

# Measles and rubella elimination country profile

## Germany

### Measles elimination status



Source: European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: [www.euro.who.int/7thrv](http://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	11-14 months	MCV2	1991
MCV2	MMR	15-23 months	RCV	1991
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/](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

### Definition used for an outbreak

At least 2 measles or rubella cases with documentation of an epidemiological link. Definition of outbreaks generally results from the assessment of local public health authorities. Outbreaks are counted for that year in which the outbreak has been notified first

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



### Rubella elimination status



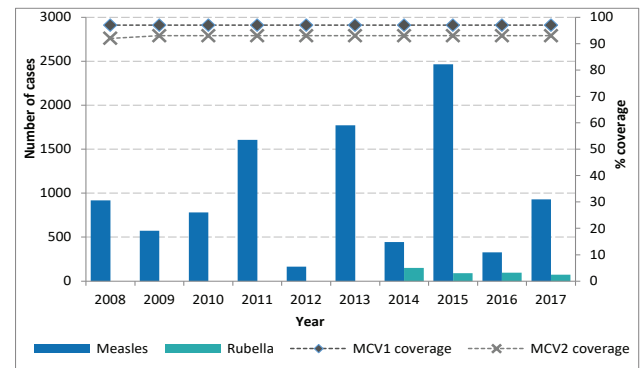
Source: European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: [www.euro.who.int/7thrv](http://www.euro.who.int/7thrv)

### Demographic information, 2017

Total population	82 114 224
< 1 year old	726 720
< 5 years old	3 595 119

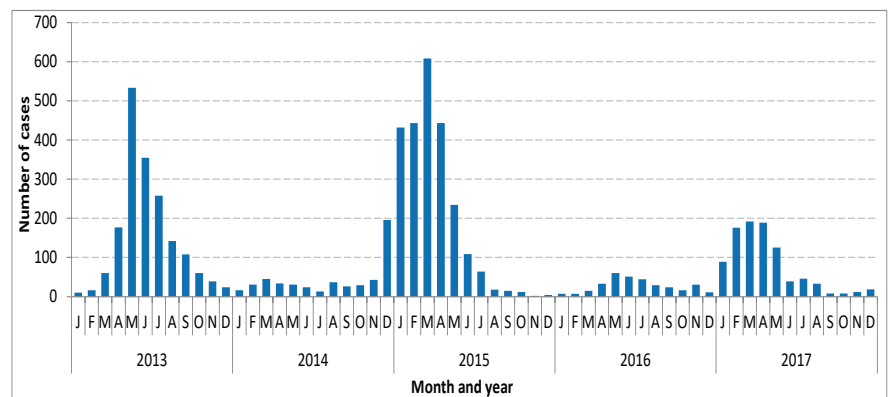
Source: World Population Prospects: The 2017 Revision, New York, United Nations

### 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/](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

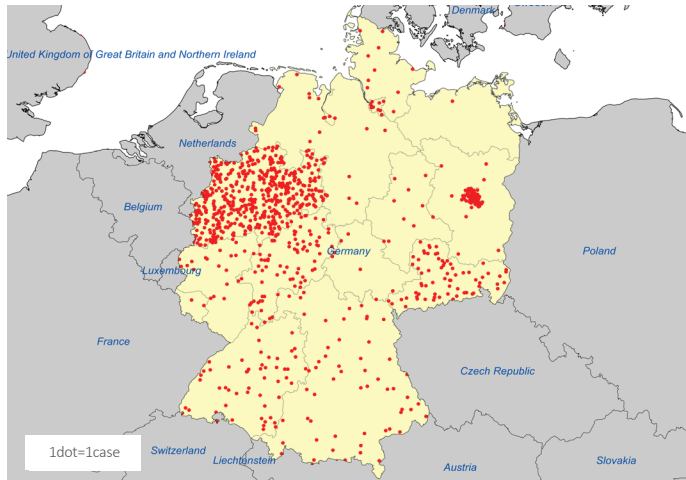


Source: CISID 2017

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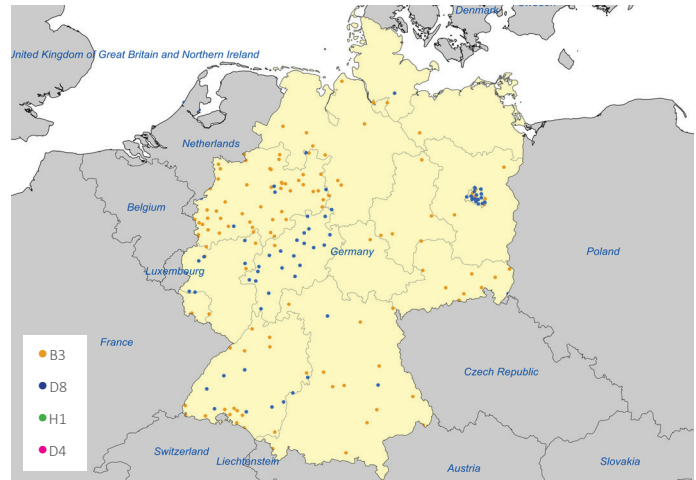
## Germany

### Measles cases by first subnational level, 2017



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

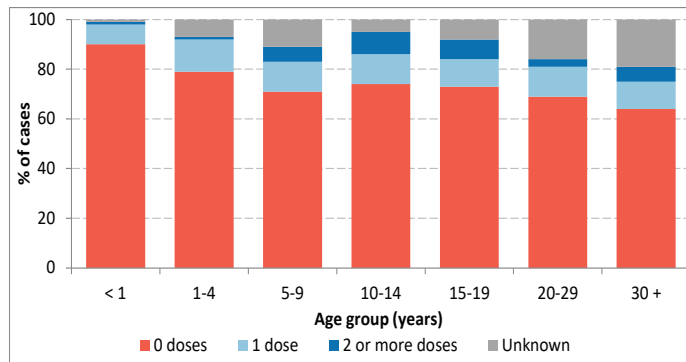
### Measles genotypes by first subnational level, 2017



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	68	1
Import-related	24	0
Unknown/ Not reported	837	73
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	Asylum seekers and refugees born after 1970	MMR	ND
2017	Migrants from ROU and BGR	MMR	ND
2016	Asylum seekers and refugees born after 1970	MMR	ND

Source: Supplementary immunization activities, WHO, Data and Statistics, Immunization Monitoring and Surveillance ([http://www.who.int/immunization/monitoring\\_surveillance/data/en/](http://www.who.int/immunization/monitoring_surveillance/data/en/)) and communication with the country  
MMR = measles-mumps-rubella vaccine  
ND = Data not available

# Measles and rubella elimination country profile

## Germany

### 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	ND	1 037	481	253	1761	ND	20.9	B3,D4,D8,D9
2014	ND	344	57	42	443	ND	4.9	B3,D8,D9,H1
2015	ND	1586	639	239	2464	ND	29.8	B3,D8,H1
2016	391	272	35	19	326	235	3.3	B3, D8
2017	ND	643	257	29	929	7602	10.5	B3, D8

Source: Measles and rubella elimination Annual Status Update report, 2013-2017 and communication with the country  
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	80.4%	3.7%	ND	ND	33.5%	ND
2014	ND	ND	89%	43%	ND	ND	55%	ND
2015	22	ND	87%	21%	ND	ND	52%	ND
2016	11	ND	93%	61%	10 741	3.6%	85%	ND
2017	9	ND	96%	10%	8848	11.1%	84%	ND

Source: ASU 2013-2017 and communication with the 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, 2013-2017

	Suspected rubella cases	Confirmed rubella cases				Discarded as non-rubella	Rubella incidence	Genotypes detected
		Laboratory	Epi-linked	Clinically	Total			
2013	ND	ND	ND	ND	ND	ND	ND	ND
2014	ND	32	6	113	151	ND	1.8	ND
2015	ND	19	2	68	89	ND	1.1	ND
2016	275	22	8	65	95	268	1.1	ND
2017	ND	12	7	55	74	308	0.9	ND

Source: Measles and rubella elimination Annual Status Update report, 2013-2017 and communication with the country  
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	22%	NA	ND	ND	0%	ND
2015	ND	ND	22%	NA	ND	ND	0%	ND
2016	ND	ND	25%	2%	275	9.1%	0%	ND
2017	ND	ND	18%	1%	311	1%	0%	ND

Source: ASU 2013-2017 and communication with the country  
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) commends Germany and the national verification committee for measles and rubella elimination (NVC) on the high-quality report provided. The RVC urges further improvement in the epidemiological surveillance of measles and rubella with better contact tracing. More efforts to identify chains of transmission using epidemiological and laboratory data are needed as well as continued efforts to improve rubella surveillance, including laboratory confirmation of suspected cases and genotyping. Greater efforts are also needed to monitor and improve the immunization status of health care workers.

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