# Measles and rubella elimination country profile Israel



#### Measles elimination status

2015 eliminated 2016 eliminated

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

#### National plan of action

Does the country have a national plan of action? Is it updated? ND

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

#### Measles and rubella immunization schedule, 2016

	Vaccine	Schedule	Year of introduction		
MCV1	MMR	1 year	MCV2	Prior to 1995	
MCV2	MMR	6 years	6 years RCV		
Me	Yes				

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

#### Definition used for an outbreak

Measles: two or more confirmed cases which are temporally related (with onset of rash in cases occurring between 7 and 18 days after exposure) and epidemiologically or virologically linked or both. Rubella: two or more confirmed cases which are temporally related (with onset of rash in cases occurring between 12 and 46 after exposure) and epidemiologically or virologically linked or both

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

#### Rubella elimination status

2015 eliminated 2016 eliminated



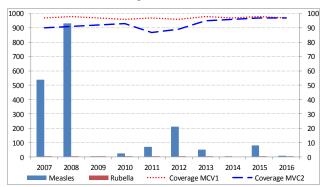
Source: European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: www.euro.who.int/6thRVC

#### Demographic information, 2016

Total population	8 192 463
< 1 year old	166 361
< 5 years old	845 014

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

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



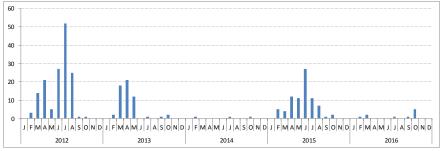
Source: Disease incidence and immunization coverage, WHO, Data and Statistics, Immunization Monitoring and Surveilance

(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

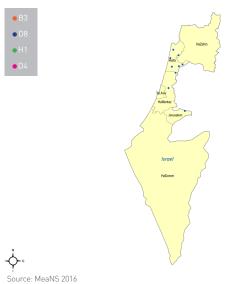
# Measles and rubella elimination country profile Israel



#### Measles cases by first subnational level, 2016



## Measles genotypes by first subnational level, 2016

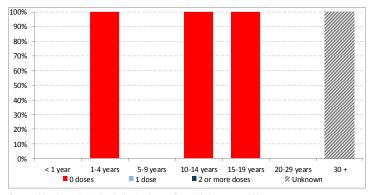


Source: Measles and rubella elimination Annual Status Update report, 2016

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	3	1
Import-related	4	0
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 Israel



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

	Suspected	C	Confirmed m	easles case	S	Discarded as	Measles	Genotypes	
	cases	Labora- tory	Epi- linked	Epi- Clincally Total measle		non- measles	incidence	detected	
2012	ND	105	106	0	211	ND	26.6	B3,D8	
2013	ND	ND	ND	ND	ND	ND	6	B3,D4,D6,D8	
2014	166	5	0	0	5	161	0.6	B3,G3	
2015	324	74	4	2	80	216	9.1	B3,D8,D9	
2016	91	7	1	0	8	83	0.6	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

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

	Suspected rubella		Confirmed m	easles cases	5	Discarded as	Rubella	Genotypes detected
	cases	Laboratory	Epi- linked	Clincally	Total	non- rubella	incidence	
2012	ND	1	0	0	1	ND	0	NA
2013	ND	ND	ND	ND	ND	ND	0.1	ND
2014	89	0	0	0	0	89	0	NA
2015	48	1	0	0	1	47	0.1	ND
2016	69	1	0	0	1	68	0	2B

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 investiga- tion	% origin of infection known	# specimen tested for measles	% positive for measles	Rate of viral detection	% WHO and proficient labs
2012	ND	ND	50%	100%	ND	ND	ND	ND
2013	ND	ND	ND	ND	ND	ND	ND	ND
2014	2	ND	100%	100%	166	3%	100%	ND
2015	3	ND	98.1%	88.8%	296	24.3%	100%	ND
2016	1	ND	98.9%	87.5%	90	7.8%	100%	ND

Source: ASU 2012-2016, MeaNS 2012-2016 and laboratory accreditation results 2012-2016 ND = Data not available; NA= Not applicable

A proficient laboratory is WHO accredited and/or has an established quality assurance programme with oversight

#### 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	ND	ND	100%	100%	ND	ND	ND	ND
2013	ND	ND	ND	ND	ND	ND	ND	ND
2014	1.1	ND	100%	ND	89	0%	ND	ND
2015	0.6	ND	100%	ND	48	2.0%	0	ND
2016	0.8	ND	100%	100%	69	1.5%	0	100%

Source: ASU 2012-2016, RubeNS 2012-2016 and laboratory accreditation results 2012-2016

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 Israel in 2016, and confirmed that measles and rubella elimination has been sustained. The RVC commends the National Verification Committee (NVC), national health authorities and public health system on this achievement but would appreciate further explanation from the NVC and national health authorities of the vaccination coverage data provided, particularly the immunization status of the 24% of children not included in the computerized database. The NVC should consider looking for any additional evidence that confirms similarly high immunization coverage in that part of the population.

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: ≥ 80%
- c. % origin of infection known: ≥ 80%
- d. Rate of viral detection: ≥ 80%

