### Measles and rubella elimination country profile Israel



#### Measles elimination status

2016 eliminated 2017 eliminated

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

#### Measles and rubella surveillance

National case-based surveillance for Lab confirmation for diagnosis of

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

#### Measles and rubella immunization schedule, 2017

	Vaccine	Schedule	Year of introduction		
MCV1	MMR	1 year	MCV2	Prior to 1995	
MCV2	MMR	6 years	RCV Prior t		
N	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 vaccine; MCV1 = first dose measles-containing vaccine; MCV2 = second dose measles-containing vaccine; RCV = rubella-containing vaccir

#### Definition used for an outbreak



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

#### Rubella elimination status

2016 eliminated 2017 eliminated

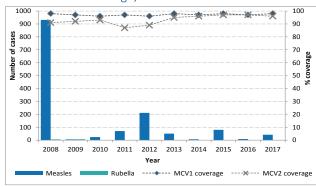
Source: European Regional Verification Commission for Measles and Rubella Elimination (RVC) meeting report: www.euro.who.int/7thrvo

#### Demographic information, 2017

Total population	8 321 570
< 1 year old	166 622
< 5 years old	841 581

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

#### Measles and rubella cases and immunization coverage, 2008-2017



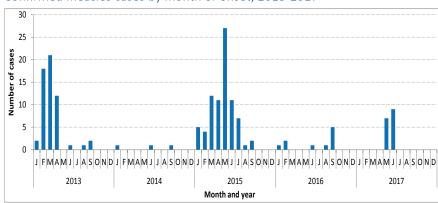
Source: Disease incidence and immunization coverage (WUENIC), WHO, Data and Statistics, Immunization Monitoring and Surveillance

(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



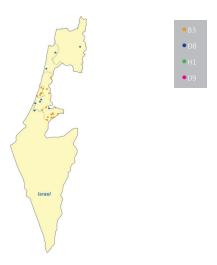
### Measles and rubella elimination country profile Israel



#### Measles cases by first subnational level, 2017



#### Measles genotypes by first subnational level, 2017



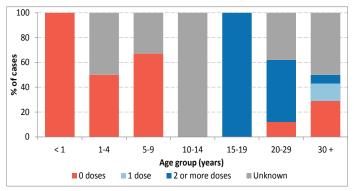
Source: MeaNS 2017

Source: Measles and rubella elimination Annual Status Update report, 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

#### Information on CRS, 2017



Source: Measles and rubella elimination Annual Status Update report, 2017 CRS = congenital rubella syndrome

#### Sources of infection, 2017

	Measles	Rubella
Imported	8	1
Import-related	14	0
Unknown/ Not reported	20	0
Endemic	0	0

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

# Measles and rubella elimination country profile Israel



# Measles incidence, epidemiologic and virologic characteristics, 2013-2017

	Suspected		Confirmed m	neasles cases	Discarded as	Measles	Genotypes		
	cases	Laboratory	Epi- linked	Clinically			incidence	detected	
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	
2017	180	40	1	1	42	138	4.9	B3,D8	

Source: Measles and rubella elimination Annual Status Update report, 2013-2017

ND = Data not available: NA= Not applicable

# Rubella incidence, epidemiologic and virologic characteristics, 2013-2017

	Suspected		Confirmed r	ubella cases	Discarded as	Rubella	Genotypes	
	cases	Laboratory	Epi- linked	Clinically	Total	non- rubella	incidence	detected
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
2017	60	1	0	0	1	59	0	2B

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	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
2017	ND	ND	95%	52%	180	22.2%	65%	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

### Rubella surveillance and laboratory performance indicators, 2013-2017

		Discarded non- rubella rate	% 1st sub- national unit with ≥ 2 discarded cases	% cases with adequate laboratory investigtion	% origin of infection known	# specimen tested for rubella	% positive for rubella	Rate of viral detection	% WHO and proficient labs
20	013	ND	ND	ND	ND	ND	ND	ND	ND
20	014	1.1	ND	100%	ND	89	0%	ND	ND
20	015	0.6	ND	100%	ND	48	2.0%	0	ND
20	016	0.8	ND	100%	100%	69	1.5%	0	100%
20	017	ND	ND	100%	100%	60	1.7%	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

#### RVC comments, based on 2017 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 2017 and confirmed that measles and rubella elimination has been sustained. Surveillance performance and sensitivity need to be strengthened and better documented.

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

#### 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%

