

Measles and rubella elimination country profile

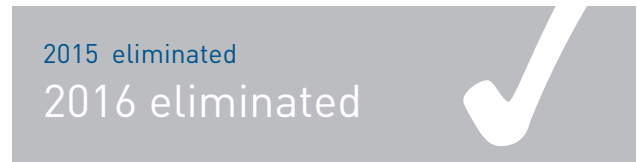
Spain

Measles elimination status



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

Rubella elimination status



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

National plan of action



Source: Measles and rubella elimination Annual Status Update report, 2016
ND= Data not available

Demographic information, 2016

Total population	46 064 604
< 1 year old	411 803
< 5 years old	2 042 034

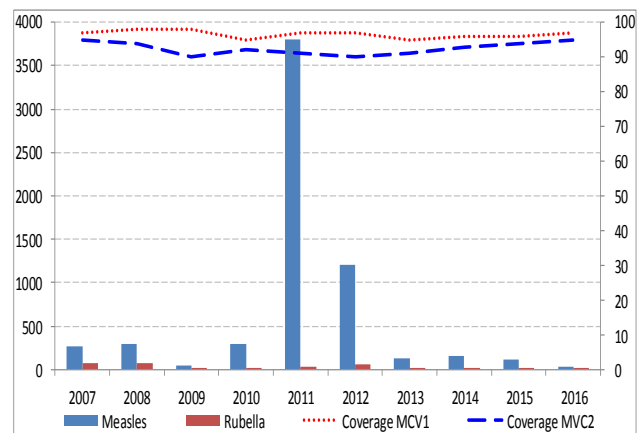
Source: World Population Prospects: The 2015 Revision, New York, United Nations

Measles and rubella immunization schedule, 2016

	Vaccine	Schedule	Year of introduction	
MCV1	MMR	12 months	MCV2	1996
MCV2	MMR	3-4 years	RCV	1978
Measles vaccination in school				No

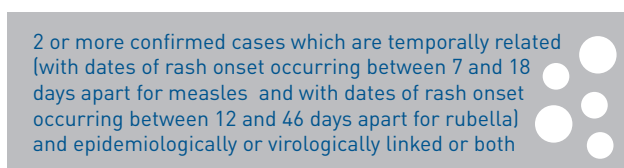
Source: Immunization schedule, WHO, Data and Statistics, Immunization Monitoring and Surveillance (http://www.who.int/immunization/monitoring_surveillance/data/en/)
MMR = measles-mumps-rubella-containing vaccine; MCV1 = first dose measles-containing vaccine; MCV2 = second dose measles-containing vaccine; RCV = rubella-containing vaccine

Measles and rubella cases and immunization coverage, 2007-2016



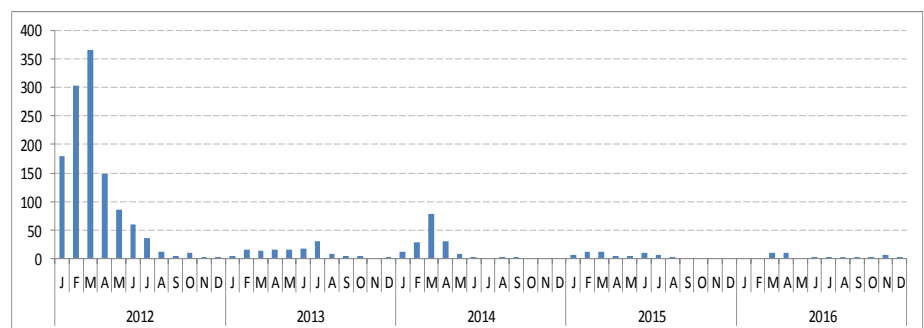
Source: Disease incidence and immunization coverage, WHO, Data and Statistics, Immunization Monitoring and Surveillance (http://www.who.int/immunization/monitoring_surveillance/data/en/)
MCV1 = first dose of measles-containing vaccine
MCV2 = second dose of measles-containing vaccine

Definition used for an outbreak



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

Confirmed measles cases by month of onset, 2012-2016



Source: CISID2 2016



Measles and rubella elimination country profile

Spain

Measles cases by first subnational level, 2016



1 dot=1 case

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

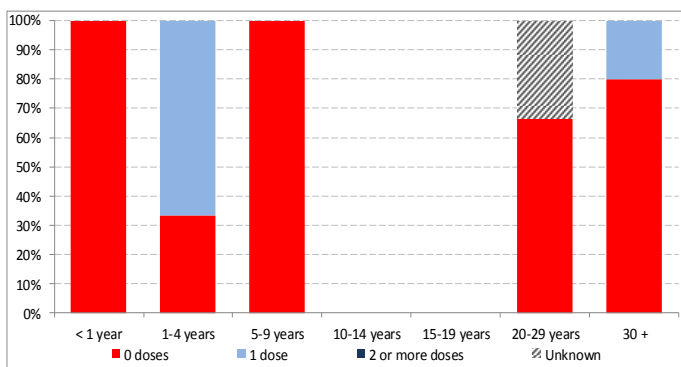
Measles genotypes by first subnational level, 2016



Source: MeaNS 2016

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, 2016



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

Sources of infection, 2016

	Measles	Rubella
Imported	11	1
Import-related	23	1
Unknown/ Not reported	1	0
Endemic	0	0

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

Information on CRS, 2016



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

Measles and rubella elimination country profile

Spain

Measles incidence, epidemiologic and virologic characteristics, 2012-2016

	Suspected measles cases	Confirmed measles cases				Discarded as non-measles	Measles incidence	Genotypes detected
		Laboratory	Epi-linked	Clinically	Total			
2012	ND	713	243	148	1 204	ND	25	B3,D4,D8
2013	217	109	14	8	131	86	2.5	B3,D8
2014	339	150	3	6	159	181	3.3	B3,D8
2015	115	32	3	2	37	78	0.8	B3,D8,H1
2016	98	27	8	0	35	63	0.8	B3,D8

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 investigation	% origin of infection known	# specimen tested for measles	% positive for measles	Rate of viral detection	% WHO and proficient labs
2012	ND	ND	92.6%	54.6%	1 517	73%	ND	ND
2013	18%	0%	92.2%	96.2%	324	49%	68.8%	ND
2014	38%	ND	98.8%	96.2%	383	50%	100%	ND
2015	17%	ND	90.4%	86.5%	158	32%	100%	100%
2016	14%	0%	91.8%	97%	135	33%	100%	100%

Source: ASU 2012-2016, MeaNS 2012-2016 and laboratory accreditation results 2012-2016, and internal communication from country 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, 2012-2016

	Suspected rubella cases	Confirmed measles cases				Discarded as non-rubella	Rubella incidence	Genotypes detected
		Laboratory	Epi-linked	Clinically	Total			
2012	ND	56	0	8	64	ND	1.1	2B
2013	17	2	0	0	2	16	0	2B
2014	22	3	0	2	5	18	0.0	1J
2015	29	3	1	0	4	25	0.1	2B
2016	10	2	0	0	2	8	0.0	ND

Source: Measles and rubella elimination Annual Status Update report, 2012-2016, and internal communication from country ND = Data not available; NA= Not applicable
ND = Data not available; NA= Not applicable

Rubella surveillance and laboratory performance indicators, 2012-2016

	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
2012	ND	ND	91.2%	84%	86	80%	ND	ND
2013	0	0%	94.1%	100%	26	12%	ND	ND
2014	0	ND	86.4%	60%	30	37%	100%	ND
2015	0.1	ND	93.1%	50%	30	30%	ND	100%
2016	0	ND	100%	100%	13	23%	ND	100%

Source: ASU 2012-2016, RubeNS 2012-2016 and laboratory accreditation results 2012-2016, and internal communication from country 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 Spain in 2016. The RVC confirmed that rubella elimination has been sustained and, considering the conclusions of the interrupted status of measles transmission in 2014 and 2015, the RVC is pleased to declare that Spain has achieved elimination of measles. The RVC commends Spain on the improvements made in case investigation, laboratory confirmation and genotyping, and providing additional information on rubella through review of CRS cases in hospital registries. The RVC urges the national health authorities to maintain high-quality surveillance and take appropriate measures to ensure high MRCV coverage.

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

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: \geq 80%
- % origin of infection known: \geq 80%
- Rate of viral detection: \geq 80%