





EXPANDED PROGRAMME ON IMMUNIZATION (EPI)

EPI HISTORY

- · EPI launched in 1977
- HepB vaccine introduced in 1997
- AD syringe introduced in 2002
- MCV2 introduced in 2004
- DTP-HepB vaccine introduced in 2004 (in
- IPV introduced in one province in 2007
- Pentavalent vaccine introduced in four provinces in 2013 and gradually expended to all provinces by 2014
- tOPV to bOPV switched on 04 April 2016
- IPV vaccine launched in national routine immunization programme from July 2016.
- MR vaccine introduced 6 provinces in Java island during phase 1 from August 2017 and remaining 28 province from August 2018
- PCV introduced in 2 districts of NTB province from October 2017 and expand in another 2
- JE (SA 14142) LiveAtd introduced in Bali province from March 2018
- HPV introduced in all districts of Jakarta Province, 2 districts of Yogyakarta and one district of of East Java province, one in North Sulawesi (Manado City) and one in South Sulawesi (Makassar City)

Source: WHO/UNICEF joint reporting form (JRF) and EPI/ МОН

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 1: Basic information 2019

Total population ¹	268,074,565
Live births ¹	4,766,582
Children <1 year¹	4,674,643
Children <5 years ¹	23,604,923
Children <15 years ¹	70,635,883
Pregnant women ¹	5,311,026
Women of child bearing age ¹ (WCBA) (15-49 years)	46,378,757
Neonatal mortality rate ²	12.7 (per 1,000 LB)
Infant mortality rate ²	21.1 (per 1,000 LB)
Under-five mortality rate ²	25.0 (per 1,000 LB)
Maternal mortality ratio ²	177 (per 100,000 LB)
Division/Province/State/Region	34
District	514
Blocks	7165
Village	74,957
Population density¹ (per sq. km)	138
Population living in urban areas ²	57.2%
Population using at least basic drinking- water services ²	92%
Population using at least basic sanitation services ²	85%
Total expenditure on health as % of GDP ³	5%
Births attended by skilled health personnel ²	95%
Neonates protected at birth NT ²	85%
SEAR annual EPI reporting form, 2019	

- WHO, Global Health Observatory (GHO) data http://apps.who.
- int/gho/data accessed on 06 June 2020;
- Ministry of Finance

Table 2: Immunization schedule, 2019

Vaccine	Age of administration
BCG	Birth
НерВ	Birth 0 – 24 hours
DTP-Hib-HepB	2 months, 3 months, 4 months and 18 months
DT	6 to 7 years
Td	7 to 8 years, 9 to 10 years, 15 to 39 years (Child bearing women)
OPV	1 month, 2 months, 3 months and 4 months
IPV	4 months
MR	9 months, 18 months, 7 years
HPV	11 years, 12 years 5th and 6th grade school girls including out of school girls Jakarta Province, Yogyakarta Province (2 districts), East Java Province (1 district), North Sulawesi (1 district) and South Sulawesi (1 district)
PCV	2 months, 3 months, 12 months (NTB Province and Bangka Belitung Island Province)
JE_LiveAtd	10 months (Bali province)
Vitamin A	6 - 59 months

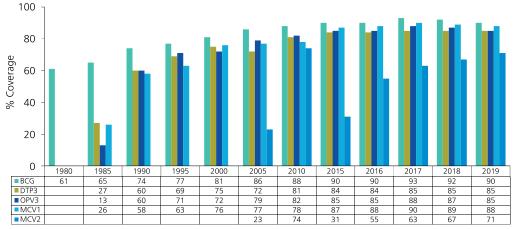
Source: WHO/UNICEF joint reporting form (JRF) 2019

Table 3: Immunization system highlights

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cMYP for immunization	2018-2022
NTAGI	fully functional
Spending on vaccines financed by the government	99.8%
Spending on routine immunization programme financed by the government	97.7%
Updated micro-plans that include activities to improve immunization coverage	No data
National policy for health care waste management including waste from immunization activities	in place
National system to monitor AEFI	in place
Most recent EPI CES	Basic Health Survey - 2018
≥80% coverage for DTP-Hib-HepB3	398 districts (77%)
≥90% coverage for MCV1	295 districts (57%)
≥90% coverage for MCV2	88 districts (17%)
≥10% drop-out rate for DTP-Hib- HepB1 to DTP-Hib-HepB3	56 districts (11%)
Assessment of vaccine hesitancy at national level	2018

Source: WHO/UNICEF joint reporting form (JRF) 2019

Figure 1: National immunization coverage, 1980-2019



Source: WHO and UNICEF estimates of immunization coverage, July 2020 revision





Figure 2: DTP3 coverage¹, diphtheria and pertussis cases², 1980-2019

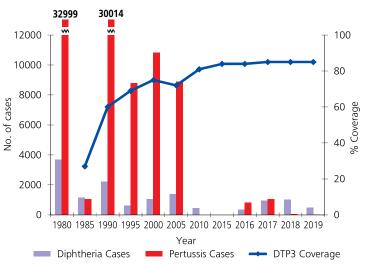
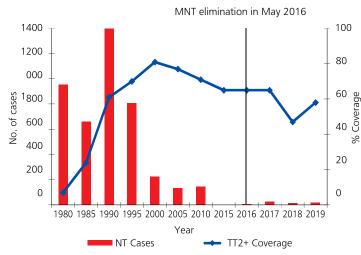


Figure 3: TT2+ coverage¹ and NT cases², 1980-2018

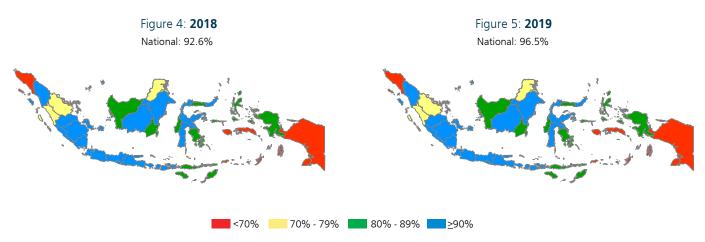


- ¹ Country official estimates, 1980-2019
- WHO vaccine-preventable diseases: monitoring system 2020

WHO and UNICEF estimates of immunization coverage, July 2020 revision

WHO vaccine-preventable diseases: monitoring system 2020

DTP-Hib-HepB3 coverage by province



Source: SEAR annual EPI reporting form, 2018 and 2019 (administrative data)

Table 4: Reported cases of vaccine preventable diseases, 2014-2019

Year	Polio	Diphtheria	Pertussis	NT (% of all tetanus)	Measles	Rubella	Mumps	JE	CRS
2014	0	430	2,082	75 (7%)	12,943	3,542	ND	72	ND
2015	0	252	1,004	69 (ND)	9,863	826	ND	39	44
2016	0	342	826	33(6%)	6,962	1,238	ND	43	174
2017	0	954	1,043	25 (5%)	9,035	1,264	ND	281	532
2018	O ^a	1,026	40	14 (3%)	5,300	1,767	ND	ND	188
2019	0	495	27	17 (4%)	1,965	713	ND	ND	198

Source: WHO/UNICEF JRF (multiple years)

Excludes one type 1 VDPV

Table 5: AFP surveillance performance indicators, 2014-2019

• The last polio case due to WPV was reported from Tenggara district, Aceh on 20 February 2006.

Indicator	2014	2015	2016	2017	2018	2019
AFP cases	1,765	1,428	1,409	1,740	1,726	1,853
Wild poliovirus confirmed cases	0	0	0	0	0	0
Compatible cases	0	0	0	2	0	1
Non-polio AFP rate ¹	2.43	2.04	2.01	2.47	2.45	2.38
Adequate stool specimen collection percentage ²	89%	92%	86%	82%	82%	81%
Total stool samples collected	3,424	2,801	2,686	3,315	3,267	3,523
% NPEV isolation	7	7	7	8	7	8
% Timeliness of primary result reported ³	98	99	98	96	96	98

- 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: 2018 National: 2.45 Figure 7: 2019 National: 2.37 Figure 7: 2019 National: 2.37 National: 2.37 Non-polio AFP case Adequate stool specimen collection percentage by district Figure 8: 2018 National: 82% Figure 9: 2019 National: 81%

Table 6: Environmental surveillance sites for polio detection in 2018 and 2019

Year	# Provinces	# sites	# samples tested	Isolation				
				SL1	SL3	SL1+SL3	VDPV	NPEV
2018	10	10	115	0	2	0	0	30
2019	12	12	156	1	2	0	0	25

Note: SL1: SL1: Sabin like type 1; SL3: Sabin like type 3; VDPV: Vaccine Derived Polio Virus; NPEV: Non Polio Entero Virus

Table 7: OPV SIAs

Year	Antigen	Geographic coverage	Target age	Target population		Covera	nge (%)
				Round 1	Round 2	Round 1	Round 2
2002	OPV	NID	<5 years	20,03	1,168	107	109
2005	OPV	NID	<5 years	23,42	6,156	95	98
2005	OPV	NID	<5 years	23,620,427		98	
2006	OPV	NID	<5 years	23,62	0,427	99	100
2006	OPV	SNID	<5 years	4,523,187	6,045,438	97	92
2007	OPV	SNID	<5 years	12,517,699		90	92
2009	OPV	SNID*	<5 years	2,052,067		97	
2010	OPV	SNID*	<5 years	4,322,178		92	
2011	OPV	SNID*	<5 years	13,958,095		98	
2016	OPV	NID	<5 years	23,721,004		96	
2018	OPV	SNID*	9 months to 15 years	1,189,876		79	
2019	bOPV	Subnational (Papua province)	0-15 years	977,647	977,647	71	88
2019	bOPV	Subnational (West Papua province)	0-15 years	285,230	285,230	110	111

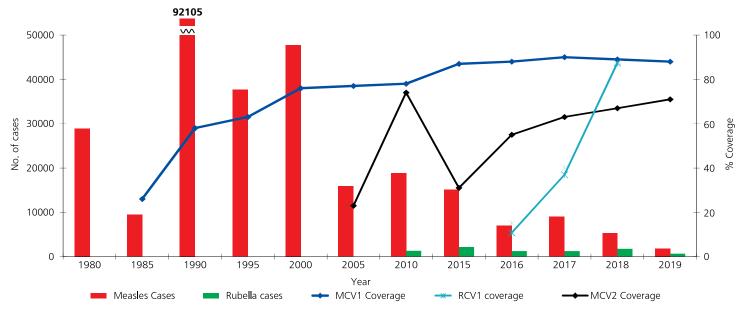
Source: WHO/UNICEF JRF (multiple years)

* During measles/MR campaign

VACCINES PROTECT

SUSTAIN. ACCELERATE. INNOVATE.

Figure 10: MCV1 & MCV2 coverage¹ and measles cases², 1980-2019



¹ WHO and UNICEF estimates of immunization coverage, July 2020 revision

MCV1 coverage by province Figure 11: 2018 National: 92% Figure 12: 2019 National: 95.1% Figure 12: 2019 National: 95.1% National: 72.7%

Source: SEAR annual EPI reporting form, 2018 and 2019 (administrative data)

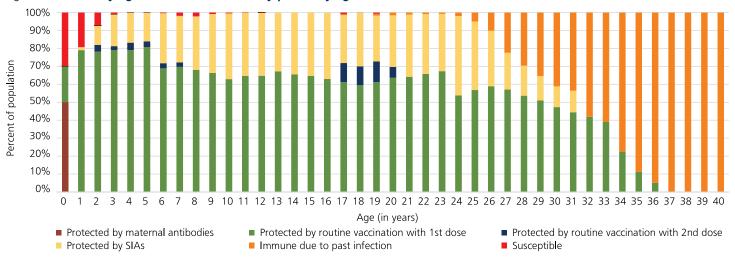
Table 8: MCV SIAs

Year	Geographic Coverage	Target group	Target	Coverage
2000	Subnational	6 to 12 years	6,665,950	95
2003	Subnational	6 to 12 years	1,030,445	95
2004	Subnational	6 to 12 years	2,180,918	94
2005	Subnational	6 months to 15 years	5,515,324	94
2006	Subnational	6 months to 5 years	3,978,096	93
2006	Subnational	6 to 12 years	3,161,323	96
2007	Subnational	6 months to 12 years	2,692,912	106
2007	Subnational	6 to 12 years	2,569,350	102
2007	Subnational	6 to 59 months	14,916,592	93
2008	Subnational	1 to 3 years	11,203	78
2009	Subnational	9 to 59 months	1,763,122	97
2010	Subnational	9 to 59 months	3,619,024	92
2011	Subnational	9 to 59 months	11,843,093	98
2016	Subnational	9 to 59 months	4,222,172	86
2017	Subnational	9 months to 15 years	34,964,386	101
2018	Subnational	9 months to 15 years	31,963,154	73

Source: WHO/UNICEF JRF (multiple years)

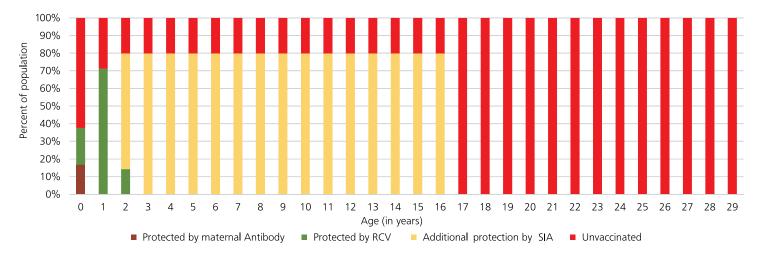
² WHO vaccine-preventable diseases: monitoring system 2020

Figure 15: Immunity against measles - immunity profile by age in 2019*



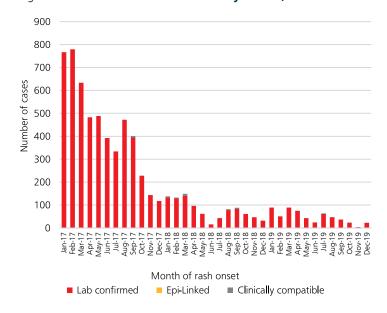
^{*}Modeled using MSP tool ver 2

Figure 16: Immunity against rubella through vaccination - immunity profile by age in 2019*



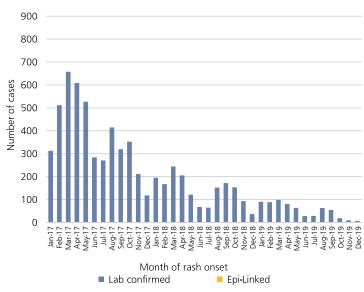
^{*}Modeled using WHO and UNICEF estimates and JRF (multiple years) and does not include immunity due to natural infection

Figure 17: Confirmed measles cases* by month, 2017-2019



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

Figure 18: Confirmed rubella cases* by month, 2017-2019

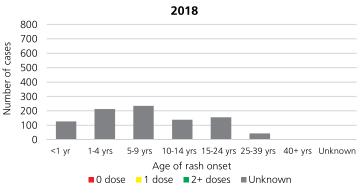


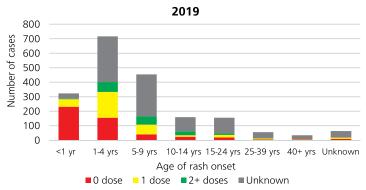
^{*}Includes laboratory confirmed and epidemiologically linked cases Source: SEAR measles case-based data

VACCINES PROTECT

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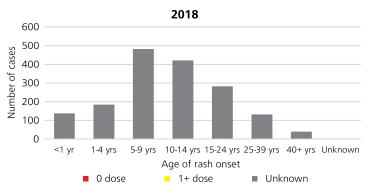
Figure 19: Vaccination status of confirmed (laboratory, Epi linked and clinically compatible) measles cases by age in 2018 and 2019

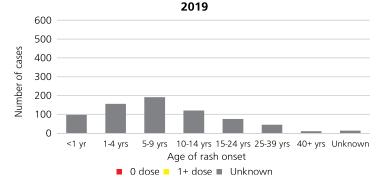




Source: SEAR measles rubella database

Figure 20: Vaccination status of confirmed (laboratory and Epi linked) rubella cases by age in 2018 and 2019





Source: SEAR measles rubella database

Table 9: Summary of measles surveillance indicators, 2017-2019

Indicator	Target	2017	2018	2019
Number of suspected measles cases		16,615	9,768	8,828
Confirmed measles cases	0	9,035	5,283	1,965
Lab confirmed	0	1,532	828	639
Epi-Linked	0	731	153	22
Clinically-compatible	0	6,772	4,302	1,304
Confirmed rubella cases	0	1,264	1,592	713
Lab confirmed	0	926	1,475	710
Epi-Linked	0	338	117	3
Discarded non-measles non-rubella cases		934	2,893	5,099
Percentage of suspected cases with adequate investigation initiated within 48 hours of notification	≥ 80%	21.8	41.7	61.8
Reporting rate of non-measles non-rubella cases to national level per 100,000 population	≥ 2	0.36	1.09	1.92
Percentage of second-level administrative units reporting at least 2 non-measles non-rubella cases per 100 000 population	≥ 80%	18.5	13.8	23.9
Percentage of surveillance units reporting measles and rubella data to the national level on time, even in the absence of cases	≥ 80%	44.8	55.1	40.1
Percentage of specimens received at the laboratory within 5 days of collection	≥ 80%	35	31	93
Percentage of IgM results reported to the national public health authorities by the laboratory within 4 days of receipt of specimens	≥ 80%	46	82	87
Genotypes detected				
Measles		ND	ND	ND
Rubella		ND	ND	ND

Figure 21: Laboratory network



- ▲ Polio, measles & rubella laboratories
 - National Institute of Health Research and Development (NIHRD), Jakarta
 - Biofarma, Bandung
 - Public Health Laboratory, Surabaya
- ▼ Japanese encephalitis laboratory
 - NIHRD, Jakarta

Source: EPI Indonesia

• Public Health Laboratory, Denpasar

Measles & rubella laboratory

- Public Health Laboratory, Yogyakarta
- Public Health Laboratory, Palembang
- Public Health Laboratory, Makassar
- Public Health Laboratory, Jakarta

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

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