World Health Organization
REGIONAL OFFICE FOR South-East Asia

Immunization and Vaccine Development South-East Asia Region

FACTSHEET 2023
MYANMAR

EXPANDED PROGRAMME ON IMMUNIZATION (EPI)

Table 1: EPI History

Year	Milestone
1978	EPI launched
1987	OPV and MCV introduced
2002	AD syringes introduced
2003	HepB vaccine introduced
2008-12	MCV2 introduced partially in 2008 and made available nationwide in 2012
2012	DTP-Hib-HepB vaccine introduced
2015	MR vaccine introduced
2015	IPV introduced
2016	tOPV to bOPV switched on 29 April
2016	PCV introduced in July
2018	JE vaccine introduced in January
2020	Rota vaccine introduced in February
2020	HPV vaccine introduced in October

Source: cMYP 2017-2021 and EPI/MOH

Disclaimer: The boundaries and names shown and the designations used on all 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.

Table 2: Basic information 2022

Total population[1]	54,823,426
Live births[1]	932,056
Children <1 year[1]	888,436
Children <5 years[1]	4,534,046
Children <15 years[1]	12,972,936
Pregnant women[1]	933,486
WCBA (15-49 years)	14,875,969
Neonatal mortality rate[2]	21.66 (per 1,000 LB)
Infant mortality rate[2]	33.72 (per 1,000 LB)
Under-five mortality rate[2]	41.81 (per 1,000 LB)
Maternal mortality ratio[2]	179 (per 100,000 LB)
Division/Province/State/Region	17
Township/District	330
City/Town	396
Village	67,285
Population density[1] (per sq. km)	81
Population living in urban areas[2]	36.90%
Population using at least basic drinking-water services[2]	82%
Population using at least basic sanitation services[2]	74%
Total expenditure on health as % of GDP[2]	0.74%
Births attended by skilled health personnel[2]	60%
Neonates protected at birth against NT[2]	90%
Children not covered by immunization programme (zero dose children)[3]	168,429

1 *SEAR annual EPI reporting form, 2022*
2 *WHO, Global Health Observatory (GHO) data http://apps.who.int/gho/data accessed on 03 August 2023*
3 *DTP1 coverage from WHO and UNICEF estimates of immunization coverage and UN estimated under one population*

Table 3: Immunization schedule, 2022

Vaccine	Age of administration
BCG	Birth to 2 months
HepB	Birth
DTP-Hib-HepB	2 months, 4 months 6 months and 18 months
OPV	2 months, 4 months and 6 months
IPV	4 months
MR	9 months and 18 months
Td	During pregnancy (at first contact and 4 weeks later)
PCV	2 months, 4 months and 6 months
JE_LiveAtd	9 months
Vitamin A	6-59 months
HPV	9 years and 10 years
Rotavirus	2 months and 4 months

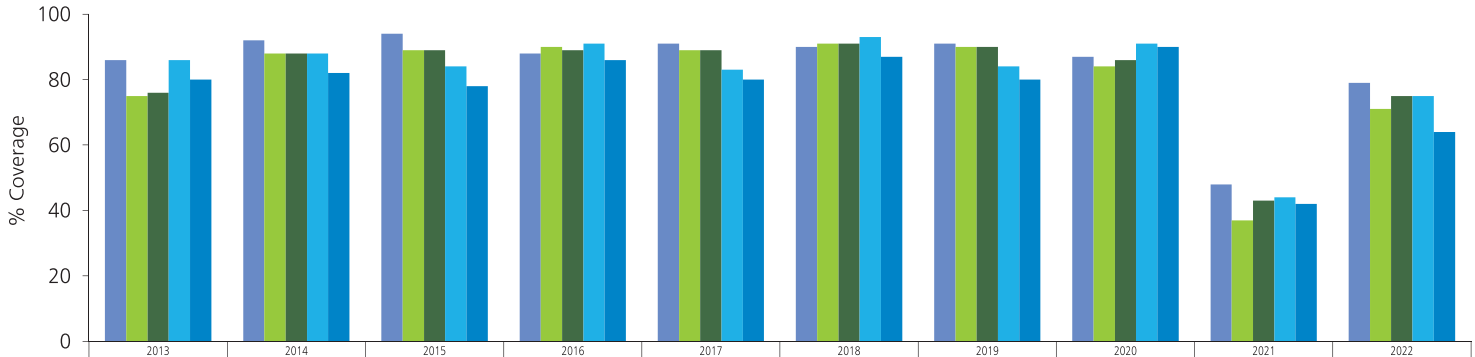
Source: WHO/UNICEF JRF, 2022

Table 4: Immunization system highlights

cMYP for immunization	2017 -2021
NITAG	fully functional
Spending on vaccines financed by the government	28%
Spending on routine immunization programme financed by the government	ND
Updated micro-plans that include activities to improve immunization coverage	315 districts (95%)
National policy for health care waste management including waste from immunization activities	Yes
National system to monitor AEFI	in place
Most recent EPI CES	Vaccination Coverage Evaluation Survey 2019-20
≥80% coverage for DTP-Hib-HepB3	153 districts (46%)
≥90% coverage for MCV1	126 districts (38%)
≥90% coverage for MCV2	77 districts (23%)
≥10% drop-out rate for DTP-Hib-HepB1 to DTP-Hib-HepB3	145 districts (47%)

Source: WHO/UNICEF JRF, 2022

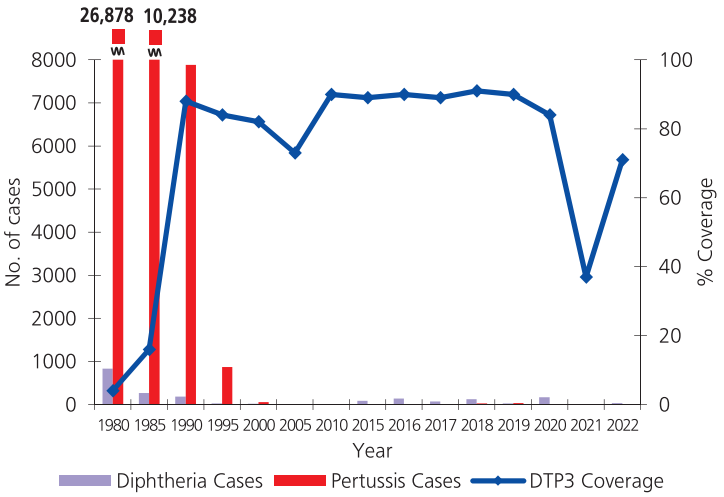
Figure 1: National immunization coverage, 2013-2022



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BCG	86	92	94	88	91	90	91	87	48	79
DTP3	75	88	89	90	89	91	90	84	37	71
OPV3	76	88	89	89	89	91	90	86	43	75
MCV1	86	88	84	91	83	93	84	91	44	75
MCV2	80	82	78	86	80	87	80	90	42	64

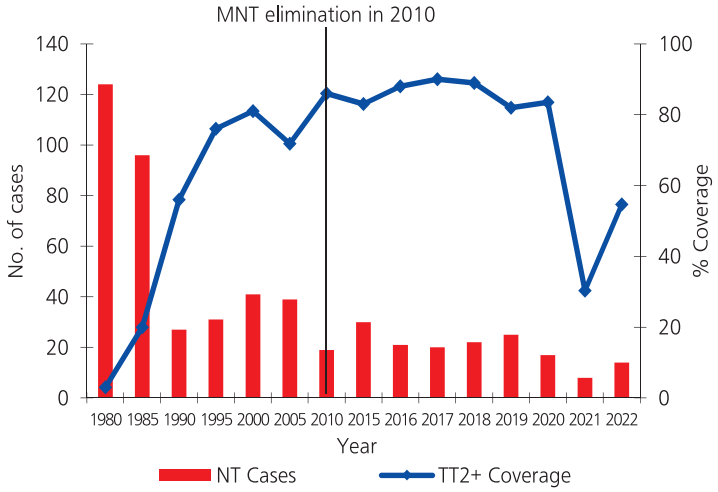
Source: WHO and UNICEF estimates of immunization coverage

Figure 2: DTP3 coverage[1], diphtheria and pertussis cases[2], 1980-2022



[1] *WHO and UNICEF estimates of immunization coverage*
[2] *WHO vaccine-preventable diseases: monitoring system 2022*

Figure 3: TT2+ coverage[1] and NT cases[2], 1980-2022



[1] *Country official estimates, 1980-2022*
[2] *WHO vaccine-preventable diseases: monitoring system 2022*

DTP-Hib-HepB3 coverage by district

Figure 4: 2021

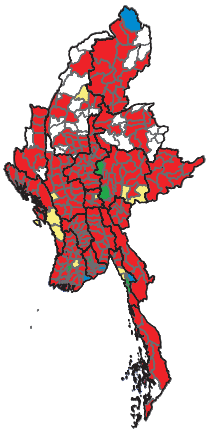
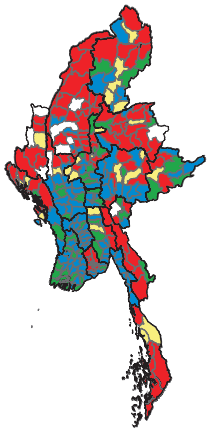


Figure 5: 2022



Source: SEAR annual EPI reporting form, 2021 and 2022 (administrative data)

Table 5: Reported cases of vaccine preventable diseases, 2016-2022

Year	Polio	Diphtheria	Pertussis	NT (% of all tetanus)	Measles	Rubella	Mumps	JE	CRS
2016	0	136	2	21 (11%)	266	10	ND	393	ND
2017	0	68	4	20 (33%)	1,293	6	ND	442	0
2018	0	127	28	22 (38%)	1,389	13	ND	126	8
2019	0[a]	22	30	25 (43%)	5,252	28	ND	115	0
2020	0	169	13	17 (ND)	444	3	ND	75	ND
2021	0	3	ND	8 (ND)	8	3	ND	2	ND
2022	0	29	ND	14 (ND)	10	0	ND	6	ND

[a] *Excludes six type 1 VDPV* *Source: WHO/UNICEF JRF (multiple years)* *ND=No data*

Table 6: AFP surveillance performance indicators, 2016-2022

- Last polio case due to indigenous WPV reported from Rakhine province in February 2000
- Last polio case due to imported WPV reported from Rakhine province in May 2007

Indicator	2016	2017	2018	2019	2020	2021	2022
AFP cases	466	396	335	420	187	33	151
Wild poliovirus confirmed cases	0	0	0	0	0	0	0
Compatible cases	0	0	0	0	0	0	0
Non-polio AFP rate[1]	3.38	2.94	2.5	3.11	1.32	0.25	1.1
Adequate stool specimen collection percentage[2]	96%	95%	94%	90%	86%	85%	89%
Total stool samples collected	931	794	663	839	369	65	294
% NPEV isolation	12	14	13	10	9	9.2	13.2
% Timeliness of primary result reported[3]	96	93	96	97	97	93	96

[1] *Number of discarded AFP cases per 100,000 children under 15 years of age.*
[2] *Percent with 2 specimens, 24 hours apart and within 14 days of paralysis onset.*
[3] *Results reported within 14 days of sample received at laboratory.*

Non-polio AFP rate by district

Figure 6: 2021

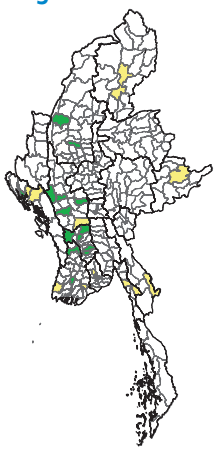
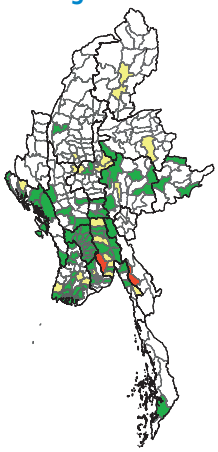
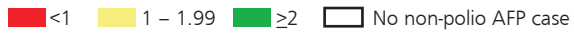


Figure 7: 2022





Adequate stool specimen collection % by district

Figure 8: 2021

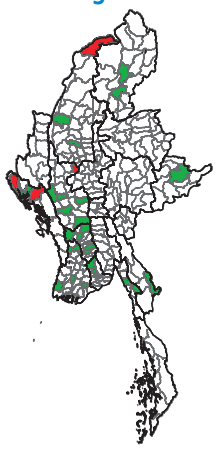


Figure 9: 2022

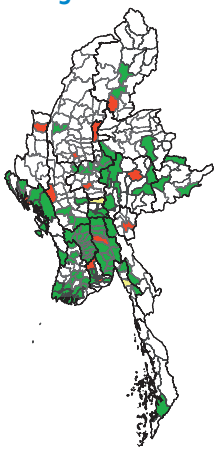


Table 7: Environmental surveillance sites for polio detection, 2019 - 2022

Year	# Provinces	# sites	# samples tested	Isolation								
				SL1	SL3	SL1+SL3	SL2	SL1+SL2	SL1+SL2+SL3	SL2+SL3	VDPV	NPEV
2019	2	3	12	0	2							2
2020	2	3	31	1	3							7
2021	2	3	25	0	2							11
2022	1	1	12	0	0							6

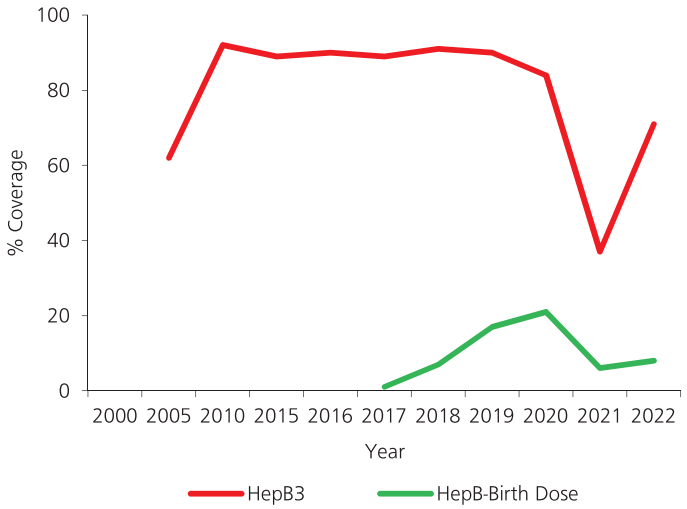
Note: SL1: Sabin like type 1; SL2: Sabin like type 2; SL3: Sabin like type 3; VDPV: Vaccine Derived Polio Virus; NPEV: Non Polio Entero Virus SL2 was isolated due to contamination of bOPV

Table 8: OPV SIAs

Year	Antigen	Geographic coverage	Target age	Target population		Coverage (%)	
				Round 1	Round 2	Round 1	Round 2
2002	OPV	NID	<5 years	6,251,093		97	97
2003	OPV	SNID	<5 years	771,081		95	99
2005	OPV	SNID	<5 years	321,850		99	100
2006	OPV	SNID	<5 years	2,037,606		97	97
2007	OPV	SNID	<5 years	2,416,960		102	99
2007	OPV	NID	<5 years	7,207,399		98	98
2008	OPV	SNID	<5 years	1,825,117		99	-
2009	OPV	NID	<5 years	7,394,415		98	100
2010	OPV	SNID	<5 years	2,229,394		98	100
2011	OPV	SNID	<5 years	2,925,709		98	99
2012	OPV	SNID	<5 years	281,026		99	101
2013	OPV	SNID	<5 years	335,860		97	97
2015	OPV	SNID	<5 years	367,972		97	-
2016	OPV	Mop-up SNID	<5 years	3,017,377		96	99
2016	OPV	Mop-up NID	<5 years	4,908,837		99	99
2017	bOPV	Mop-up	<5 years	372,833		94	89
2019	bOPV	ORI	<5 years	305,313		95	-
2019	bOPV	subnational	<5 years	629,950		88	-
2019	bOPV	Subnational	0-5 years 6 months	1,231,369		91	-

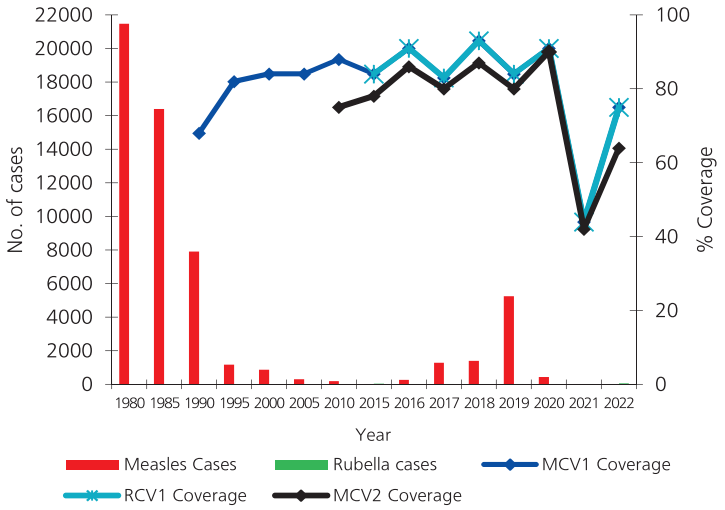
Source: WHO/UNICEF JRF (multiple years)

Figure 10: HepB3 and HepB birth dose immunization coverage[1], 2000-2022



[1] *WHO and UNICEF estimates of immunization coverage*

Figure 11: MCV1 & MCV2 coverage[1] and measles, rubella cases[2], 1980-2022



[1] *WHO and UNICEF estimates of immunization coverage*
[2] *WHO vaccine-preventable diseases: monitoring system 2022*

MR1 coverage by district

Figure 12: 2021

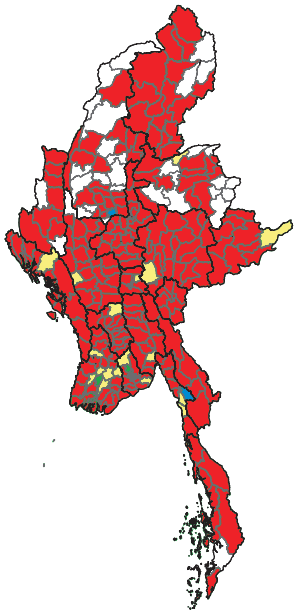
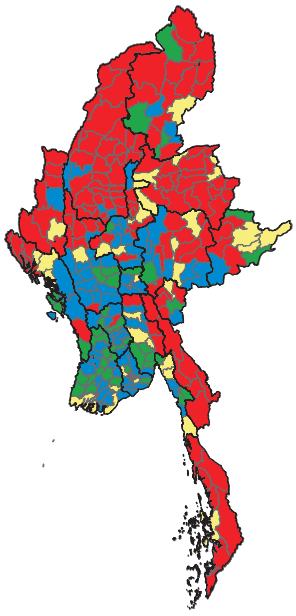


Figure 13: 2022



MR2 coverage by district

Figure 14: 2021

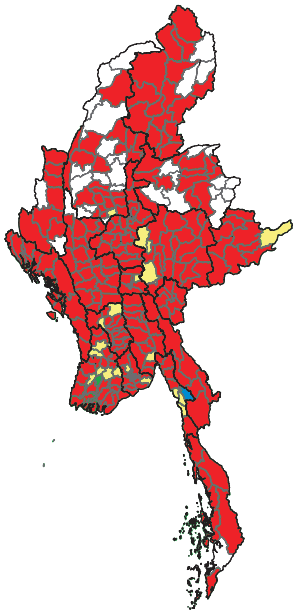
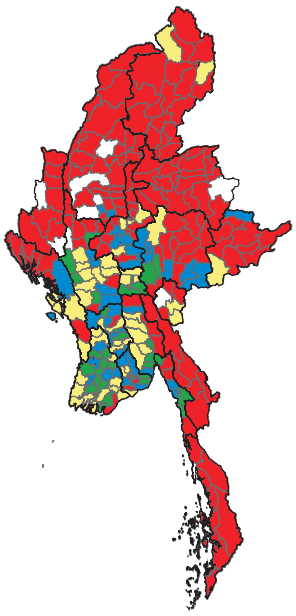
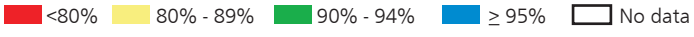


Figure 15: 2022





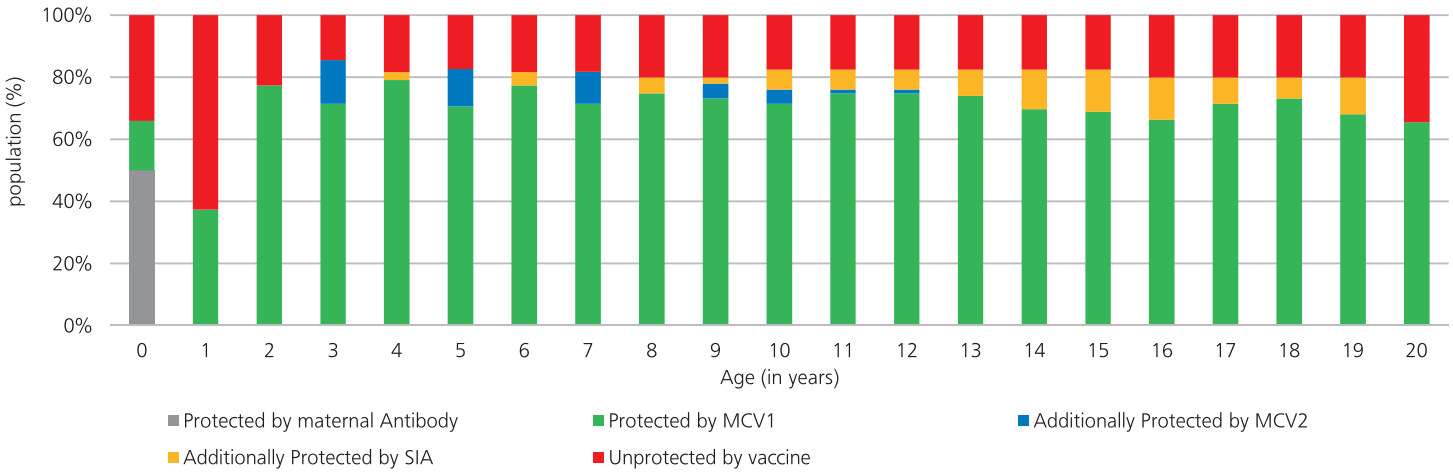
Source: SEAR annual EPI reporting form, 2021 and 2022 (administrative data)

Table 9: MCV/MR SIAs

Year	Antigen	Geographic Coverage	Target group	Target	Coverage (%)
2007	M	nationwide	9 to 59 months	6,056,000	94
2012	M	follow-up	9 to 59 months	6,432,064	97
2015	MR	nationwide	9 months to 15 years	13,958,963	94
2019	MR	subnational	9 months to 15 years	604,230	92
2019	MR	subnational	9 months - 5 Years 6 months	4,234,002	96

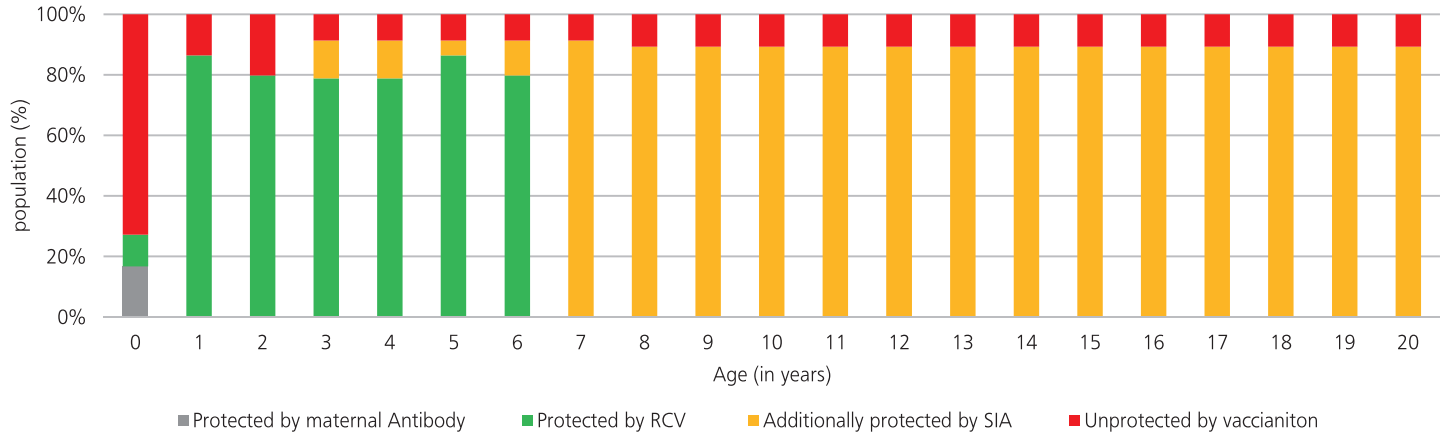
Source: WHO/UNICEF JRF (multiple years)

Figure 16: Immunity against measles - immunity profile by age in 2022*



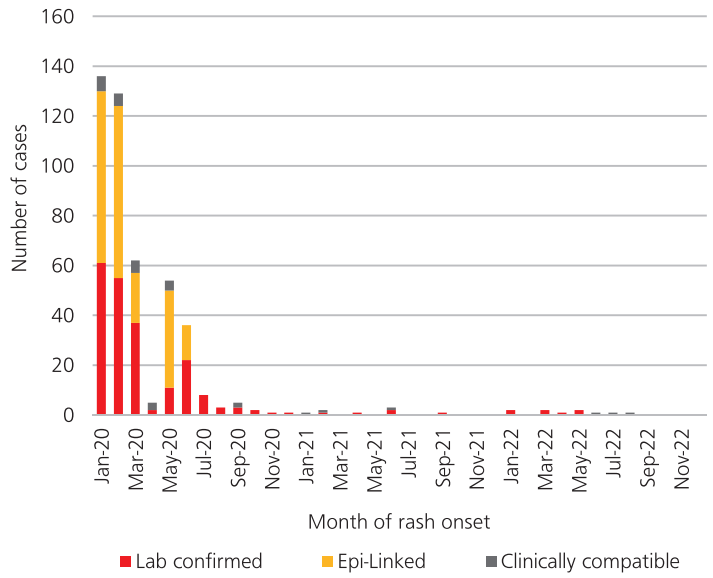
Modelled using MSP tool ver 2

Figure 17: Immunity against rubella through vaccination - immunity profile by age in 2022*



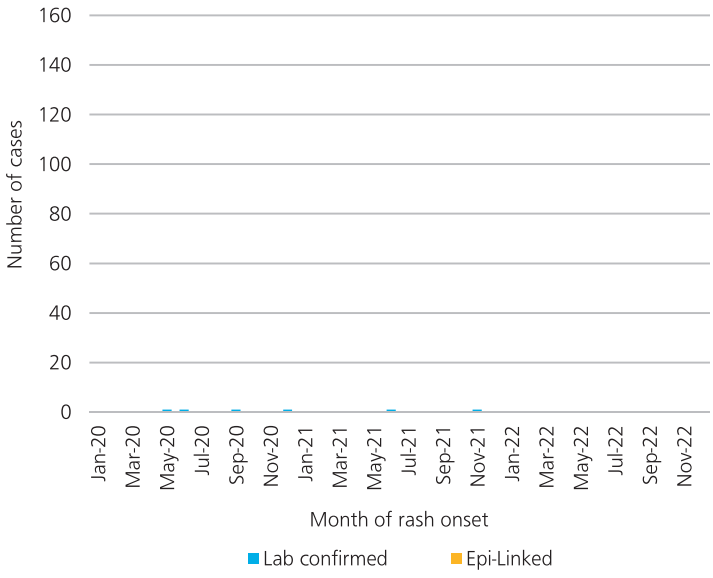
Modelled using WHO and UNICEF estimates and JRF (multiple years) and does not include immunity due to natural infection

Figure 18: Confirmed measles cases* by month 2020-2022



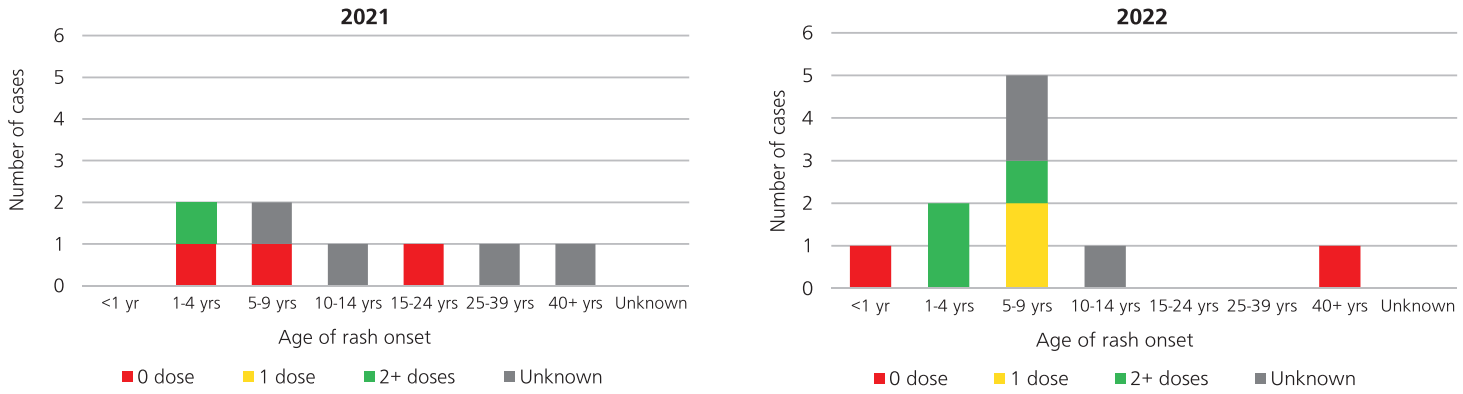
*Includes laboratory confirmed, epidemiologically linked and clinically compatible cases
Source: SEAR measles case-based data

Figure 19: Confirmed rubella cases* by month 2020-2022



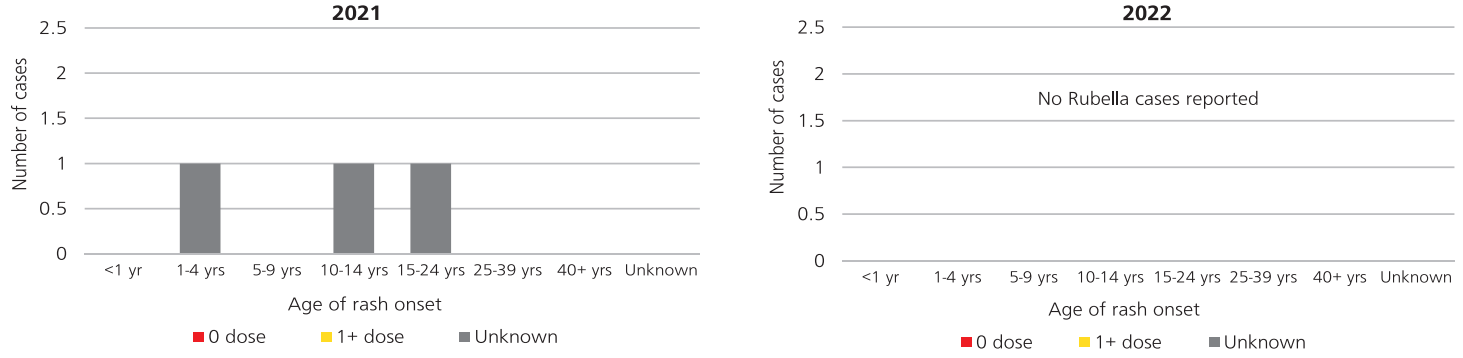
*Includes laboratory confirmed and epidemiologically linked cases
Source: SEAR measles case-based data

Figure 20: Vaccination status of confirmed (laboratory, Epi linked and clinically compatible) measles cases, by age in 2021 and 2022



Source: SEAR measles case-based data

Figure 21: Vaccination status of confirmed (laboratory and Epi linked) rubella cases, by age in 2021 and 2022



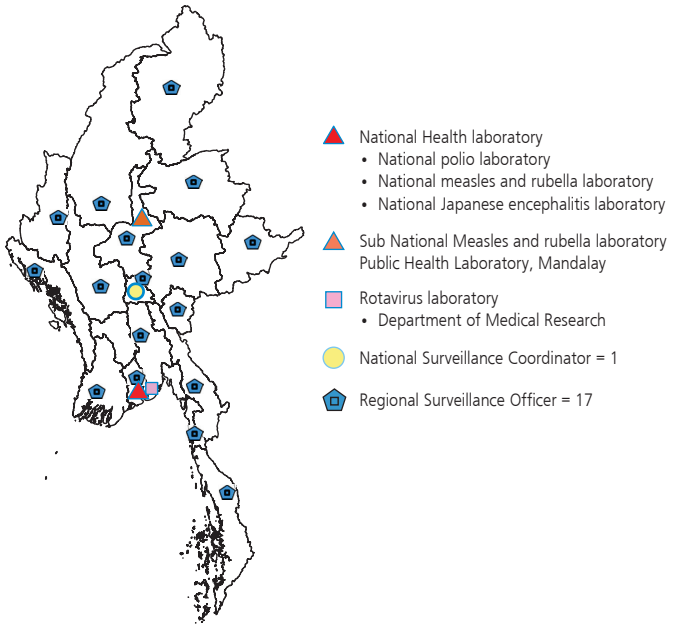
Source: SEAR measles case-based data

Table 10: Summary of measles surveillance indicators, 2020-2022

Indicator	Target	2020	2021	2022
Number of suspected measles cases		680	30	57
Confirmed measles cases	0	444	8	10
Lab confirmed	0	206	5	7
Epi-Linked	0	213	0	0
Clinically-compatible	0	25	3	3
Confirmed rubella cases	0	3	3	0
Lab confirmed	0	3	3	0
Epi-Linked	0	0	0	0
Discarded non-measles non-rubella cases		233	19	47
Percentage of suspected cases with adequate investigation initiated within 48 hours of notification	≥ 80%	96	53	86
Reporting rate of non-measles non-rubella cases to national level per 100,000 population	≥ 2	0.43	0.03	0.09
Percentage of second-level administrative units reporting at least 2 non-measles non-rubella cases per 100,00 population	≥ 80%	6	ND	1
Percentage of surveillance units reporting measles and rubella data to the national level on time, even in the absence of cases	≥ 80%	94	37	ND
Percentage of specimens received at the laboratory within 5 days of collection	≥ 80%	89	53	93
Percentage of IgM results reported to the national public health authorities by the laboratory within 4 days of receipt of specimens	≥ 80%	99	100	100
Genotypes detected				
Measles		ND		
Rubella		ND		

Source: SEAR Annual EPI Reporting Form (multiple years) *ND=No data*

Figure 22: Network of WHO supported surveillance and immunization medical officers and laboratories



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