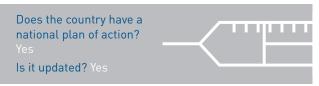


## Measles elimination status



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

## Measles and rubella immunization schedule, 2016

	Vaccine	Schedule	Year of introduction		
MCV1	MMR	1 year	MCV2	1992	
MCV2	MMR	4-5 years	RCV 1971		
Me	Yes				

Source: Immunization schedule, WHO, Data and Statistics, Immunization Monitoring and Surveillance (http://www.vho.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

## 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. Outbreaks may be confined to some of the members of one family or may be more widespread and involve cases either locally, nationally or internationally

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

### Rubella elimination status



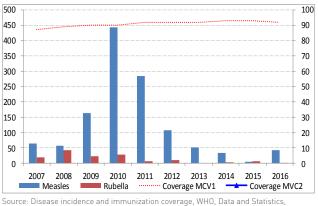
Source:European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: www.euro.who.int/6thRVC

## Demographic information, 2016

Total population	4 713 993		
< 1 year old	68 081		
< 5 years old	344 889		

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

## Measles and rubella cases and immunization coverage, 2007–2016



Source: Disease incidence and immunization coverage, WHO, Data and Statistic Immunization Monitoring and Surveilance

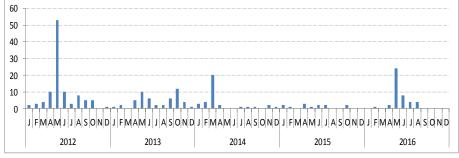
[http://www.who.int/immunization/monitoring\_surveillance/data/en/]

MCV1 = first dose of measles-containing vaccine

MCV2= second dose of measles-containing vaccine

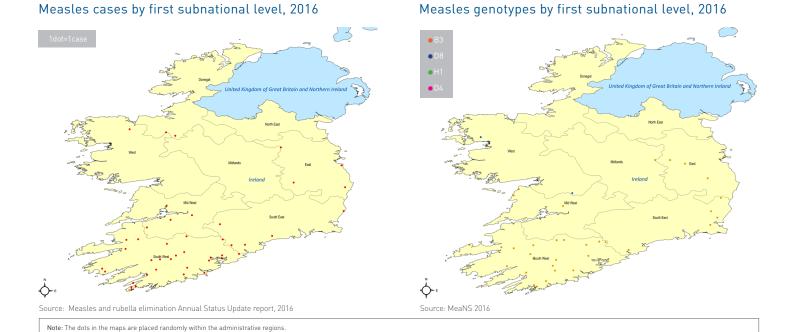


## Confirmed measles cases by month of onset, 2012-2016



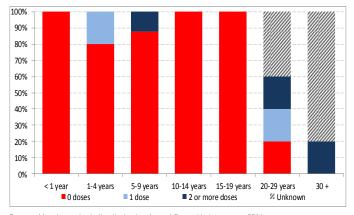
Source: CISID2 2016





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



## Sources of infection, 2016

	Measles	Rubella
Imported	3	0
Import-related	40	0
Unknown/ Not reported	0	1
Endemic	0	0

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

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 incidence, epidemiologic and virologic characteristics, 2012-2016

		Suspected measles	C	Confirmed m	ieasles case	Discarded as non- measles	Measles incidence	Genotypes detected	
	Cases	Labora- tory	Epi- linked	Clincally	Total				
	2012	ND	26	53	25	104	ND	21.4	D4
	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

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

# Rubella incidence, epidemiologic and virologic characteristics, 2012-2016

	Suspected rubella	1	Confirmed m	easles cases	Discarded as	Rubella	Genotypes	
	cases	Laboratory	Epi- linked	Clincally	Total	non- rubella	incidence	detected
2012	ND	1	0	8	9	ND	1.7	ND
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

Source: Measles and rubella elimination Annual Status Update report, 2012-2016, and internal communication from country Incidence calculated per 1 million population No – 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 investiga- tion	% origin of infection known	# specimen tested for measles	% positive for measles	Rate of viral detection	% WHO and proficient labs
2012	ND	ND	70%	89%	ND	ND	ND	ND
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%

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 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	0.3	ND	20%	11%	ND	ND	ND	ND
2013	0.2	ND	NA	NA	ND	ND	0%	ND
2014	0.2	ND	83.3%	67%	1 780	0%	0%	ND
2015	0.4	ND	91%	67%	241	0%	0%	100%
2016	0.3	ND	93%	0%	415	0%	0%	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

A proficient laboratory is WHU 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) commends the National Verification Committee (NVC), national health authorities and public health system on sustained elimination of rubella and interruption of measles transmission. The RVC is concerned about the low vaccination coverage in some areas, particularly around the capital city of Dublin, and urges that steps be taken to increase population immunity in all areas. The RVC urges the national health authorities to improve the rate of viral detection of rubella.

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:  $\ge 80\%$
- c. % origin of infection known: > 80%
- d. Rate of viral detection: ≥ 80%