committee for measles and rubella elimination (NVC) conclusion that measles transmission has been re-established but refers to the current definition of re-establishment as 12 months of uninterrupted transmission. Based on this definition the RVC concluded that for 2017 measles in Greece remained eliminated but, as the measles outbreak has spread throughout the country and continued into 2018, the RVC is concerned that evidence for ongoing transmission for >12 months will be forthcoming and that Greece will have re-established measles transmission in 2018. The RVC urges for activities in response to the outbreak, and is anticipating a detailed ASU for 2018.

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

Surveillance performance indicators and targets

- Rate of discarded cases: at least 2 discarded measles or rubella cases per 100 000 population
- % cases with adequate laboratory investigation: ≥ 80%
- % origin of infection known: ≥ 80%
- Rate of viral detection: ≥ 80%