Measles and rubella elimination country profile Greece



Measles elimination status



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

National plan of action



Source: Rubella Elimination Annual Status Update report, 2016 ND = Data not available

Measles and rubella immunization schedule, 2016

	Vaccine	Schedule	Year of introduction				
MCV1	MMR	12-15 months	MCV2	Prior to 1995			
MCV2	MMR	4-6 years	RCV	Prior to 1995			
Me	Measles vaccination in school						

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

 $\frac{\text{MMR} = \text{measles-mumps-rubella-containing vaccine; MCV1} = \text{first dose measles-containing vaccine; MCV2} = \text{second dose measles-containing vaccine; RCV} = \text{rubella-containing vaccine}$

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, 2016

Rubella elimination status

2015 interrupted 2016 eliminated

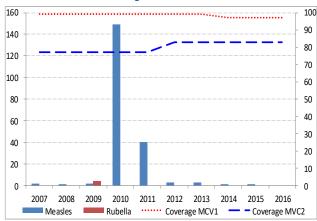
Source: Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report (www.euro.who.int/6thRVC)

Demographic information, 2016

Total population	10 919 459	
< 1 year old	91 923	
< 5 years old	523 839	

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

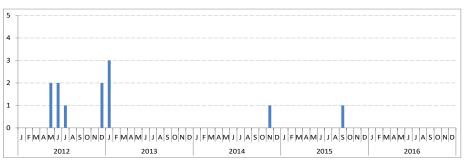
[http://www.who.int/immunization/monitoring_surveillance/data/en/]

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

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Measles incidence, epidemiologic and virologic characteristics, 2012-2016

	Suspected measles		Confirmed m	easles cases	Discarded as	Measles	Genotypes	
	cases	Laboratory	Epi- linked	Clincally	Total	non- measles	incidence	detected
2012	ND	3	0	0	3	ND	0.3	ND
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

Source: Measles and rubella elimination Annual Status Update report, 2012-2016

ND = Data not available: NA= Not applicable

Rubella incidence, epidemiologic and virologic characteristics, 2012-2016

	Suspected rubella		Confirmed m	easles cases	Discarded as	Rubella	Genotypes	
	cases	Laboratory	Epi- linked	Clincally	Total	non- rubella	incidence	detected
2012	0	0	0	0	0	0	0	NA
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

Source: 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	0	ND	100%	100%	ND	ND	ND	ND
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%

Source: ASU 2012-2016, MeaNS 2012-2016 and laboratory accreditation results 2012-2016 ND = Data not available; NA= Not applicable

A proficient laboratory is WHO accredited and/or has an established quality assurance programme with oversight

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	ND	ND	ND	NA	ND	0%	ND	ND
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%

Source: ASU 2012-2016, RubeNS 2012-2016 and laboratory accreditation results 2012-2016

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 Greece in 2016. Considering the RVC's conclusions on the interrupted status of measles and rubella transmission in 2014 and 2015, it is pleased to declare that Greece has achieved elimination of both measles and rubella. The RVC commends Greece on this achievement. The RVC also commends the national health authorities on the surveillance and immunization activities carried out for the migrant and refugee population, but urges them to improve measles and rubella surveillance sensitivity and to consider a system of routine collection of MRCV coverage data by subnational levels. The RVC requests the National Verification Committee (NVC) to provide detailed epidemiological information on measles and rubella cases (suspected, discarded and confirmed) and consistent information about the proficiency of laboratories providing measles and rubella investigations in the next ASU.

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%



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Information on CRS, 2016



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

Supplementary immunization activities

Year	Target age	Vaccine used	% Coverage
2016	1 - < 15 years	MMR	83%
NA			
NA			

Source: Supplementary immunization activities, WHO, Data and Statistics, Immunization Monitoring and Surveillance (http://www.who.int/immunization/monitoring_surveillance/data/en/) NA= Not applicable; MMR = measles-mumps-rubella vaccine