

July 2, 2024; page 1

WHO and UNICEF estimates of national immunization coverage - next revision available July  $15,\,2025$ 

BACKGROUND NOTE: Each year WHO and UNICEF jointly review reports submitted by Member States regarding national immunization coverage, finalized survey reports as well as data from published and grey literature. Based on these data, with due consideration to potential biases and the views of local experts, WHO and UNICEF attempt to distinguish between situations where available empirical data accurately reflect immunization system performance and those where the data are likely compromised and present a misleading view of coverage.

WHO and UNICEF estimates are country-specific; that is to say, each country's data are reviewed individually, and data are not borrowed from other countries in the absence of data. Estimates are not based on ad hoc adjustments to reported data; in some instances empirical data are available from a single source, usually the nationally reported coverage data. In cases where no data are available for a given country/vaccine/year combination, data are considered from earlier and later years and interpolated to estimate coverage for the missing year(s). In cases where data sources are mixed and show large variation, an attempt is made to identify the most likely estimate with consideration of the possible biases in available data. For methods see:

- \*Burton et al. 2009. Bull World Health Organ.
- \*Burton et al. 2012. PLoS One.
- \*Danovaro-Holliday et al. 2021. Gates Open Res.

#### DATA SOURCES.

- ADMINISTRATIVE coverage: Reported by national authorities and based on aggregated administrative reports from health service providers on the number of vaccinations administered during a given period (numerator data) and reported target population data (denominator data). May be biased by inaccurate numerator and/or denominator data.
- OFFICIAL coverage: Estimated coverage reported by national authorities that reflects their assessment of the most likely coverage based on any combination of administrative coverage, survey-based estimates or other data sources or adjustments. Approaches to determine OFFICIAL coverage may differ across countries.
- SURVEY coverage: Based on estimated coverage from population-based household surveys among children aged 12-23 or 24-35 months following a review of survey methods and results. Information is based on the combination of vaccination history from documented evidence or caregiver recall. Survey results are considered for the appropriate birth cohort based on data collection period.

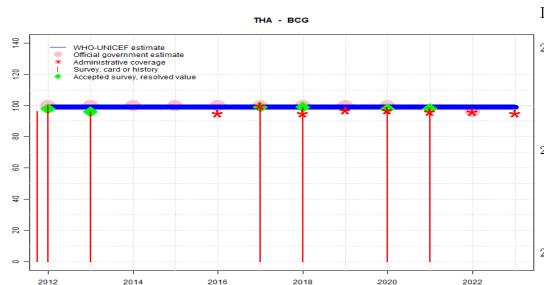
#### ABBREVIATIONS

- BCG: percentage of births who received one dose of Bacillus Calmette Guerin vaccine.
- DTP1 / DTP3: percentage of surviving infants who received the 1st / 3rd dose, respectively, of diphtheria and tetanus toxoid with pertussis containing vaccine.
- Pol3: percentage of surviving infants who received the 3rd dose of polio containing vaccine. May be either oral or inactivated polio vaccine.
- IPV1: percentage of surviving infants who received at least one dose of inactivated polio vaccine. In countries utilizing an immunization schedule recommending either (i) a primary series of three doses of oral polio vaccine (OPV) plus at least one dose of IPV where OPV is included in routine immunization and/or campaign or (ii) a sequential schedule of IPV followed by OPV, WHO and UNICEF estimates for IPV1 reflect coverage with at least one routine dose of IPV among infants <1 year of age. For countries utilizing IPV containing vaccine only, i.e., no recommended dose of OPV, WHO and UNICEF estimate for IPV1 corresponds to coverage for the 1st dose of IPV.

Production of IPV coverage estimates, which begins in 2015, results in no change of the estimated coverage levels for the 3rd dose of polio (Pol3). For countries recommending routine immunization with a primary series of three doses of IPV alone, WHO and UNICEF estimated Pol3 coverage is equivalent to estimated coverage with three doses of IPV. For countries with a sequential schedule, estimated Pol3 coverage is based on that for the 3rd dose of polio vaccine regardless of vaccine type.

- **IPV2:** percentage of surviving infants who received a 2nd dose of inactivated polio vaccine. IPV2 coverage estimates produced for OPV using countries.
- MCV1: percentage of surviving infants who received the 1st dose of measles containing vaccine. In countries where the national schedule recommends the 1st dose of MCV at 12 months or later based on the epidemiology of disease in the country, coverage estimates reflect the percentage of children who received the 1st dose of MCV as recommended.
- MCV2: percentage of children who received the 2nd dose of measles containing vaccine according to the nationally recommended schedule.
- RCV1: percentage of surviving infants who received the 1st dose of rubella containing vaccine. Co verage estimates are based on WHO and UNICEF estimates of coverage for the dose of measles containing vaccine that corresponds to the first measles-rubella combination vaccine. Nationally reported coverage of RCV is not taken into consideration nor are the data represented in the accompanying graph and data table.
- HepBB: percentage of births which received a dose of hepatitis B vaccine within 24 hours of delivery. Estimates of hepatitis B birth dose coverage are produced only for countries with a universal birth dose policy. Estimates are not produced for countries that recommend a birth dose to infants born to HepB virus-infected mothers only or where there is insufficient information to determine whether vaccination is within 24 hours of birth.
- **HepB3:** percentage of surviving infants who received the 3rd dose of hepatitis B containing vaccine following the birth dose.
- **Hib3:** percentage of surviving infants who received the 3rd dose of Haemophilus influenzae type b containing vaccine.
- **RotaC:** percentage of surviving infants who received the final recommended dose of rotavirus vaccine, which can be either the 2nd or the 3rd dose depending on the vaccine.
- PcV3: percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect the percentage of surviving infants who received two doses of PcV prior to the 1st birthday.
- YFV: percentage of surviving infants who received one dose of yellow fever vaccine in countries where YFV is part of the national immunization schedule for children or is recommended in at risk areas; coverage estimates are annualized for the entire cohort of surviving infants.
- MengA: percentage of children who received one dose of meningococcal A conjugate vaccine. MengA coverage estimates produced for countries in the meningitis belt of sub-Saharan Africa.

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	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	99	99	99	99	99	99	99	99	99	99	99	99
Estimate GoC	••	••	••	••	••	•	•	•	•	•	•	•
Official	100	100	100	100	100	100	100	100	100	NA	96	NA
Administrative	NA	NA	NA	NA	95	100	95	97	97	96	96	95
Survey	*	96.4	NA	NA	NA	98.6	98.8	NA	97.5	98.4	NA	NA

- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- •• Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

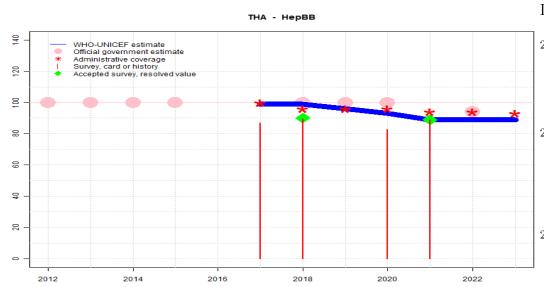
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

- 2023: Estimate based on extrapolation from data reported by national government. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-
- 2022: Estimate based on extrapolation from data reported by national government. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-
- 2021: Estimate based on extrapolation from data reported by national government supported by survey. Survey evidence of 98 percent based on 1 survey(s). Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-
- 2020: Estimate informed by reported data supported by survey. Survey evidence of 98 percent based on 1 survey(s). Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Bangkok seems not to be included in the data reporting system. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- 2018: Estimate informed by reported data supported by survey. Survey evidence of 99 percent based on 1 survey(s). Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- 2017: Estimate informed by reported data supported by survey. Survey evidence of 99 percent based on 1 survey(s). Reported official coverage is informed by a 2013 cluster coverage survey. Estimate challenged by: D-
- 2016: Estimate informed by reported data. Reported official coverage is informed by a 2013 cluster coverage survey. GoC=R+S+
- 2015: Estimate informed by reported data. GoC=R+S+
- 2014: Estimate informed by reported data. GoC=R+ S+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 1 survey(s). GoC=R+S+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 98 percent

## Thailand - BCG

based on 2 survey(s). GoC=R+ S+

## Thailand - HepBB



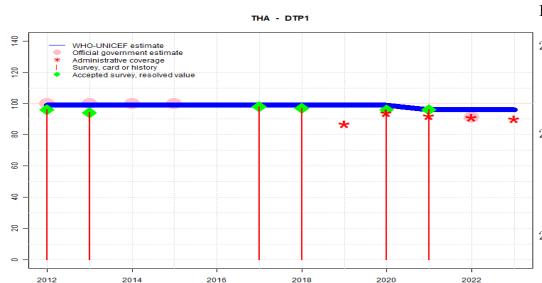
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	NA	NA	99	99	96	93	89	89	89
Estimate GoC	NA	NA	NA	NA	NA	•	•	•	•	•	•	•
Official	100	100	100	100	NA	NA	100	100	100	NA	94	NA
Administrative	NA	NA	NA	NA	NA	100	96	96	96	94	94	93
Survey	NA	NA	NA	NA	NA	87	89.6	NA	82.8	88.9	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- •• Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

- 2023: Reported data calibrated to 2021 levels. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-R-
- 2022: Reported data calibrated to 2021 levels. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 89 percent changed from previous revision value of 99 percent. Estimate challenged by: D-R-
- 2021: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 89 percent based on 1 survey(s). Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 89 percent changed from previous revision value of 99 percent. Estimate challenged by: D-R-
- 2020: Reported data calibrated to 2018 and 2021 levels. Thailand Multiple Indicator Cluster Survey 2022 results ignored by working group. Survey results lower than for younger cohort. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Bangkok seems not to be included in the data reporting system. Estimate of 93 percent changed from previous revision value of 99 percent. Estimate challenged by: D-R-
- 2019: Reported data calibrated to 2018 and 2021 levels. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate of 96 percent changed from previous revision value of 99 percent. Estimate challenged by: D-R-
- 2018: Estimate informed by reported data supported by survey. Survey evidence of 90 percent based on 1 survey(s). Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Thailand Multiple Indicator Cluster Survey 2019 results ignored by working group. Survey results lower than for younger cohort. Reported official coverage is informed by a 2013 cluster coverage survey. Reporting of doses delivered during first 24 hours started from 2017. Estimate challenged by: D-

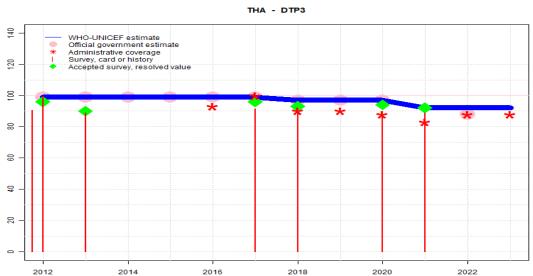


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	99	99	99	99	99	99	99	99	99	96	96	96
Estimate GoC	••	••	••	••	••	••	••	•	•	•	•	•
Official	100	100	100	100	NA	NA	NA	NA	NA	NA	91	NA
Administrative	NA	87	94	92	91	90						
Survey	96.3	94.2	NA	NA	NA	98	96.9	NA	95.6	96.3	NA	NA

- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- •• Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

- 2023: Reported data calibrated to 2021 levels. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-R-
- 022: Reported data calibrated to 2021 levels. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 96 percent changed from previous revision value of 99 percent. Estimate challenged by: D-R-
- 2021: Estimate of 96 percent assigned by working group. Estimate informed by survey coverage. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 96 percent changed from previous revision value of 99 percent. Estimate challenged by: D-R-
- 2020: DTP1 coverage estimated based on DTP3 coverage of 97. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Bangkok seems not to be included in the data reporting system. Estimate challenged by: D-R-
- 2019: DTP1 coverage estimated based on DTP3 coverage of 97. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-R-
- 2018: DTP1 coverage estimated based on DTP3 coverage of 97. Reported official coverage is informed by a 2018 cluster coverage survey. GoC=S+
- 2017: DTP1 coverage estimated based on DTP3 coverage of 99. Reported official coverage is informed by a 2013 cluster coverage survey. GoC=S+
- 2016: DTP1 coverage estimated based on DTP3 coverage of 99. Reported official coverage is informed by a 2013 cluster coverage survey. GoC=S+
- 2015: Estimate informed by reported data. GoC=R+S+
- 2014: Estimate informed by reported data. GoC=R+ S+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). GoC=R+S+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 1 survey(s). GoC=R+ S+



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	99	99	99	99	99	99	97	97	97	92	92	92
Estimate GoC	••	••	••	••	••	•	•	•	•	•	•	•
Official	99	99	99	99	99	99	97	97	97	NA	88	NA
						4.00		0.0	0.0	0.0	00	0.0
Administrative	NA	NA	NA	NA	93	100	90	90	88	83	88	88

- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- •• Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

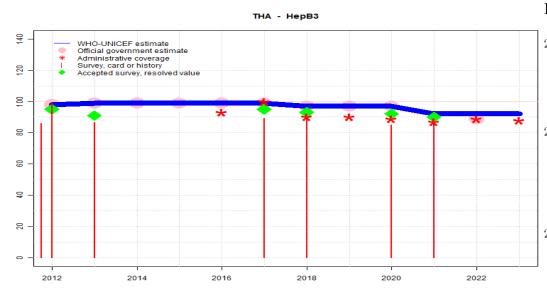
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

- 2023: Reported data calibrated to 2021 levels. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-R-
- 2022: Reported data calibrated to 2021 levels. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 92 percent changed from previous revision value of 97 percent. Estimate challenged by: D-R-
- 2021: Estimate of 92 percent assigned by working group. Estimate informed by survey coverage. Thailand Multiple Indicator Cluster Survey 2022 card or history results of 89 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 88 percent and 3rd dose card only coverage of 85 percent. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 92 percent changed from previous revision value of 97 percent. Estimate challenged by: D-R-
- 2020: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). Thailand Multiple Indicator Cluster Survey 2022 card or history results of 90 percent modifed for recall bias to 94 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 82 percent and 3rd dose card only coverage of 81 percent. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Bangkok seems not to be included in the data reporting system. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- 2018: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Thailand Multiple Indicator Cluster Survey 2019 card or history results of 90 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 86 percent. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- $2017\!:$  Estimate informed by reported data supported by survey. Survey evidence of 96 percent

### Thailand - DTP3

- based on 1 survey(s). Thailand Multiple Indicator Cluster Survey 2019 card or history results of 91 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 88 percent and 3rd dose card only coverage of 85 percent. Reported official coverage is informed by a 2013 cluster coverage survey. Estimate challenged by: D-
- 2016: Estimate informed by reported data. Reported official coverage is informed by a 2013 cluster coverage survey. GoC=R+S+
- 2015: Estimate informed by reported data. GoC=R+S+
- 2014: Estimate informed by reported data. GoC=R+ S+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 90 percent based on 1 survey(s). Thailand Multiple Indicator Cluster Survey 2015-2016 card or history results of 89 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 84 percent and 3rd dose card only coverage of 80 percent. GoC=R+S+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 2 survey(s). Thailand Multiple Indicator Cluster Survey 2015-2016 card or history results of 90 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 82 percent. GoC=R+S+

## Thailand - HepB3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	98	99	99	99	99	99	97	97	97	92	92	92
Estimate GoC	••	••	••	••	••	•	•	•	•	•	•	•
Official	98	99	99	99	99	99	97	97	97	NA	89	NA
Administrative	NA	NA	NA	NA	93	100	90	90	89	87	89	88
Survey	*	86.6	NA	NA	NA	89.1	89	NA	84.9	85.7	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
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- 2023: Reported data calibrated to 2021 levels. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-R-
- 2022: Reported data calibrated to 2021 levels. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 92 percent changed from previous revision value of 97 percent. Estimate challenged by: D-R-
- 2021: Estimate of 92 percent assigned by working group. Estimate informed by survey coverage for DTP3. Thailand Multiple Indicator Cluster Survey 2022 card or history results of 86 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 88 percent and 3rd dose card only coverage of 85 percent. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 92 percent changed from previous revision value of 97 percent. Estimate challenged by: D-R-
- 2020: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). Thailand Multiple Indicator Cluster Survey 2022 card or history results of 85 percent modifed for recall bias to 92 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 82 percent and 3rd dose card only coverage of 81 percent. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Bangkok seems not to be included in the data reporting system. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- 2018: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Thailand Multiple Indicator Cluster Survey 2019 card or history results of 89 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 86 percent. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- $2017\!:$  Estimate informed by reported data supported by survey. Survey evidence of 95 percent

## Thailand - HepB3

- based on 1 survey(s). Thailand Multiple Indicator Cluster Survey 2019 card or history results of 89 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 88 percent and 3rd dose card only coverage of 86 percent. Reported official coverage is informed by a 2013 cluster coverage survey. Estimate challenged by: D-
- 2016: Estimate informed by reported data. Reported official coverage is informed by a 2013 cluster coverage survey. GoC=R+S+
- 2015: Estimate informed by reported data. GoC=R+S+
- 2014: Estimate informed by reported data. GoC=R+ S+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 91 percent based on 1 survey(s). Thailand Multiple Indicator Cluster Survey 2015-2016 card or history results of 87 percent modified for recall bias to 91 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 83 percent. GoC=R+S+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 2 survey(s). Thailand Multiple Indicator Cluster Survey 2015-2016 card or history results of 86 percent modified for recall bias to 91 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 84 percent. GoC=R+S+



2018

2020

2022

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	45	84	83	83							
Estimate GoC	NA	•	•	•	•							
Official	NA	79	NA									
Administrative	NA	45	76	79	80							
Survey	NA											

2016

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- •• Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

### Description:

- 2023: Estimate informed by previous year estimated coverage. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-R-
- 022: Estimate of 83 percent assigned by working group. Estimate informed by the relationship between reported coverage for DTP3 and Hib3 applied to the estimated DTP3. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 83 percent changed from previous revision value of 88 percent. Estimate challenged by: D-R-
- 21: Estimate informed by the relationship between reported coverage for DTP3 and Hib3 applied to the estimated DTP3. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate informed by reported administrative data during introduction period. Estimate of 84 percent changed from previous revision value of 76 percent. Estimate challenged by: D-R-
- 2020: Hib introduced in June 2019 nationally as DTP-Hib-HepB combination vaccine. Reporting started in 2020. Estimate is exceptionally informed by reported coverage. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Bangkok seems not to be included in the data reporting system. Estimate challenged by: D-R-

8

8

9

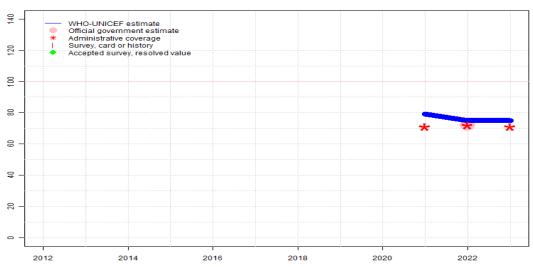
9

20

2012

2014





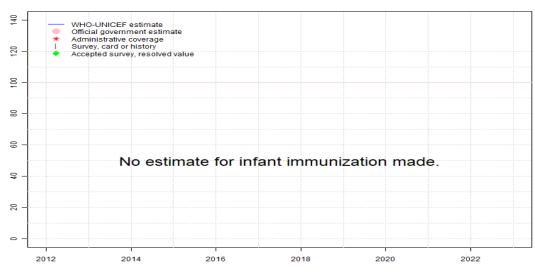
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	79	75	75								
Estimate GoC	NA	•	•	•								
Official	NA	72	NA									
Administrative	NA	71	72	71								
Survey	NA											

- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- •• Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

- 2023: Estimate informed by previous year estimated coverage. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-R-
  - 22: Estimate informed by the relationship between reported coverage for DTP3 and RotaC applied to the estimated DTP3. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 75 percent changed from previous revision value of 72 percent. Estimate challenged by: D-R-
  - 21: Estimate informed by the relationship between reported coverage for DTP3 and RotaC applied to the estimated DTP3. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Rotavirus vaccine introduced nationally in 2020. Reporting began in 2021. Estimate of 79 percent changed from previous revision value of 71 percent. Estimate challenged by: D-R-

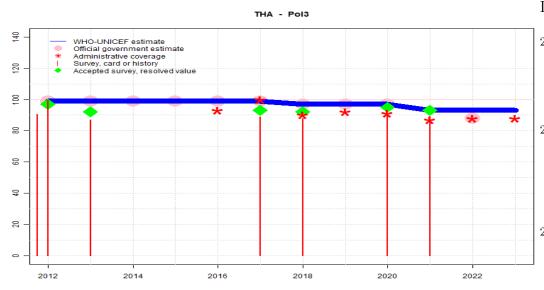




	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	NA											

- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- •• Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	99	99	99	99	99	99	97	97	97	93	93	93
Estimate GoC	••	••	••	••	••	•	•	•	•	•	•	•
Official	99	99	99	99	99	99	97	97	97	NA	88	NA
Administrative	NA	NA	NA	NA	93	100	90	92	91	87	88	88
Survey	*	86.9	NA	NA	NA	88.7	87.8	NA	90.1	89.3	NA	NA

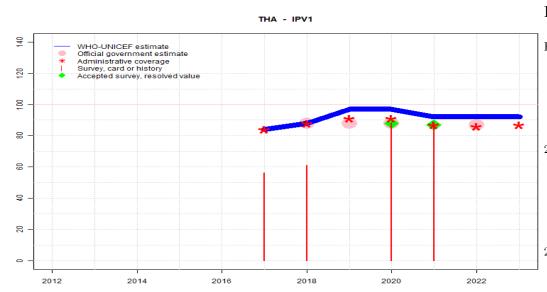
- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- •• Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

- 2023: Reported data calibrated to 2021 levels. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-R-
- Reported data calibrated to 2021 levels. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 93 percent changed from previous revision value of 97 percent. Estimate challenged by: D-R-
- 2021: Estimate of 93 percent assigned by working group. Estimate informed by survey coverage. Thailand Multiple Indicator Cluster Survey 2022 card or history results of 89 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 88 percent and 3rd dose card only coverage of 85 percent. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 93 percent changed from previous revision value of 97 percent. Estimate challenged by: D-R-
- 2020: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 1 survey(s). Thailand Multiple Indicator Cluster Survey 2022 card or history results of 90 percent modifed for recall bias to 95 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 82 percent and 3rd dose card only coverage of 81 percent. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Bangkok seems not to be included in the data reporting system. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- 2018: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). Thailand Multiple Indicator Cluster Survey 2019 card or history results of 88 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 86 percent. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- $2017\!:$  Estimate informed by reported data supported by survey. Survey evidence of 93 percent

### Thailand - Pol3

- based on 1 survey(s). Thailand Multiple Indicator Cluster Survey 2019 card or history results of 89 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 88 percent and 3rd dose card only coverage of 85 percent. Reported official coverage is informed by a 2013 cluster coverage survey. Estimate challenged by: D-
- 2016: Estimate informed by reported data. Reported official coverage is informed by a 2013 cluster coverage survey. GoC=R+S+
- 2015: Estimate informed by reported data. GoC=R+S+
- 2014: Estimate informed by reported data. GoC=R+ S+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). Thailand Multiple Indicator Cluster Survey 2015-2016 card or history results of 87 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 82 percent. GoC=R+S+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 2 survey(s). Thailand Multiple Indicator Cluster Survey 2015-2016 card or history results of 91 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 84 percent. GoC=R+S+



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	NA	NA	84	88	97	97	92	92	92
Estimate GoC	NA	NA	NA	NA	NA	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	NA	NA	88	88	88	NA	87	NA
Administrative	NA	NA	NA	NA	NA	84	88	91	91	87	86	87
Survey	NA	NA	NA	NA	NA	56.3	60.9	NA	88.2	87.1	NA	NA

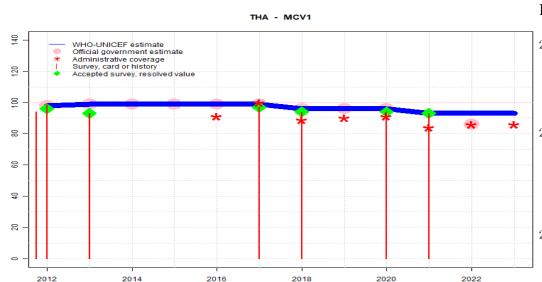
- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- •• Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

- Estimates for a dose of inactivated polio vaccine (IPV) begin in 2015 following the Global Polio Eradication Initiative's Polio Eradication and Endgame Strategic Plan: 2013-2018 which recommended at least one full dose or two fractional doses of IPV into routine immunization schedules as a strategy to mitigate the potential consequences should any re-emergence of type 2 poliovirus occur following the planned withdrawal of Sabin type 2 strains from oral polio vaccine (OPV).
- 2023: Estimate is based on 2022 estimated coverage. Recommended age changed from 4 to 2 months of age, as a second IPV dose was added. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-R-
- 2022: Estimate informed by the DTP3 estimated coverage. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 92 percent changed from previous revision value of 97 percent. Estimate challenged by: D-R-
- 2021: Estimate of 92 percent assigned by working group. Estimate informed by the DTP3 estimated coverage. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 92 percent changed from previous revision value of 97 percent. Estimate challenged by: D-R-
- 2020: Estimate of 97 percent assigned by working group. Estimate informed by the DTP3 estimated coverage. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Bangkok seems not to be included in the data reporting system. Estimate challenged by: D-R-
- 2019: Estimate informed by the DTP3 estimated coverage. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-R-
- 2018: Estimate informed by reported data during period of introduction. Thailand Multiple Indicator Cluster Survey 2019 results ignored by working group. Survey results inconsistent with other vaccine-doses recommended at the same age.Reported data excluded.

  Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-R-

2017: Estimate informed by reported coverage following introduction. Thailand Multiple Indicator Cluster Survey 2019 results ignored by working group. Survey results inconsistent with other vaccine-doses recommended at the same age. Reported official coverage is informed by a 2013 cluster coverage survey. IPV introduced in 2015 reporting started in 2017. Estimate challenged by: D-

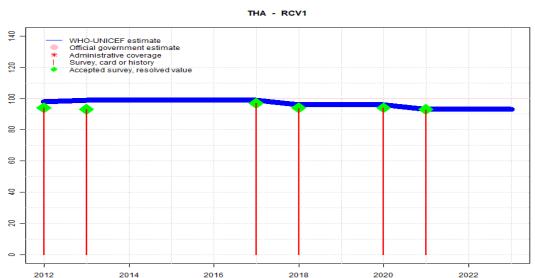


	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	98	99	99	99	99	99	96	96	96	93	93	93
Estimate GoC	••	••	••	••	••	•	•	•	•	•	•	•
Official	98	99	99	99	99	99	96	96	96	NA	86	NA
Administrative	NA	NA	NA	NA	91	100	89	90	91	84	86	86
Survey	*	92.9	NA	NA	NA	96.8	93.7	NA	94.1	92.8	NA	NA

- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- •• Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

- 2023: Reported data calibrated to 2021 levels. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-R-
- 2022: Reported data calibrated to 2021 levels. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 93 percent changed from previous revision value of 96 percent. Estimate challenged by: D-R-
- 2021: Estimate of 93 percent assigned by working group. Estimate informed by survey coverage. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate of 93 percent changed from previous revision value of 96 percent. Estimate challenged by: D-R-
- 2020: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Bangkok seems not to be included in the data reporting system. GoC=Assigned by working group. Consistency with other vaccine doses.
- 2019: Estimate informed by reported data. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- 2018: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- 2017: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 1 survey(s). Reported official coverage is informed by a 2013 cluster coverage survey. Estimate challenged by: D-
- 2016: Estimate informed by reported data. Reported official coverage is informed by a 2013 cluster coverage survey. GoC=R+ S+
- 2015: Estimate informed by reported data. GoC=R+ S+  $\,$
- 2014: Estimate informed by reported data. GoC=R+S+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+S+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 2 survey(s). GoC=R+ S+



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	98	99	99	99	99	99	96	96	96	93	93	93
Estimate GoC	••	••	••	••	••	•	•	•	•	•	•	•
Official	NA											
Administrative	NA											
Survey	93.9	92.9	NA	NA	NA	96.8	93.7	NA	94.1	92.8	NA	NA

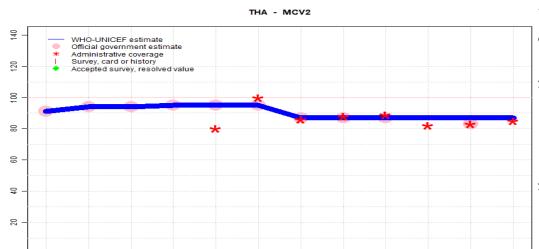
- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- •• Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

#### Description:

For this revision, coverage estimates for the first dose of rubella containing vaccine are based on WHO and UNICEF estimates of coverage of measles containing vaccine. Nationally reported coverage of rubella containing vaccine is not taken into consideration nor are they represented in the the accompanying graph and data table.

- 2023: Estimate based on estimated MCV1. Estimate challenged by: D-R-
- 2022: Estimate based on estimated MCV1. Estimate of 93 percent changed from previous revision value of 96 percent. Estimate challenged by: D-R-
- 2021: Estimate based on estimated MCV1. Estimate of 93 percent changed from previous revision value of 96 percent. Estimate challenged by: D-R-
- 2020: Estimate based on estimated MCV1. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Bangkok seems not to be included in the data reporting system. GoC=Assigned by working group. Consistency with other vaccine doses.
- 2019: Estimate based on estimated MCV1. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- 2018: Estimate based on estimated MCV1. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- 2017: Estimate based on estimated MCV1. Reported official coverage is informed by a 2013 cluster coverage survey. Estimate challenged by: D-
- 2016: Estimate based on estimated MCV1. Reported official coverage is informed by a 2013 cluster coverage survey. GoC=R+S+
- 2015: Estimate based on estimated MCV1. GoC=R+S+
- 2014: Estimate based on estimated MCV1. GoC=R+S+
- 2013: Estimate based on estimated MCV1. GoC=R+S+
- 2012: Estimate based on estimated MCV1. GoC=R+S+



2018

2020

2022

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	91	94	94	95	95	95	87	87	87	87	87	87
Estimate GoC	••	••	••	••	••	•	•	•	•	•	•	•
Official	91	94	94	95	95	95	87	87	87	NA	83	NA
Administrative	NA	NA	NA	NA	80	100	86	88	89	82	83	85
Survey	NA											

2016

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- •• Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

2014

#### Description:

Coverage estimates for the second dose of measles containing vaccine are for children by the nationally recommended age.

- 2023: Estimate informed by the estimated MCV2 for the previous year. No survey data for MCV2. Estimated coverage may underestimate coverage. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-R-
- 2022: Estimate informed by extrapolation from reported data. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-
- 2021: Estimate informed by extrapolation from reported data. Reported data excluded. Estimated coverage levels may overestimate actual coverage levels informed by patterns signalling declines in the reported number of doses administered. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Data for Bangkok are not included in the data reporting system. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Reported denominator is likely an underestimate. Country reports that denominator is informed by count of children residing in the area of responsibility of each health facility. Bangkok seems not to be included in the data reporting system. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Reported official coverage is informed by a 2018 cluster coverage survey. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Reported official coverage is informed by a 2013 cluster coverage survey. Estimate challenged by: D-
- 2016: Estimate informed by reported data. Reported official coverage is informed by a 2013 cluster coverage survey. GoC=R+
- 2015: Estimate informed by reported data. GoC=R+
- 2014: Estimate informed by reported data. GoC=R+
- 2013: Estimate informed by reported data. GoC=R+
- 2012: Estimate informed by reported data. GoC=R+

2012

NOTE: A survey to measure vaccination coverage for infants (i.e., children aged 0-11 months) will sample children aged 12-23 months at the time of survey to capture the youngest annual cohort of children who should have completed the vaccination schedule. Because WUENIC are for infant vaccinations, survey data in this report are presented to reflect the birth year of the youngest survey cohort. For example, results for a survey conducted during December 2020 among children aged 12-23 months at the time of the survey reflect the immunization experience of children born in 2019. Depending on the timing of survey field work, results may reflect the immunization experience of children born and vaccinated 1 or 2 years prior to the survey field work.

### 2021 Thailand Multiple Indicator Cluster Survey 2022

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	98.4	12-23  m	1994	89
BCG	Card	89	$12\text{-}23~\mathrm{m}$	1994	89
BCG	Card or History	98.4	12-23  m	1994	89
BCG	History	9.4	12-23  m	1994	89
DTP1	C or H $<$ 12 months	95.6	12-23  m	1994	89
DTP1	Card	88.1	$12\text{-}23~\mathrm{m}$	1994	89
DTP1	Card or History	96.3	$12\text{-}23~\mathrm{m}$	1994	89
DTP1	History	8.3	12-23  m	1994	89
DTP3	C or H $<$ 12 months	86.8	12-23  m	1994	89
DTP3	Card	84.6	12-23  m	1994	89
DTP3	Card or History	88.7	12-23  m	1994	89
DTP3	History	4.1	12-23  m	1994	89
HepB1	C  or  H < 12  months	93.5	12-23  m	1994	89
HepB1	Card	88.1	12-23  m	1994	89
HepB1	Card or History	94.2	12-23  m	1994	89
HepB1	History	6.2	12-23  m	1994	89
HepB3	C  or  H < 12  months	83.8	$12-23 \mathrm{m}$	1994	89
HepB3	Card	84.6	$12-23 \mathrm{m}$	1994	89
HepB3	Card or History	85.7	12-23  m	1994	89
HepB3	History	1	12-23  m	1994	89
HepBB	C  or  H < 12  months	88.9	12-23  m	1994	89
HepBB	Card	88.8	12-23  m	1994	89
HepBB	Card or History	88.9	$12\text{-}23~\mathrm{m}$	1994	89
HepBB	History	0	12-23  m	1994	89

IPV1	C or H $<$ 12 months	85.1	$12-23~\mathrm{m}$	1994	89
IPV1	Card	78.4	$12\text{-}23~\mathrm{m}$	1994	89
IPV1	Card or History	87.1	$12\text{-}23~\mathrm{m}$	1994	89
IPV1	History	8.7	$12\text{-}23~\mathrm{m}$	1994	89
MCV1	C or H $<$ 12 months	88.4	12-23  m	1994	89
MCV1	Card	85	12-23  m	1994	89
MCV1	Card or History	92.8	12-23  m	1994	89
MCV1	History	7.8	12-23  m	1994	89
Pol1	C or H $<$ 12 months	96.4	12-23  m	1994	89
Pol1	Card	88.1	12-23  m	1994	89
Pol1	Card or History	97.1	$12\text{-}23 \mathrm{\ m}$	1994	89
Pol1	History	9	12-23  m	1994	89
Pol3	C or H $<$ 12 months	87.3	12-23  m	1994	89
Pol3	Card	84.6	12-23  m	1994	89
Pol3	Card or History	89.3	$12\text{-}23 \mathrm{\ m}$	1994	89
Pol3	History	4.7	$12\text{-}23~\mathrm{m}$	1994	89

#### 2020 Thailand Multiple Indicator Cluster Survey 2022

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C  or  H < 12  months	97.4	$24\text{-}35~\mathrm{m}$	2276	84
BCG	Card	83.5	$24\text{-}35~\mathrm{m}$	2276	84
BCG	Card or History	97.5	$24\text{-}35~\mathrm{m}$	2276	84
BCG	History	14	$24-35 \mathrm{\ m}$	2276	84
DTP1	C or H $<$ 12 months	95.2	$24-35 \mathrm{\ m}$	2276	84
DTP1	Card	82.4	$24-35 \mathrm{\ m}$	2276	84
DTP1	Card or History	95.6	$24\text{-}35~\mathrm{m}$	2276	84
DTP1	History	13.2	$24-35 \mathrm{\ m}$	2276	84
DTP3	C or H $<$ 12 months	86.4	$24-35 \mathrm{\ m}$	2276	84
DTP3	Card	81	$24-35 \mathrm{\ m}$	2276	84
DTP3	Card or History	89.6	$24-35 \mathrm{\ m}$	2276	84
DTP3	History	8.5	$24-35 \mathrm{\ m}$	2276	84
HepB1	C or H $<$ 12 months	92.7	$24-35 \mathrm{\ m}$	2276	84
HepB1	Card	82.4	$24-35 \mathrm{\ m}$	2276	84
HepB1	Card or History	93.1	$24-35 \mathrm{\ m}$	2276	84
HepB1	History	10.7	$24-35 \mathrm{m}$	2276	84
HepB3	C or H $<$ 12 months	81.9	$24-35 \mathrm{m}$	2276	84
HepB3	Card	81	$24-35 \mathrm{\ m}$	2276	84
HepB3	Card or History	84.9	$24-35 \mathrm{\ m}$	2276	84

HepB3	History	3.9	$24\text{-}35~\mathrm{m}$	2276	84
HepBB	C or H $<$ 12 months	82.7	$24-35 \mathrm{\ m}$	2276	84
HepBB	Card	82.4	$24-35 \mathrm{\ m}$	2276	84
HepBB	Card or History	82.8	$24\text{-}35~\mathrm{m}$	2276	84
HepBB	History	0.4	$24\text{-}35~\mathrm{m}$	2276	84
IPV1	C or H $<$ 12 months	84.7	$24-35 \mathrm{\ m}$	2276	84
IPV1	Card	75.1	$24-35 \mathrm{\ m}$	2276	84
IPV1	Card or History	88.2	$24\text{-}35~\mathrm{m}$	2276	84
IPV1	History	13.1	$24\text{-}35~\mathrm{m}$	2276	84
MCV1	C or H $<$ 12 months	87.4	$24-35 \mathrm{\ m}$	2276	84
MCV1	Card	80.7	$24-35 \mathrm{\ m}$	2276	84
MCV1	Card or History	94.1	$24\text{-}35~\mathrm{m}$	2276	84
MCV1	History	13.4	$24\text{-}35~\mathrm{m}$	2276	84
Pol1	C or H <12 months	95.8	$24\text{-}35~\mathrm{m}$	2276	84
Pol1	Card	82.3	$24\text{-}35~\mathrm{m}$	2276	84
Pol1	Card or History	96.1	$24\text{-}35~\mathrm{m}$	2276	84
Pol1	History	13.8	$24\text{-}35~\mathrm{m}$	2276	84
Pol3	C or H <12 months	87.3	$24\text{-}35~\mathrm{m}$	2276	84
Pol3	Card	81	$24\text{-}35~\mathrm{m}$	2276	84
Pol3	Card or History	90.1	$24-35 \mathrm{\ m}$	2276	84
Pol3	History	9.1	$24\text{-}35~\mathrm{m}$	2276	84

### 2018 Thailand Multiple Indicator Cluster Survey 2019

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	98.8	12-23 m	2614	90
BCG	Card	89.6	$12\text{-}23 \mathrm{\ m}$	2614	90
BCG	Card or History	98.8	$12\text{-}23~\mathrm{m}$	2614	90
BCG	History	9.1	$12\text{-}23 \mathrm{\ m}$	2614	90
DTP1	C or H $<$ 12 months	96.4	$12\text{-}23 \mathrm{\ m}$	2614	90
DTP1	Card	89.7	$12\text{-}23 \mathrm{\ m}$	2614	90
DTP1	Card or History	96.9	$12\text{-}23~\mathrm{m}$	2614	90
DTP1	History	7.1	$12\text{-}23~\mathrm{m}$	2614	90
DTP3	C or H $<$ 12 months	88	$12\text{-}23 \mathrm{\ m}$	2614	90
DTP3	Card	86	$12\text{-}23 \mathrm{\ m}$	2614	90
DTP3	Card or History	89.9	$12\text{-}23~\mathrm{m}$	2614	90
DTP3	History	3.9	$12\text{-}23 \mathrm{\ m}$	2614	90
HepB1	C or H $<$ 12 months	95.4	$12\text{-}23 \mathrm{\ m}$	2614	90
HepB1	Card	89.7	12-23 m	2614	90

HepB1	Card or History	96.1	$12\text{-}23~\mathrm{m}$	2614	90
HepB1	History	6.4	12-23  m	2614	90
HepB3	C or H $<$ 12 months	86.8	$12\text{-}23~\mathrm{m}$	2614	90
HepB3	Card	86.4	$12\text{-}23~\mathrm{m}$	2614	90
HepB3	Card or History	89	12-23  m	2614	90
HepB3	History	2.6	12-23  m	2614	90
HepBB	C or H $<$ 12 months	89.6	$12\text{-}23~\mathrm{m}$	2614	90
HepBB	Card	89.6	$12\text{-}23~\mathrm{m}$	2614	90
HepBB	Card or History	89.6	$12\text{-}23 \mathrm{\ m}$	2614	90
HepBB	History	0	$12\text{-}23~\mathrm{m}$	2614	90
IPV1	C or H $<$ 12 months	59.3	$12\text{-}23~\mathrm{m}$	2614	90
IPV1	Card	54.7	$12\text{-}23~\mathrm{m}$	2614	90
IPV1	Card or History	60.9	$12\text{-}23~\mathrm{m}$	2614	90
IPV1	History	6.2	12-23  m	2614	90
MCV1	C or H $<$ 12 months	89.7	$12\text{-}23~\mathrm{m}$	2614	90
MCV1	Card	86.2	$12\text{-}23~\mathrm{m}$	2614	90
MCV1	Card or History	93.7	12-23  m	2614	90
MCV1	History	7.5	12-23  m	2614	90
Pol1	C or H <12 months	95.7	$12\text{-}23~\mathrm{m}$	2614	90
Pol1	Card	89.7	$12\text{-}23~\mathrm{m}$	2614	90
Pol1	Card or History	95.9	$12\text{-}23~\mathrm{m}$	2614	90
Pol1	History	6.2	12-23  m	2614	90
Pol3	C or H $<$ 12 months	86.4	$12\text{-}23~\mathrm{m}$	2614	90
Pol3	Card	86	$12\text{-}23~\mathrm{m}$	2614	90
Pol3	Card or History	87.8	$12\text{-}23~\mathrm{m}$	2614	90
Pol3	History	1.7	$12-23 \mathrm{m}$	2614	90

### 2017 Thailand Multiple Indicator Cluster Survey 2019

Vaccine	Confirmation method	Coverage	Age cohort	Sample	${\bf Cards\ seen}$
BCG	C or H $<$ 12 months	98.4	$24-35~\mathrm{m}$	2752	-
BCG	Card	87	$24\text{-}35~\mathrm{m}$	2752	-
BCG	Card or History	98.6	$24\text{-}35~\mathrm{m}$	2752	-
BCG	History	11.6	$24-35~\mathrm{m}$	2752	-
DTP1	C or H $<$ 12 months	96.6	$24-35~\mathrm{m}$	2752	-
DTP1	Card	87.6	$24-35~\mathrm{m}$	2752	-
DTP1	Card or History	98	$24-35~\mathrm{m}$	2752	-
DTP1	History	10.4	$24-35~\mathrm{m}$	2752	-
DTP3	C or H $<$ 12 months	86.5	$24\text{-}35~\mathrm{m}$	2752	-

```
Card
DTP3
                                  85.4
                                            24-35 \mathrm{m}
                                                         2752
          Card or History
                                                         2752
DTP3
                                  91.4
                                            24-35 \text{ m}
DTP3
         History
                                  6
                                            24-35 \text{ m}
                                                         2752
HepB1
         C or H < 12 months
                                  95.6
                                            24-35 \text{ m}
                                                         2752
HepB1
         Card
                                  87.6
                                            24-35 m
                                                         2752
         Card or History
HepB1
                                  96.9
                                            24-35 \text{ m}
                                                         2752
                                                         2752
HepB1 History
                                            24-35 \text{ m}
                                  9.3
HepB3 C or H <12 months
                                                         2752
                                  83.6
                                            24-35 \text{ m}
HepB3 Card
                                  85.6
                                            24-35 m
                                                         2752
HepB3 Card or History
                                                         2752
                                  89.1
                                            24-35 \text{ m}
HepB3 History
                                  3.5
                                            24-35 \text{ m}
                                                         2752
HepBB \, C or H <12 months
                                  87
                                            24-35 \mathrm{m}
                                                         2752
HepBB Card
                                  87
                                            24-35 \text{ m}
                                                         2752
HepBB Card or History
                                  87
                                            24-35 m
                                                         2752
HepBB History
                                  0
                                            24-35 m
                                                         2752
          C or H <12 months
                                                         2752
IPV1
                                  51.6
                                            24-35 \text{ m}
IPV1
          Card
                                  48.1
                                            24-35 m
                                                         2752
IPV1
          Card or History
                                            24\text{-}35~\mathrm{m}
                                                         2752
                                  56.3
                                            24-35 \mathrm{m}
IPV1
          History
                                  8.2
                                                         2752
MCV1
          C or H <12 months
                                  86.8
                                            24-35 m
                                                         2752
MCV1
          Card
                                                         2752
                                            24-35 m
                                  86.8
         Card or History
                                                         2752
MCV1
                                            24-35 m
                                  96.8
MCV1
         History
                                  10
                                            24-35 \text{ m}
                                                         2752
Pol1
          C \text{ or } H < 12 \text{ months}
                                  94.1
                                            24-35 m
                                                         2752
Pol1
          Card
                                  87.6
                                            24-35 \text{ m}
                                                         2752
          Card or History
Pol1
                                  95.4
                                            24-35 m
                                                         2752
          History
                                  7.8
                                            24-35 \text{ m}
                                                         2752
Pol1
          C or H <12 months
Pol3
                                  83.9
                                            24-35 \text{ m}
                                                         2752
          Card
Pol3
                                  85.4
                                            24-35 m
                                                         2752
          Card or History
Pol3
                                  88.7
                                            24-35 \text{ m}
                                                         2752
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DTP1	Card	83.7	12-23  m	2510	86
DTP1	Card or History	94.2	$12\text{-}23~\mathrm{m}$	2510	86
DTP3	C or H $<$ 12 months	87.6	$12\text{-}23~\mathrm{m}$	2510	86
DTP3	Card	80.1	$12\text{-}23~\mathrm{m}$	2510	86
DTP3	Card or History	89	$12\text{-}23~\mathrm{m}$	2510	86
HepB1	C or H $<$ 12 months	93.8	$12\text{-}23~\mathrm{m}$	2510	86
HepB1	Card	85.8	$12\text{-}23~\mathrm{m}$	2510	86
HepB1	Card or History	94.1	$12\text{-}23~\mathrm{m}$	2510	86
HepB3	C or H $<$ 12 months	84.3	$12\text{-}23~\mathrm{m}$	2510	86
HepB3	Card	83	$12\text{-}23~\mathrm{m}$	2510	86
HepB3	Card or History	86.6	$12\text{-}23~\mathrm{m}$	2510	86
MCV1	C or H $<$ 12 months	89	$12\text{-}23~\mathrm{m}$	2510	86
MCV1	Card	82.6	$12\text{-}23~\mathrm{m}$	2510	86
MCV1	Card or History	92.9	$12\text{-}23~\mathrm{m}$	2510	86
Pol1	C or H $<$ 12 months	95.5	$12\text{-}23~\mathrm{m}$	2510	86
Pol1	Card	85.6	$12\text{-}23~\mathrm{m}$	2510	86
Pol1	Card or History	95.8	$12\text{-}23~\mathrm{m}$	2510	86
Pol3	C or H $<$ 12 months	85.8	$12\text{-}23~\mathrm{m}$	2510	86
Pol3	Card	82.4	$12\text{-}23~\mathrm{m}$	2510	86
Pol3	Card or History	86.9	12-23  m	2510	86

2012 Immunization Coverage Survey: Thailand 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	100	$12\text{-}23 \mathrm{\ m}$	2700	-
DTP3	Card or History	99.4	$12\text{-}23 \mathrm{\ m}$	2700	-
HepB3	Card or History	99.4	$12\text{-}23 \mathrm{\ m}$	2700	-
MCV1	Card or History	98.7	$12\text{-}23 \mathrm{\ m}$	2700	-
Pol3	Card or History	99.4	12-23 m	2700	_

2012 Thailand Multiple Indicator Cluster Survey 2015-2016

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	96.2	$12\text{-}23~\mathrm{m}$	2510	86
BCG	Card	85.9	$12\text{-}23~\mathrm{m}$	2510	86
BCG	Card or History	96.4	$12\text{-}23~\mathrm{m}$	2510	86
DTP1	C or H $<$ 12 months	93.9	$12\text{-}23~\mathrm{m}$	2510	86

3.3

2013 Thailand Multiple Indicator Cluster Survey 2015-2016

 $24\text{-}35~\mathrm{m}$ 

2752

Vaccine	$Confirmation\ method$	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	96.1	$24\text{-}35~\mathrm{m}$	2550	-
BCG	Card	85.1	$24\text{-}35~\mathrm{m}$	2550	-
BCG	Card or History	96.3	$24\text{-}35~\mathrm{m}$	2550	-
DTP1	C or H $<$ 12 months	94.2	$24\text{-}35~\mathrm{m}$	2550	-

History

Pol3

DTP1	Card	85.5	$24\text{-}35~\mathrm{m}$	2550	-
DTP1	Card or History	96.3	$24\text{-}35~\mathrm{m}$	2550	-
DTP3	C or H $<$ 12 months	86.6	$24\text{-}35~\mathrm{m}$	2550	-
DTP3	Card	81.9	$24\text{-}35~\mathrm{m}$	2550	-
DTP3	Card or History	90.4	$24\text{-}35~\mathrm{m}$	2550	-
HepB1	C or H $<$ 12 months	92.5	$24\text{-}35~\mathrm{m}$	2550	-
HepB1	Card	85.8	$24\text{-}35~\mathrm{m}$	2550	-
HepB1	Card or History	93.4	$24\text{-}35~\mathrm{m}$	2550	-
HepB3	C  or  H < 12  months	80.2	$24-35 \mathrm{\ m}$	2550	-
HepB3	Card	83.7	$24\text{-}35~\mathrm{m}$	2550	-
HepB3	Card or History	85.9	$24\text{-}35~\mathrm{m}$	2550	-
MCV1	C or H $<$ 12 months	85.1	$24\text{-}35~\mathrm{m}$	2550	-
MCV1	Card	83.5	$24\text{-}35~\mathrm{m}$	2550	-
MCV1	Card or History	93.9	$24\text{-}35~\mathrm{m}$	2550	-
Pol1	C or H $<$ 12 months	95.1	$24\text{-}35~\mathrm{m}$	2550	-
Pol1	Card	85.5	$24\text{-}35~\mathrm{m}$	2550	-
Pol1	Card or History	96.2	$24\text{-}35~\mathrm{m}$	2550	-
Pol3	C or H $<$ 12 months	86.2	$24\text{-}35~\mathrm{m}$	2550	-
Pol3	Card	83.5	$24\text{-}35~\mathrm{m}$	2550	-
Pol3	Card or History	90.6	$24\text{-}35~\mathrm{m}$	2550	-

### 2011 Thailand Multiple Indicator Cluster Survey 2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	97.5	$12\text{-}23~\mathrm{m}$	1827	82
BCG	Card	82	$12\text{-}23~\mathrm{m}$	-	82
BCG	Card or History	97.5	$12\text{-}23~\mathrm{m}$	1827	82
BCG	History	15.5	$12\text{-}23 \mathrm{\ m}$	-	82
DTP1	C or H $<$ 12 months	96.3	$12\text{-}23~\mathrm{m}$	1827	82
DTP1	Card	81.7	$12\text{-}23~\mathrm{m}$	-	82
DTP1	Card or History	96.7	$12\text{-}23~\mathrm{m}$	1827	82
DTP1	History	15	$12\text{-}23 \mathrm{\ m}$	-	82
DTP3	C or H $<$ 12 months	87.9	$12\text{-}23~\mathrm{m}$	1827	82
DTP3	Card	80.5	$12\text{-}23~\mathrm{m}$	-	82
DTP3	Card or History	89.9	$12\text{-}23~\mathrm{m}$	1827	82
DTP3	History	9.5	$12\text{-}23~\mathrm{m}$	-	82
HepB1	C or H $<$ 12 months	92.7	$12\text{-}23~\mathrm{m}$	1827	82
HepB1	Card	81.8	$12\text{-}23~\mathrm{m}$	-	82
HepB1	Card or History	92.8	12-23 m	1827	82

HepB1	History	11	$12\text{-}23~\mathrm{m}$	-	82
HepB3	C or H <12 months	80.7	12-23  m	1827	82
HepB3	Card	80.8	$12\text{-}23~\mathrm{m}$	-	82
HepB3	Card or History	83.6	12-23  m	1827	82
HepB3	History	2.8	$12\text{-}23~\mathrm{m}$	-	82
HepBB	C or H <12 months	95.5	$12\text{-}23~\mathrm{m}$	1827	82
HepBB	Card	82.8	$12\text{-}23~\mathrm{m}$	-	82
HepBB	Card or History	95.5	$12\text{-}23~\mathrm{m}$	1827	82
HepBB	History	12.6	$12\text{-}23~\mathrm{m}$	-	82
MCV1	C or H <12 months	91.9	$12\text{-}23~\mathrm{m}$	1827	82
MCV1	Card	80.8	$12\text{-}23~\mathrm{m}$	-	82
MCV1	Card or History	95.3	$12\text{-}23~\mathrm{m}$	1827	82
MCV1	History	14.5	$12\text{-}23~\mathrm{m}$	-	82
Pol1	C or H $<$ 12 months	96.3	$12\text{-}23~\mathrm{m}$	1827	82
Pol1	Card	80.8	$12\text{-}23~\mathrm{m}$	-	82
Pol1	Card or History	96.4	$12\text{-}23~\mathrm{m}$	1827	82
Pol1	History	15.6	$12\text{-}23~\mathrm{m}$	-	82
Pol3	C or H <12 months	89	$12\text{-}23~\mathrm{m}$	1827	82
Pol3	Card	79.7	$12\text{-}23~\mathrm{m}$	-	82
Pol3	Card or History	90.9	$12\text{-}23~\mathrm{m}$	1827	82
Pol3	History	11.2	$12\text{-}23~\mathrm{m}$	-	82

### 2007 Immunization Coverage Survey: Thailand 2008

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	99.9	$12\text{-}23~\mathrm{m}$	1800	97
DTP3	Card or History	98.7	$12\text{-}23 \mathrm{\ m}$	1800	97
HepB3	Card or History	98.3	$12\text{-}23~\mathrm{m}$	1800	97
MCV1	Card or History	98.1	$12\text{-}23 \mathrm{\ m}$	1800	97
Pol3	Card or History	98.7	$12\text{-}23~\mathrm{m}$	1800	97

# 2005 Thailand Multiple Indicator Cluster Survey, December 2005 – February 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	98.1	$12\text{-}23~\mathrm{m}$	1895	88
BCG	Card	88.5	$12\text{-}23~\mathrm{m}$	1895	88
BCG	Card or History	98.2	$12\text{-}23 \mathrm{\ m}$	1895	88

BCG	History	9.7	$12\text{-}23~\mathrm{m}$	1895	88
DTP1	C or H $<$ 12 months	98	$12\text{-}23~\mathrm{m}$	1895	88
DTP1	Card	89.2	$12\text{-}23~\mathrm{m}$	1895	88
DTP1	Card or History	98.4	$12\text{-}23~\mathrm{m}$	1895	88
DTP1	History	9.2	$12\text{-}23~\mathrm{m}$	1895	88
DTP3	C or H $<$ 12 months	92.3	$12\text{-}23~\mathrm{m}$	1895	88
DTP3	Card	89.1	12-23  m	1895	88
DTP3	Card or History	94.4	$12\text{-}23~\mathrm{m}$	1895	88
DTP3	History	5.4	$12\text{-}23~\mathrm{m}$	1895	88
HepB1	C or H $<$ 12 months	98.3	$12\text{-}23~\mathrm{m}$	1895	88
HepB1	Card	89	$12\text{-}23~\mathrm{m}$	1895	88
HepB1	Card or History	98.4	$12\text{-}23~\mathrm{m}$	1895	88
HepB1	History	9.4	$12\text{-}23~\mathrm{m}$	1895	88
HepB3	C or H $<$ 12 months	91.6	$12\text{-}23~\mathrm{m}$	1895	88
HepB3	Card	88.3	$12\text{-}23~\mathrm{m}$	1895	88
HepB3	Card or History	94.4	$12\text{-}23~\mathrm{m}$	1895	88
HepB3	History	6.1	$12\text{-}23~\mathrm{m}$	1895	88
MCV1	C or H $<$ 12 months	92.1	$12\text{-}23~\mathrm{m}$	1895	88
MCV1	Card	86.5	$12\text{-}23~\mathrm{m}$	1895	88
MCV1	Card or History	96.9	$12\text{-}23 \mathrm{\ m}$	1895	88
MCV1	History	10.4	$12\text{-}23 \mathrm{\ m}$	1895	88
Pol1	C or H $<$ 12 months	97.7	$12\text{-}23~\mathrm{m}$	1895	88
Pol1	Card	88.5	$12\text{-}23~\mathrm{m}$	1895	88
Pol1	Card or History	98.1	12-23  m	1895	88
Pol1	History	9.6	$12\text{-}23~\mathrm{m}$	1895	88
Pol3	C or H $<$ 12 months	91.6	$12\text{-}23~\mathrm{m}$	1895	88

Pol3	Card	88.3	$12\text{-}23~\mathrm{m}$	1895	88
Pol3	Card or History	93.7	$12\text{-}23~\mathrm{m}$	1895	88
Pol3	History	5.4	12-23  m	1895	88

### 2002 Immunization Coverage Survey: Thailand 2003

Vaccine	$Confirmation\ method$	Coverage	Age cohort	Sample	${\bf Cards\ seen}$
BCG	Card or History	99.5	$12\text{-}23~\mathrm{m}$	2520	98
DTP3	Card or History	97.6	$12\text{-}23~\mathrm{m}$	2520	98
HepB3	Card or History	96	$12\text{-}23~\mathrm{m}$	2520	98
MCV1	Card or History	96.1	$12\text{-}23~\mathrm{m}$	2520	98
Pol3	Card or History	97.6	$12\text{-}23~\mathrm{m}$	2520	98

### 1998 Immunization Coverage Survey: Thailand 1999

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	98.7	$12\text{-}23~\mathrm{m}$	3369	94
DTP1	Card or History	98.5	$12\text{-}23~\mathrm{m}$	3369	94
DTP3	Card or History	96.5	$12\text{-}23~\mathrm{m}$	3369	94
HepB3	Card or History	95.4	$12\text{-}23~\mathrm{m}$	3369	94
MCV1	Card or History	94.2	$12\text{-}23~\mathrm{m}$	3369	94
Pol3	Card or History	96.6	$12\text{-}23 \mathrm{\ m}$	3369	94

Further information and estimates for previous years are available at:

https://data.unicef.org/topic/child-health/immunization/

https://immunizationdata.who.int/listing.html