


# Measles and rubella elimination country profile

## Ireland

### Measles elimination status


2016 interrupted  
2017 eliminated



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

### Rubella elimination status

2016 eliminated  
2017 eliminated




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

National case-based surveillance for measles, rubella and CRS

Lab confirmation for diagnosis of measles, rubella and CRS



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

### Demographic information, 2017

Total population	4 761 657
< 1 year old	63 588
< 5 years old	337 794

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

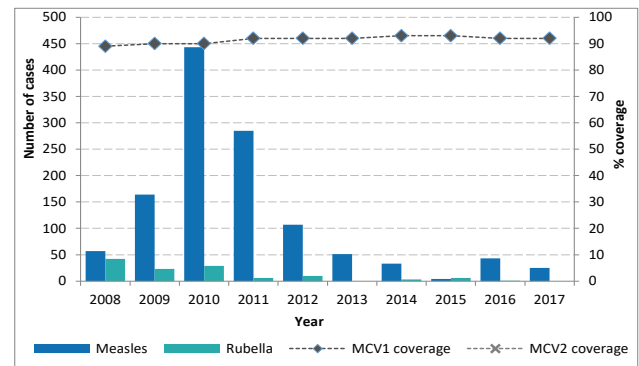
### Measles and rubella immunization schedule, 2017

	Vaccine	Schedule	Year of introduction	
MCV1	MMR	12 months	MCV2	1992
MCV2	MMR	4-5 years	RCV	1971
Measles vaccination in school				Yes

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

### 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

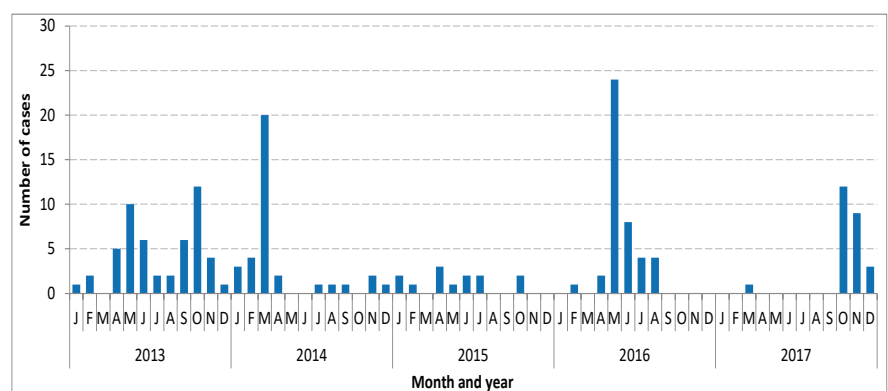
### Definition used for an outbreak

An outbreak may be defined as two or more linked cases of the same illness or the situation where the observed number of cases exceeds the expected number



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

### Confirmed measles cases by month of onset, 2013-2017

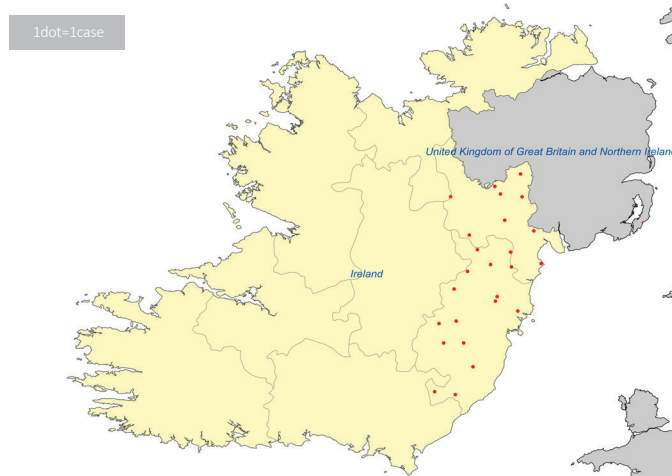


Source: CSISD 2017



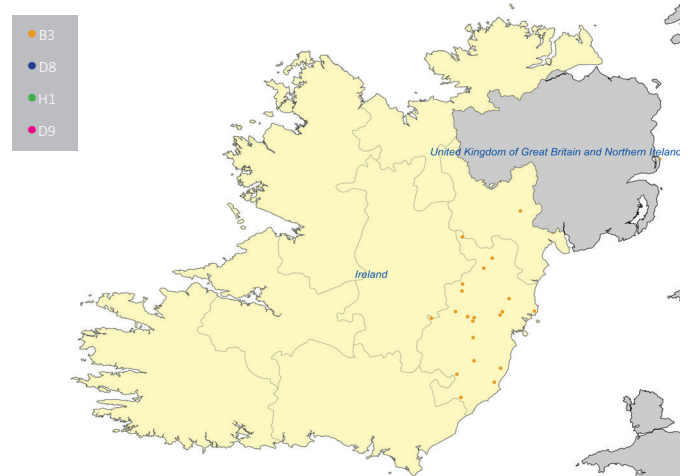
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## Measles cases by first subnational level, 2017



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

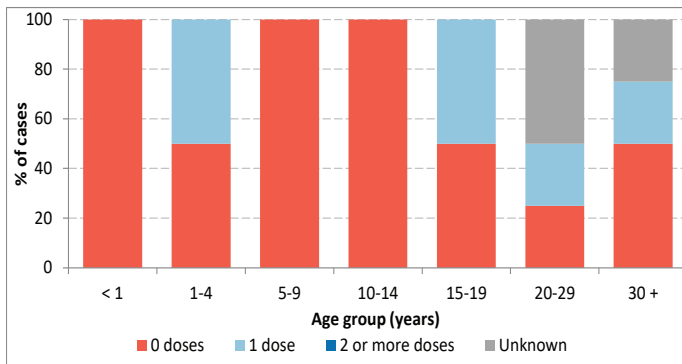
## Measles genotypes by first subnational level, 2017



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



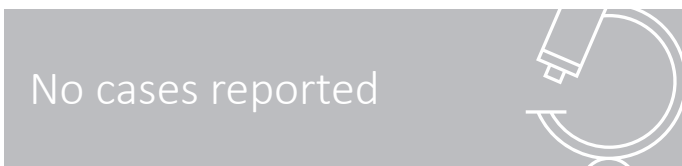
Source: Measles and rubella elimination Annual Status Update report, 2017  
Note: Excludes imported cases

## Sources of infection, 2017

	Measles	Rubella
Imported	0	0
Import-related	1	0
Unknown/ Not reported	0	0
Endemic	24	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

# Measles and rubella elimination country profile Ireland

## 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	33	10	8	51	43	10.5	D4, D8
2014	92	20	5	8	33	59	6.5	B3, D8
2015	71	2	0	0	2	69	0.2	D8
2016	197	43	0	0	43	154	8.7	B3, D8
2017	285	23	0	2	25	260	5.3	B3

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	0.9	12.5%	73%	86%	ND	ND	100%	ND
2014	1.3	25%	95%	52%	23	9.1%	67%	ND
2015	2	63%	99%	100%	333	9.3%	100%	100%
2016	3.4	50%	100%	100%	768	12.0%	100%	100%
2017	5	87.5%	100%	100%	299	7.7%	100%	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	ND	0	0	0	0	ND	0	ND
2014	12	1*	0	2	3	9	0.4	ND
2015	23	0	0	3	3	20	0.4	ND
2016	15	0	0	1	1	14	0.2	ND
2017	16	0	0	0	0	16	0	NA

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  
\* This case was weakly positive for IgM

## 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	0.2	ND	NA	NA	ND	ND	0%	ND
2014	0.2	ND	83.3%	67%	1780	0%	0%	ND
2015	0.4	ND	91%	67%	241	0%	0%	100%
2016	0.3	ND	93%	0%	415	0%	0%	100%
2017	0.3	0%	100%	0%	866	0%	0%	80.1%

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

## RVC comments, based on 2017 reporting

The Regional Verification Commission for Measles and Rubella Elimination (RVC) concluded that endemic transmission of measles remained interrupted in 2017 and verified that measles has been eliminated. The RVC commends the national verification committee for measles and rubella elimination (NVC), national health authorities and public health system on this achievement. It also concluded that endemic transmission of rubella remained interrupted in 2017 and confirmed that rubella elimination has been sustained. The RVC is greatly concerned over the low vaccination coverage reported for Dublin and considers this a potential threat to maintaining elimination status. Further clarification is requested from the NVC on the status of confirmed measles cases as per currently available data on surveillance quality RVC cannot clearly determine decisions are these imported or endemic cases. The RVC would appreciate better consistency between number of suspected cases and number of reported tests.

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%