

Measles and rubella elimination country profile

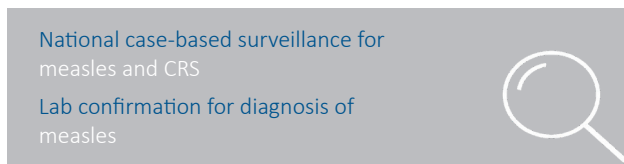
France

Measles elimination status



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

Measles and rubella surveillance



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

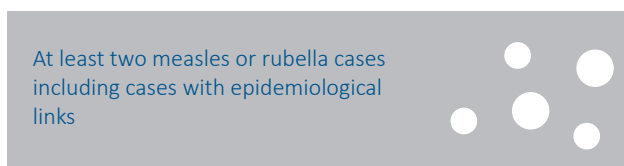
Measles and rubella immunization schedule, 2017

	Vaccine	Schedule	Year of introduction	
MCV1	MMR	12 months	MCV2	1996
MCV2	MMR	18 months	RCV	1970
Measles vaccination in school				ND

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
ND = Data not available

Definition used for an outbreak



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

Rubella elimination status



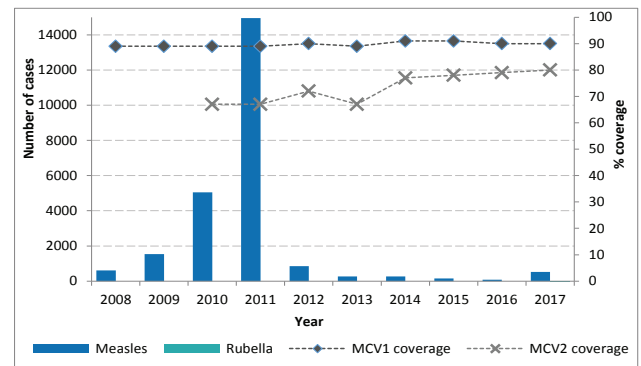
Source: European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: www.euro.who.int/7thrv

Demographic information, 2017

Total population	64 979 548
< 1 year old	754 122
< 5 years old	3 824 185

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

Measles and rubella cases and immunization coverage, 2008–2017

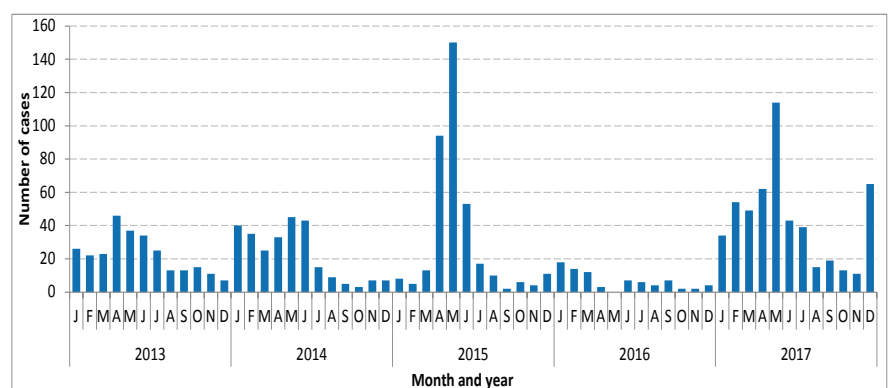


Source: Disease incidence and immunization coverage (WUENIC), WHO, Data and Statistics, Immunization Monitoring and Surveillance

(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

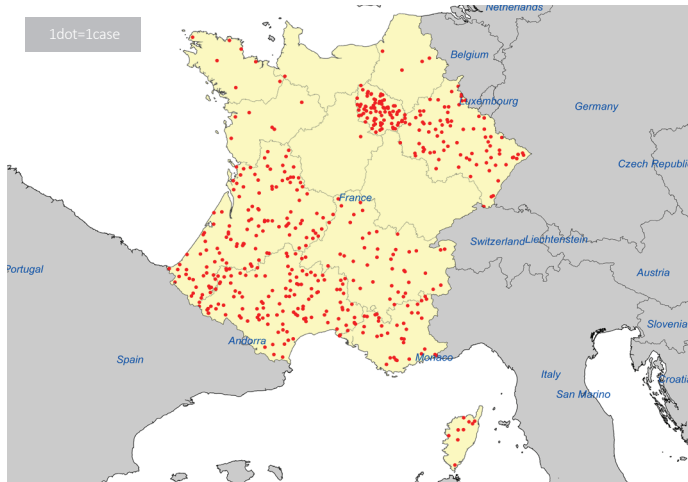


Source: CISID 2017



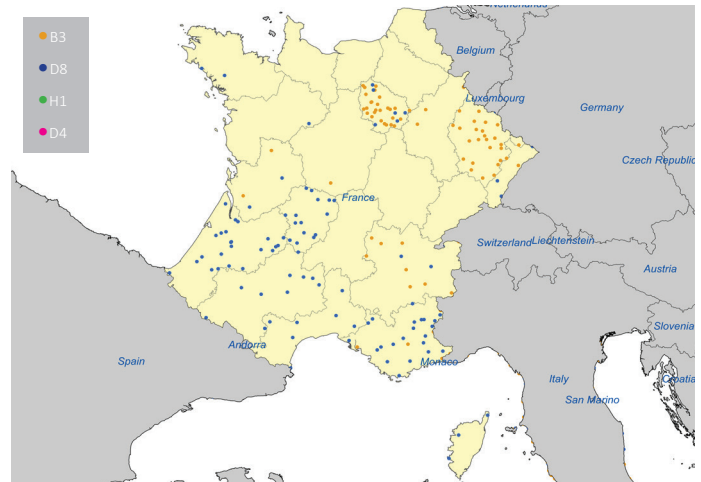
Measles and rubella elimination country profile France

Measles cases by first subnational level, 2017



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

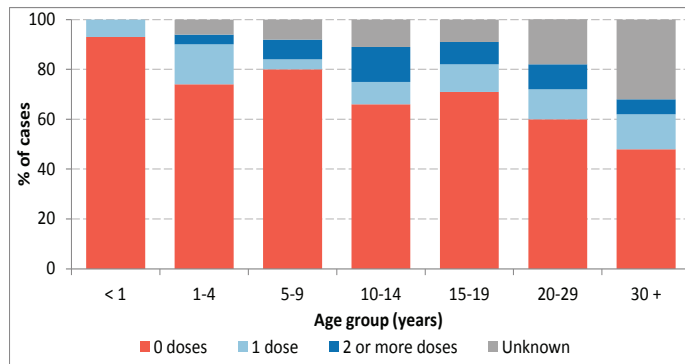
Measles genotypes by first subnational level, 2017



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



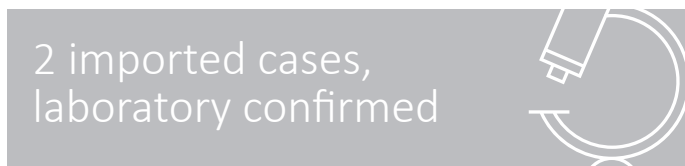
Source: Measles and rubella elimination Annual Status Update report, 2017
Note: Excludes imported cases

Sources of infection, 2017

	Measles	Rubella
Imported	29	4
Import-related	0	0
Unknown/ Not reported	49	0
Endemic	441	3

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
2016	Refugees ≥ 1 and ≤ 35	MMR	63%

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

Measles and rubella elimination country profile

France

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	326	132	8	119	259	67	4	B3,D4,D8,D9
2014	313	137	52	78	267	46	4.1	B3, D8
2015	401	157	136	71	364	36	5.7	B3,D4,D8
2016	112	50	3	26	79	33	1.2	B3, D8
2017	595	349	86	84	519	76	8	B3,D8

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	ND	ND	ND	ND	ND	ND
2014	ND	ND	100%	100%	506	0.6%	100%	ND
2015	ND	ND	42.6%	89.8%	330	19.1%	ND	ND
2016	ND	ND	83%	91%	225	14.2%	ND	100%
2017	ND	ND	74%	92%	489	71.4%	ND	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 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	427	8	0	0	8	383	ND	ND
2014	506	3	0	0	3	491	ND	ND
2015	410	ND	ND	ND	2	376	ND	1E
2016	608	3	0	0	3	538	ND	1E
2017	ND	7	0	0	7	ND	ND	ND

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	ND	ND	ND	ND	ND	ND
2014	ND	ND	ND	ND	14	21.4%	ND	ND
2015	ND	ND	ND	ND	410	0.5%	ND	100%
2016	ND	ND	ND	ND	594	0.6%	ND	100%
2017	ND	ND	ND	ND	235	3.0%	ND	100%

Source: ASU 2013-2017
ND = Data not available; NA= Not applicable
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RVC comments, based on 2017 reporting

Regional Verification Commission for Measles and Rubella Elimination (RVC) commends introduction of mandatory school vaccination for 11 antigens from 2018 and the decision to initiate mandatory notification of rubella from 2019. RVC requests details on the implementation of case-based measles and rubella surveillance, to make it possible for the RVC to monitor standard surveillance indicators, especially sensitivity.

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

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%