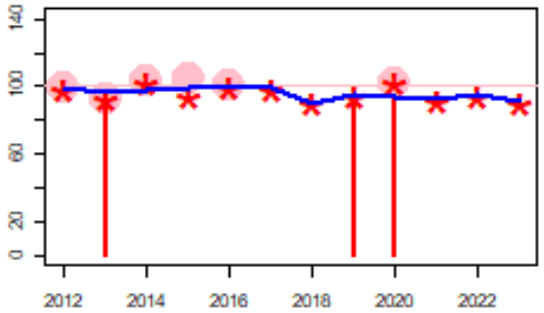
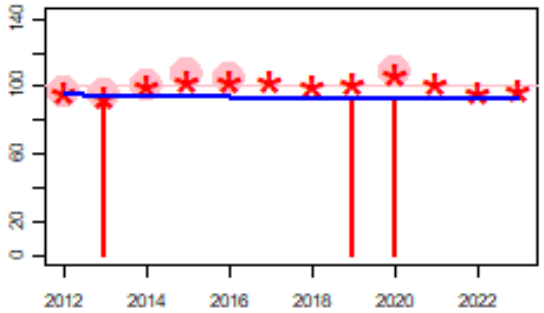
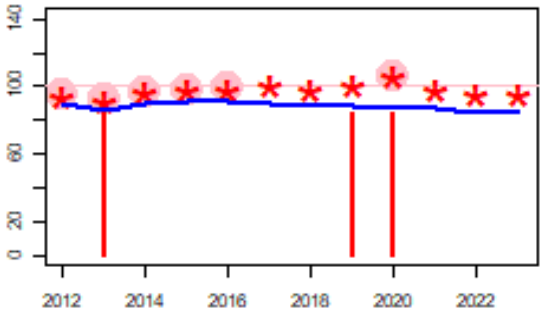
BCG



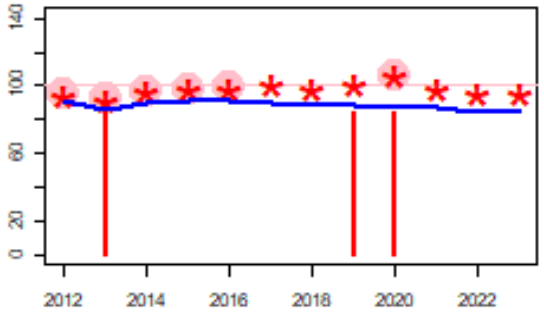
DTP1



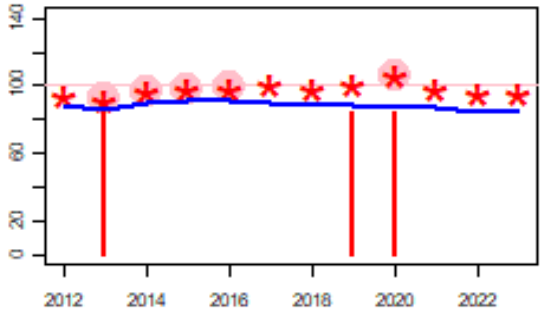
DTP3



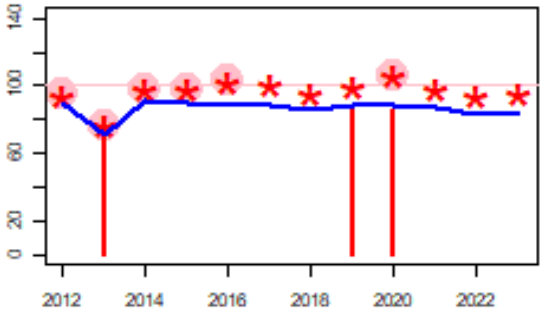
HepB3



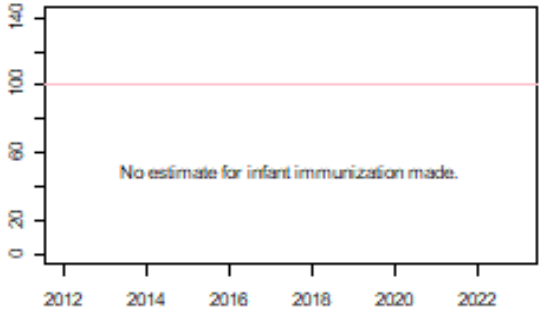
Hib3



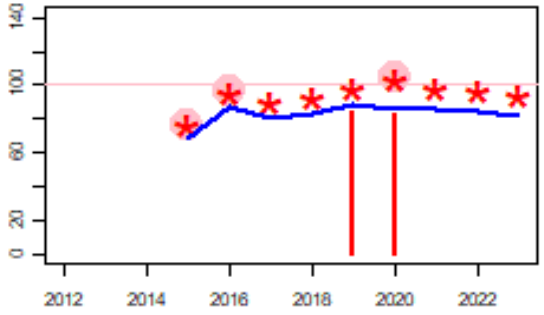
Pol3



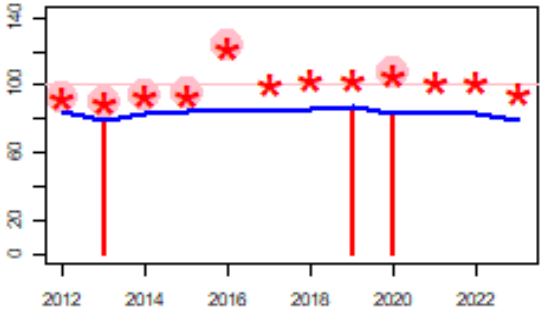
RotaC



PcV3



MCV1



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.

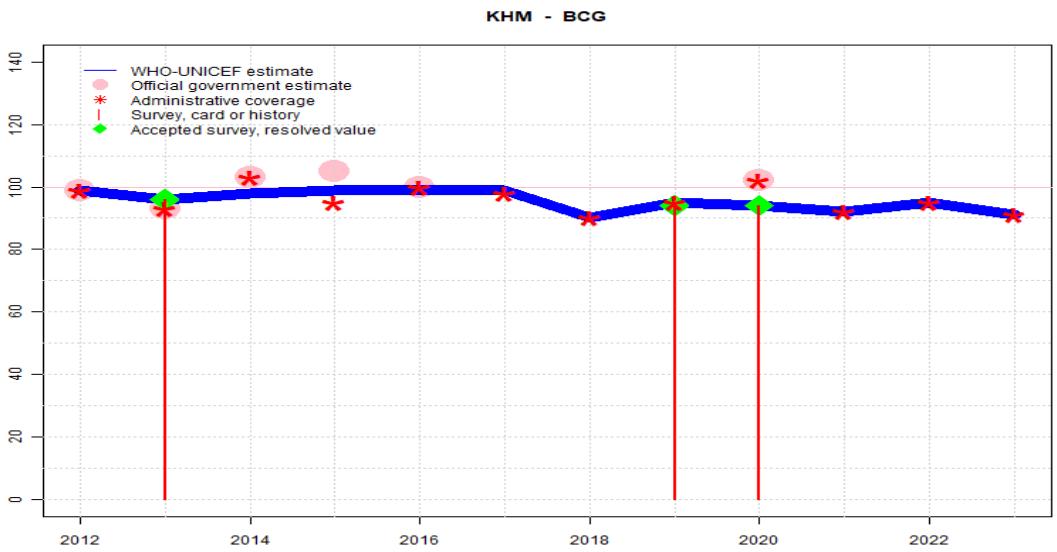
RotaC: percentage of surviving infants who received the final recommended dose of rotavirus vaccine, which can be either the 2nd or the 3rd dose depending on the vaccine.

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.

Cambodia - BCG



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	99	96	98	99	99	99	90	95	94	92	95	91
Estimate GoC	•	•	•	•	•	•	•	•••	•••	•••	•••	••
Official	99	93	103	105	100	NA	NA	NA	102	NA	NA	NA
Administrative	99	93	103	95	100	98	90	95	102	92	95	91
Survey	NA	96	NA	NA	NA	NA	NA	94	94	NA	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.

Description:

2023: Estimate informed by reported administrative data. GoC=R+ D+

2022: Estimate informed by reported administrative data. Programme reports one month vaccine stockout. GoC=R+ S+ D+

2021: Estimate informed by reported administrative data. Estimates for some antigens do not reflect declines in reported coverage from 2020 to 2021. GoC=R+ S+ D+

2020: Estimate informed by interpolation between reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). Reported data excluded because 102 percent greater than 100 percent. Programme reports a one month vaccine stockout at national level and unknown for subnational levels. GoC=R+ S+ D+

2019: Estimate informed by reported administrative data supported by survey. Survey evidence of 94 percent based on 1 survey(s). Programme reports two months national and district level vaccine stockout. GoC=R+ S+ D+

2018: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: R-

2017: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: R-

2016: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: R-

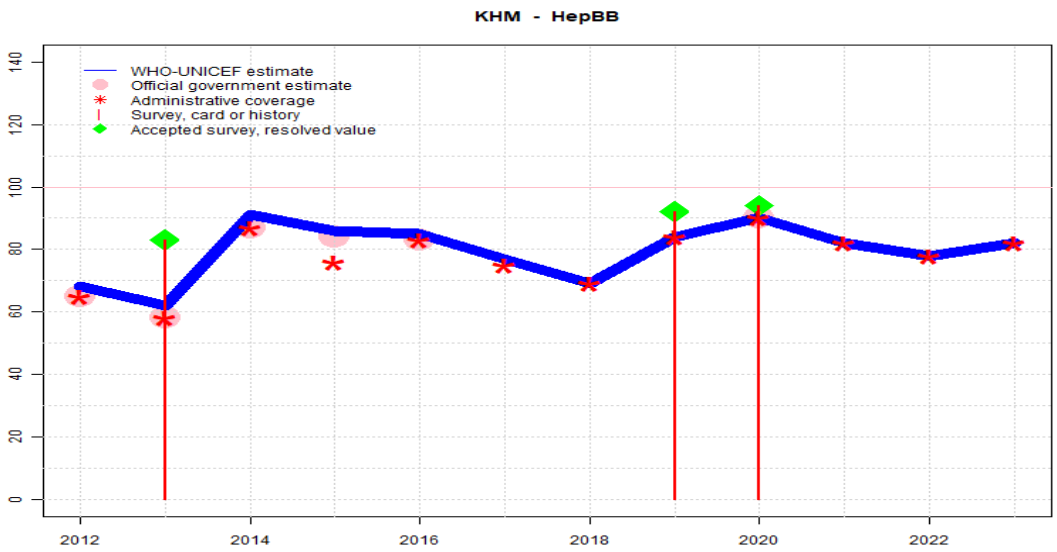
2015: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 105 percent greater than 100 percent. Programme acknowledges challenges in data quality impacting on administrative coverage levels. Programme reports a switch in information source from the national statistics office to the national health information system. Current information suggests a decline in target population that may partially explain reported increase in coverage. WHO and UNICEF recommend a review of recording and reporting practices as well as a data review inclusive of the target population data sources. Estimate challenged by: R-

2014: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 103 percent greater than 100 percent. Estimate challenged by: R-

2013: Estimate of 96 percent assigned by working group. Estimate is based on survey results from 2013 DHS. Four months national stockout reported. Estimate challenged by: R-

2012: Reported data calibrated to 2009 and 2013 levels. Estimate challenged by: R-

Cambodia - HepBB



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	68	62	91	86	85	77	69	84	90	82	78	82
Estimate GoC	•	•	•	•	•	•	•	•••	•••	•	•	••
Official	65	58	87	84	83	NA	NA	NA	90	NA	NA	NA
Administrative	65	58	87	76	83	75	69	84	90	82	78	82
Survey	NA	83	NA	NA	NA	NA	NA	92	94	NA	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.

Description:

2023: Estimate informed by reported administrative data. GoC=R+ D+

2022: Estimate informed by reported administrative data. Estimate challenged by: S-

2021: Estimate informed by reported administrative data. Estimates for some antigens do not reflect declines in reported coverage from 2020 to 2021. Estimate challenged by: S-

2020: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). Programme reports a one month vaccine stockout at national level and unknown for subnational levels. GoC=R+ S+ D+

2019: Estimate informed by reported administrative data supported by survey. Survey evidence of 92 percent based on 1 survey(s). Programme reports two months national and district level vaccine stockout of monovalent HepB vaccine. GoC=R+ S+ D+

2018: Reported data calibrated to 2013 and 2019 levels. Programme reports three months vaccine stockout at national level. Estimate challenged by: R-S-

2017: Reported data calibrated to 2013 and 2019 levels. Programme reports vaccine stockout of unspecified duration. Estimate challenged by: R-S-

2016: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: R-

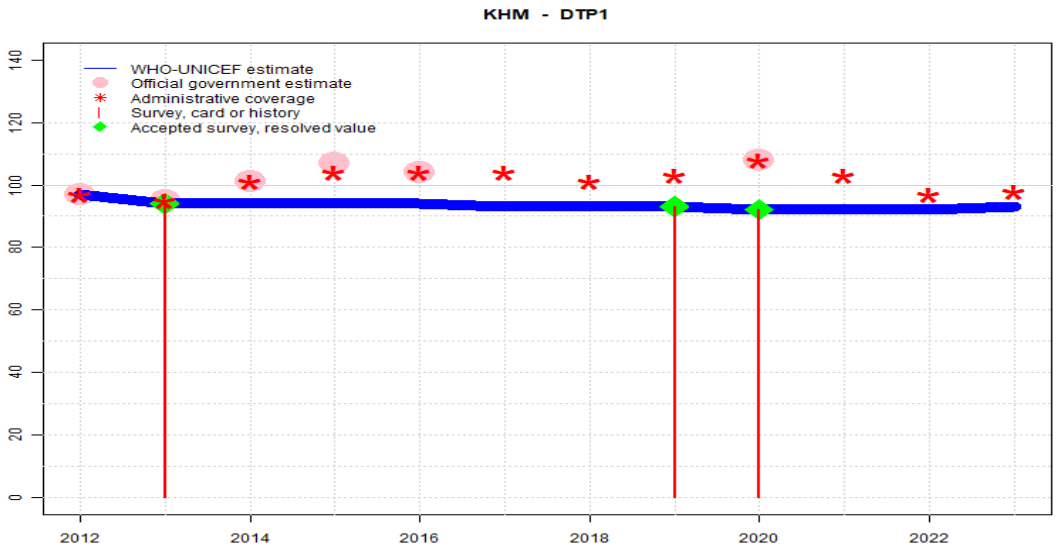
2015: Reported data calibrated to 2013 and 2019 levels. Programme acknowledges challenges in data quality impacting on administrative coverage levels. Programme reports a switch in information source from the national statistics office to the national health information system. Current information suggests a decline in target population that may partially explain reported increase in coverage. WHO and UNICEF recommend a review of recording and reporting practices as well as a data review inclusive of the target population data sources. Estimate challenged by: R-

2014: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: D-R-

2013: Estimate of 62 percent assigned by working group. Estimate is based on adjustment between estimated and reported HepB birth dose. Three months national stockout reported. Estimate challenged by: R-S-

2012: Reported data calibrated to 2009 and 2013 levels. Estimate challenged by: R-S-

Cambodia - DTP1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	97	94	94	94	94	93	93	93	92	92	92	93
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	97	95	101	107	104	NA	NA	NA	108	NA	NA	NA
Administrative	97	95	101	104	104	104	101	103	108	103	97	98
Survey	NA	94	NA	NA	NA	NA	NA	93	92	NA	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.

Description:

2023: Reported data calibrated to 2020 levels. Estimate challenged by: R-

2022: Reported data calibrated to 2020 levels. Estimate challenged by: R-

2021: Reported data calibrated to 2020 levels. Reported data excluded because 103 percent greater than 100 percent. Estimates for some antigens do not reflect declines in reported coverage from 2020 to 2021. Estimate challenged by: R-

2020: Estimate of 92 percent assigned by working group. Estimate informed by survey result. Reported data excluded because 108 percent greater than 100 percent. Estimate challenged by: D-R-

2019: Estimate of 93 percent assigned by working group. Estimate informed by survey result. Reported data excluded because 103 percent greater than 100 percent. Estimate challenged by: R-

2018: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 101 percent greater than 100 percent. Estimate challenged by: R-

2017: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 104 percent greater than 100 percent. Estimate challenged by: R-

2016: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 104 percent greater than 100 percent. Estimate challenged by: R-

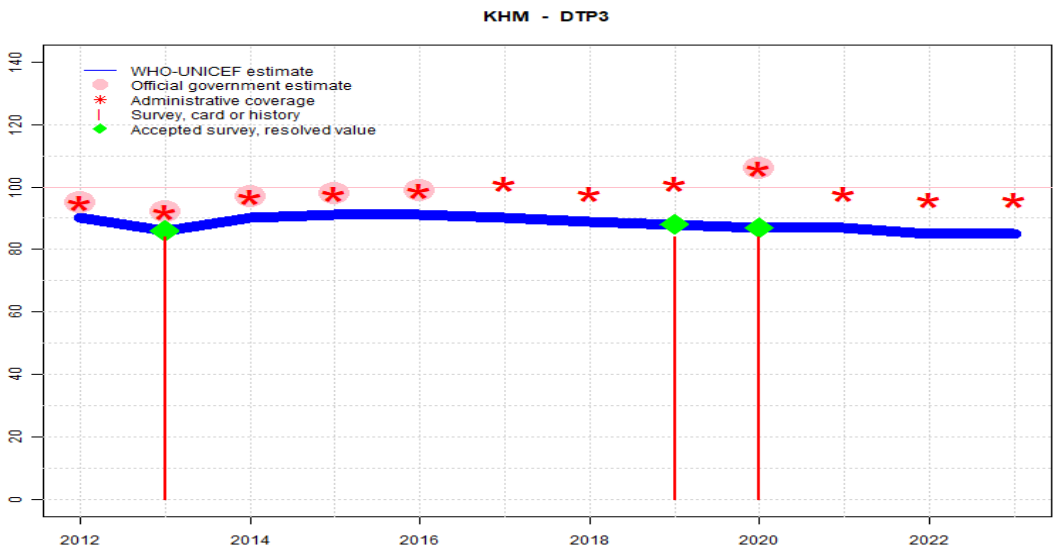
2015: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 107 percent greater than 100 percent. Programme acknowledges challenges in data quality impacting on administrative coverage levels. Programme reports a switch in information source from the national statistics office to the national health information system. Current information suggests a decline in target population that may partially explain reported increase in coverage. WHO and UNICEF recommend a review of recording and reporting practices as well as a data review inclusive of the target population data sources. Estimate challenged by: R-

2014: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 101 percent greater than 100 percent. Estimate challenged by: R-

2013: Estimate of 94 percent assigned by working group. Estimate is based on survey results from 2013 DHS. Estimate challenged by: R-

2012: Reported data calibrated to 2009 and 2013 levels. Estimate challenged by: R-

Cambodia - DTP3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	90	86	90	91	91	90	89	88	87	87	85	85
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	95	92	97	98	99	NA	NA	NA	106	NA	NA	NA
Administrative	95	92	97	98	99	101	98	101	106	98	96	96
Survey	NA	84	NA	NA	NA	NA	NA	84	84	NA	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.

Description:

2023: Reported data calibrated to 2020 levels. Estimate challenged by: R-

2022: Reported data calibrated to 2020 levels. Estimate challenged by: R-

2021: Reported data calibrated to 2020 levels. Estimates for some antigens do not reflect declines in reported coverage from 2020 to 2021. Estimate challenged by: R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 87 percent based on 1 survey(s). Cambodia Demographic and Health Survey 2021-2022 card or history results of 84 percent modifed for recall bias to 87 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 78 percent and 3rd dose card only coverage of 74 percent. Reported data excluded because 106 percent greater than 100 percent. Estimate challenged by: D-R-

2019: Estimate of 88 percent assigned by working group. Estimate informed by survey result. Cambodia Demographic and Health Survey 2021-2022 card or history results of 84 percent modifed for recall bias to 88 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 71 percent and 3rd dose card only coverage of 67 percent. Reported data excluded because 101 percent greater than 100 percent. Estimate challenged by: R-

2018: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: R-

2017: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 101 percent greater than 100 percent. Estimate challenged by: R-

2016: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: R-

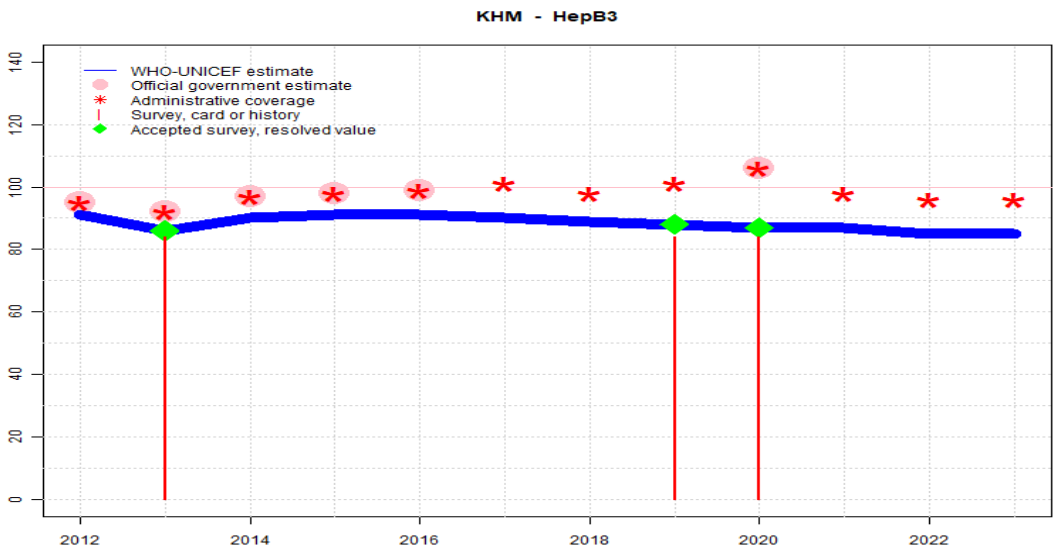
2015: Reported data calibrated to 2013 and 2019 levels. Programme acknowledges challenges in data quality impacting on administrative coverage levels. Programme reports a switch in information source from the national statistics office to the national health information system. Current information suggests a decline in target population that may partially explain reported increase in coverage. WHO and UNICEF recommend a review of recording and reporting practices as well as a data review inclusive of the target population data sources. Estimate challenged by: R-

2014: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: R-

2013: Estimate of 86 percent assigned by working group. Estimate is based on survey results from 2013 DHS. Cambodia Demographic and Health Survey, 2014 card or history results of 84 percent modifed for recall bias to 86 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 75 percent and 3rd dose card only coverage of 69 percent. Estimate challenged by: R-

2012: Reported data calibrated to 2009 and 2013 levels. Estimate challenged by: R-

Cambodia - HepB3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	91	86	90	91	91	90	89	88	87	87	85	85
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	95	92	97	98	99	NA	NA	NA	106	NA	NA	NA
Administrative	95	92	97	98	99	101	98	101	106	98	96	96
Survey	NA	84	NA	NA	NA	NA	NA	84	84	NA	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.

Description:

2023: Reported data calibrated to 2020 levels. Estimate challenged by: R-

2022: Reported data calibrated to 2020 levels. Estimate challenged by: R-

2021: Reported data calibrated to 2020 levels. Estimates for some antigens do not reflect declines in reported coverage from 2020 to 2021. Estimate challenged by: R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 87 percent based on 1 survey(s). Cambodia Demographic and Health Survey 2021-2022 card or history results of 84 percent modifed for recall bias to 87 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 78 percent and 3rd dose card only coverage of 74 percent. Reported data excluded because 106 percent greater than 100 percent. Estimate challenged by: D-R-

2019: Estimate of 88 percent assigned by working group. Estimate informed by survey result. Cambodia Demographic and Health Survey 2021-2022 card or history results of 84 percent modifed for recall bias to 88 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 71 percent and 3rd dose card only coverage of 67 percent. Reported data excluded because 101 percent greater than 100 percent. Estimate challenged by: R-

2018: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: R-

2017: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 101 percent greater than 100 percent. Estimate challenged by: R-

2016: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: R-

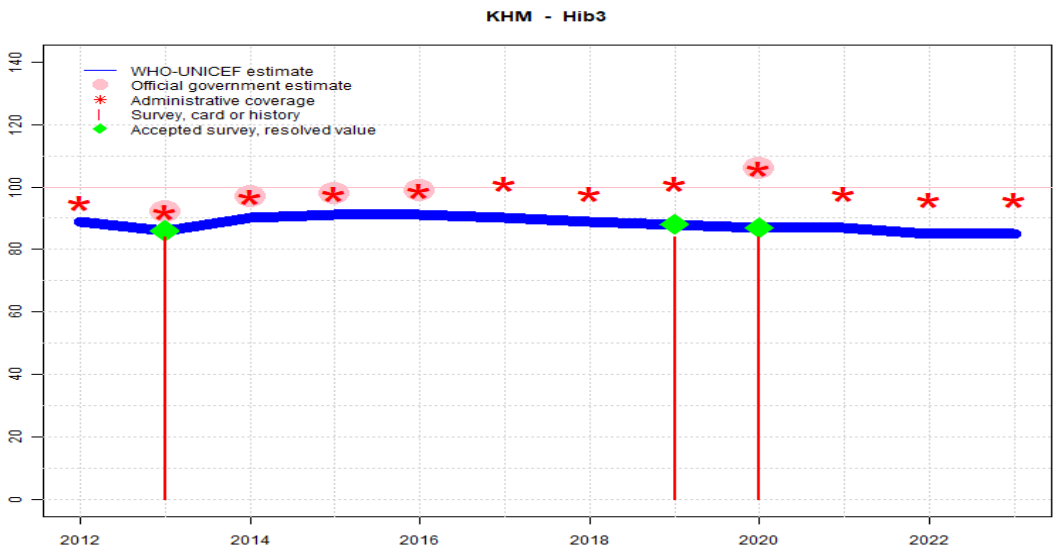
2015: Reported data calibrated to 2013 and 2019 levels. Programme acknowledges challenges in data quality impacting on administrative coverage levels. Programme reports a switch in information source from the national statistics office to the national health information system. Current information suggests a decline in target population that may partially explain reported increase in coverage. WHO and UNICEF recommend a review of recording and reporting practices as well as a data review inclusive of the target population data sources. Estimate challenged by: R-

2014: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: R-

2013: Estimate of 86 percent assigned by working group. Estimate is based on survey results from 2013 DHS. Cambodia Demographic and Health Survey, 2014 card or history results of 84 percent modifed for recall bias to 86 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 75 percent and 3rd dose card only coverage of 69 percent. Estimate challenged by: R-

2012: Reported data calibrated to 2009 and 2013 levels. Estimate challenged by: R-

Cambodia - Hib3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	89	86	90	91	91	90	89	88	87	87	85	85
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	NA	92	97	98	99	NA	NA	NA	106	NA	NA	NA
Administrative	95	92	97	98	99	101	98	101	106	98	96	96
Survey	NA	84	NA	NA	NA	NA	NA	84	84	NA	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.

Description:

2023: Reported data calibrated to 2020 levels. Estimate challenged by: R-

2022: Reported data calibrated to 2020 levels. Estimate challenged by: R-

2021: Reported data calibrated to 2020 levels. Estimates for some antigens do not reflect declines in reported coverage from 2020 to 2021. Estimate challenged by: R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 87 percent based on 1 survey(s). Cambodia Demographic and Health Survey 2021-2022 card or history results of 84 percent modifed for recall bias to 87 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 78 percent and 3rd dose card only coverage of 74 percent. Reported data excluded because 106 percent greater than 100 percent. Estimate challenged by: D-R-

2019: Estimate of 88 percent assigned by working group. Estimate informed by survey result. Cambodia Demographic and Health Survey 2021-2022 card or history results of 84 percent modifed for recall bias to 88 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 71 percent and 3rd dose card only coverage of 67 percent. Reported data excluded because 101 percent greater than 100 percent. Estimate challenged by: R-

2018: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: R-

2017: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 101 percent greater than 100 percent. Estimate challenged by: R-

2016: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: R-

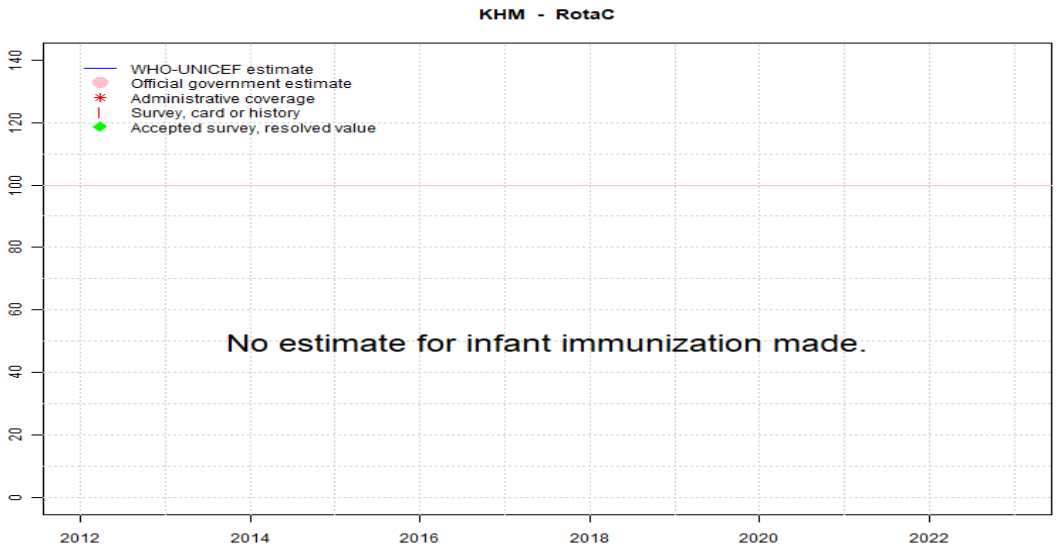
2015: Reported data calibrated to 2013 and 2019 levels. Programme acknowledges challenges in data quality impacting on administrative coverage levels. Programme reports a switch in information source from the national statistics office to the national health information system. Current information suggests a decline in target population that may partially explain reported increase in coverage. WHO and UNICEF recommend a review of recording and reporting practices as well as a data review inclusive of the target population data sources. Estimate challenged by: R-

2014: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: R-

2013: Estimate of 86 percent assigned by working group. Estimate is based on survey results from 2013 DHS. Cambodia Demographic and Health Survey, 2014 card or history results of 84 percent modifed for recall bias to 86 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 75 percent and 3rd dose card only coverage of 69 percent. Estimate challenged by: R-

2012: Reported data calibrated to 2013 levels. Estimate challenged by: R-

Cambodia - RotaC



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

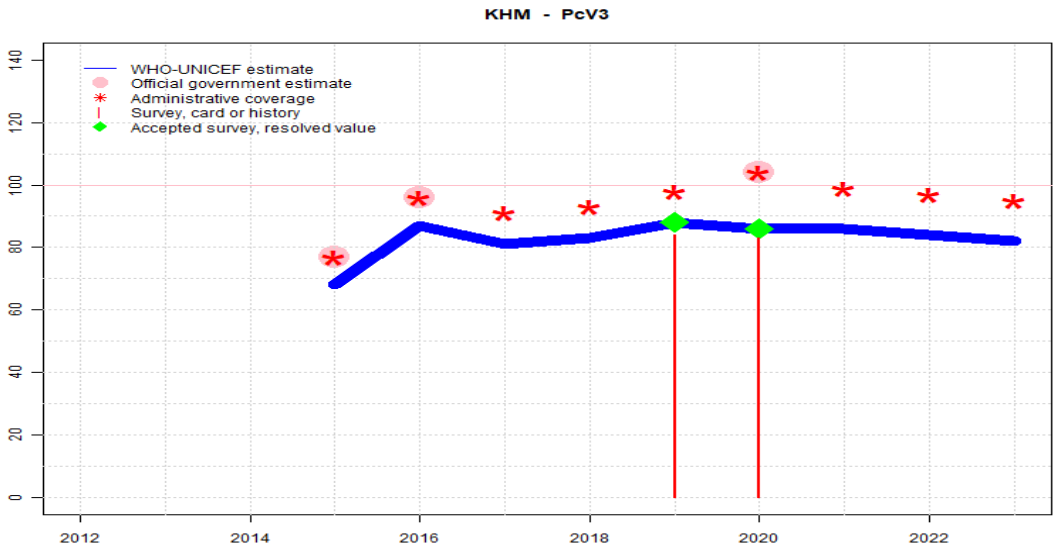
●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk 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.

Cambodia - PcV3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	68	87	81	83	88	86	86	84	82
Estimate GoC	NA	NA	NA	•	•	•	•	•	•	•	•	•
Official	NA	NA	NA	77	96	NA	NA	NA	104	NA	NA	NA
Administrative	NA	NA	NA	77	96	91	93	98	104	99	97	95
Survey	NA	NA	NA	NA	NA	NA	NA	84	83	NA	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.

Description:

2023: Reported data calibrated to 2020 levels. Estimate challenged by: D-R-

2022: Reported data calibrated to 2020 levels. Estimate challenged by: R-

2021: Reported data calibrated to 2020 levels. Estimates for some antigens do not reflect declines in reported coverage from 2020 to 2021. Estimate challenged by: R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 86 percent based on 1 survey(s). Cambodia Demographic and Health Survey 2021-2022 card or history results of 83 percent modifed for recall bias to 86 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 79 percent and 3rd dose card only coverage of 74 percent. Reported data excluded because 104 percent greater than 100 percent. Estimate challenged by: D-R-

2019: Estimate of 88 percent assigned by working group. Estimate informed by survey result. Cambodia Demographic and Health Survey 2021-2022 card or history results of 84 percent modifed for recall bias to 88 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 71 percent and 3rd dose card only coverage of 68 percent. Estimate challenged by: R-

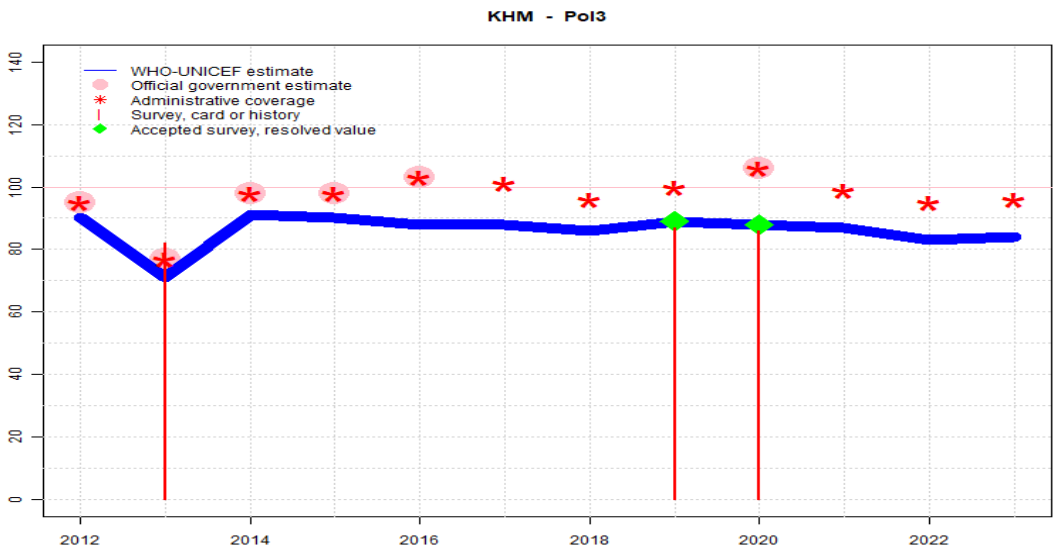
2018: Reported data calibrated to 2015 and 2019 levels. Programme reports one month vaccine stockout at national level. Estimate challenged by: R-

2017: Reported data calibrated to 2015 and 2019 levels. Programme reports vaccine stockout of unspecified duration. Estimate challenged by: R-

2016: Reported data calibrated to 2015 and 2019 levels. Estimate challenged by: R-

2015: Estimate of 68 percent assigned by working group. Pneumococcal conjugate vaccine introduced in 2015. Estimate is based on estimated DTP3 coverage level. Programme acknowledges challenges in data quality impacting on administrative coverage levels. Programme reports a switch in information source from the national statistics office to the national health information system. Current information suggests a decline in target population that may partially explain reported increase in coverage. WHO and UNICEF recommend a review of recording and reporting practices as well as a data review inclusive of the target population data sources. Estimate challenged by: R-

Cambodia - Pol3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	90	71	91	90	88	88	86	89	88	87	83	84
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	95	77	98	98	103	NA	NA	NA	106	NA	NA	NA
Administrative	95	77	98	98	103	101	96	100	106	99	95	96
Survey	NA	82	NA	NA	NA	NA	NA	87	86	NA	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.

Description:

2023: Reported data calibrated to 2020 levels. Estimate challenged by: R-

2022: Reported data calibrated to 2020 levels. Estimate challenged by: R-

2021: Reported data calibrated to 2020 levels. Estimates for some antigens do not reflect declines in reported coverage from 2020 to 2021. Estimate challenged by: R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 88 percent based on 1 survey(s). Cambodia Demographic and Health Survey 2021-2022 card or history results of 86 percent modifed for recall bias to 88 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 80 percent and 3rd dose card only coverage of 75 percent. Reported data excluded because 106 percent greater than 100 percent. Estimate challenged by: D-R-

2019: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 89 percent based on 1 survey(s). Cambodia Demographic and Health Survey 2021-2022 card or history results of 87 percent modifed for recall bias to 89 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 72 percent and 3rd dose card only coverage of 68 percent. Programme reports two months national and district level vaccine stockout. Estimate challenged by: R-

2018: Reported data calibrated to 2013 and 2019 levels. Programme reports one month vaccine stockout at national level. Estimate challenged by: R-

2017: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 101 percent greater than 100 percent. Estimate challenged by: R-

2016: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 103 percent greater than 100 percent. Estimate challenged by: R-

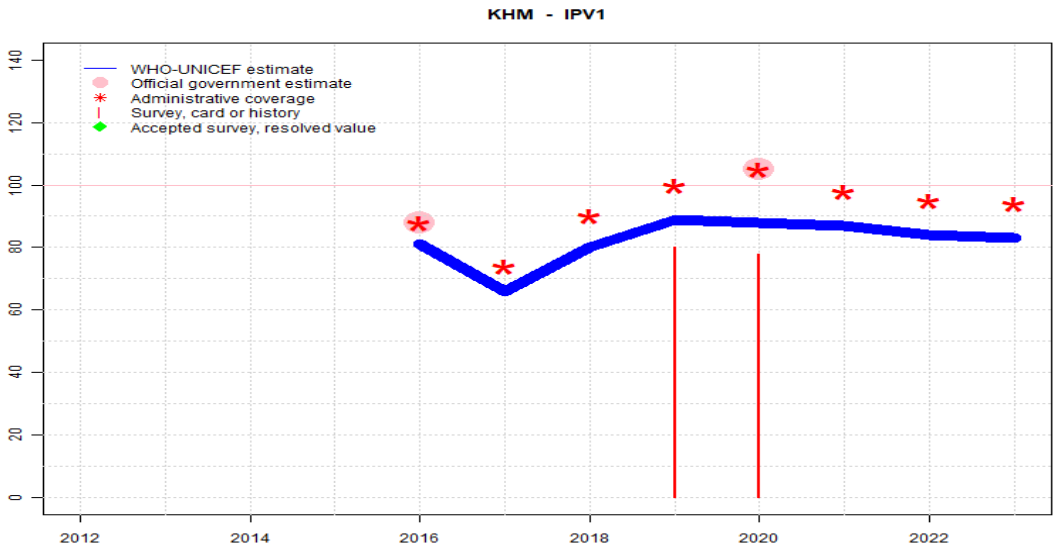
2015: Reported data calibrated to 2013 and 2019 levels. Programme acknowledges challenges in data quality impacting on administrative coverage levels. Programme reports a switch in information source from the national statistics office to the national health information system. Current information suggests a decline in target population that may partially explain reported increase in coverage. WHO and UNICEF recommend a review of recording and reporting practices as well as a data review inclusive of the target population data sources. Estimate challenged by: R-

2014: Reported data calibrated to 2013 and 2019 levels. Recovery from stockout during prior year. Estimate challenged by: R-

2013: Estimate of 71 percent assigned by working group. Estimate based on difference between survey and reported coverage for DTP3. Cambodia Demographic and Health Survey, 2014 results ignored by working group. Survey may have not detected vaccine stockout.Cambodia Demographic and Health Survey, 2014 card or history results of 82 percent modifed for recall bias to 84 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 76 percent and 3rd dose card only coverage of 67 percent. Reported decline likely due to five months vaccine stockout. Estimate challenged by: R-

2012: Reported data calibrated to 2009 and 2013 levels. Estimate challenged by: R-

Cambodia - IPV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	NA	81	66	80	89	88	87	84	83
Estimate GoC	NA	NA	NA	NA	•	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	88	NA	NA	NA	105	NA	NA	NA
Administrative	NA	NA	NA	NA	88	74	90	100	105	98	95	94
Survey	NA	NA	NA	NA	NA	NA	NA	80	78	NA	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.

Description:

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: Reported data calibrated to 2020 levels. Estimate challenged by: R-

2022: Reported data calibrated to 2020 levels. Programme reports two months vaccine stockout. Estimate challenged by: R-

2021: Reported data calibrated to 2020 levels. Estimates for some antigens do not reflect declines in reported coverage from 2020 to 2021. Estimate challenged by: R-

2020: Estimate of 88 percent assigned by working group. Estimate informed by estimated DTP3 coverage. Cambodia Demographic and Health Survey 2021-2022 results ignored by working group. Survey results for IPV1 are inconsistent with those for DTP3 which is recommended for administration at the same age.Reported data excluded because 105 percent greater than 100 percent. Estimate challenged by: D-R-

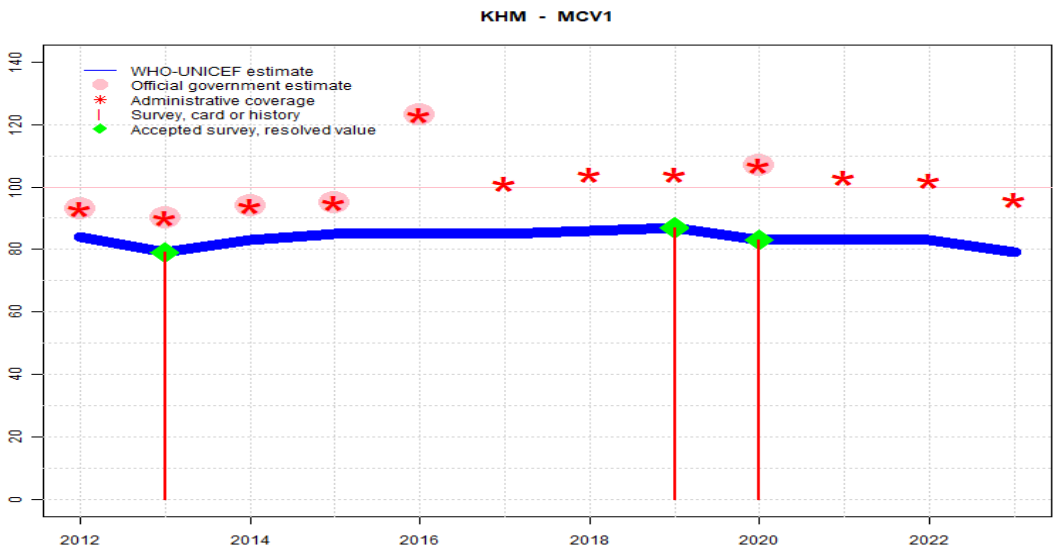
2019: Estimate of 89 percent assigned by working group. Estimate informed by estimated DTP3 coverage. Cambodia Demographic and Health Survey 2021-2022 results ignored by working group. Survey results for IPV1 are inconsistent with those for DTP3 which is recommended for administration at the same age. Estimate challenged by: R-

2018: Reported data calibrated to 2016 and 2019 levels. Programme appears to have recovered from prior years stockouts. Estimate challenged by: R-

2017: Reported data calibrated to 2016 and 2019 levels. Programme reports vaccine stockout of unspecified duration. Estimate challenged by: R-

2016: Estimate of 81 percent assigned by working group. Estimate informed by reported coverage adjusted for the difference between estimated and administrative coverage for DTP3. Inactivated polio vaccine introduced in December 2015. Estimate challenged by: R-

Cambodia - MCV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	84	79	83	85	85	85	86	87	83	83	83	79
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	93	90	94	95	123	NA	NA	NA	107	NA	NA	NA
Administrative	93	90	94	95	123	101	104	104	107	103	102	96
Survey	NA	79	NA	NA	NA	NA	NA	87	83	NA	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.

Description:

2023: Estimate is informed by the relative relationship between estimated coverage and reported number of doses administered in 2022 applied to the reported number of doses administered in 2023 to reflect the trend in reported doses administered. Estimate challenged by: D-R-

2022: Reported data calibrated to 2020 levels. Reported data excluded because 102 percent greater than 100 percent. Programme reports two months vaccine stockout. Estimate challenged by: D-R-

2021: Reported data calibrated to 2020 levels. Reported data excluded because 103 percent greater than 100 percent. Estimates for some antigens do not reflect declines in reported coverage from 2020 to 2021. Programme reports a MR vaccine stockout at national level. Estimate challenged by: D-R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 83 percent based on 1 survey(s). Reported data excluded because 107 percent greater than 100 percent. Estimate challenged by: D-R-

2019: Estimate of 87 percent assigned by working group. Estimate informed by survey result. Reported data excluded because 104 percent greater than 100 percent. Programme reports two months national and district level vaccine stockout. Estimate challenged by: D-R-

2018: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 104 percent greater than 100 percent. Estimate of 86 percent changed from previous revision value of 87 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 101 percent greater than 100 percent. Programme reports vaccine stockout of unspecified duration. Estimate of 85 percent changed from previous revision value of 86 percent. Estimate challenged by: R-

2016: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 123 percent greater than 100 percent. Reported data excluded due to an increase from 95 percent to 123 percent with decrease 101 percent. Increase in reported coverage due in part to doses included from MR catch up campaign as well as inclusion of children over one year of age. Estimate challenged by: D-R-

2015: Reported data calibrated to 2013 and 2019 levels. Programme acknowledges challenges in data quality impacting on administrative coverage levels. Programme reports a switch in information source from the national statistics office to the national health information system. Current information suggests a decline in target population that may partially explain reported increase in coverage. WHO and UNICEF recommend a review of recording and reporting practices as well as a data review inclusive of the target population data sources. Estimate challenged by: R-

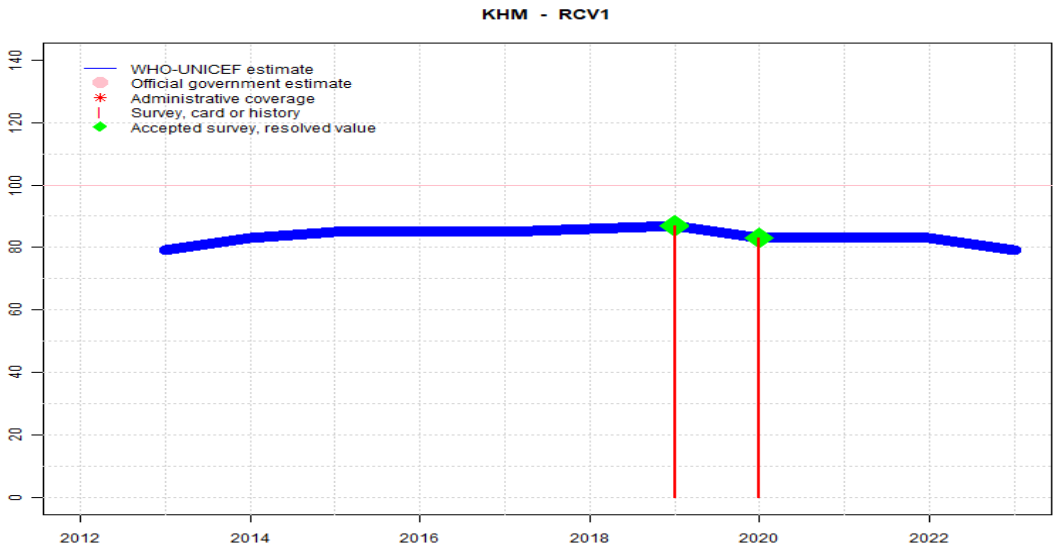
2014: Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 79 percent based on 1 survey(s). Estimate challenged by: R-

2012: Reported data calibrated to 2009 and 2013 levels. Measles and rubella combination intro-

duced in 2012; second dose recommend at 18 months. Estimate challenged by: R-

Cambodia - RCV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	79	83	85	85	85	86	87	83	83	83	79
Estimate GoC	NA	•	•	•	•	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	87	83	NA	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.

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 is based on estimated MCV1. Estimate challenged by: D-R-

2022: Estimate based on estimated MCV1. Programme reports two months vaccine stockout. Estimate challenged by: D-R-

2021: Estimate based on estimated MCV1. Estimates for some antigens do not reflect declines in reported coverage from 2020 to 2021. Programme reports a MR vaccine stockout at national level. Estimate challenged by: D-R-

2020: Estimate based on estimated MCV1. Estimate challenged by: D-R-

2019: Estimate based on estimated MCV1. Estimate challenged by: D-R-

2018: Estimate based on estimated MCV1. Estimate of 86 percent changed from previous revision value of 87 percent. Estimate challenged by: D-R-

2017: Estimate based on estimated MCV1. Programme reports vaccine stockout of unspecified duration. Estimate of 85 percent changed from previous revision value of 86 percent. Estimate challenged by: R-

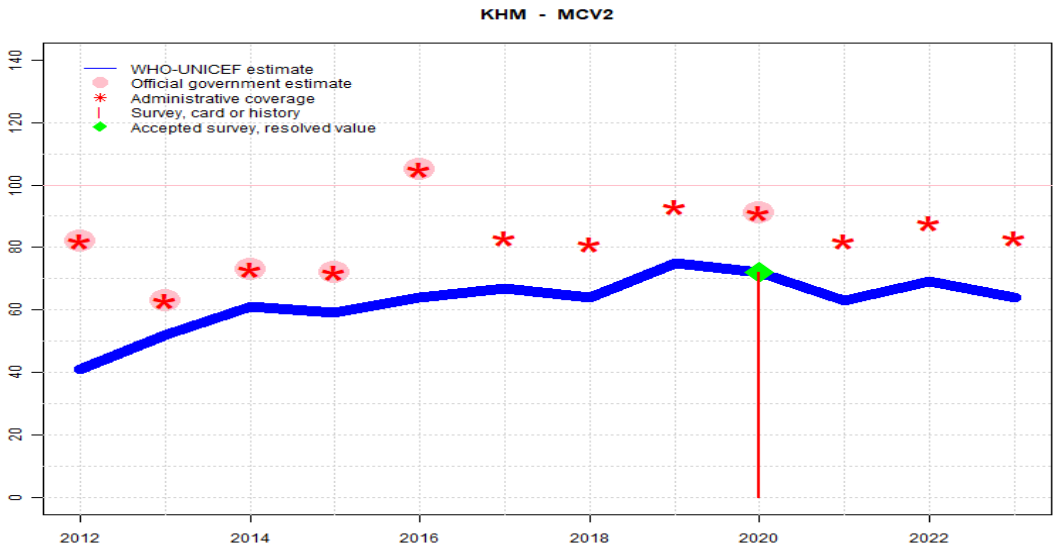
2016: Estimate based on estimated MCV1. Estimate challenged by: D-R-

2015: Estimate based on estimated MCV1. Programme acknowledges challenges in data quality impacting on administrative coverage levels. Programme reports a switch in information source from the national statistics office to the national health information system. Current information suggests a decline in target population that may partially explain reported increase in coverage. WHO and UNICEF recommend a review of recording and reporting practices as well as a data review inclusive of the target population data sources. Estimate challenged by: R-

2014: Estimate based on estimated MCV1. Estimate challenged by: R-

2013: Estimate based on estimated MCV1. Estimate challenged by: R-

Cambodia - MCV2



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	41	52	61	59	64	67	64	75	72	63	69	64
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	82	63	73	72	105	NA	NA	NA	91	NA	NA	NA
Administrative	82	63	73	72	105	83	81	93	91	82	88	83
Survey	NA	NA	NA	NA	NA	NA	NA	NA	72	NA	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.

Description:

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

2023: Reported data calibrated to 2020 levels. Estimate challenged by: D-R-

2022: Reported data calibrated to 2020 levels. Estimate challenged by: D-R-

2021: Reported data calibrated to 2020 levels. Estimates for some antigens do not reflect declines in reported coverage from 2020 to 2021. Estimate challenged by: D-R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 72 percent based on 1 survey(s). Estimate challenged by: D-R-

2019: Reported data calibrated to 2013 and 2020 levels. Programme reports two months national and district level vaccine stockout. Estimate challenged by: D-R-

2018: Reported data calibrated to 2013 and 2020 levels. Estimate challenged by: D-R-

2017: Reported data calibrated to 2013 and 2020 levels. Programme reports vaccine stockout of unspecified duration. Estimate challenged by: D-R-

2016: Reported data calibrated to 2013 and 2020 levels. Reported data excluded because 105 percent greater than 100 percent. Reported data excluded due to an increase from 72 percent to 105 percent with decrease 83 percent. Increase in reported coverage due in part to doses included from MR catch up campaign. Estimate challenged by: D-R-

2015: Reported data calibrated to 2013 and 2020 levels. Programme acknowledges challenges in data quality impacting on administrative coverage levels. Programme reports a switch in information source from the national statistics office to the national health information system. Current information suggests a decline in target population that may partially explain reported increase in coverage. WHO and UNICEF recommend a review of recording and reporting practices as well as a data review inclusive of the target population data sources. Estimate challenged by: R-

2014: Reported data calibrated to 2013 and 2020 levels. Estimate challenged by: R-

2013: Estimate of 52 percent assigned by working group. Estimates is based on adjustment between estimated and reported MCV1 coverage levels. Estimate challenged by: D-R-

2012: Eighty-two percent coverage achieved in 50 percent of the national target population. Measles and rubella combination introduced in 2012; second dose recommend at 18 months. Estimate challenged by: R-

Cambodia - survey details

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.

2020 Cambodia Demographic and Health Survey 2021-2022

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94	12-23 m	1641	82
BCG	Card	79.6	12-23 m	1346	82
BCG	Card or History	94.4	12-23 m	1641	82
BCG	History	14.8	12-23 m	295	82
DTP1	C or H <12 months	92	12-23 m	1641	82
DTP1	Card	78.5	12-23 m	1346	82
DTP1	Card or History	92.3	12-23 m	1641	82
DTP1	History	13.8	12-23 m	295	82
DTP3	C or H <12 months	83.6	12-23 m	1641	82
DTP3	Card	73.8	12-23 m	1346	82
DTP3	Card or History	84.1	12-23 m	1641	82
DTP3	History	10.3	12-23 m	295	82
HepB1	C or H <12 months	92	12-23 m	1641	82
HepB1	Card	78.5	12-23 m	1346	82
HepB1	Card or History	92.3	12-23 m	1641	82
HepB1	History	13.8	12-23 m	295	82
HepB3	C or H <12 months	83.6	12-23 m	1641	82
HepB3	Card	73.8	12-23 m	1346	82
HepB3	Card or History	84.1	12-23 m	1641	82
HepB3	History	10.3	12-23 m	295	82
HepBB	C or H <12 months	93	12-23 m	1641	82
HepBB	Card	79.2	12-23 m	1346	82
HepBB	Card or History	93.6	12-23 m	1641	82
HepBB	History	14.5	12-23 m	295	82
Hib1	C or H <12 months	92	12-23 m	1641	82
Hib1	Card	78.5	12-23 m	1346	82
Hib1	Card or History	92.3	12-23 m	1641	82
Hib1	History	13.8	12-23 m	295	82
Hib3	C or H <12 months	83.6	12-23 m	1641	82
Hib3	Card	73.8	12-23 m	1346	82
Hib3	Card or History	84.1	12-23 m	1641	82
Hib3	History	10.3	12-23 m	295	82
IPV1	C or H <12 months	77.8	12-23 m	1641	82
IPV1	Card	64.5	12-23 m	1346	82
IPV1	Card or History	78.1	12-23 m	1641	82
IPV1	History	13.7	12-23 m	295	82
MCV1	C or H <12 months	80.4	12-23 m	1641	82
MCV1	Card	70.2	12-23 m	1346	82
MCV1	Card or History	83.1	12-23 m	1641	82
MCV1	History	12.9	12-23 m	295	82
MCV2	C or H <12 months	69.5	24-35 m	1494	-
MCV2	Card	56.1	24-35 m	1095	-
MCV2	Card or History	72.1	24-35 m	1494	-
MCV2	History	16.1	24-35 m	399	-
PcV1	C or H <12 months	91.1	12-23 m	1641	82
PcV1	Card	79.1	12-23 m	1346	82
PcV1	Card or History	91.5	12-23 m	1641	82
PcV1	History	12.5	12-23 m	295	82
PcV3	C or H <12 months	82.5	12-23 m	1641	82
PcV3	Card	74	12-23 m	1346	82
PcV3	Card or History	83	12-23 m	1641	82
PcV3	History	9	12-23 m	295	82
Pol1	C or H <12 months	94.3	12-23 m	1641	82
Pol1	Card	80	12-23 m	1346	82
Pol1	Card or History	94.5	12-23 m	1641	82
Pol1	History	14.5	12-23 m	295	82
Pol3	C or H <12 months	85.6	12-23 m	1641	82
Pol3	Card	75.1	12-23 m	1346	82
Pol3	Card or History	86	12-23 m	1641	82
Pol3	History	10.9	12-23 m	295	82

2019 Cambodia Demographic and Health Survey 2021-2022

Cambodia - survey details

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	92.6	24-35 m	1494	-
BCG	Card	70.8	24-35 m	1095	-
BCG	Card or History	93.8	24-35 m	1494	-
BCG	History	23.1	24-35 m	399	-
DTP1	C or H <12 months	92.6	24-35 m	1494	-
DTP1	Card	70.9	24-35 m	1095	-
DTP1	Card or History	93.1	24-35 m	1494	-
DTP1	History	22.2	24-35 m	399	-
DTP3	C or H <12 months	83	24-35 m	1494	-
DTP3	Card	66.6	24-35 m	1095	-
DTP3	Card or History	84.2	24-35 m	1494	-
DTP3	History	17.6	24-35 m	399	-
HepB1	C or H <12 months	92.6	24-35 m	1494	-
HepB1	Card	70.9	24-35 m	1095	-
HepB1	Card or History	93.1	24-35 m	1494	-
HepB1	History	22.2	24-35 m	399	-
HepB3	C or H <12 months	83	24-35 m	1494	-
HepB3	Card	66.6	24-35 m	1095	-
HepB3	Card or History	84.2	24-35 m	1494	-
HepB3	History	17.6	24-35 m	399	-
HepBB	C or H <12 months	90.8	24-35 m	1494	-
HepBB	Card	69.2	24-35 m	1095	-
HepBB	Card or History	92.1	24-35 m	1494	-
HepBB	History	22.9	24-35 m	399	-
Hib1	C or H <12 months	92.6	24-35 m	1494	-
Hib1	Card	70.9	24-35 m	1095	-
Hib1	Card or History	93.1	24-35 m	1494	-
Hib1	History	22.2	24-35 m	399	-
Hib3	C or H <12 months	83	24-35 m	1494	-
Hib3	Card	66.6	24-35 m	1095	-
Hib3	Card or History	84.2	24-35 m	1494	-
Hib3	History	17.6	24-35 m	399	-
IPV1	C or H <12 months	78.3	24-35 m	1494	-
IPV1	Card	58.3	24-35 m	1095	-
IPV1	Card or History	79.9	24-35 m	1494	-
IPV1	History	21.5	24-35 m	399	-
MCV1	C or H <12 months	81.6	24-35 m	1494	-
MCV1	Card	66.7	24-35 m	1095	-
MCV1	Card or History	87.2	24-35 m	1494	-
MCV1	History	20.4	24-35 m	399	-
PcV1	C or H <12 months	91.7	24-35 m	1494	-
PcV1	Card	70.6	24-35 m	1095	-
PcV1	Card or History	92.2	24-35 m	1494	-
PcV1	History	21.6	24-35 m	399	-
PcV3	C or H <12 months	82.8	24-35 m	1494	-
PcV3	Card	67.6	24-35 m	1095	-
PcV3	Card or History	84.4	24-35 m	1494	-
PcV3	History	16.8	24-35 m	399	-
Pol1	C or H <12 months	94	24-35 m	1494	-
Pol1	Card	72.1	24-35 m	1095	-
Pol1	Card or History	94.5	24-35 m	1494	-
Pol1	History	22.4	24-35 m	399	-
Pol3	C or H <12 months	86.1	24-35 m	1494	-
Pol3	Card	68.5	24-35 m	1095	-
Pol3	Card or History	87.1	24-35 m	1494	-
Pol3	History	18.6	24-35 m	399	-

2013 Cambodia Demographic and Health Survey, 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	95.9	12-23 m	1460	77
BCG	Card	76.4	12-23 m	1129	77
BCG	Card or History	96.1	12-23 m	1460	77
BCG	History	19.7	12-23 m	332	77
DTP1	C or H <12 months	93.6	12-23 m	1460	77
DTP1	Card	75.4	12-23 m	1129	77
DTP1	Card or History	94	12-23 m	1460	77
DTP1	History	18.6	12-23 m	332	77
DTP3	C or H <12 months	81.9	12-23 m	1460	77
DTP3	Card	68.6	12-23 m	1129	77
DTP3	Card or History	83.7	12-23 m	1460	77
DTP3	History	15.1	12-23 m	332	77
HepB1	C or H <12 months	93.6	12-23 m	1460	77
HepB1	Card	75.4	12-23 m	1129	77
HepB1	Card or History	94	12-23 m	1460	77
HepB1	History	18.6	12-23 m	332	77
HepB3	C or H <12 months	81.9	12-23 m	1460	77
HepB3	Card	68.6	12-23 m	1129	77

HepB3	Card or History	83.7	12-23 m	1460	77
HepB3	History	15.1	12-23 m	332	77
HepBB	C or H <12 months	82.6	12-23 m	1460	77
HepBB	Card	65.1	12-23 m	1129	77
HepBB	Card or History	82.8	12-23 m	1460	77
HepBB	History	17.7	12-23 m	332	77
Hib1	C or H <12 months	93.6	12-23 m	1460	77
Hib1	Card	75.4	12-23 m	1129	77
Hib1	Card or History	94	12-23 m	1460	77
Hib1	History	18.6	12-23 m	332	77
Hib3	C or H <12 months	81.9	12-23 m	1460	77
Hib3	Card	68.6	12-23 m	1129	77
Hib3	Card or History	83.7	12-23 m	1460	77
Hib3	History	15.1	12-23 m	332	77
MCV1	C or H <12 months	70.3	12-23 m	1460	77
MCV1	Card	63.4	12-23 m	1129	77
MCV1	Card or History	78.6	12-23 m	1460	77
MCV1	History	15.2	12-23 m	332	77
Pol1	C or H <12 months	94.5	12-23 m	1460	77
Pol1	Card	75.9	12-23 m	1129	77
Pol1	Card or History	94.8	12-23 m	1460	77
Pol1	History	18.9	12-23 m	332	77
Pol3	C or H <12 months	80.2	12-23 m	1460	77
Pol3	Card	67.2	12-23 m	1129	77
Pol3	Card or History	82.3	12-23 m	1460	77
Pol3	History	15.1	12-23 m	332	77

2009 Cambodia Demographic and Health Survey 2010

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94.2	12-23 m	1614	77
BCG	Card	77.1	12-23 m	1614	77
BCG	Card or History	94.3	12-23 m	1614	77
BCG	History	17.3	12-23 m	1614	77
DTP1	C or H <12 months	92.6	12-23 m	1614	77
DTP1	Card	75.6	12-23 m	1614	77
DTP1	Card or History	93.1	12-23 m	1614	77
DTP1	History	17.6	12-23 m	1614	77
DTP3	C or H <12 months	83.6	12-23 m	1614	77
DTP3	Card	70.9	12-23 m	1614	77
DTP3	Card or History	84.8	12-23 m	1614	77
DTP3	History	14	12-23 m	1614	77
HepB1	C or H <12 months	92.6	12-23 m	1614	77
HepB1	Card	75.6	12-23 m	1614	77
HepB1	Card or History	93.1	12-23 m	1614	77
HepB1	History	17.6	12-23 m	1614	77
HepB3	C or H <12 months	83.6	12-23 m	1614	77
HepB3	Card	70.9	12-23 m	1614	77
HepB3	Card or History	84.8	12-23 m	1614	77
HepB3	History	14	12-23 m	1614	77
HepBB	C or H <12 months	73	12-23 m	1614	77
HepBB	Card	60.9	12-23 m	1249	77
HepBB	Card or History	73	12-23 m	1614	77
HepBB	History	12	12-23 m	364	77
Hib1	C or H <12 months	92.6	12-23 m	1614	77
Hib1	Card	75.6	12-23 m	1614	77
Hib1	Card or History	93.1	12-23 m	1614	77
Hib1	History	17.6	12-23 m	1614	77
Hib3	C or H <12 months	83.6	12-23 m	1614	77
Hib3	Card	70.9	12-23 m	1614	77
Hib3	Card or History	84.8	12-23 m	1614	77
Hib3	History	14	12-23 m	1614	77
MCV1	C or H <12 months	77	12-23 m	1614	77
MCV1	Card	66.8	12-23 m	1614	77
MCV1	Card or History	81.9	12-23 m	1614	77
MCV1	History	15	12-23 m	1614	77
Pol1	C or H <12 months	93	12-23 m	1614	77
Pol1	Card	75.6	12-23 m	1614	77
Pol1	Card or History	93.6	12-23 m	1614	77
Pol1	History	17.9	12-23 m	1614	77
Pol3	C or H <12 months	83.8	12-23 m	1614	77
Pol3	Card	70.8	12-23 m	1614	77
Pol3	Card or History	85	12-23 m	1614	77
Pol3	History	14.2	12-23 m	1614	77

2008 Cambodia Socio-Economic Survey 2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen

BCG	Card	77.7	12-23 m	1068	79
DTP1	Card	76.9	12-23 m	1068	79
DTP3	Card	55.8	12-23 m	1068	79
HepBB	Card	61.1	12-23 m	1068	79
MCV1	Card	59.3	12-23 m	1068	79

2004 Cambodia Demographic and Health Survey 2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	91	12-23 m	1517	67
BCG	Card	65.9	12-23 m	1517	67
BCG	Card or History	91.4	12-23 m	1517	67
BCG	History	25.5	12-23 m	1517	67
DTP1	C or H <12 months	89.7	12-23 m	1517	67
DTP1	Card	66.3	12-23 m	1517	67
DTP1	Card or History	90.6	12-23 m	1517	67
DTP1	History	24.3	12-23 m	1517	67
DTP3	C or H <12 months	75.5	12-23 m	1517	67
DTP3	Card	61.3	12-23 m	1517	67
DTP3	Card or History	78.3	12-23 m	1517	67
DTP3	History	17	12-23 m	1517	67
MCV1	C or H <12 months	70.2	12-23 m	1517	67
MCV1	Card	56.3	12-23 m	1517	67
MCV1	Card or History	76.9	12-23 m	1517	67
MCV1	History	20.6	12-23 m	1517	67
Pol1	C or H <12 months	89.8	12-23 m	1517	67
Pol1	Card	66.2	12-23 m	1517	67
Pol1	Card or History	90.6	12-23 m	1517	67
Pol1	History	24.4	12-23 m	1517	67
Pol3	C or H <12 months	74.2	12-23 m	1517	67
Pol3	Card	59.8	12-23 m	1517	67
Pol3	Card or History	76.9	12-23 m	1517	67
Pol3	History	17.1	12-23 m	1517	67

1999 Cambodia Demographic and Health Survey 2000, 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	66.1	12-23 m	1253	48
BCG	Card	45.9	12-23 m	1253	48
BCG	Card or History	71.4	12-23 m	1253	48
BCG	History	25.5	12-23 m	1253	48
DTP1	C or H <12 months	63.4	12-23 m	1253	48
DTP1	Card	45.6	12-23 m	1253	48
DTP1	Card or History	68	12-23 m	1253	48
DTP1	History	22.4	12-23 m	1253	48
DTP3	C or H <12 months	42.7	12-23 m	1253	48
DTP3	Card	35.8	12-23 m	1253	48
DTP3	Card or History	48.5	12-23 m	1253	48
DTP3	History	12.7	12-23 m	1253	48
MCV1	C or H <12 months	41.4	12-23 m	1253	48
MCV1	Card	36.4	12-23 m	1253	48
MCV1	Card or History	55.4	12-23 m	1253	48
MCV1	History	18.9	12-23 m	1253	48
Pol1	C or H <12 months	69.1	12-23 m	1253	48
Pol1	Card	45.6	12-23 m	1253	48
Pol1	Card or History	74.7	12-23 m	1253	48
Pol1	History	29.1	12-23 m	1253	48
Pol3	C or H <12 months	45.3	12-23 m	1253	48
Pol3	Card	35.8	12-23 m	1253	48
Pol3	Card or History	51.5	12-23 m	1253	48
Pol3	History	15.6	12-23 m	1253	48

1997 National Health Survey Cambodia 1998, 1999

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	33.4	12-23 m	804	-
BCG	Card or History	66.7	12-23 m	804	-
BCG	History	33.4	12-23 m	804	-
DTP1	C or H <12 months	60.9	12-23 m	804	-
DTP1	Card	33	12-23 m	804	-
DTP1	Card or History	62	12-23 m	804	-
DTP1	History	29	12-23 m	804	-
DTP3	C or H <12 months	44.4	12-23 m	804	-
DTP3	Card	26.8	12-23 m	804	-
DTP3	Card or History	46.5	12-23 m	804	-
DTP3	History	19.7	12-23 m	804	-

Cambodia - survey details

MCV1	C or H <12 months	45.4	12-23 m	804	-
MCV1	Card	25.7	12-23 m	804	-
MCV1	Card or History	49.5	12-23 m	804	-
MCV1	History	23.8	12-23 m	804	-
Pol1	C or H <12 months	79.6	12-23 m	804	-
Pol1	Card	33	12-23 m	804	-
Pol1	Card or History	81.1	12-23 m	804	-
Pol1	History	48.2	12-23 m	804	-
Pol3	C or H <12 months	53.8	12-23 m	804	-
Pol3	Card	26.6	12-23 m	804	-
Pol3	Card or History	56.1	12-23 m	804	-
Pol3	History	29.5	12-23 m	804	-

Cambodia - survey details

Further information and estimates for previous years are available at:
https://data.unicef.org/topic/child-health/immunization/
https://immunizationdata.who.int/listing.html