Measles and rubella elimination country profile
Hungary

World Health Organization
REGIONAL OFFICE FOR Europe

Measles elimination status

2015 eliminated
2016 eliminated

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

Rubella elimination status

2015 eliminated
2016 eliminated

Source: 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?
ND
Is it updated? ND

Source: Rubella Elimination Annual Status Update report, 2016
ND = Data not available

Demographic information, 2016

Total population	9 821 318
< 1 year old	91 711
< 5 years old	453 993

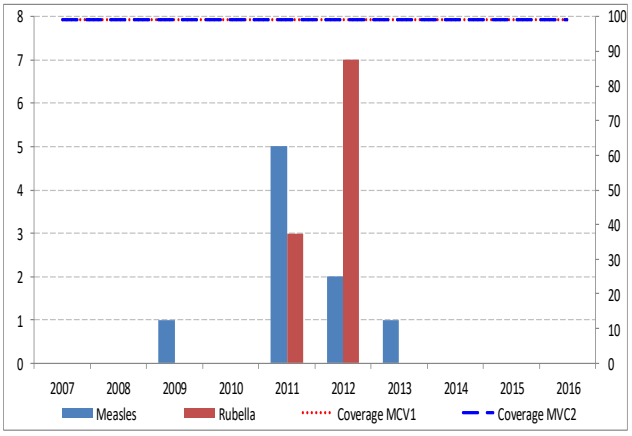
Source: World Population Prospects: The 2015 Revision, New York, United Nations

Measles and rubella immunization schedule, 2016

	Vaccine	Schedule	Year of introduction	
MCV1	MMR	15 months	MCV2	1989
MCV2	MMR	11 years	RCV	1989
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/)
MMR = measles-mumps-rubella-containing vaccine; MCV1 = first dose measles-containing vacccine; MCV2 = second dose measles-containing vaccine; RCV = rubella-containing vaccine

Measles and rubella cases and immunization coverage, 2007–2016



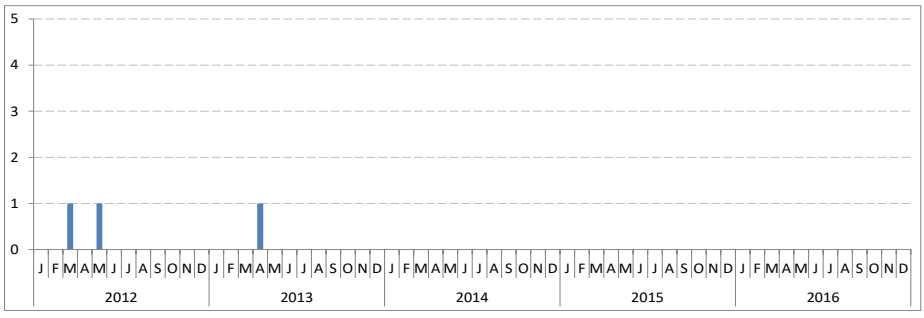
Source: Disease incidence and immunization coverage, WHO, Data and Statistics, Immunization Monitoring and Surveillance (http://www.who.int/immunization/monitoring_surveillance/data/en/)
MCV1 = first dose of measles-containing vaccine
MCV2= second dose of measles-containing vaccine

Definition used for an outbreak

At least two measles or rubella cases including cases with epidemiological links

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

Confirmed measles cases by month of onset, 2012-2016



Source: CISID2 2016

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Measles incidence, epidemiologic and virologic characteristics, 2012-2016

	Suspected measles cases	Confirmed measles cases				Discarded as non-measles	Measles incidence	Genotypes detected
		Laboratory	Epi- linked	Clincally	Total			
2012	ND	2	0	0	2	ND	0	D4
2013	6	1	0	0	1	5	0	D4
2014	0	0	0	0	0	0	0	NA
2015	2	0	0	0	0	3	0	NA
2016	1	0	0	0	0	1	0	NA

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	100%	100%	ND	ND	ND	ND
2013	0.1	ND	100%	100%	ND	ND	ND	ND
2014	NA	NA	100%	NA	2	0%	NA	ND
2015	0.0	ND	100%	NA	71	0%	NA	100%
2016	0.0	NA	100%	NA	89	0%	NA	100%

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 by a WHO accredited laboratory

Rubella incidence, epidemiologic and virologic characteristics, 2012-2016

	Suspected rubella cases	Confirmed measles cases				Discarded as non-rubella	Rubella incidence	Genotypes detected
		Laboratory	Epi- linked	Clincally	Total			
2012	ND	7	0	0	7	ND	6	ND
2013	11	0	0	0	0	11	0	NA
2014	5	0	0	0	0	5	0	NA
2015	3	0	0	0	0	3	0	NA
2016	10	0	0	0	0	10	0	NA

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 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%	29%	ND	ND	ND	ND
2013	0.1	ND	100%	NA	ND	ND	NA	ND
2014	0.1	ND	100%	NA	5	0%	NA	ND
2015	0.0	ND	100%	NA	98	0%	NA	100%
2016	0.1	ND	100%	NA	90	0%	NA	100%

Source: ASU 2012-2016, RubeNS 2012-2016 and laboratory accreditation results 2012-2016
ND = Data not available; NA= Not applicable
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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 Hungary in 2016, and confirmed that measles and rubella elimination has been sustained. The RVC commends Hungary for sustaining a very high level of population immunity. It urges the National Verification Committee (NVC) and national health authorities to strengthen measles and rubella surveillance to the level considered adequate (with a rate of measles and rubella discarded cases ≥2/100 000) and to improve the way in which surveillance performance is presented in the ASU in order to facilitate better documentation of the elimination status.

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%

Information on CRS, 2016

No cases reported

Source: Measles and rubella elimination Annual Status Update report, 2016
CRS = congenital rubella syndrome