



World Health  
Organization  
REGIONAL OFFICE FOR  
South-East Asia

Immunization and  
Vaccine Development  
South-East Asia Region



# 2023

## EPI FACTSHEET

### South-East Asia Region



## WHO South-East Asia Region

The Immunization and Vaccine Development (IVD) unit of the Department of Communicable Diseases of the World Health Organization (WHO), Regional Office for South-East Asia (SEARO), has been producing the Expanded Programme on Immunization (EPI) factsheets for all Member States of the South-East Asia (SEA) Region and the Region annually. The primary data sources of the EPI factsheet are the WHO-UNICEF Joint Reporting Form (JRF) and the SEA Region annual EPI reporting form (AERF), in which each country officially reports EPI and vaccine preventable diseases related core information annually. The EPI factsheets 2023 are based on 2022 data reported to WHO SEARO by Member States.



*Disclaimer for all maps:*

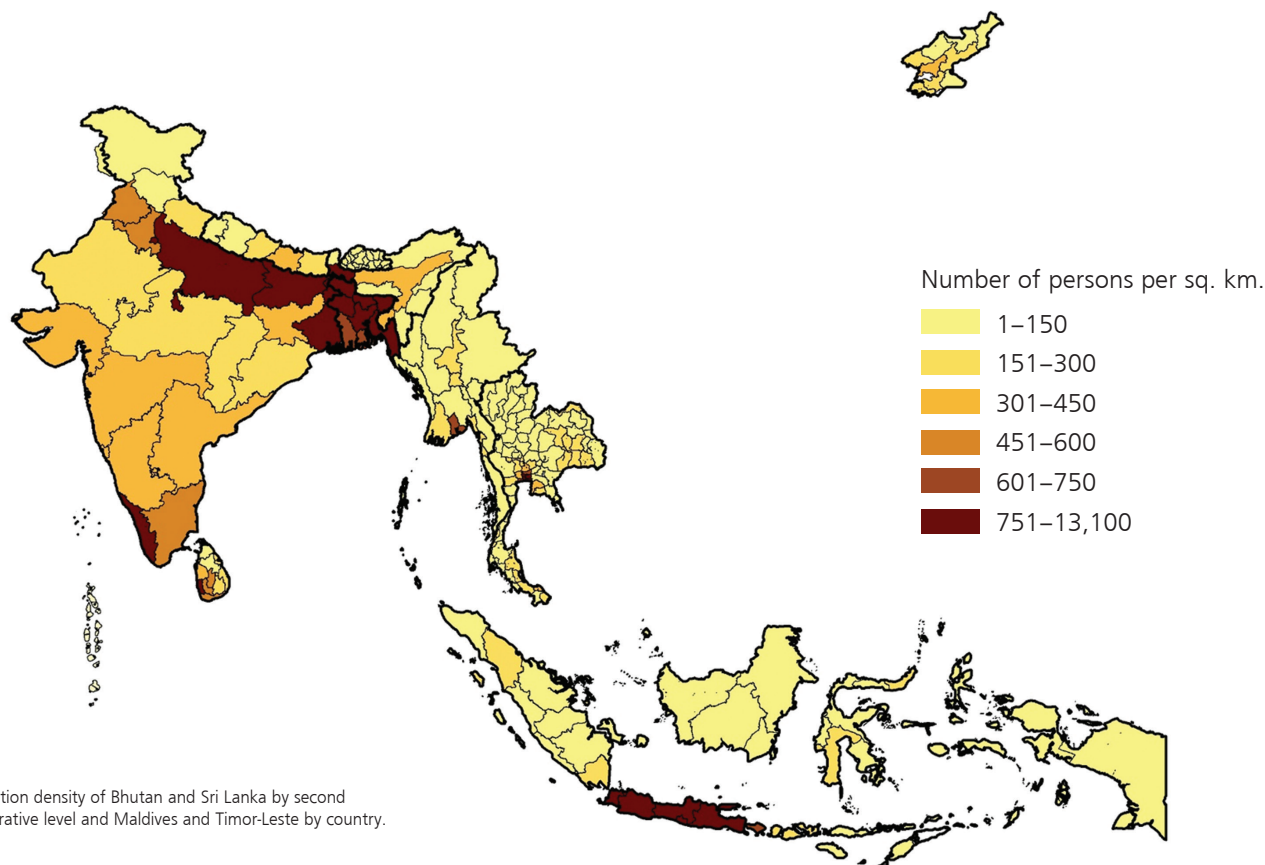
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# VACCINES PROTECT

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## Regional demographic attributes

Figure 1. SEA regional population density by first administrative level\*



\* Population density of Bhutan and Sri Lanka by second administrative level and Maldives and Timor-Leste by country.

Table 1. Basic information by country, 2022

Country	2022 population <sup>1</sup>					Mortality <sup>2</sup>				Administrative levels	
	Total population	Live births	Under 1 year	Under 5 years	Under 15 years	Neonatal mortality rate (per 1000 LB)	"Infant mortality rate (per 1000 LB)	Under-5 mortality rate (per 1000 LB)	Maternal mortality ratio (per 100 000 LB)	Number of province / region / division	Number of district
Bangladesh	175,349,084	3,495,475	3,345,170	16,686,896	48,140,623	16	22.91	27.27	123	8	64
Bhutan	763,249	10,499	10,341	59,666	179,313	14.83	22.5	26.7	59.95	3	20
DPR Korea	25,652,687	305,571	302,701	1,569,405	4,941,881	8.3	10.1	15.4	106.7	13	211
India	1,379,752,250	20,987,726	26,403,088	no data	no data	19.1	25.5	30.62	102.7	36	757
Indonesia	274,859,094	4,452,717	4,373,429	21,856,192	65,877,189	11.33	18.88	22.17	172.9	34	514 <sup>a</sup>
Maldives	515,122	5,717	5,717	30,310	103,689	4.1	5.1	5.96	56.69	1	20
Myanmar	54,823,426	932,056	888,436	4,534,046	12,972,936	21.66	33.72	41.81	178.7	17	330 <sup>b</sup>
Nepal	29,266,472	525,062	520,049	2,621,953	7,855,158	21 <sup>3</sup>	28 <sup>3</sup>	33 <sup>3</sup>	151 <sup>3</sup>	7	77
Sri Lanka	22,181,000	275,321	273,056	1,905,000	5,603,000	3.9	5.8	6.8	29	9	26
Thailand	66,090,475	485,085	461,034	2,767,309	10,152,436	4.71	7.1	8.29	28.6	77	928
Timor-Leste	1,318,445	31,832	31,832	157,324	474,368	22.23	43.08	50.55	203.9	no data	13
<b>SEAR</b>	<b>2,030,571,304</b>	<b>31,507,061</b>	<b>36,614,853</b>	<b>52,188,101</b>	<b>156,300,593</b>	<b>17.28</b>	<b>23.87</b>	<b>28.6</b>	<b>117</b>	-	-

<sup>1</sup> SEA Region annual EPI reporting form, 2022

<sup>2</sup> WHO, Global Health Observatory (GHO) data <http://apps.who.int/gho/data> accessed on 03 August 2023

<sup>3</sup> Nepal Demographic and Health Survey 2022

<sup>a</sup> District & city

<sup>b</sup> Township

## Routine immunization systems and services are strengthened

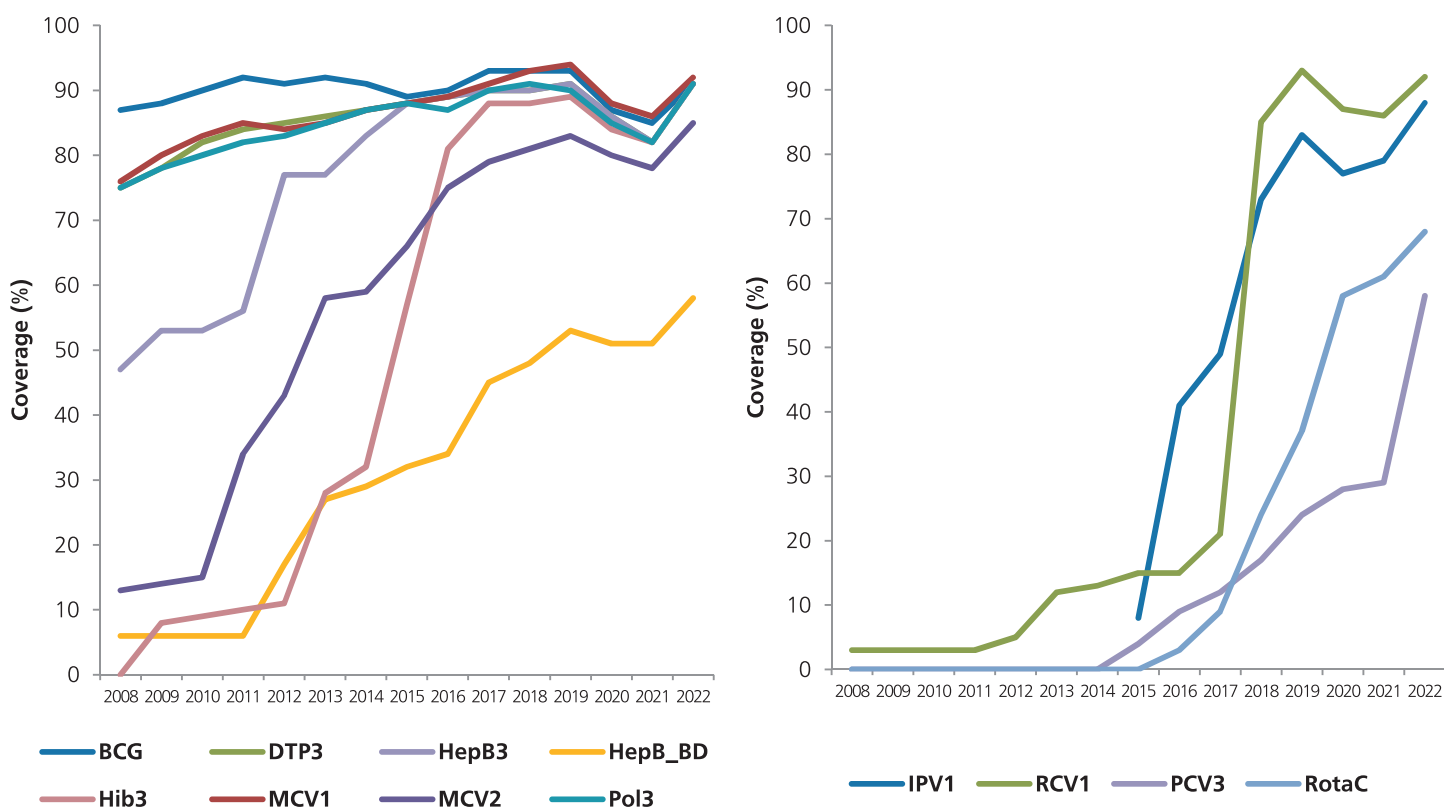
Table 2. Routine immunization schedules by country, 2022

Country	BCG	DTPHibHepB	MCV/MRCV	OPV/IPV	TT/Td	Vitamin A	Other vaccinations
<b>Bangladesh</b>	At birth	DTPHibHepB - 6W, 10W, 14W	MR- 38W, 15M	6W, 10W, 14W IPV (fIPV)-6W, 14W	Td- Females 15Y to 49Y (5 doses with an interval of + 1 month, + 6 months, + 1 year and + 1 year with preceding dose)	6-59M	PCV- 6W, 10W, 14W
<b>Bhutan</b>	At birth	HepB- At birth (within 24 hours) DTPHibHepB- 6W, 10W, 14W DTP- 24M	MMR- 9M, 24M	At birth, 6W, 10W, 14W IPV-14W, 8M	Td- 6Y, 12Y and during pregnancy (at first contact and one month later)	6M, 12M, 18M, 24M, 30M, 36M, 42M, 48M and 54M	HPV- Females 12 years and grade VI girls (two doses 6 months apart) HPV for boys PCV- 6W, 10W, 9M
<b>DPR Korea</b>	At birth	HepB- At birth DTPHibHepB - 6W, 10W, 14W	MR-9M, 15M	6W, 10W, 14W IPV-14W	Td - 3M, 4M of pregnancy	6-59M	-
<b>India</b>	0-1 year	HepB - At birth DTPHibHepB - 6W, 10W, 14W DTP - 16-24M, 5-6Y	MR- 9-12M, 16-24M	At birth, 6W, 10W, 14W, 16-24M IPV (fIPV)-6W, 14W	Td- 10Y and 16Y, 2 doses/booster for pregnant women	9M, 18M, 24M, 30M, 36M and 42M	JE vaccine- 9-12M and 16-24M (select JE endemic districts) PCV - 6W, 14W, 9M (subnational) Rotavirus-6W,10W,14W
<b>Indonesia</b>	At birth, 0-1M	HepB- 0-24 hours of birth DTPHibHepB - 2M, 3M, 4M, 18M	MR-9M, 18M, 7Y	0-1M, 2M, 3M, 4M IPV- 4M, 9M	DT - 6-7Y Td- 7-8Y, 10-11Y, 15-39Y (child bearing women)	6-59M	HPV- 11Y, 12Y (subnational) JE_LiveAtd - 10M (Bali province) PCV- 2M,3M,12M (subnational) Rotavirus - 2M, 3M, 4M
<b>Maldives</b>	At birth	HepB-At birth DTPHibHepB - 2M, 4M, 6M DTP booster- 4 years	MR-9M MMR - 18M	2M, 4M, 6M, pilgrims to Haj & Umrah and travellers to polio endemic countries IPV-6M	Td - Females 15Y (+1M, +6M, +1Y, +1Y)	9M, 18M, 24M, 30M, 36M, 42M, 48M, 54M, 60M	Men ACWY-135 conj- all travellers to Haj & Umrah YF ->9M travellers to endemic countries HPV- 10 years (2 doses 6M apart) cholera - >2 years travellers to endemic countries
<b>Myanmar</b>	Birth to 2M	HepB- At birth DTPHibHepB- 2M, 4M, 6M, 18M	MR- 9M, 18M	2M, 4M, 6M IPV- 4M	Td-First contact during pregnancy and 4 weeks later	6-59M	PCV- 2M, 4M, 6M; HPV-9Y, 10Y JE_LiveAtd - 9M; Rotavirus-2M, 4M
<b>Nepal</b>	At birth	DTPHibHepB - 6W, 10W, 14W	MR-9M, 15M	6W, 10W, 14W fIPV-14W, 9M	Td- First contact pregnancy, +1M	6M-5Y, +6M	JE_LiveAtd - 12M PCV- 6W, 10W, 9M Rotavirus- 6W,10W
<b>Sri Lanka</b>	At birth	DTPHibHepB - 2M, 4M, 6M DTP - 18M	MMR - 9M, 3Y	2M, 4M, 6M, 18M, 5Y IPV (fIPV)- 2M, 4M	DT - 5Y aTd - 12Y (grade 7) TT - Pregnant women (2 doses in 1st pregnancy and 1 dose in subsequent 3 pregnancies)	6-59M	JE_LiveAtd - 1Y; YF - travellers to yellow fever endemic countries; HPV- Girls grade VI at school, on 10Y completion, 2 doses 6M apart; Typhoid fever polysaccharid vaccine - high risk categories, food handlers, based on transmission pattern and data
<b>Thailand</b>	At birth	HepB - At birth, 1M (new-born from HepB carrier mother) Adult HepB - Healthcare Workers DTPHibHepB - 2M, 4M, 6M DTP - 1.5Y, 4Y	MMR - 9M, 1.5Y MR - Healthcare workers, all university students of first year and faculty of medical and public health	2M, 4M, 6M, 1.5Y, 4Y IPV-4M	Td- 12Y (grade 6), Pregnant women 1st contact, +1M, +6M (depending on vaccination history)	-	JE_LiveAtd- 1Y, 2.5Y Rotavirus- 2M, 4M, 6M HPV- females at grade V (2 doses 6M apart) Men ACWY-135 _conj - 9 months to 55 years (two doses five years apart), travellers (if >55 years, they should be certified by their physician) YF - >=9 monts old travellers
<b>Timor-Leste</b>	At Birth	HepB- At birth within 24 hours DTPHibHepB- 6W, 10W, 14W DTP-18M DT-6Y	MR-9M, 18M	Birth, 6W, 10W, 14W IPV-14W	Td-Females 15Y-49Y (1st pregnancy contact, +1M, +6M, +1Y, +1Y)	6-36M (6M interval)	Rotavirus-6W,10W,14W

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Figure 2. Immunization coverage by antigen, 2008-2022



Source: WHO and UNICEF estimates of immunization coverage

Table 3. Immunization coverage by country, 2019-2022

Country	BCG				HepB birth dose				DTP3				MCV1/MRCV1				MCV2/MRCV2			
	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
Bangladesh	99	99	99	99	no birth dose				98	98	98	98	97	97	97	97	93	93	93	93
Bhutan	92	98	99	99	86	85	84	94	97	95	98	98	97	93	97	97	92	92	91	97
DPR Korea	96	99	95	0	98	99	99	50	97	97	41	0	98	99	42	0	98	99	41	0
India	92	85	84	91	56	54	55	63	91	85	85	93	95	89	89	95	84	81	82	90
Indonesia	90	87	81	93	84	73	70	85	85	77	67	85	88	76	72	84	71	60	50	67
Maldives	99	99	99	99	99	99	99	99	98	99	96	99	99	98	97	98	96	97	98	98
Myanmar	91	87	48	79	17	21	6	8	90	84	37	71	84	91	44	75	80	90	42	64
Nepal	96	92	95	96	no birth dose				93	84	91	90	92	87	90	90	76	74	87	87
Sri Lanka	99	99	99	99	no birth dose				99	96	96	98	99	96	97	99	99	96	97	98
Thailand	99	99	99	99	99	99	99	99	97	97	97	97	96	96	96	96	87	87	87	87
Timor-Leste	95	88	88	88	70	72	72	72	90	86	86	86	85	79	79	79	80	78	78	78
SEA Region	93	87	85	91	53	51	51	58	91	86	82	91	94	88	86	92	83	80	78	85

Source: WHO and UNICEF estimates of immunization coverage

Figure 3. DTP3 immunization coverage by first administrative level\*, 2022

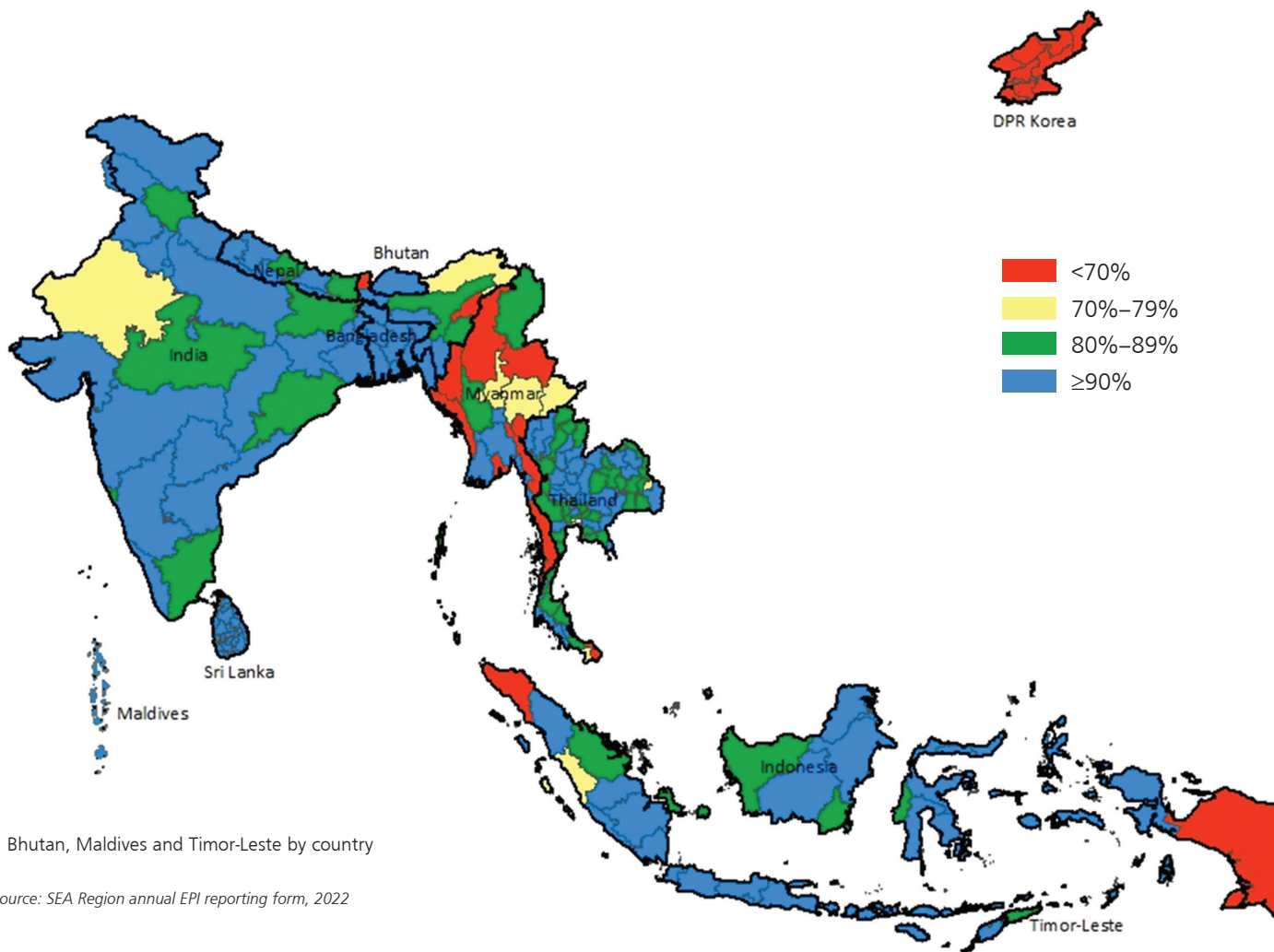
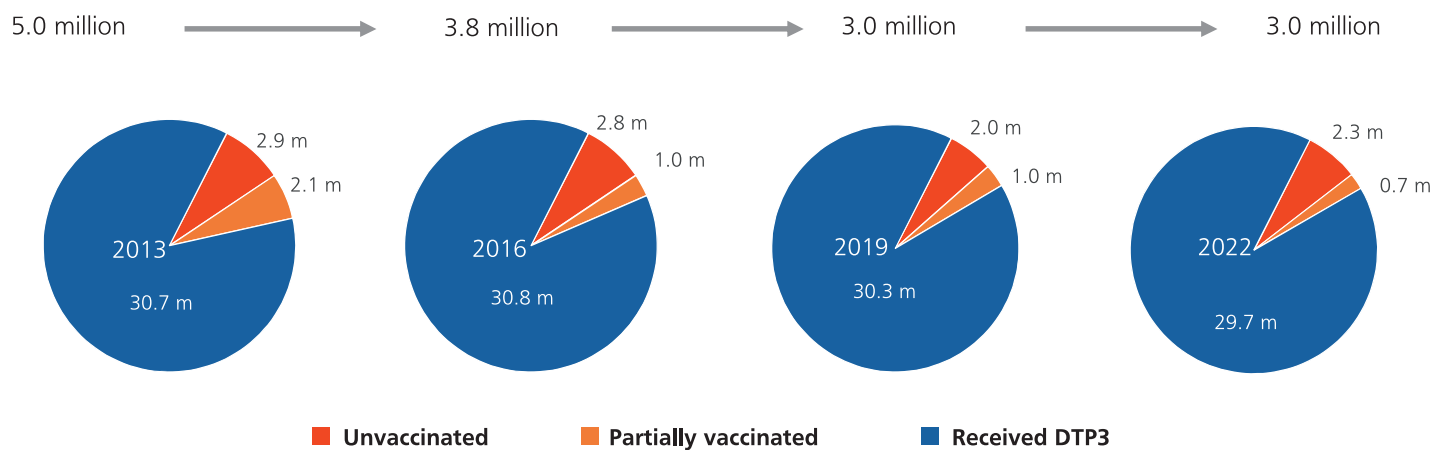


Figure 4. Un- and partially vaccinated children, 2013-2022



Source: DTP coverage from WHO and UNICEF estimates and UN estimated under 1 year population

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Figure 5. Range of protection increased through addition of vaccines

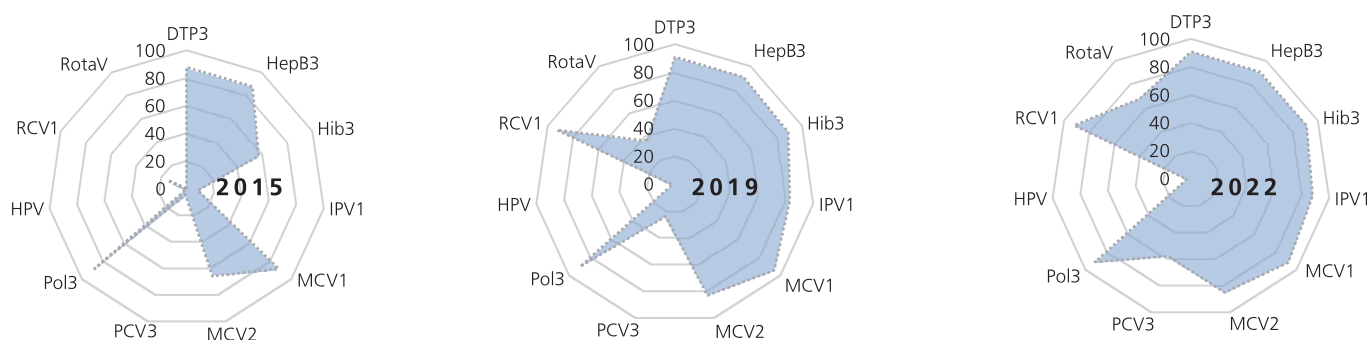


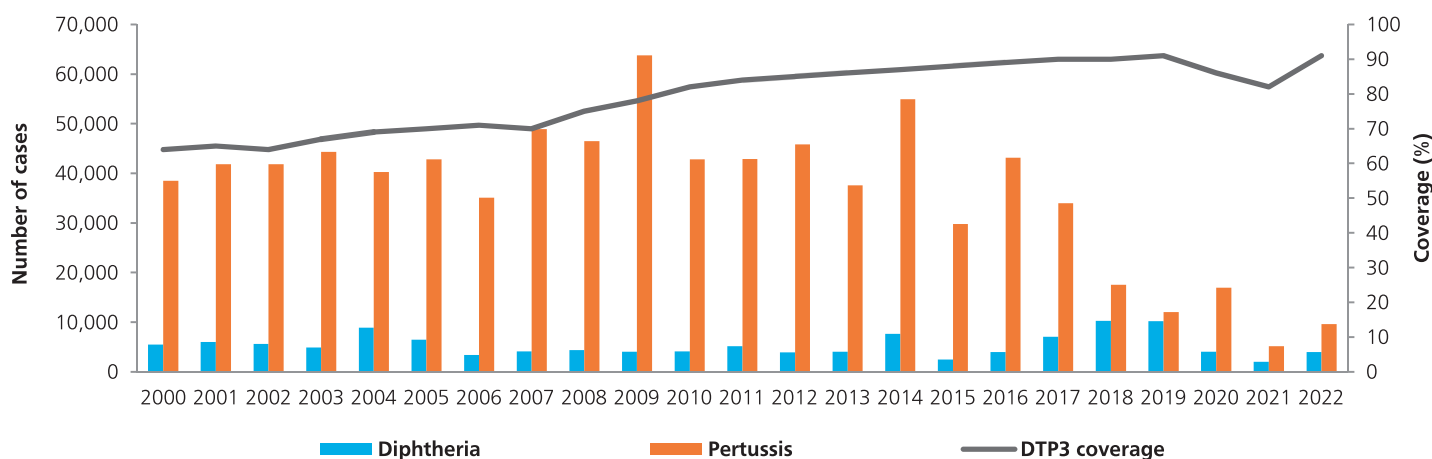
Table 4. Planning and management indicators by country, 2022

Country	cMYP for immunization	NTAGI	Spending on vaccines by the government	Spending on routine immunization programme by the government	Updated micro-plans that include activities to improve immunization coverage	Most recent EPI CES
Bangladesh	2018–2022	fully functional	38.8%	43.2%	64 districts (100%)	EPI CES 2019
Bhutan	2019–2023	fully functional	78.1%	no data	20 districts (100%)	National Health Survey, 2012
DPR Korea	2020–2024	fully functional	no data	no data	211 districts (100%)	National Immunization Coverage Survey 2017
India	2018–2022	fully functional	99.5%	99.7%	757 districts (100%)	National Family Health Survey-5 2021
Indonesia	2020–2024	fully functional	100%	96.4%	no data	DHS - 2022
Maldives	2020–2024	fully functional	no data	100%	no data	Demographic Health Survey 2017
Myanmar	2017 –2021	fully functional	28.3%	no data	315 districts (95%)	Vaccination Coverage Evaluation Survey 2019-20
Nepal	2017–2021	fully functional	27.4%	27%	no data	Nepal, Demographic Health Survey 2022
Sri Lanka	2017–2022	fully functional	96.4%	no data*	26 districts (100%)	EPI coverage survey Puttalam district 2017
Thailand	2022–2027	fully functional	no data	no data	928 districts (100%)	CES for routine and school-based immunization 2018
Timor-Leste	2016–2022	fully functional	100%	64%	13 districts (100%)	EPI coverage survey 2018

Source: WHO/UNICEF JRF, 2022

\* Integrated health systems provide all operational costs

Figure 6. DTP3 coverage, diphtheria and pertussis cases, 2000-2022



Source: WHO and UNICEF coverage estimates; WHO/UNICEF JRF and EPI/MoHFW; Diphtheria and pertussis cases from JRF 2000-2022

**Table 5. Vaccine preventable diseases reported by country, 2020-2022**

Country	2020							
	Polio	Diphtheria	Pertussis	Total tetanus (NT)	Measles	Rubella	Mumps	JE
Bangladesh	0	10	1	62 (42)	2,410	66	ND	32
Bhutan	0	0	0	0	0	0	214	0
DPR Korea	0	ND	ND	ND	0	0	ND	ND
India	0	3,485	12,566	1,200 (162)	5,511	1,398	ND	718
Indonesia	0	259	36	ND (4)	310	159	ND	6
Maldives	0	0	0	0	15	1	2	0
Myanmar	0	169	13	ND (17)	444	3	ND	75
Nepal	0	38	4,224	333 (3)	388	37	31,489	29
Sri Lanka	0	0	1	0	2	0	170	31
Thailand	0	79	90	ND	802	195	4	33
Timor-Leste	0	0	5	2 (2)	2	5	0	0
<b>SEA Region</b>	<b>0</b>	<b>4,040</b>	<b>16,936</b>	<b>1,597 (230)</b>	<b>9,884</b>	<b>1,864</b>	<b>31,879</b>	<b>924</b>

Country	2021							
	Polio	Diphtheria	Pertussis	Total tetanus (NT)	Measles	Rubella	Mumps	JE
Bangladesh	0	0	0	33 (33)	203	129	ND	82
Bhutan	0	0	ND	0 (0)	ND	0	0	0
DPR Korea	0	ND	ND	ND (ND)	0	0	ND	ND
India	0	1,768	593	1,240 (81)	5,700	1,675	758	489
Indonesia	0	235	ND	ND (11)	394	268	ND	13
Maldives	0	0	0	0 (0)	0	0	0	0
Myanmar	0	3	ND	ND (8)	8	3	ND	2
Nepal	0	29	4,588	927 (2)	143	44	13,075	31
Sri Lanka	0	0	0	4 (0)	0	0	73	4
Thailand	0	0	4	0 (0)	66	8	0	0
Timor-Leste	0	0	0	ND (ND)	3	4	0	ND
<b>SEAR</b>	<b>0</b>	<b>2,035</b>	<b>5,185</b>	<b>2,204 (135)</b>	<b>6,517</b>	<b>2,131</b>	<b>13,906</b>	<b>621</b>

Country	2022							
	Polio	Diphtheria	Pertussis	Total tetanus (NT)	Measles	Rubella	Mumps	JE
Bangladesh	0	6	0	21 (21)	311	236	ND	110
Bhutan	0	0	0	0 (0)	7	4	ND	0
DPR Korea	0	0	0	0 (0)	0	0	0	0
India	0	3,286	4,362	65 (65)	43,410	2,554	6	1,271
Indonesia	0 <sup>a</sup>	540	414	21 (21)	7,704	839	ND	ND
Maldives	0	0	0	0 (0)	0	0	0	0
Myanmar	0	29	ND	14 (14)	10	0	ND	6
Nepal	0	95	4,828	768 (3)	130	24	8,898	79
Sri Lanka	0	0	0	5 (0)	0	0	73	16
Thailand	0	0	10	0 (0)	64	9	8	0
Timor-Leste	0	0	0	2 (1)	8	41	0	1
<b>SEAR</b>	<b>0</b>	<b>3,956</b>	<b>9,614</b>	<b>896 (125)</b>	<b>51,644</b>	<b>3,707</b>	<b>8,985</b>	<b>1,483</b>

Source: WHO/UNICEF JRF (2020-2022)

<sup>a</sup> Excludes one type 2 VDPV

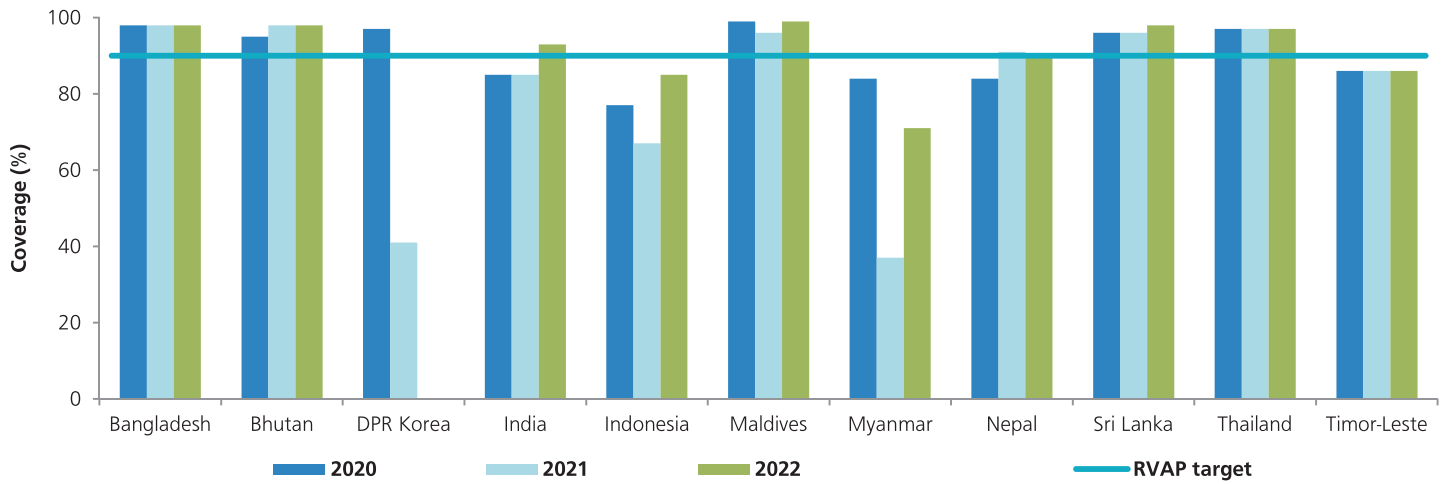
ND = No data



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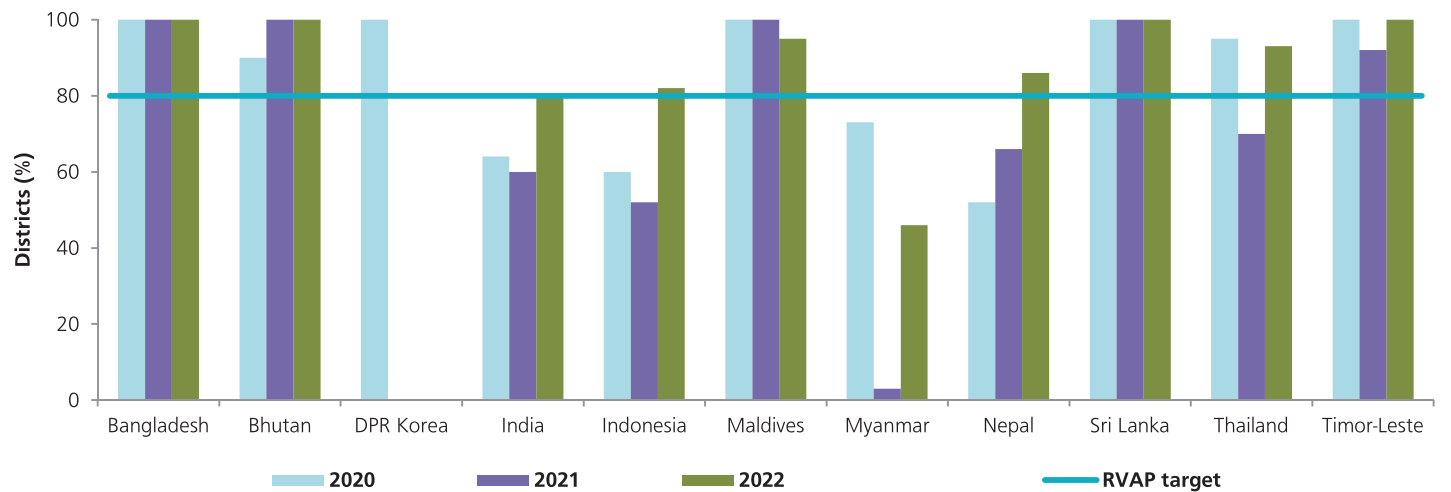
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Figure 7. DTP3 coverage by country, 2020-2022



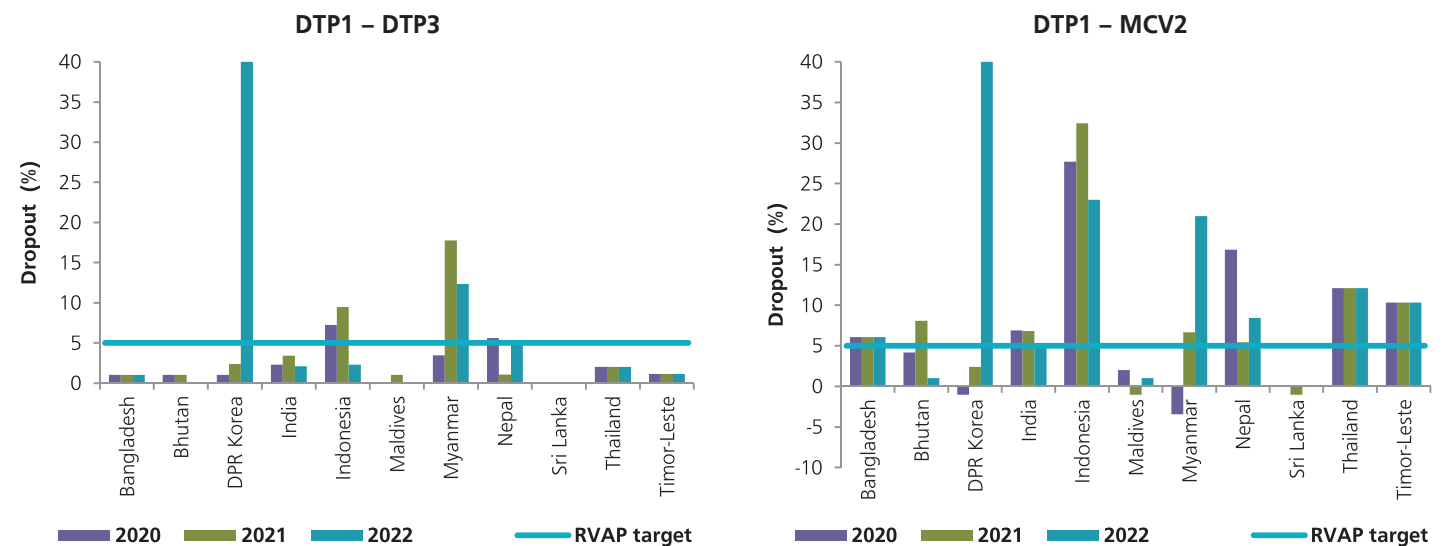
Source: WHO and UNICEF estimates of immunization coverage

Figure 8. Percentage districts achieving ≥80% DTP3 coverage by country, 2020-2022



Source: WHO UNICEF JRF (Multiple years)

Figure 9. Drop-out rates by country, 2020-2022



Source: WHO and UNICEF estimates of immunization coverage

## Measles and rubella elimination

Figure 10. Status of measles and rubella elimination

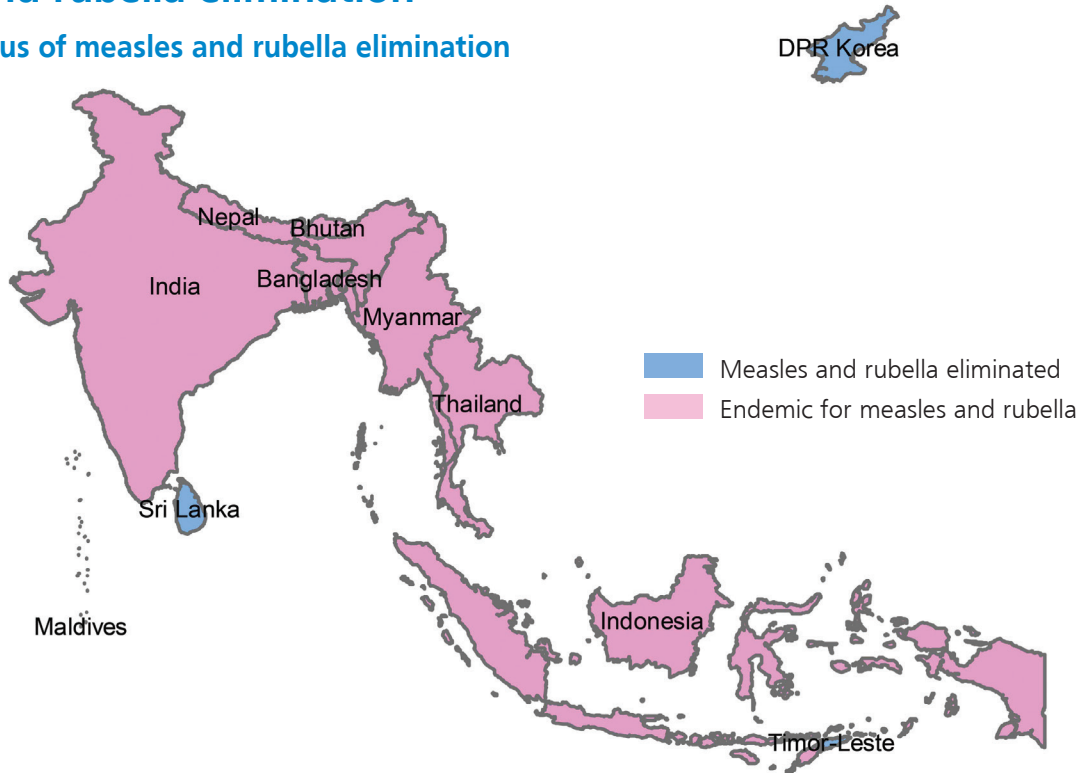
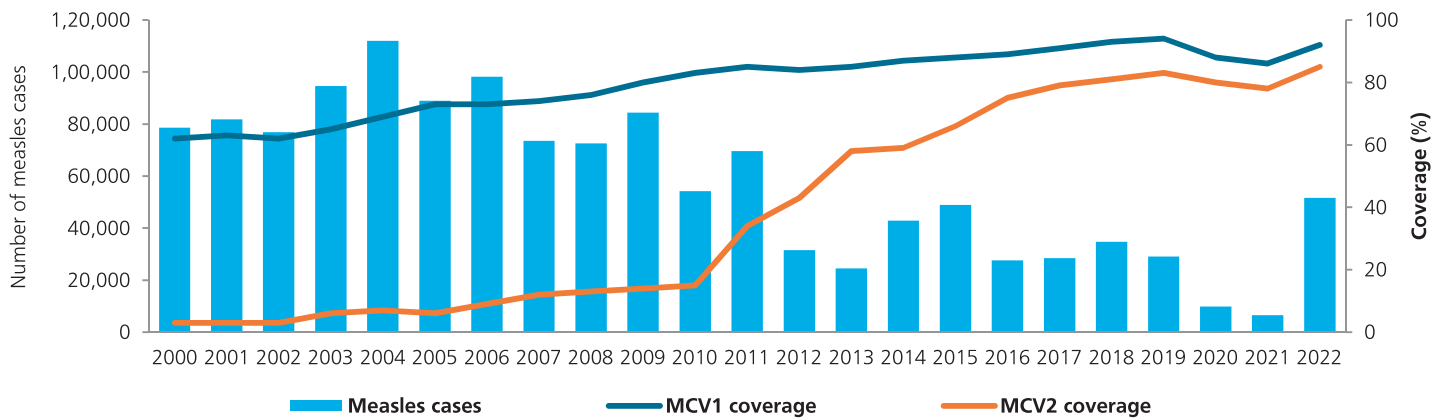
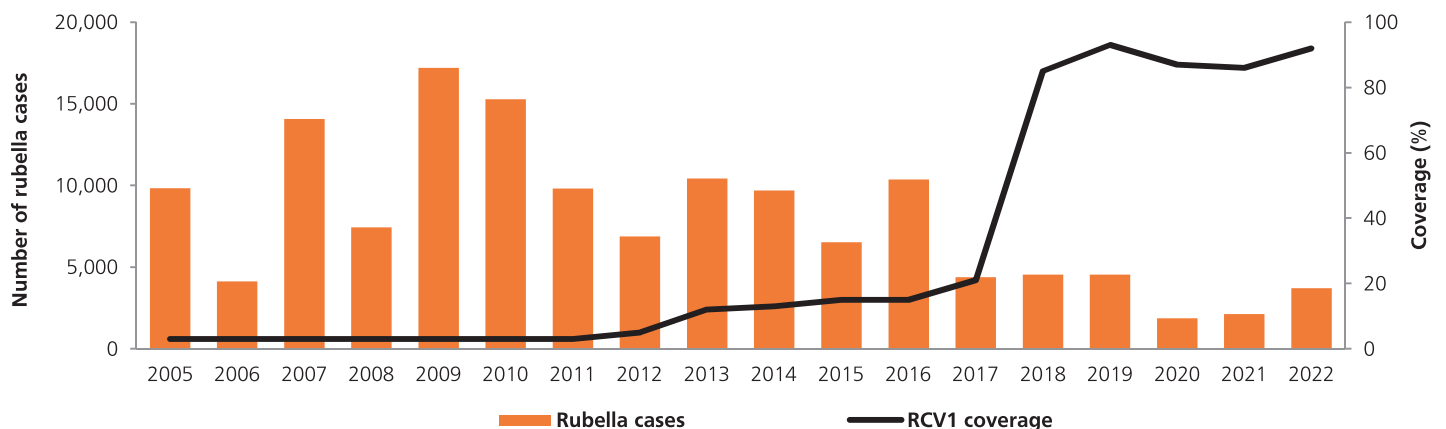


Figure 11. Measles cases and coverage of measles containing vaccine 1<sup>st</sup> and 2<sup>nd</sup> dose (MCV1; MCV2), 2000-2022



Source: WHO UNICEF coverage estimates, WHO UNICEF JRF and EPI/MoHFW; Measles cases from JRF 2000-2022

Figure 12. Rubella cases and rubella containing vaccine (RCV) coverage, 2005-2022

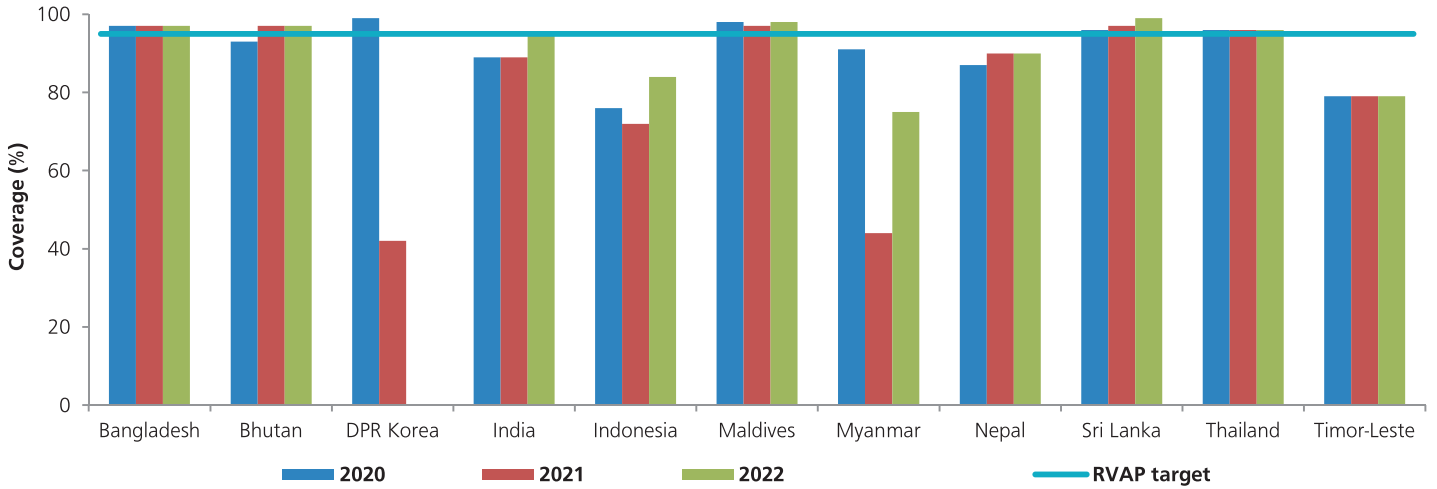


Source: WHO UNICEF coverage estimates, WHO UNICEF JRF and EPI/MoHFW; Rubella cases from JRF 2005-2022

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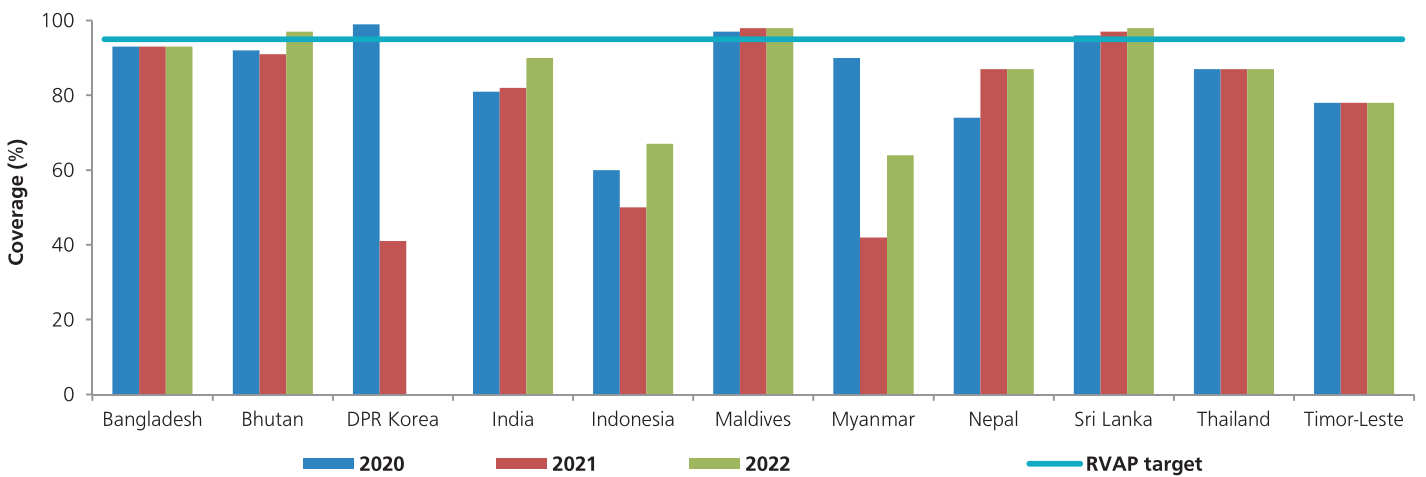
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Figure 13. MCV1 coverage by country, 2020-2022



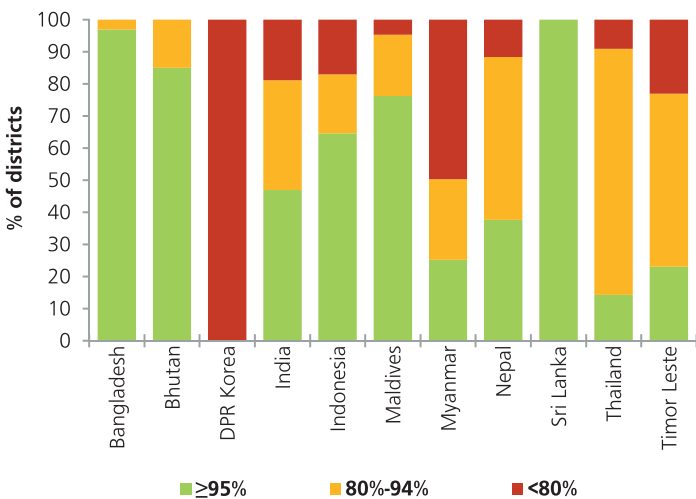
Source: WHO and UNICEF estimates of immunization coverage

Figure 14. MCV2 coverage by country, 2020-2022



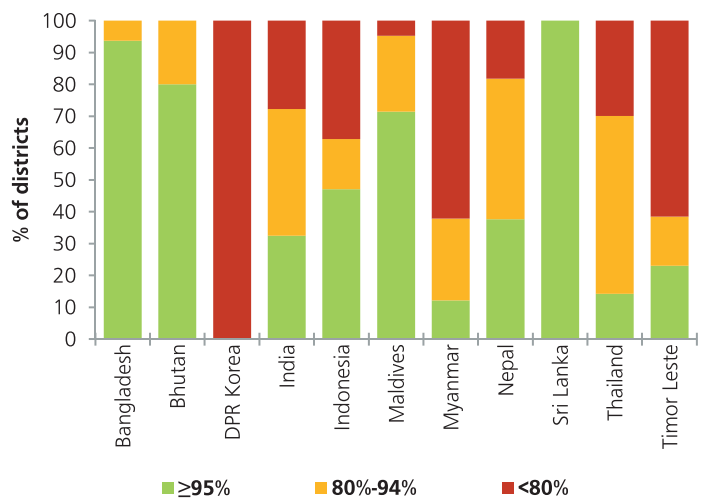
Source: WHO and UNICEF estimates of immunization coverage

Figure 15. Percent districts with MCV1 coverage by country, 2022



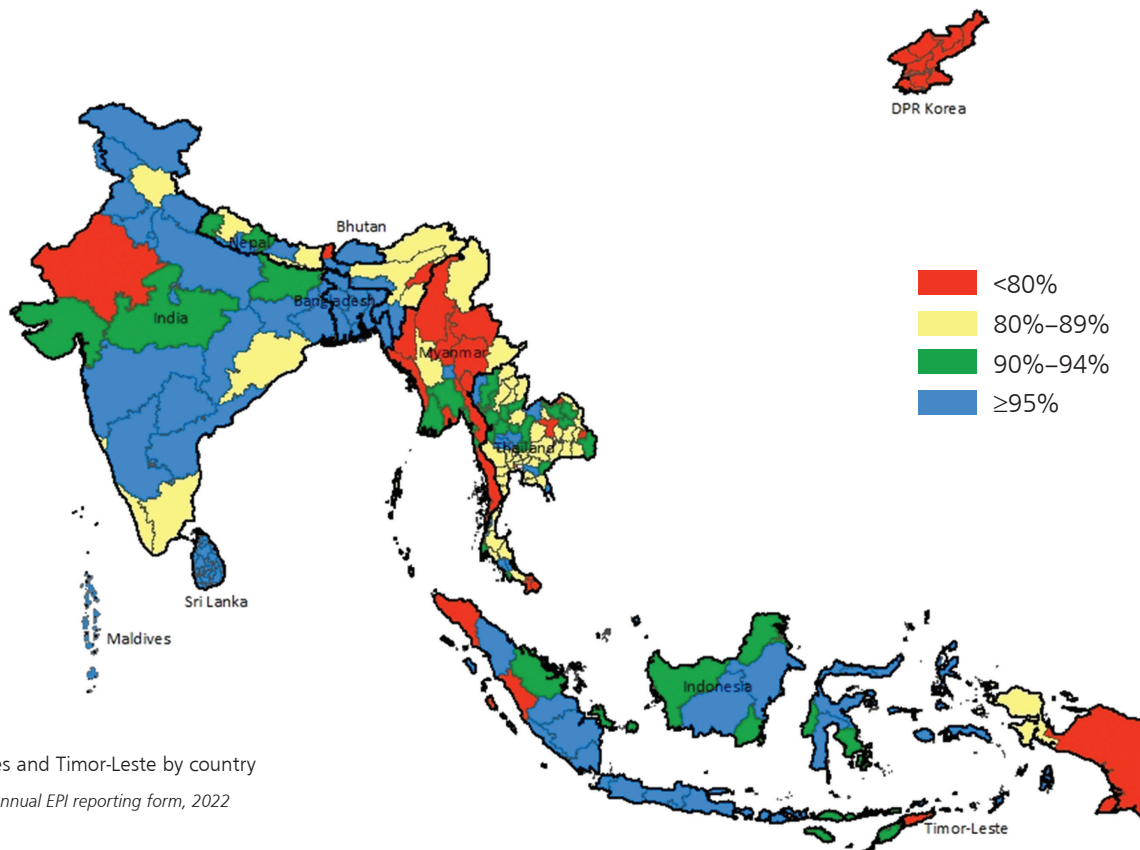
Source: WHO UNICEF JRF, 2022

Figure 16. Percent districts with MCV2 coverage by country, 2022



Source: WHO UNICEF JRF, 2022

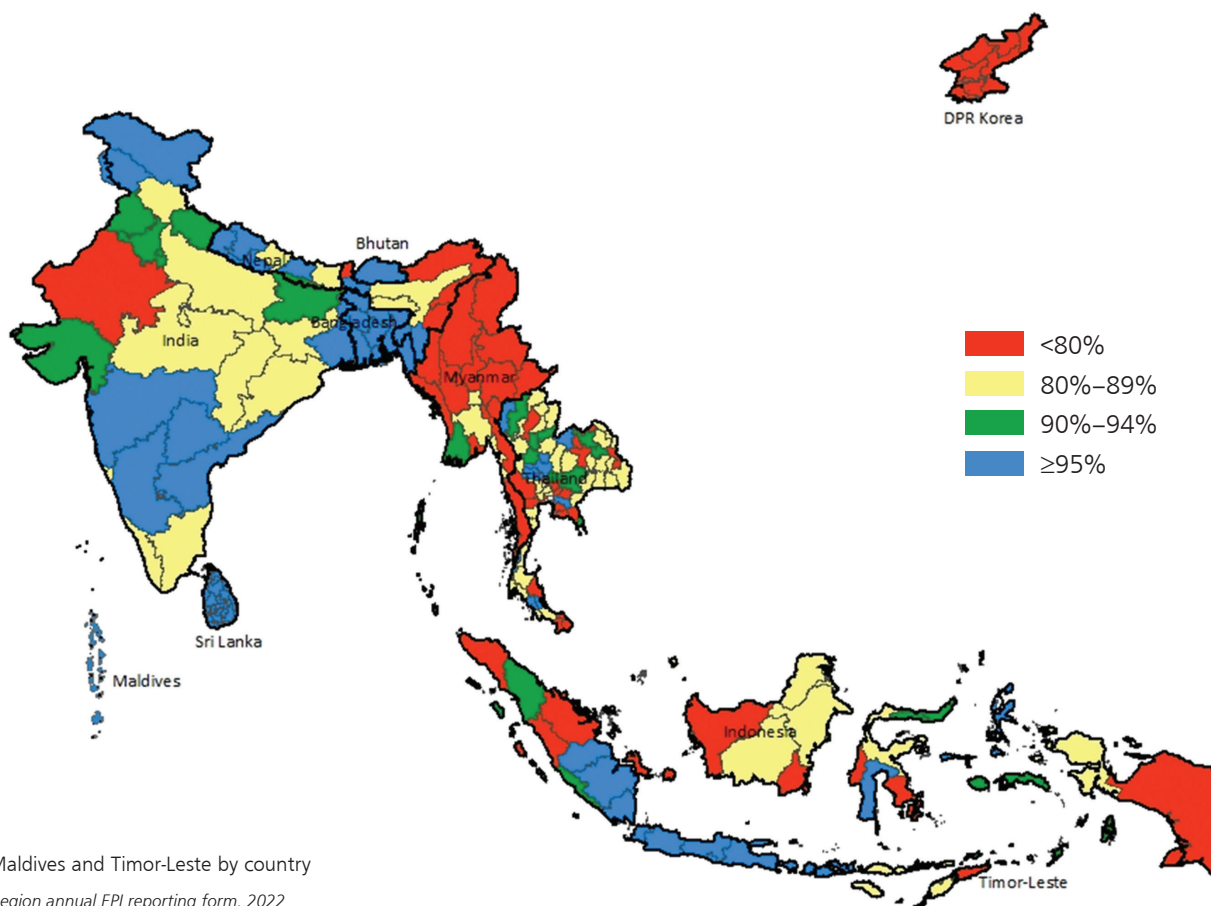
Figure 17. MCV1 immunization coverage by first administrative level\*, 2022



\* Bhutan, Maldives and Timor-Leste by country

Source: SEA Region annual EPI reporting form, 2022

Figure 18. MCV2 immunization coverage by first administrative level\*, 2022



\* Bhutan, Maldives and Timor-Leste by country

Source: SEA Region annual EPI reporting form, 2022

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**Table 6. Measles and rubella surveillance performance indicators, 2022**

Country	No. of suspected measles cases	Case classification (number)						Indicators					
		Measles			Rubella			Discarded non-measles non-rubella cases	Annual incidence of confirmed measles cases per million total population	Annual incidence of confirmed rubella cases per million total population	Proportion of all suspected measles and rubella cases that have had an adequate investigation initiated within 48 hours of notification	Non-measles non-rubella discard rate per 100 000 total population	Proportion of surveillance units reporting on time
		Lab-confirmed	Epi-linked	Clinically-confirmed	Lab-confirmed	Epi-linked							
Bangladesh	6,408	234	14	63	169	2	5,926	1.77	0.98	97%	3.38	98%	
Bhutan	122	7	0	0	4	0	114	9.17	5.24	88%	14.94	100%	
DPR Korea	492	0	0	0	0	0	492	0.00	0.00	99%	1.99	100%	
India	112,185	14,017	21,670	7,723	2,474	80	65,926	31.46	1.85	94%	4.63	94%	
Indonesia	21,322	4,844	103	2,757	839	0	9,149	28.03	3.05	79%	3.33	89%	
Maldives	56	0	0	0	0	0	56	0.00	0.00	71%	9.67	100%	
Myanmar	57	7	0	3	0	0	47	0.18	0.00	86%	0.09	ND	
Nepal	1,105	26	96	8	24	0	949	4.44	0.82	98%	3.24	87%	
Sri Lanka	77	0	0	0	0	0	56	0.00	0.00	82%	0.25	ND	
Thailand	250	14	0	50	4	0	182	0.97	0.06	98%	0.28	0%	
Timor-Leste	47	0	0	0	0	0	47	0.00	0.00	100%	6.10	ND	

Source: MR surveillance database

ND = no data

**Table 7. Measles and rubella laboratory surveillance indicators, 2022**

Country	Serum specimen collected from suspected measles cases		Specimens received at the laboratory within 5 days of collection		Specimen positive for measles IgM		Specimen positive for rubella IgM		Results reported by the laboratory within 4 days of receiving the specimen for serology	Genotypes detected	
	No	%	No.	%	No.	%	No.	%		%	Measles
Bangladesh	6,446	100%	5,313	82%	253	4%	184	3%	99%	-	-
Bhutan	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-
DPR Korea	506	100%	506	100%	0	0%	0	0%	100%	-	-
India	76,725	68%	66,389	87%	12,782	17%	2,403	3%	90%	-	-
Indonesia	17,948	84%	15,705	88%	4,945	34%	865	6%	47%	B3, D8	-
Maldives	54	100%	54	100%	2	4%	3	5.6%	100%	-	-
Myanmar	57	100%	53	93%	7	12%	ND	ND	100%	-	-
Nepal	1,015	92%	824	81%	20	2%	23	2%	76%	-	-
Sri Lanka	77	100%	72	94%	0	0%	0	0.0%	94%	-	-
Thailand	216	86%	162	75%	14	6%	9	4%	96%	-	-
Timor-Leste	239	100%	239	100%	0	0%	0	0%	97%	-	-

Source: SEA Region annual EPI reporting form, 2022

ND = no data

Figure 19. Rubella vaccine introduction through routine immunization program

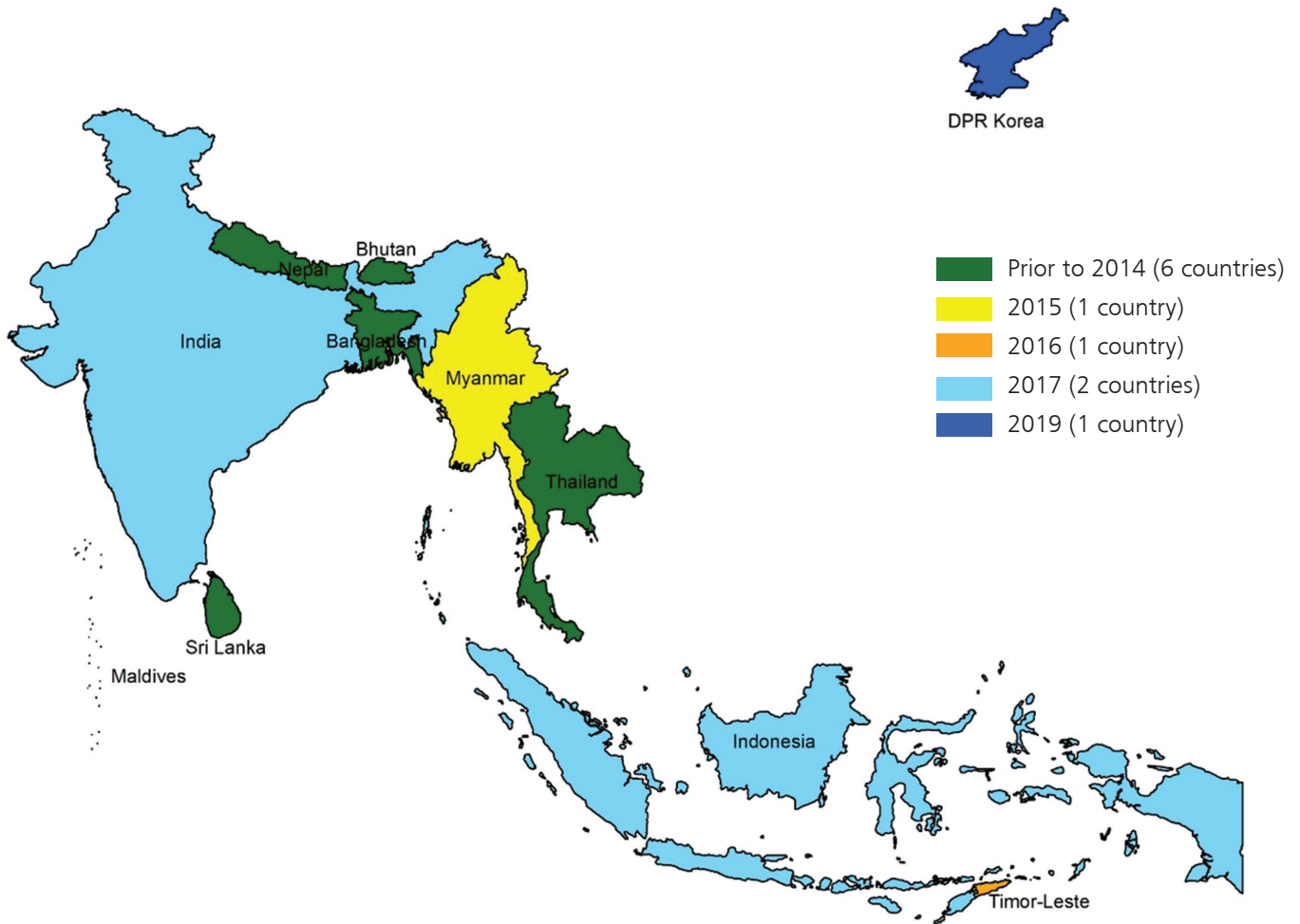
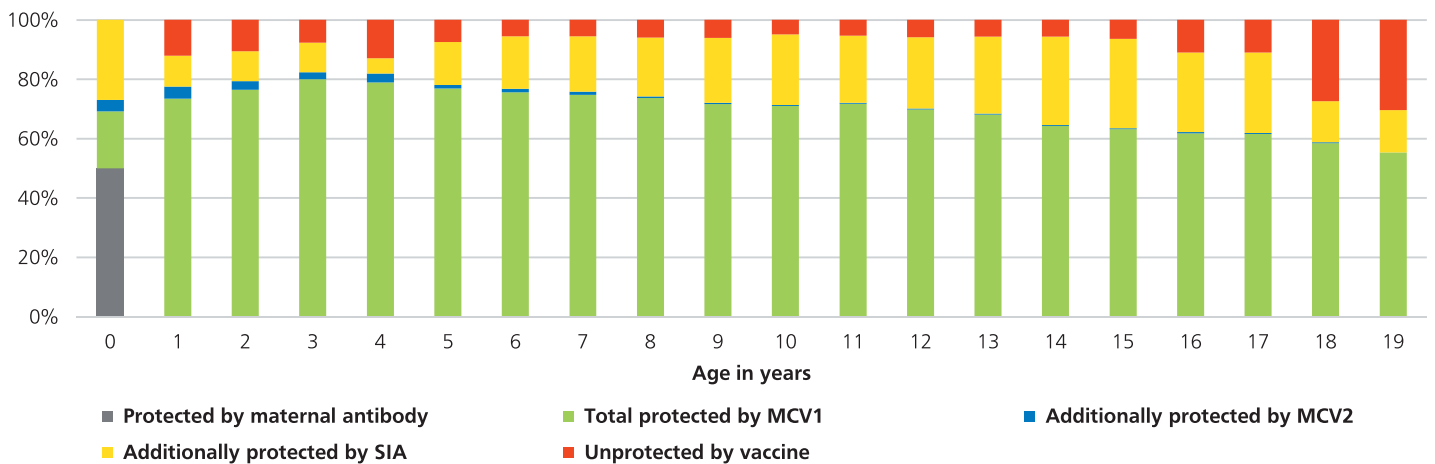


Figure 20. Immunity profile against measles through vaccination, 2022\*

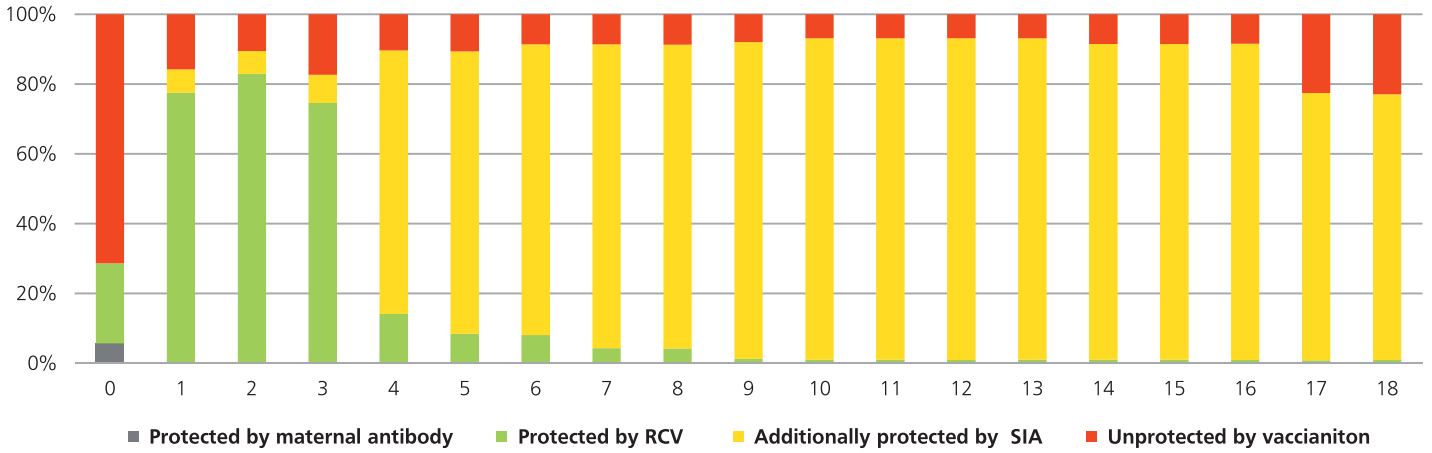


\*Modelled using MSP tool ver 2

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Figure 21. Immunity against rubella through vaccination - immunity profile by age in 2022\*

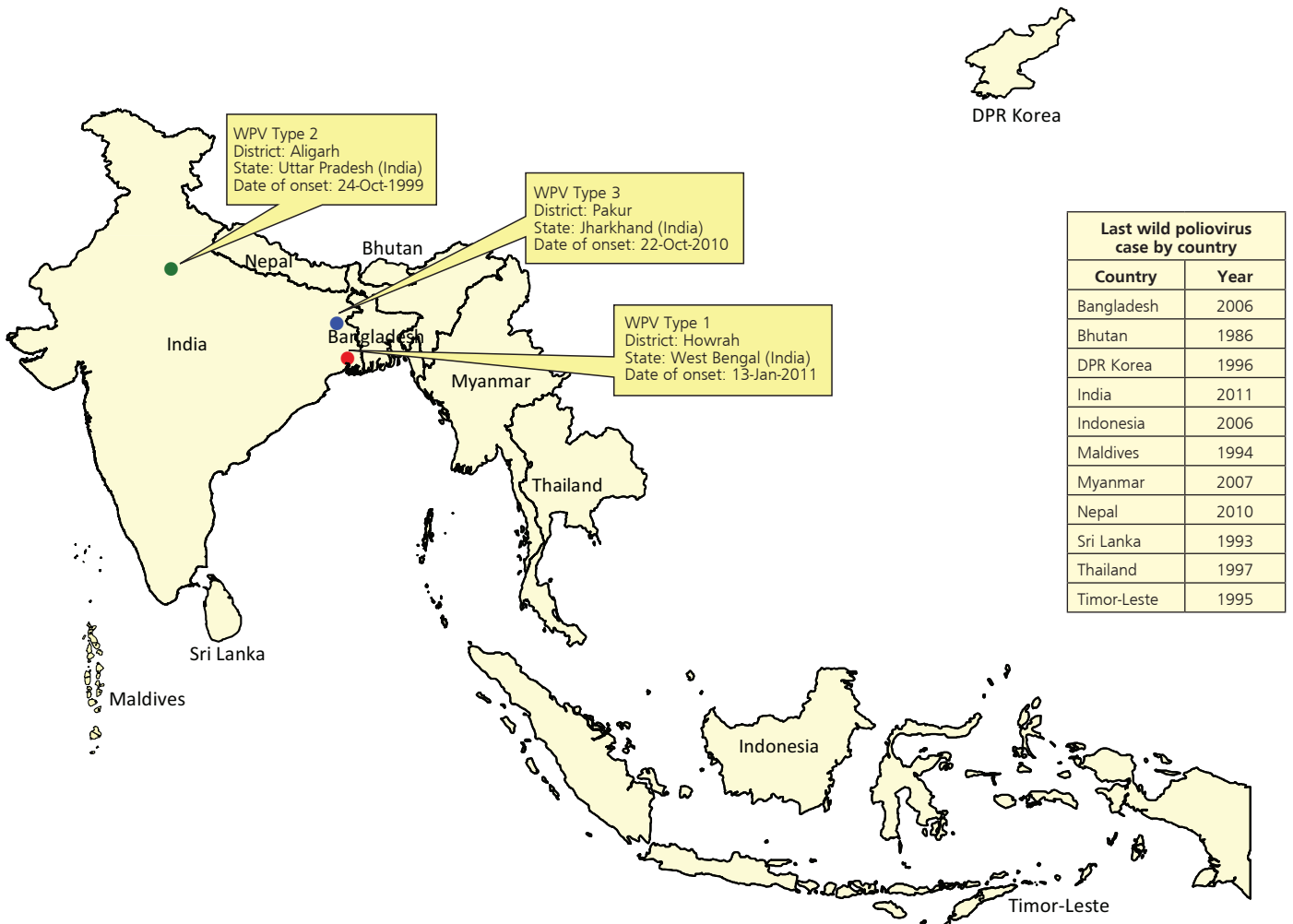


\*Modelled using WHO and UNICEF estimates and JRF (multiple years) and does not include immunity due to natural infection

## Maintaining polio-free status

Polio-free certification status maintained since 2014

Figure 22. Last wild poliovirus (WPV) cases by type

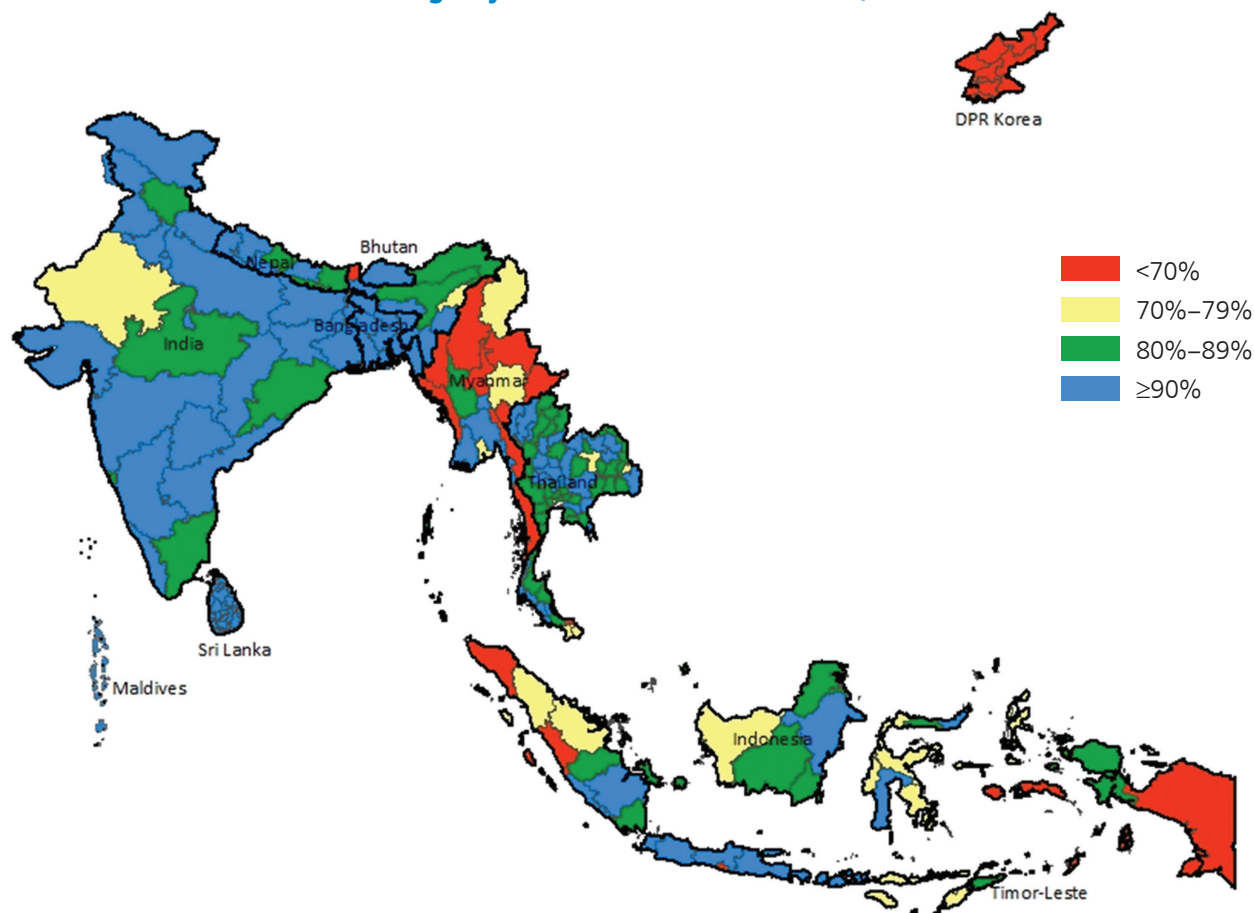


**Table 8. Immunization coverage with 3rd dose of oral polio vaccine (OPV3) and inactivated polio vaccine (IPV), 2019-2022**

Country	POL3				IPV1			
	2019	2020	2021	2022	2019	2020	2021	2022
Bangladesh	98	98	98	98	92	96	96	96
Bhutan	97	96	98	98	96	93	98	99
DPR Korea	98	70	0	0	98	98	17	0
India	90	85	85	93	82	81	82	91
Indonesia	85	76	68	86	76	37	61	77
Maldives	99	99	97	99	98	99	96	99
Myanmar	90	86	43	75	90	86	46	71
Nepal	92	84	91	87	80	73	86	84
Sri Lanka	99	96	96	98	99	96	96	98
Thailand	97	97	97	97	97	97	97	97
Timor-Leste	90	86	86	86	85	84	84	84
SEA Region	90	85	82	91	83	77	79	88

Source: WHO and UNICEF estimates of immunization coverage

**Figure 23. IPV immunization coverage by first administrative level\*, 2022**



\* Bhutan, Maldives and Timor-Leste by country  
Source: SEA Region annual EPI reporting form, 2022



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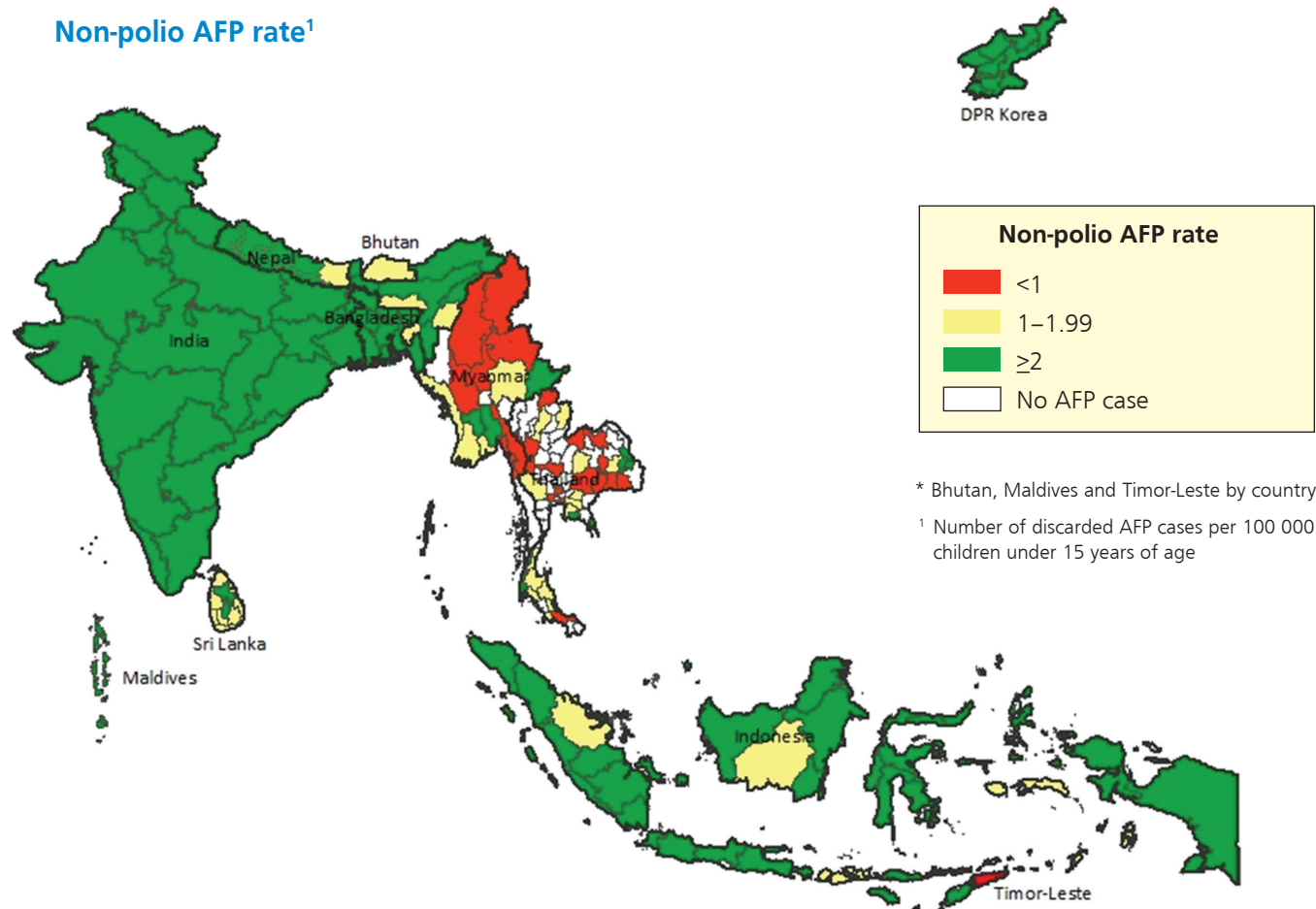
**Table 9. Acute flaccid paralysis (AFP) surveillance indicators by country, 2020-2022**

Country	2020					2021					2022				
	AFP	WPV confirmed cases	VDPV cases	Non-polio AFP rate <sup>a</sup>	Adequate stool specimen collection percentage <sup>b</sup>	AFP	WPV confirmed cases	VDPV cases	Non-polio AFP rate <sup>a</sup>	Adequate stool specimen collection percentage <sup>b</sup>	AFP	WPV confirmed cases	VDPV cases	Non-polio AFP rate <sup>a</sup>	Adequate stool specimen collection percentage <sup>b</sup>
Bangladesh	1,214	0	0	2.49	100	1,235	0	0	2.54	99	1,264	0	0	2.63	99
Bhutan	4	0	0	2.19	100	2	0	0	1.01	50	3	0	0	1.67	67
DPR Korea	128	0	0	2.23	100	134	0	0	1.90	100	132	0	0	1.93	100
India	21,244	0	0	4.60	82	25,461	0	0	5.52	86	30,208	0	1	6.65	88
Indonesia	569	0	0	0.77	79	1,050	0	0	1.52	70	2,414	0	1	3.65	77
Maldives	4	0	0	3.17	75	2	0	0	2.10	100	10	0	0	8.89	30
Myanmar	187	0	0	1.32	86	33	0	0	0.23	85	150	0	0	1.10	89
Nepal	230	0	0	2.66	98	260	0	0	3.00	99	219	0	0	2.71	97
Sri Lanka	50	0	0	0.97	88	69	0	0	1.06	78	86	0	0	1.52	71
Thailand	164	0	0	1.13	67	75	0	0	0.47	68	96	0	0	0.59	60
Timor-Leste	1	0	0	0.21	0	0	0	0	0.00	0	2	0	0	0.42	50
SEAR	23,795	0	0	7.33	87	28,321	0	0	4.54	86	34,584	0	2	5.64	88

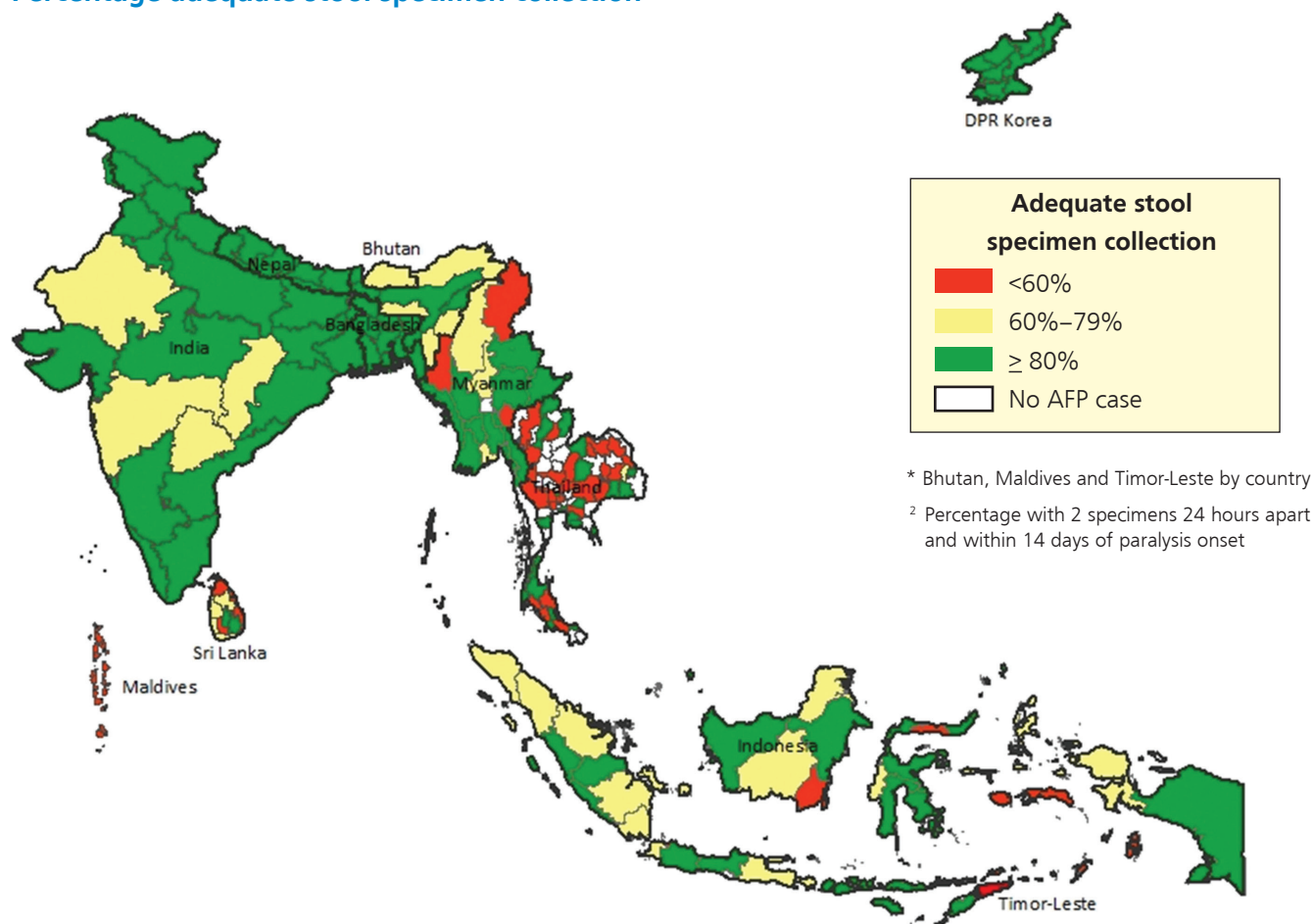
<sup>a</sup> Number of discarded AFP cases per 100 000 children under 15 years of age

<sup>b</sup> Percentage with 2 specimens, 24 hours apart and within 14 days of paralysis onset

**Figure 24. AFP surveillance indicators by first administrative level\*, 2022**



## Percentage adequate stool specimen collection<sup>2</sup>



**Table 10. Environmental surveillance for poliovirus detection, 2020 – 2022**

Country	2020					2021					2022				
	Number of sites	Number of samples collected	# WPVs detected	# VDPVs detected	NPEV	Number of sites	Number of samples collected	# WPVs detected	# VDPVs detected	NPEV	Number of sites	Number of samples collected	# WPVs detected	# VDPVs detected	NPEV
Bangladesh	8	127	0	0	80	8	120	0	0	67	8	148	0	0	98
India	56	1,258	0	0	415	58	1,533	0	0	683	63	1,739	0	1	803
Indonesia	12	128	0	0	16	13	144	0	0	19	13	155	0	0	51
Myanmar	3	31	0	0	7	3	25	0	0	11	1	12	0	0	6
Nepal	5	44	0	0	15	5	125	0	0	50	7	115	0	0	52
Thailand	6	132	0	0	73	6	136	0	0	43	6	154	0	0	21
<b>SEAR</b>	<b>90</b>	<b>1,720</b>	<b>0</b>	<b>0</b>	<b>606</b>	<b>93</b>	<b>2,083</b>	<b>0</b>	<b>0</b>	<b>873</b>	<b>98</b>	<b>2,323</b>	<b>0</b>	<b>1</b>	<b>1,031</b>

Note: Environmental surveillance started-India in 2002, Bangladesh in 2015, Indonesia and Thailand in 2016, Myanmar and Nepal in 2017

WPV: Wild Polio Virus; VDPV: Vaccine Derived Polio Virus; NPEV: Non Polio Enterovirus

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**Table 11. National immunization days (NIDs)/Sub-national immunization days (SNIDs) by country**

Country	Year of 1st NID	Total NIDs conducted	Most recent NID	SNIDs in 2022
Bangladesh	1995	40	Jan-14	No
Bhutan	1995	2	Nov-95	No
DPR Korea	1997	12	Nov-02	No
India	1995	46	Feb-22	Yes
Indonesia	1995	14	Mar-16	No
Maldives	1996	8	Jan-01	No
Myanmar	1996	23	Feb-16	No
Nepal	1996	27	Jan-14	No
Sri Lanka	1995	8	Dec-00	No
Thailand	1994	10	Jan-00	Yes
Timor-Leste	1995*	11	Jul-18	No

\* SIA conducted while still part of Indonesia

## Elimination of maternal and neonatal tetanus (MNT) is sustained

Maternal and neonatal tetanus elimination achieved and maintained since 2016.

**Figure 25. MNT elimination timeline**

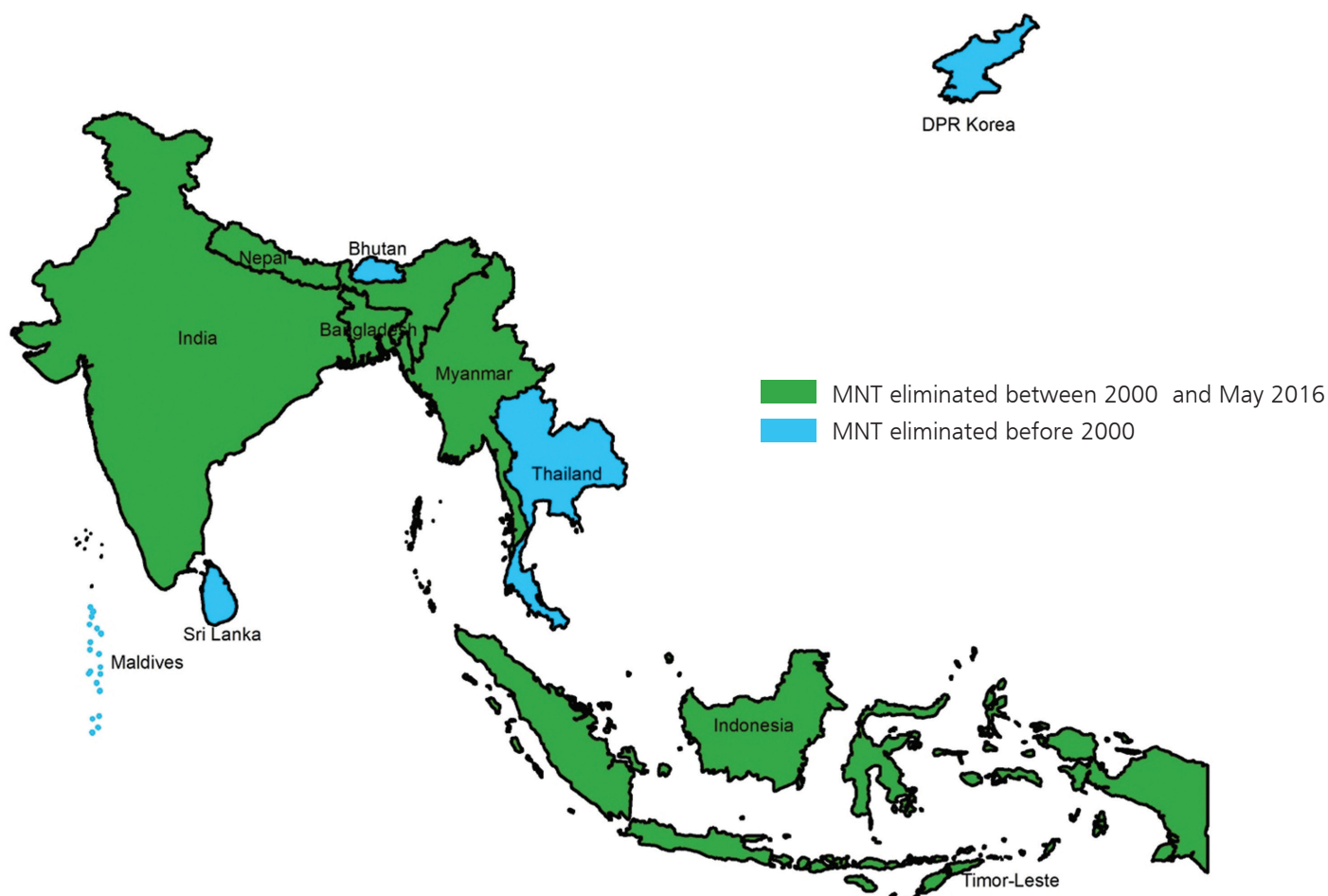
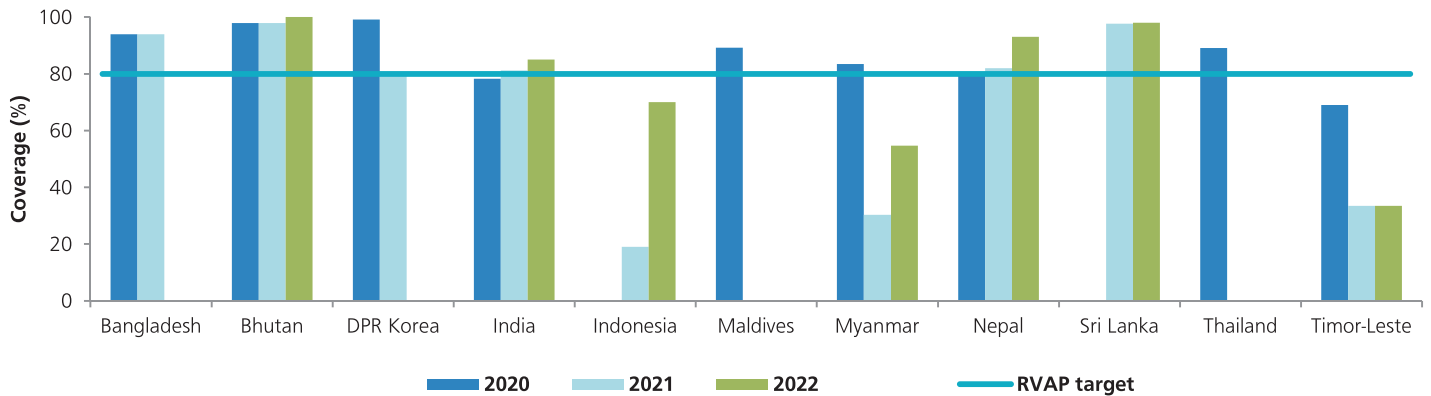
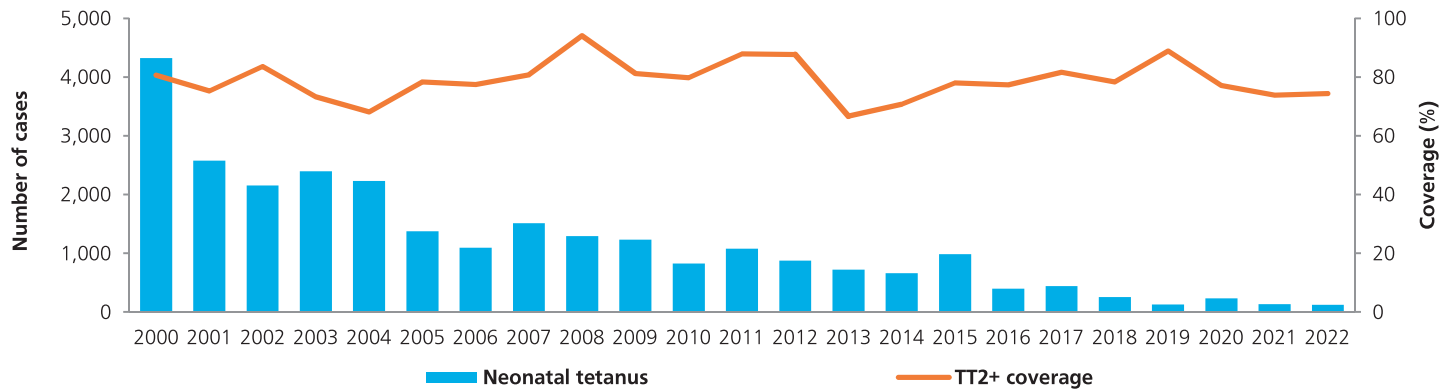


Figure 26. Immunization coverage with 2 or more doses tetanus toxoid (TT2+), 2020-2022



Source: This data is based on official and administrative system as reported in the Joint Reporting Form WHO UNICEF JRF (multiple years)

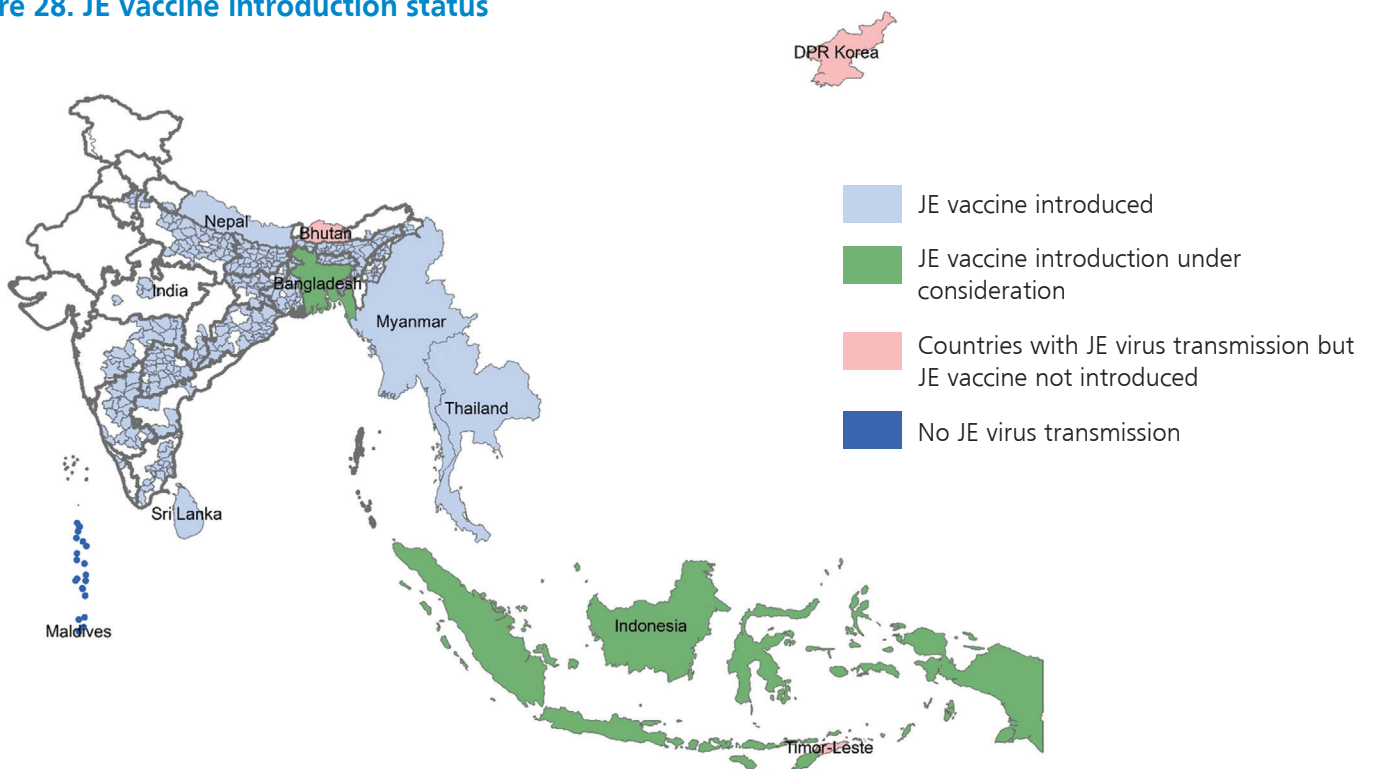
Figure 27. TT2+ coverage and neonatal tetanus cases, 2000-2022



Source: TT2+ coverage refers to country official estimates, diphtheria and pertussis cases from JRF 2000-2022

## Control of Japanese encephalitis (JE) is accelerated

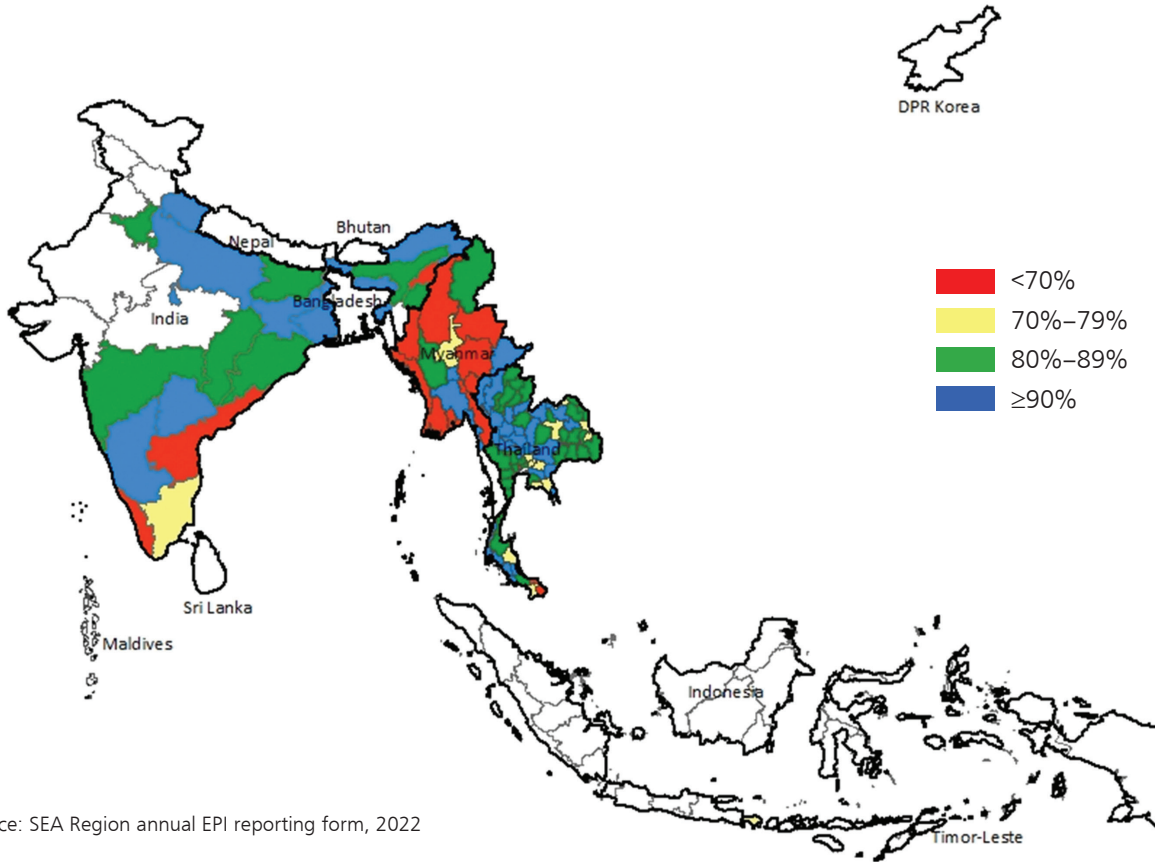
Figure 28. JE vaccine introduction status



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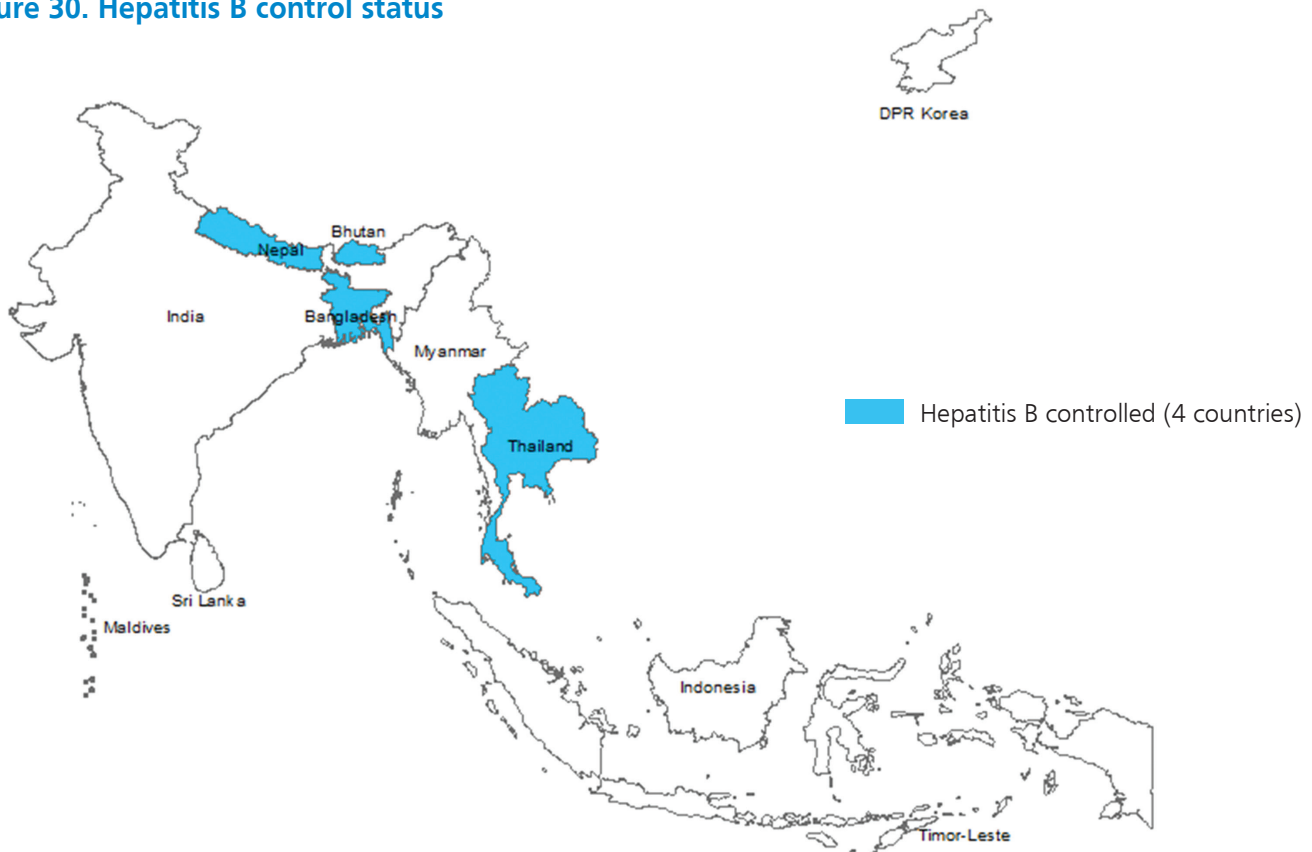
Figure 29. JE immunization coverage by first administrative level, 2022



Source: SEA Region annual EPI reporting form, 2022

## Control of hepatitis B is accelerated

Figure 30. Hepatitis B control status

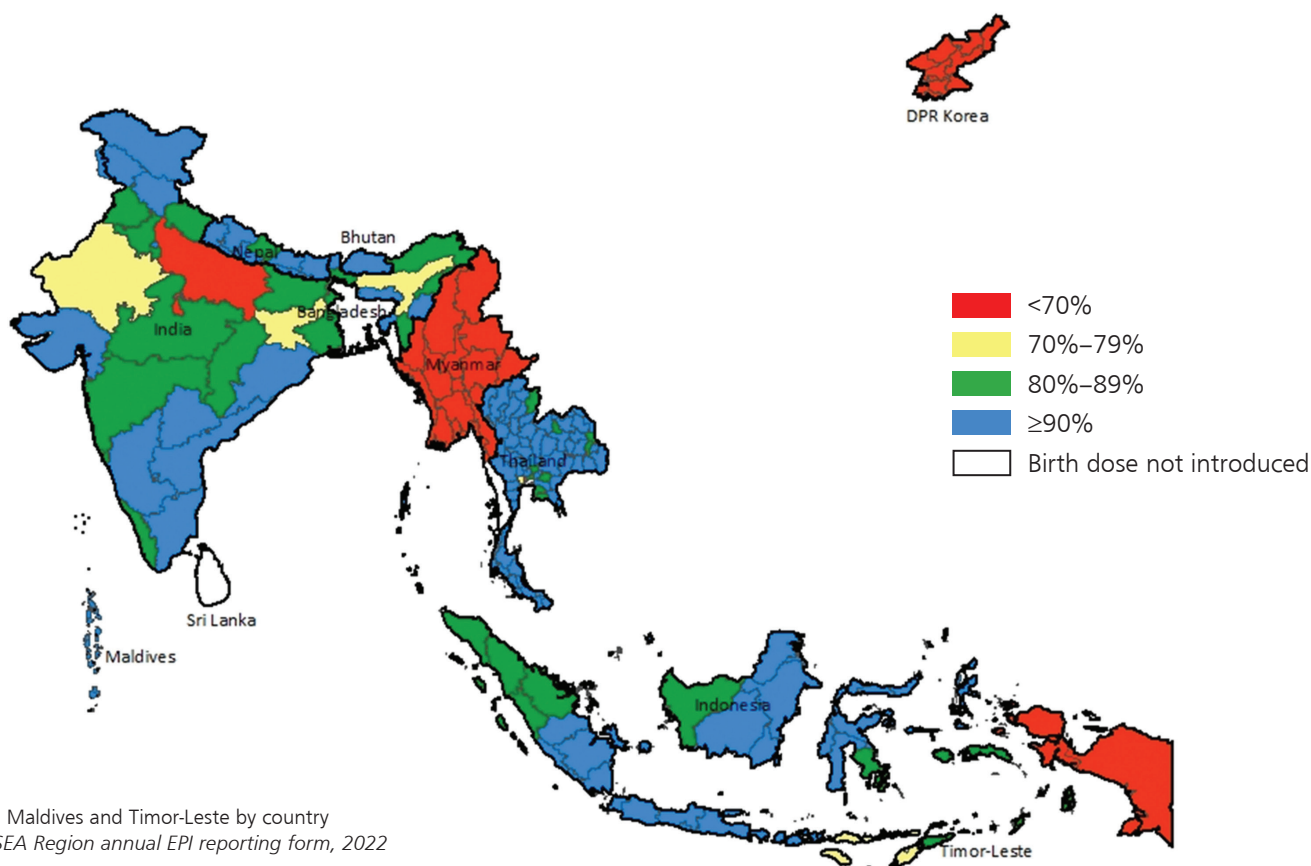


**Table 12. Immunization coverage of 3rd dose hepatitis B vaccine (HepB3) and HepB birth dose by country, 2019-2022**

Country	HepB3				HepB birth dose			
	2019	2020	2021	2022	2019	2020	2021	2022
Bangladesh	98	98	98	98	no birth dose			
Bhutan	97	96	98	98	86	85	84	94
DPR Korea	97	97	41	0	98	99	99	50
India	91	85	85	93	56	54	55	63
Indonesia	85	77	67	86	84	73	70	85
Maldives	98	99	96	99	99	99	99	99
Myanmar	90	84	37	71	17	21	6	8
Nepal	93	84	91	90	no birth dose			
Sri Lanka	99	96	96	98	no birth dose			
Thailand	97	97	97	97	99	99	99	99
Timor-Leste	90	86	86	86	70	72	72	72
SEAR	<b>91</b>	<b>86</b>	<b>82</b>	<b>91</b>	<b>53</b>	<b>51</b>	<b>51</b>	<b>58</b>

Source: WHO and UNICEF estimates of immunization coverage

**Figure 31. HepB birth dose coverage by first administrative level\*, 2022**



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## Introduction of new vaccines and related technologies is accelerated

Figure 32. HPV introduction status

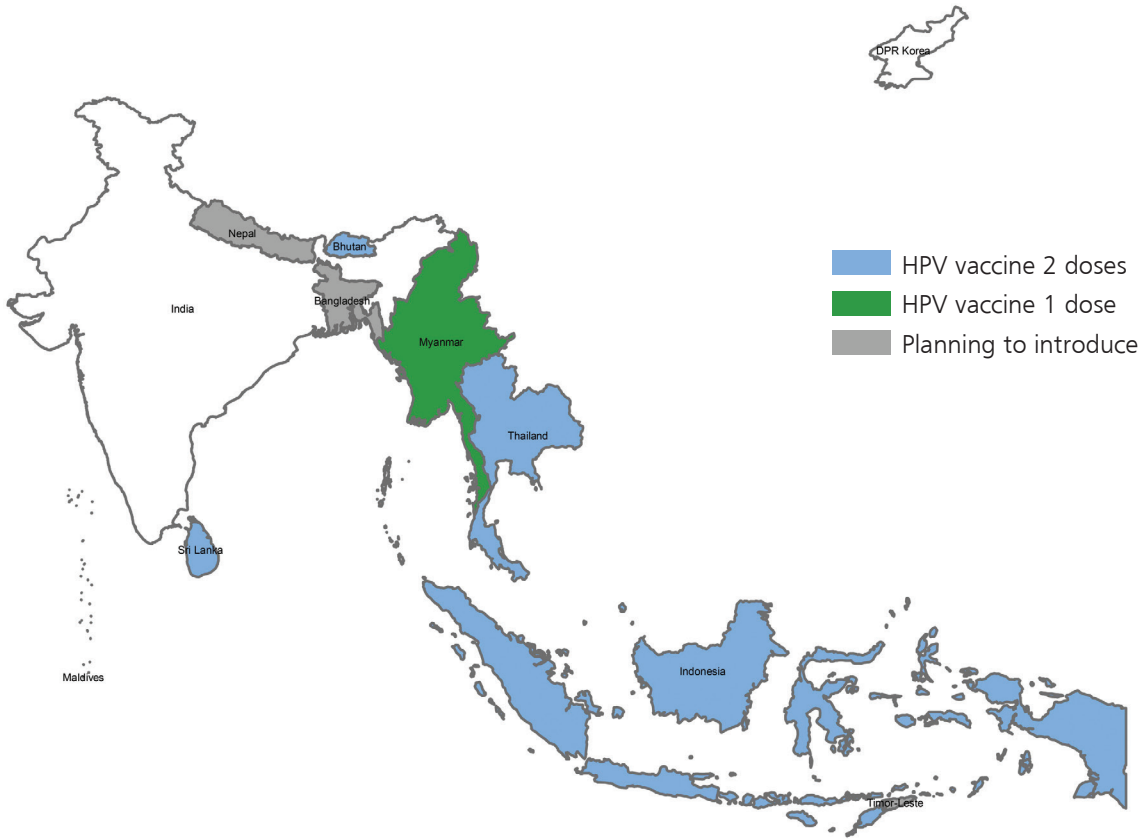


Figure 33. RV vaccine introduction status

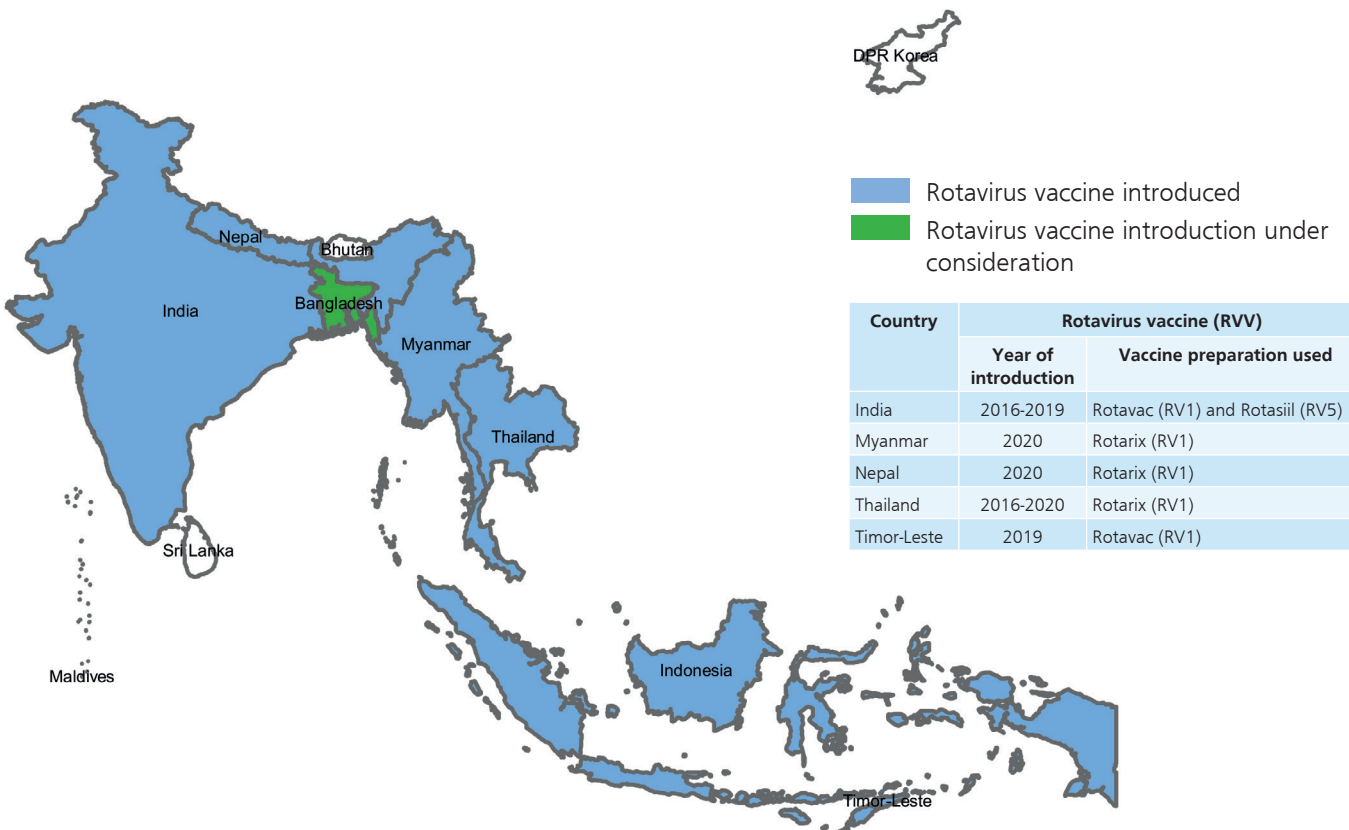
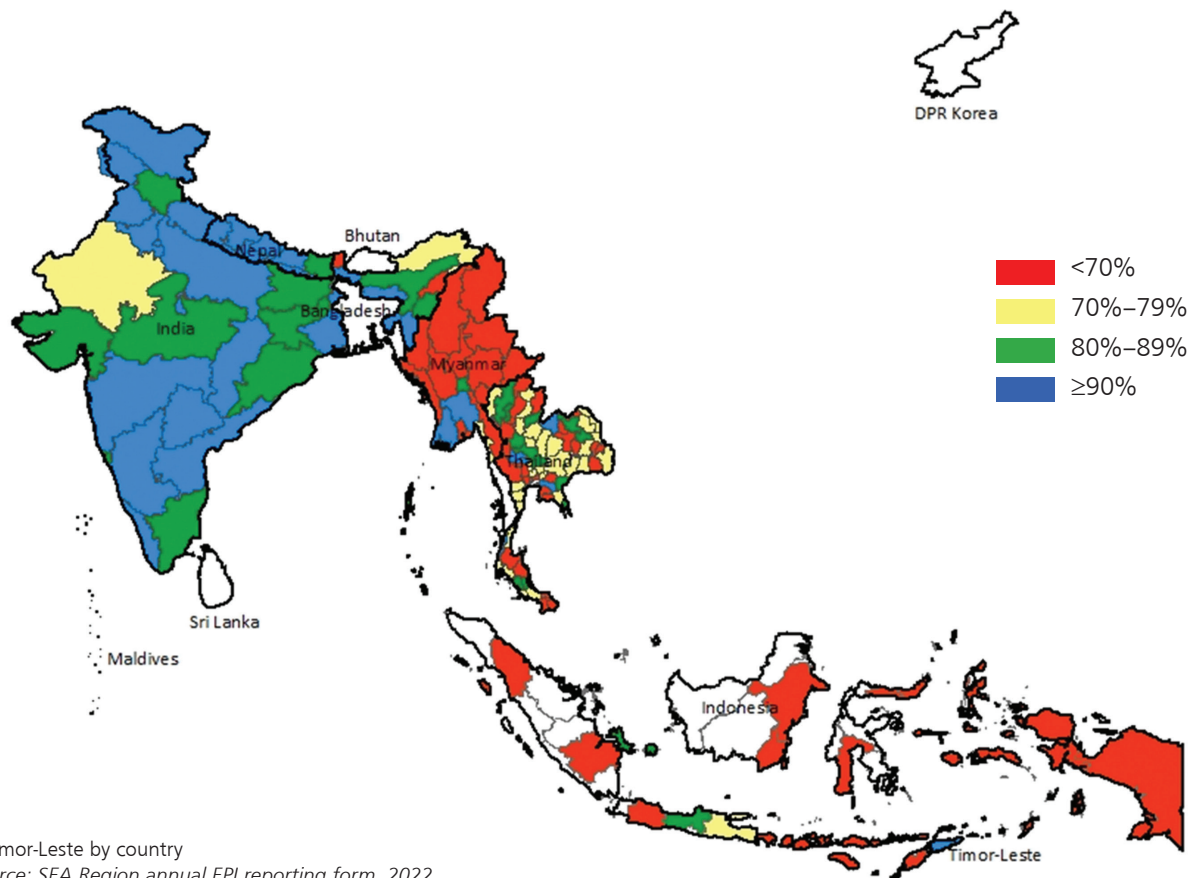
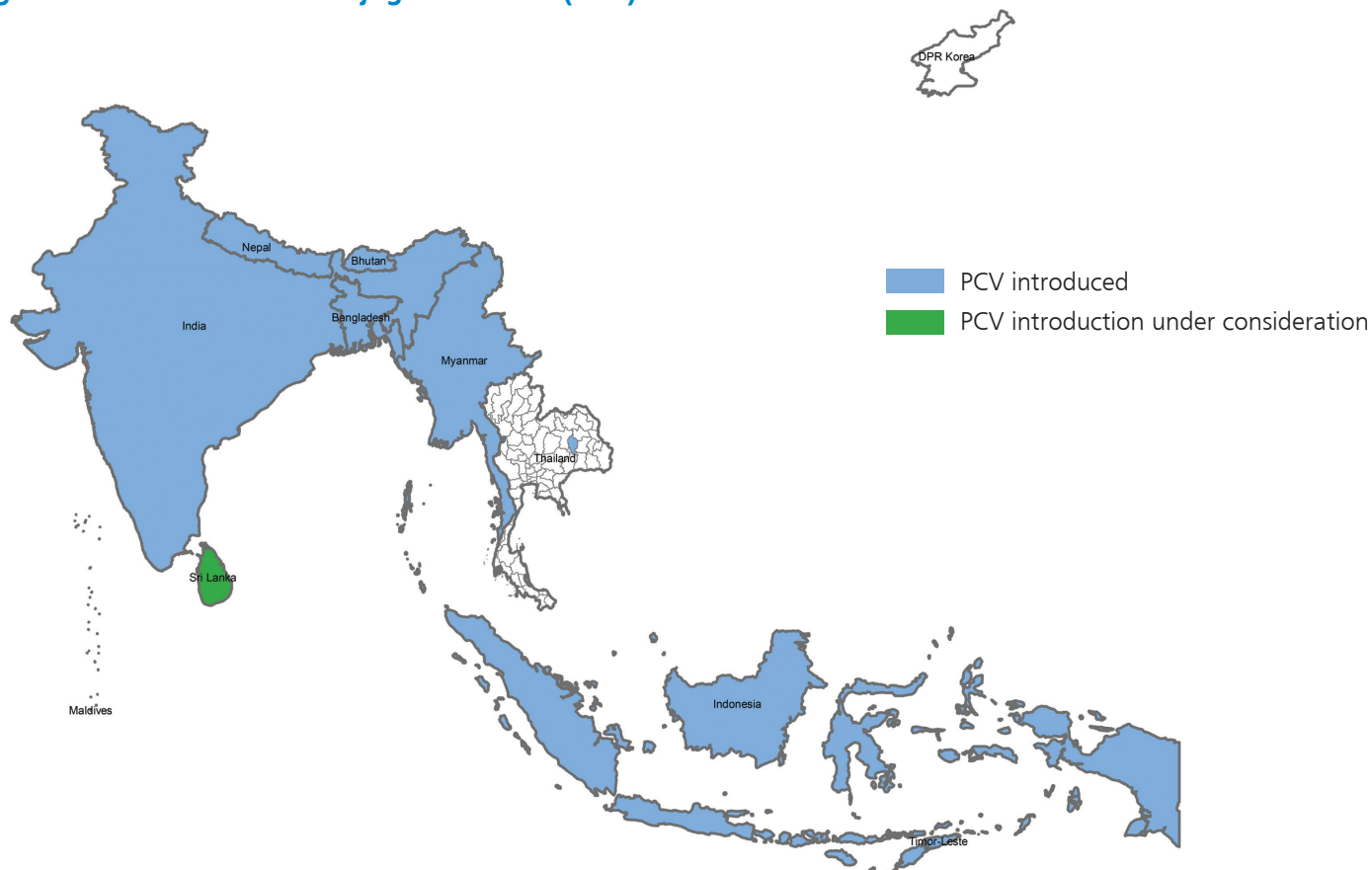


Figure 34. RV immunization coverage by first administrative level\*, 2022



\* Timor-Leste by country  
Source: SEA Region annual EPI reporting form, 2022

Figure 35. Pneumococcal conjugate vaccine (PCV) introduction status





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Figure 36. Seasonal influenza vaccine (SIV) introduction status

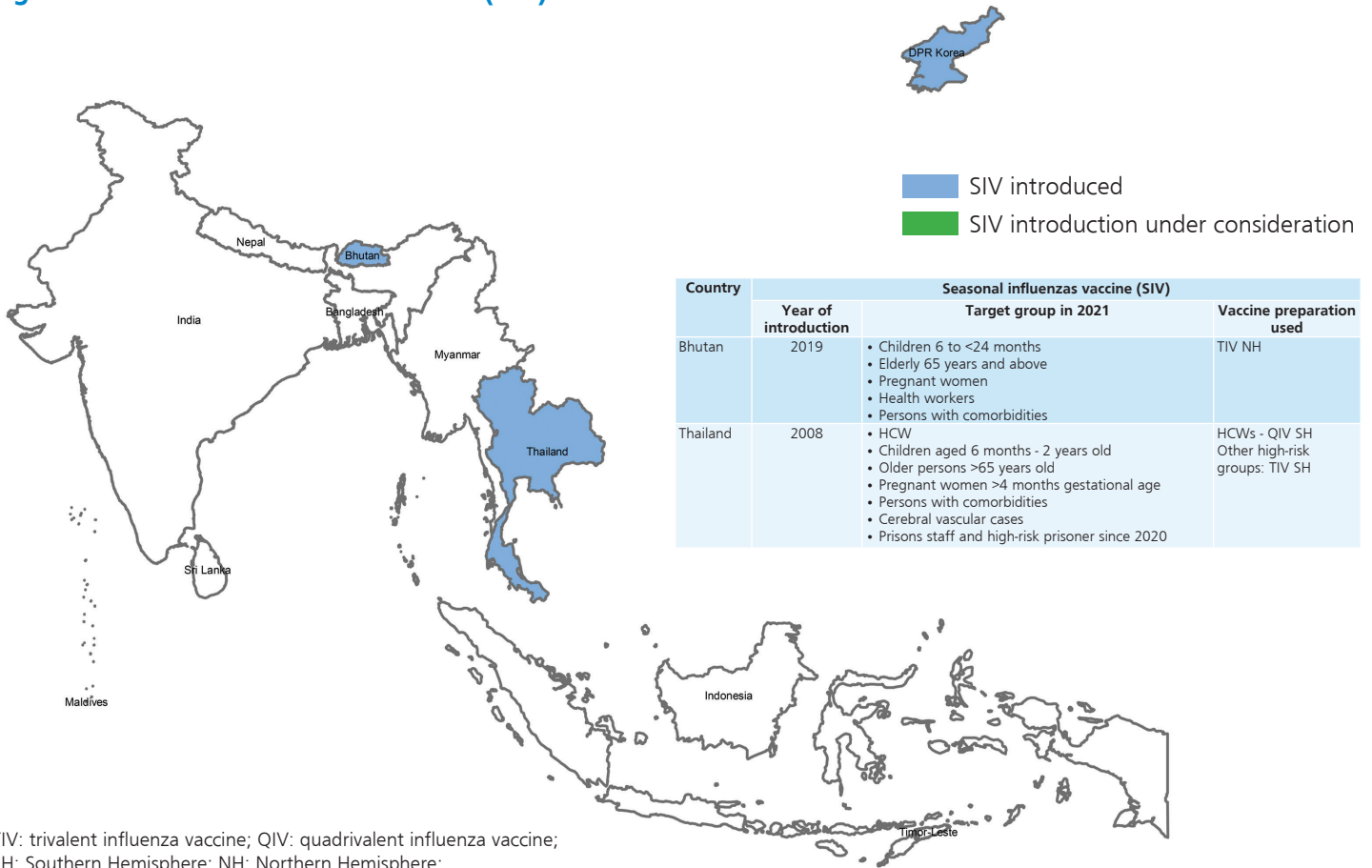


Figure 37. Typhoid containing vaccine (TCV) introduction status



## Access to high-quality vaccine is ensured

Table 13. Vaccine safety by country

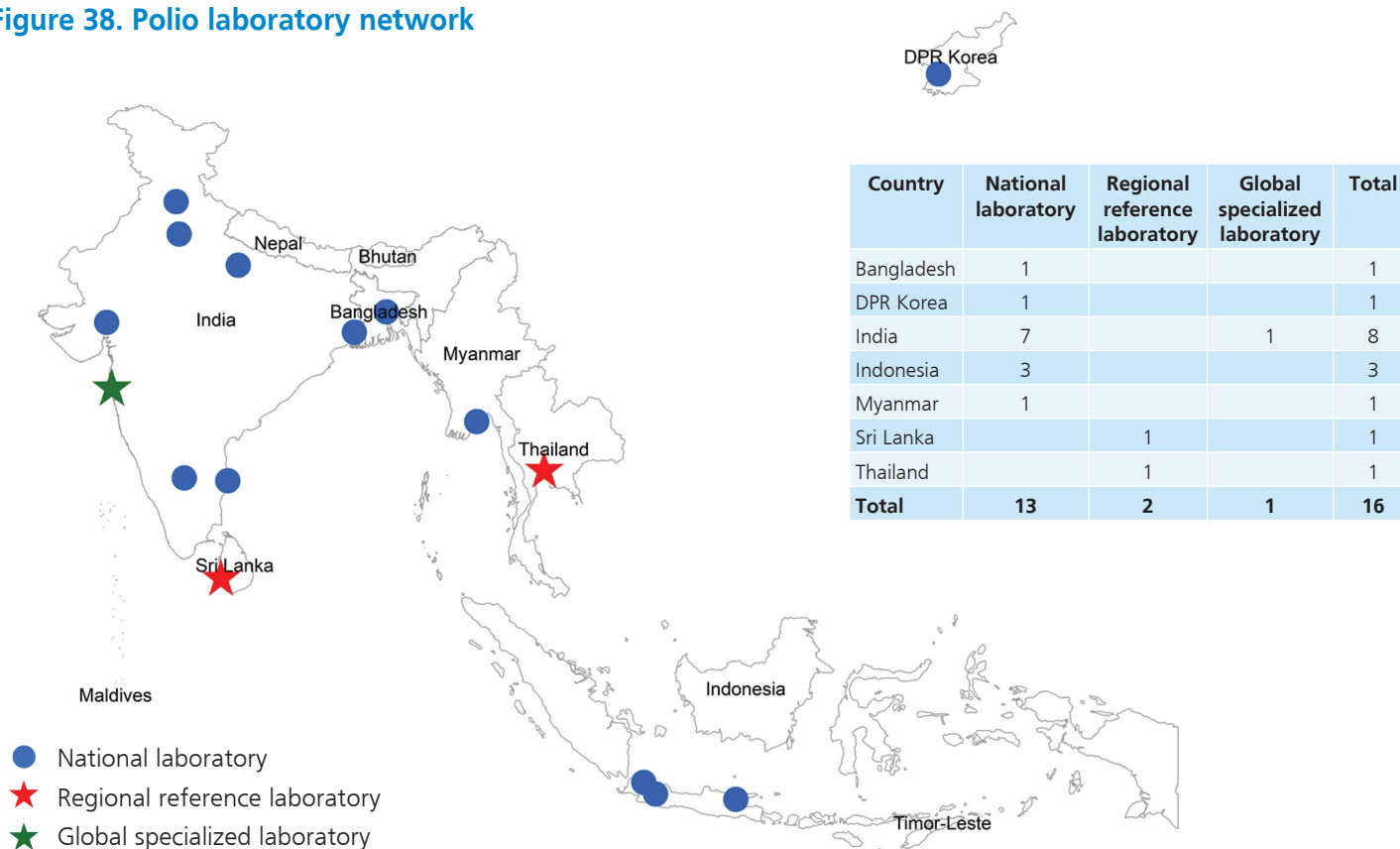
Country	Activities being implemented		Adverse events following immunization (AEFI)		
	Immunization injection safety	Vaccine adverse events review committee	National system to monitor AEFI	No. AEFI Reported	Of the total adverse events reported No of serious
Bangladesh	Yes	Yes	Yes	731	27
Bhutan	Yes	Yes	Yes	0	0
DPR Korea	Yes	Yes	Yes	4,157	49
India	Yes	Yes	Yes	1,855	1,855
Indonesia	Yes	Yes	Yes	7,328	27
Maldives	Yes	Yes	Yes	7	0
Myanmar	Yes	Yes	Yes	476	6
Nepal	Yes	Yes	Yes	1,037	10
Sri Lanka <sup>1</sup>	Yes	Yes	Yes	8,506	834
Thailand	Yes	Yes	Yes	4,029	1,665
Timor-Leste	Yes	Yes	Yes	30	30

Source: WHO/UNICEF JRF, 2022 and SEAR annual EPI reporting form 2022

<sup>1</sup> Adverse Events Following Immunization; Sri Lanka AEFI data do not reflect cases but events.

## Laboratory network for vaccine preventable diseases

Figure 38. Polio laboratory network



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Figure 39. Measles and rubella laboratory network

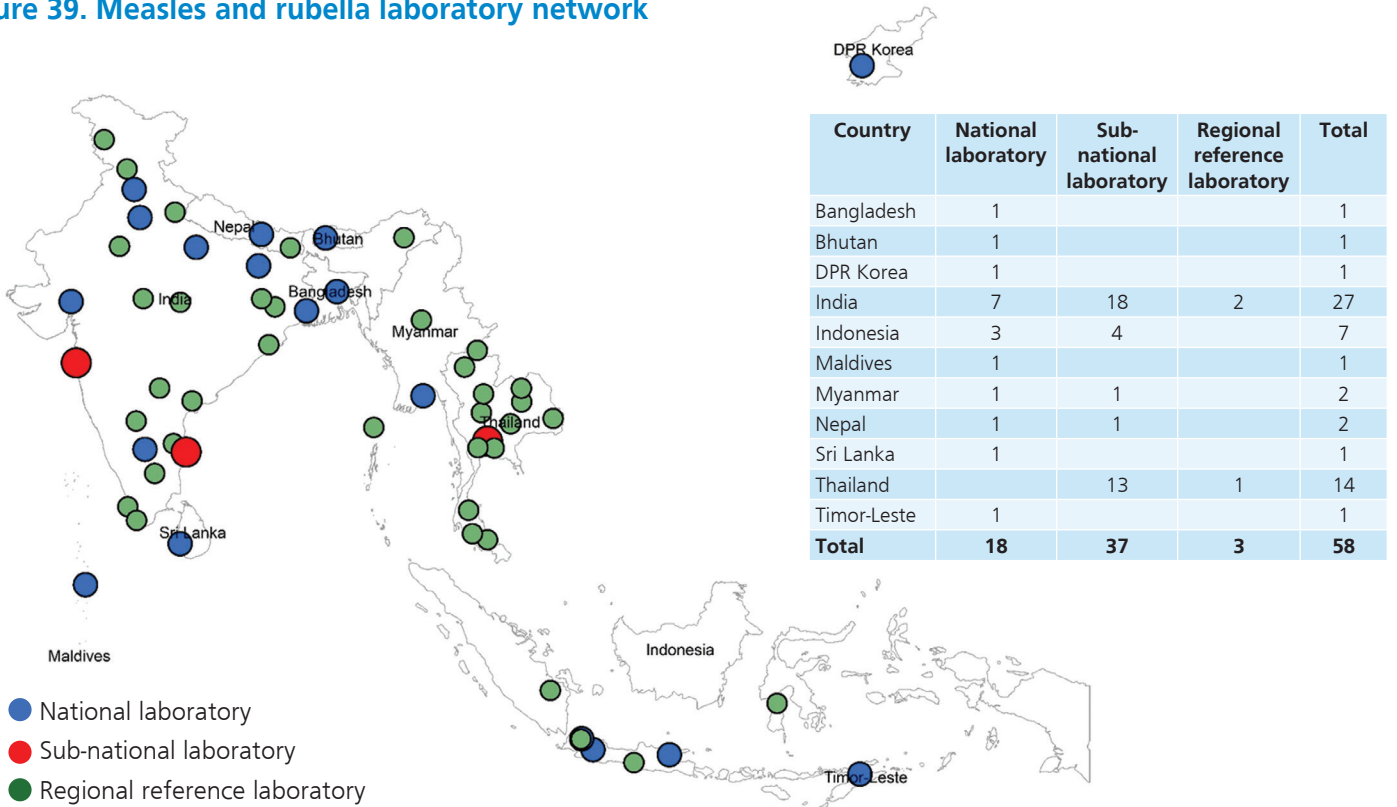
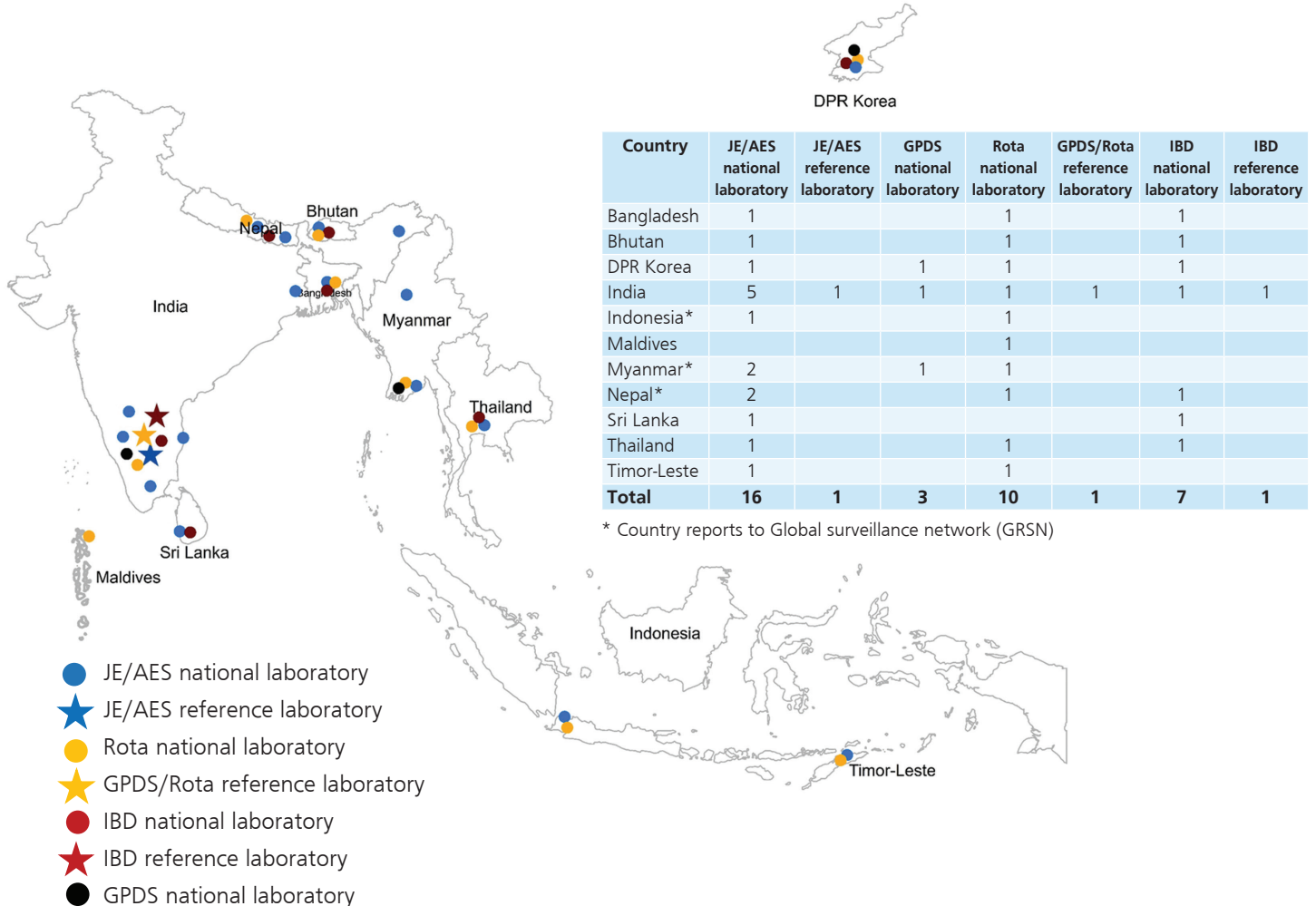


Figure 40. JE/AES, rota and invasive bacterial disease (IBD) laboratory network



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For contact or feedback:

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