Measles and rubella elimination country profile Portugal



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 NA= Not applicable

Measles and rubella immunization schedule, 2016

	Vaccine	Schedule	Year of introductior	
MCV1	MMR	1 year	MCV2	1990
MCV2	MMR	5-6 years	RCV	1984
Me	ND			

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

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

Definition used for an outbreak

Two or more cases epidemiologically linked

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



Rubella elimination status



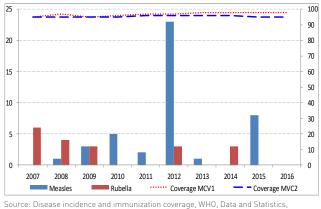
Source: Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report (www.euro.who.int/6thRVC)

Demographic information, 2016

Total population	10 304 434	
< 1 year old	82 523	
< 5 years old	427 592	

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

Measles and rubella cases and immunization coverage, 2007–2016



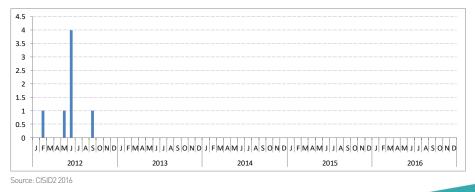
Immunization Monitoring and Surveilance

(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



Measles and rubella elimination country profile Portugal



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	5	1	1	7	ND	0.4	D4,H1
2013	7	1	0	1	2	5	0.2	D8
2014	6	0	0	0	0	6	0	NA
2015	22	0	0	0	0	22	0	NA
2016	12	0	0	0	0	12	0	NA

purce: 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		Confirmed m	easles cases	i	Discarded as	Rubella incidence	Genotypes detected
	cases	Laboratory	Epi- linked	Clincally	Total	non- rubella		
2012	ND	0	0	2	2	ND	0.2	ND
2013	0	0	0	0	0	0	0	ND
2014	10	1	0	4	5	5	0.3	ND
2015	25	0	0	6	6	19	0.6	2B
2016	17	0	0	7	7	10	0.7	ND

Source: 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

RVC comments, based on 2016 reporting

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	% WH0 and proficient labs
2012	0.2	ND	96%	100%	ND	ND	ND	ND
2013	0.1	0%	85.7%	100%	ND	ND	100%	ND
2014	0	0%	100%	NA	4	0%	0%	ND
2015	0.1	0%	100%	NA	8	0%	0%	100%
2016	0.1	0%	100%	NA	7	0%	0%	100%

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 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	0	ND	0%	0%	ND	ND	ND	ND
2013	NA	NA	NA	NA	ND	0%	0%	ND
2014	0	0%	30%	100%	3	33.3%	0%	ND
2015	0.1	0%	80%	ND	15	0%	0%	80%
2016	0.1	0%	85.7%	ND	8	0%	0%	75%

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

The Regional Verification Commission for Measles and Rubella Elimination (RVC) concluded that endemic transmission of both measles and rubella remained interrupted in Portugal in 2016, and confirmed that measles and rubella elimination has been sustained. The RVC appreciates the issues identified by the National Verification Committee (NVC) on surveillance performance and declining MRVC coverage and shares similar concerns. The RVC urges national health authorities to undertake necessary measures to improve the surveillance performance and address the declining vaccination coverage.

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%

Information on CRS, 2016

Sources of infection, 2016

	Measles	Rubella
Imported	0	0
Import-related	0	0
Unknown/ Not reported	0	7
Endemic	0	0