Cambodia: WHO and UNICEF estimates of immunization coverage: 2022 revision

WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2024 data received as of June 26, 2023
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 the 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 the available empirical data accurately reflect immunization system performance and those where the data are likely to be compromised and present a misleading view of immunization coverage while jointly estimating the most likely coverage levels for each country.

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:

*Brown et al. 2013. An introduction to the grade of confidence used to characterize uncertainty around the WHO and UNICEF estimates of national immunization coverage.

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 months 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 the period of data collection.

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 among countries. For countries utilizing IPV containing vaccine use only, i.e., no recommended dose of OPV, the 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.

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. Coverage 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.

Disclaimer: All reasonable precautions have been taken by the World Health Organization and United Nations Children’s Fund to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization or United Nations Children’s Fund be liable for damages arising from its use.
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:

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. Estimate of 92 percent changed from previous revision value of 95 percent. 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. Estimate of 94 percent changed from previous revision value of 97 percent. Estimate challenged by: 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. Estimate of 95 percent changed from previous revision value of 98 percent. Estimate challenged by: D-

2018: Reported data calibrated to 2013 and 2019 levels. Estimate of 90 percent changed from previous revision value of 93 percent. 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-

2011: Reported data calibrated to 2009 and 2013 levels. Reported data excluded because 101 percent greater than 100 percent. Estimate challenged by: R-
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:

- **2022:** Reported data calibrated to 2020 levels. 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. Estimate of 92 percent changed from previous revision value of 94 percent. Estimate challenged by: D-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 of 92 percent changed from previous revision value of 94 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 of 93 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- **2018:** Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 101 percent greater than 100 percent. Estimate of 93 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- **2017:** Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 104 percent greater than 100 percent. Estimate of 93 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- **2016:** Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 104 percent greater than 100 percent. Estimate challenged by: D-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: D-R-
- **2014:** Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 101 percent greater than 100 percent. Estimate challenged by: D-R-
- **2013:** Estimate of 94 percent assigned by working group. Estimate is based on survey results from 2013 DHS. Estimate challenged by: D-R-
- **2012:** Reported data calibrated to 2009 and 2013 levels. Estimate challenged by: R-
- **2011:** Reported data calibrated to 2009 and 2013 levels. Estimate challenged by: R-
Cambodia - DTP3

Description:

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 of 87 percent changed from previous revision value of 92 percent. Estimate challenged by: D-R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 87 percent based on 1 survey. Cambodia Demographic and Health Survey 2021-2022 card or history results of 84 percent modified 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 of 87 percent changed from previous revision value of 92 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 modified 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 of 88 percent changed from previous revision value of 92 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2013 and 2019 levels. Estimate of 89 percent changed from previous revision value of 92 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. Estimate of 90 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2016: Reported data calibrated to 2013 and 2019 levels. Estimate of 91 percent changed from previous revision value of 93 percent. 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 of 91 percent changed from previous revision value of 92 percent. Estimate challenged by: D-R-

2014: Reported data calibrated to 2013 and 2019 levels. Estimate of 90 percent changed from previous revision value of 91 percent. Estimate challenged by: D-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 modified 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: D-R-

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

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.

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimate</th>
<th>Official</th>
<th>Survey</th>
<th>Administrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>91</td>
<td>90</td>
<td>86</td>
<td>90</td>
</tr>
<tr>
<td>2012</td>
<td>91</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>2013</td>
<td>91</td>
<td>91</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>2014</td>
<td>91</td>
<td>91</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td>2015</td>
<td>89</td>
<td>88</td>
<td>87</td>
<td>87</td>
</tr>
<tr>
<td>2016</td>
<td>89</td>
<td>88</td>
<td>87</td>
<td>87</td>
</tr>
<tr>
<td>2017</td>
<td>89</td>
<td>88</td>
<td>87</td>
<td>87</td>
</tr>
<tr>
<td>2018</td>
<td>89</td>
<td>88</td>
<td>87</td>
<td>87</td>
</tr>
<tr>
<td>2019</td>
<td>89</td>
<td>88</td>
<td>87</td>
<td>87</td>
</tr>
<tr>
<td>2020</td>
<td>89</td>
<td>88</td>
<td>87</td>
<td>87</td>
</tr>
<tr>
<td>2021</td>
<td>89</td>
<td>88</td>
<td>87</td>
<td>87</td>
</tr>
<tr>
<td>2022</td>
<td>89</td>
<td>88</td>
<td>87</td>
<td>87</td>
</tr>
</tbody>
</table>

July 1, 2023; page 5  WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2024  data received as of June 26, 2023
2011: Reported data calibrated to 2009 and 2013 levels. Estimate challenged by: R-
Description:

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 of 87 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2020: Survey evidence does not support reported data. Survey evidence of 88 percent based on 1 survey(s). Cambodia Demographic and Health Survey 2021-2022 card or history results of 86 percent modified 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 of 88 percent changed from previous revision value of 94 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 modified 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 of 89 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2013 and 2019 levels. Programme reports one month vaccine stockout at national level. Estimate of 86 percent changed from previous revision value of 90 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. Estimate of 88 percent changed from previous revision value of 91 percent. Estimate challenged by: D-R-

2016: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 103 percent greater than 100 percent. Estimate of 88 percent changed from previous revision value of 91 percent. 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 of 90 percent changed from previous revision value of 92 percent. Estimate challenged by: R-

2014: Reported data calibrated to 2013 and 2019 levels. Recovery from stock-out during prior year. Estimate of 91 percent changed from previous revision value of 92 percent. 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

The WHO and UNICEF estimates of national immunization coverage (wuenvic) 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.

July 1, 2023; page 7 WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2024 data received as of June 26, 2023
Cambodia Demographic and Health Survey, 2014 card or history results of 82 percent modified 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: D-R-
2012: Reported data calibrated to 2009 and 2013 levels. Estimate challenged by: D-R-
2011: Reported data calibrated to 2009 and 2013 levels. Estimate challenged by: R-
Cambodia - IPV1

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).

**2022:** Reported data calibrated to 2020 levels. Programme reports two months vaccine stockout. 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 of 87 percent changed from previous revision value of 92 percent. Estimate challenged by: D-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 of 88 percent changed from previous revision value of 92 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 of 89 percent changed from previous revision value of 92 percent. Estimate challenged by: D-R-

**2018:** Reported data calibrated to 2016 and 2019 levels. Programme appears to have recovered from prior years stockouts. Estimate of 80 percent changed from previous revision value of 84 percent. Estimate challenged by: D-R-

**2017:** Reported data calibrated to 2016 and 2019 levels. Programme reports vaccine stockout of unspecified duration. Estimate of 66 percent changed from previous revision value of 68 percent. Estimate challenged by: D-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 of 81 percent changed from previous revision value of 82 percent. Estimate challenged by: D-R-

### Table: Cambodia - IPV1

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>81</td>
<td>66</td>
<td>80</td>
<td>89</td>
<td>88</td>
<td>87</td>
<td>84</td>
</tr>
<tr>
<td>Estimate GoC</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Official</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>88</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Administrative</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>88</td>
<td>74</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>98</td>
<td>95</td>
</tr>
<tr>
<td>Survey</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>80</td>
<td>78</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

July 1, 2023; page 9

WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2024  data received as of June 26, 2023
Cambodia - MCV1

Description:

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 of 83 percent changed from previous revision value of 84 percent. 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 a survey(s). Reported data excluded because 107 percent greater than 100 percent. Estimate of 83 percent changed from previous revision value of 84 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 of 87 percent changed from previous revision value of 84 percent. 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 87 percent changed from previous revision value of 84 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2013 and 2019 levels. Reported data excluded because 104 percent greater than 100 percent. Programme reports vaccine stockout of unspecified duration. Estimate of 86 percent changed from previous revision value of 84 percent. Estimate challenged by: D-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 of 85 percent changed from previous revision value of 84 percent. 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 record- and reporting practices as well as a data review inclusive of the target population data sources. Estimate of 85 percent changed from previous revision value of 84 percent. Estimate challenged by: D-R-

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

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 79 percent based on a survey(s). Reported data excluded because 107 percent greater than 100 percent. Programme reports a MR vaccine stockout at national level. Estimate of 87 percent changed from previous revision value of 84 percent. Estimate challenged by: D-R-

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

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. 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 - MCV1

- Duced in 2012; second dose recommend at 18 months. Estimate challenged by: D-R-
- 2011: Reported data calibrated to 2009 and 2013 levels. Estimate challenged by: R-

July 1, 2023; page 11
WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2024
data received as of June 26, 2023
Cambodia - MCV2

### Description:

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

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 of 63 percent changed from previous revision value of 71 percent. 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 of 72 percent changed from previous revision value of 80 percent. 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 of 75 percent changed from previous revision value of 82 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2013 and 2020 levels. Estimate of 64 percent changed from previous revision value of 70 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2013 and 2020 levels. Programme reports vaccine stockout of unspecified duration. Estimate of 67 percent changed from previous revision value of 72 percent. 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 of 64 percent changed from previous revision value of 67 percent. 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 of 59 percent changed from previous revision value of 61 percent. Estimate challenged by: D-R-

2014: Reported data calibrated to 2013 and 2020 levels. Estimate of 61 percent changed from previous revision value of 62 percent. Estimate challenged by: D-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-

---

### Table

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimate</th>
<th>Official</th>
<th>Administrative</th>
<th>Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2012</td>
<td>41</td>
<td>82</td>
<td>82</td>
<td>NA</td>
</tr>
<tr>
<td>2013</td>
<td>52</td>
<td>63</td>
<td>73</td>
<td>72</td>
</tr>
<tr>
<td>2014</td>
<td>61</td>
<td>72</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>2015</td>
<td>59</td>
<td>105</td>
<td>83</td>
<td>84</td>
</tr>
<tr>
<td>2016</td>
<td>64</td>
<td>64</td>
<td>81</td>
<td>81</td>
</tr>
<tr>
<td>2017</td>
<td>64</td>
<td>75</td>
<td>93</td>
<td>91</td>
</tr>
<tr>
<td>2018</td>
<td>75</td>
<td>72</td>
<td>91</td>
<td>82</td>
</tr>
<tr>
<td>2019</td>
<td>72</td>
<td>63</td>
<td>83</td>
<td>88</td>
</tr>
<tr>
<td>2020</td>
<td>72</td>
<td>63</td>
<td>83</td>
<td>88</td>
</tr>
<tr>
<td>2021</td>
<td>69</td>
<td>63</td>
<td>83</td>
<td>88</td>
</tr>
<tr>
<td>2022</td>
<td>69</td>
<td>64</td>
<td>83</td>
<td>88</td>
</tr>
</tbody>
</table>
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.

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 accompanying graph and data table.

Description:

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 of 83 percent changed from previous revision value of 84 percent. Estimate challenged by: D-R-

2020: Estimate based on estimated MCV1. Estimate of 83 percent changed from previous revision value of 84 percent. Estimate challenged by: D-R-

2019: Estimate based on estimated MCV1. Estimate of 87 percent changed from previous revision value of 84 percent. Estimate challenged by: D-R-

2018: Estimate based on estimated MCV1. Estimate of 87 percent changed from previous revision value of 84 percent. Estimate challenged by: D-R-

2017: Estimate based on estimated MCV1. Programme reports vaccine stockout of unspecified duration. Estimate of 86 percent changed from previous revision value of 84 percent. Estimate challenged by: D-R-

2016: Estimate based on estimated MCV1. Estimate of 85 percent changed from previous revision value of 84 percent. 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 of 85 percent changed from previous revision value of 84 percent. Estimate challenged by: D-R-

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

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

July 1, 2023; page 13 WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2024 data received as of June 26, 2023
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 is 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:

- **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 of 82 percent changed from previous revision value of 86 percent. 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. Estimate of 90 percent changed from previous revision value of 94 percent. 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. Estimate of 84 percent changed from previous revision value of 88 percent. Estimate challenged by: D-
- **2018:** Reported data calibrated to 2013 and 2019 levels. Programme reports three months vaccine stockout at national level. Estimate of 69 percent changed from previous revision value of 73 percent. Estimate challenged by: R-S-
- **2017:** Reported data calibrated to 2013 and 2019 levels. Programme reports vaccine stockout of unspecified duration. Estimate of 77 percent changed from previous revision value of 79 percent. Estimate challenged by: R-S-
- **2016:** Reported data calibrated to 2013 and 2019 levels. Estimate of 85 percent changed from previous revision value of 87 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 of 86 percent changed from previous revision value of 88 percent. Estimate challenged by: R-
- **2014:** Reported data calibrated to 2013 and 2019 levels. Estimate challenged by: 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-
- **2011:** Reported data calibrated to 2009 and 2013 levels. Estimate challenged by: R-S-
Cambodia - HepB3

Description:

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 of 87 percent changed from previous revision value of 92 percent. Estimate challenged by: D-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 modified 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 of 87 percent changed from previous revision value of 92 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 modified 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 of 88 percent changed from previous revision value of 92 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2013 and 2019 levels. Estimate of 89 percent changed from previous revision value of 92 percent. Estimate challenged by: D-R-

2017: Report data calibrated to 2013 and 2019 levels. Reported data excluded because 101 percent greater than 100 percent. Estimate of 90 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2016: Reported data calibrated to 2013 and 2019 levels. Estimate of 91 percent changed from previous revision value of 93 percent. 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 of 91 percent changed from previous revision value of 92 percent. Estimate challenged by: D-R-

2014: Reported data calibrated to 2013 and 2019 levels. Estimate of 90 percent changed from previous revision value of 91 percent. Estimate challenged by: D-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 modified 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: D-R-

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

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.
2011: Reported data calibrated to 2009 and 2013 levels. Estimate challenged by: R-
Cambodia - Hib3

**Description:**

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 of 87 percent changed from previous revision value of 92 percent. Estimate challenged by: D-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 modified 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 of 87 percent changed from previous revision value of 92 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 modified 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 of 88 percent changed from previous revision value of 92 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2013 and 2019 levels. Estimate of 89 percent changed from previous revision value of 92 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. Estimate of 90 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2016: Reported data calibrated to 2013 and 2019 levels. Estimate of 91 percent changed from previous revision value of 93 percent. 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 of 91 percent changed from previous revision value of 92 percent. Estimate challenged by: R-

2014: Reported data calibrated to 2013 and 2019 levels. Estimate of 90 percent changed from previous revision value of 91 percent. Estimate challenged by: D-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 modified 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: D-R-

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

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.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Official</td>
<td>94</td>
<td>NA</td>
<td>92</td>
<td>97</td>
<td>98</td>
<td>99</td>
<td>NA</td>
<td>NA</td>
<td>100</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Administrative</td>
<td>NA</td>
<td>95</td>
<td>92</td>
<td>97</td>
<td>98</td>
<td>99</td>
<td>101</td>
<td>98</td>
<td>101</td>
<td>106</td>
<td>98</td>
<td>96</td>
</tr>
<tr>
<td>Survey</td>
<td>NA</td>
<td>84</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>84</td>
<td>84</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Note: 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.
2011: Reported data calibrated to 2013 levels. Estimate challenged by: R-
The WHO and UNICEF estimates of national immunization coverage (wunecn) 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.
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:

- **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 of 86 percent changed from previous revision value of 90 percent. Estimate challenged by: D-R-
- **2020:** Survey evidence does not support reported data. Estimate based on survey results. Cambodia Demographic and Health Survey 2021-2022 card or history results of 83 percent modified 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 of 86 percent changed from previous revision value of 90 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 modified 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 of 88 percent changed from previous revision value of 89 percent. Estimate challenged by: D-R-
- **2018:** Reported data calibrated to 2015 and 2019 levels. Programme reports one month vaccine stockout at national level. Estimate of 85 percent changed from previous revision value of 84 percent. Estimate challenged by: D-R-
- **2017:** Reported data calibrated to 2015 and 2019 levels. Programme reports vaccine stockout of unspecified duration. Estimate of 81 percent changed from previous revision value of 82 percent. Estimate challenged by: D-R-
- **2016:** Reported data calibrated to 2015 and 2019 levels. Estimate challenged by: D-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: D-R-

### Table:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>68</td>
<td>87</td>
<td>81</td>
<td>83</td>
<td>88</td>
<td>86</td>
<td>86</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>Official</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>77</td>
<td>96</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>104</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Administrative</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>77</td>
<td>96</td>
<td>91</td>
<td>91</td>
<td>98</td>
<td>104</td>
<td>99</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>Survey</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>84</td>
<td>83</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>
NOTE: A survey to measure vaccination coverage for infants (i.e., children aged 0 to 11 months) will sample children aged 12 to 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 to 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

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Confirmation method</th>
<th>Coverage Age cohort</th>
<th>Sample Cards seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>C or H &lt;12 months</td>
<td>94</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>BCG</td>
<td>Card</td>
<td>79.6</td>
<td>12-23 m 1346 82</td>
</tr>
<tr>
<td>BCG</td>
<td>Card or History</td>
<td>94.4</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>BCG</td>
<td>History</td>
<td>14.8</td>
<td>12-23 m 295 82</td>
</tr>
<tr>
<td>DTP1</td>
<td>C or H &lt;12 months</td>
<td>92</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card</td>
<td>78.5</td>
<td>12-23 m 1346 82</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card or History</td>
<td>92.3</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>DTP1</td>
<td>History</td>
<td>13.8</td>
<td>12-23 m 295 82</td>
</tr>
<tr>
<td>DTP3</td>
<td>C or H &lt;12 months</td>
<td>83.6</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card</td>
<td>73.8</td>
<td>12-23 m 1346 82</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card or History</td>
<td>84.1</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>DTP3</td>
<td>History</td>
<td>10.3</td>
<td>12-23 m 295 82</td>
</tr>
<tr>
<td>HepB1</td>
<td>C or H &lt;12 months</td>
<td>92</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>HepB1</td>
<td>Card</td>
<td>78.5</td>
<td>12-23 m 1346 82</td>
</tr>
<tr>
<td>HepB1</td>
<td>Card or History</td>
<td>92.3</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>HepB1</td>
<td>History</td>
<td>13.8</td>
<td>12-23 m 295 82</td>
</tr>
<tr>
<td>HepB3</td>
<td>C or H &lt;12 months</td>
<td>83.6</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>HepB3</td>
<td>Card</td>
<td>73.8</td>
<td>12-23 m 1346 82</td>
</tr>
<tr>
<td>HepB3</td>
<td>Card or History</td>
<td>84.1</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>HepB3</td>
<td>History</td>
<td>10.3</td>
<td>12-23 m 295 82</td>
</tr>
<tr>
<td>HepBB</td>
<td>C or H &lt;12 months</td>
<td>93</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>HepBB</td>
<td>Card</td>
<td>79.2</td>
<td>12-23 m 1346 82</td>
</tr>
<tr>
<td>HepBB</td>
<td>Card or History</td>
<td>93.6</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>HepBB</td>
<td>History</td>
<td>14.5</td>
<td>12-23 m 295 82</td>
</tr>
</tbody>
</table>

### 2019 Cambodia Demographic and Health Survey 2021-2022

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Confirmation method</th>
<th>Coverage Age cohort</th>
<th>Sample Cards seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hib1</td>
<td>C or H &lt;12 months</td>
<td>92</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>Hib1</td>
<td>Card</td>
<td>78.5</td>
<td>12-23 m 1346 82</td>
</tr>
<tr>
<td>Hib1</td>
<td>Card or History</td>
<td>92.3</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>Hib1</td>
<td>History</td>
<td>13.8</td>
<td>12-23 m 295 82</td>
</tr>
<tr>
<td>Hib3</td>
<td>C or H &lt;12 months</td>
<td>83.6</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>Hib3</td>
<td>Card</td>
<td>73.8</td>
<td>12-23 m 1346 82</td>
</tr>
<tr>
<td>Hib3</td>
<td>Card or History</td>
<td>84.1</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>Hib3</td>
<td>History</td>
<td>10.3</td>
<td>12-23 m 295 82</td>
</tr>
<tr>
<td>IPV1</td>
<td>C or H &lt;12 months</td>
<td>77.8</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>IPV1</td>
<td>Card</td>
<td>64.5</td>
<td>12-23 m 1346 82</td>
</tr>
<tr>
<td>IPV1</td>
<td>Card or History</td>
<td>78.1</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>IPV1</td>
<td>History</td>
<td>13.7</td>
<td>12-23 m 295 82</td>
</tr>
<tr>
<td>MCV1</td>
<td>C or H &lt;12 months</td>
<td>80.4</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>MCV1</td>
<td>Card</td>
<td>70.2</td>
<td>12-23 m 1346 82</td>
</tr>
<tr>
<td>MCV1</td>
<td>Card or History</td>
<td>83.1</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>MCV1</td>
<td>History</td>
<td>12.9</td>
<td>12-23 m 295 82</td>
</tr>
<tr>
<td>MCV2</td>
<td>C or H &lt;12 months</td>
<td>69.5</td>
<td>24-35 m 1494 82</td>
</tr>
<tr>
<td>MCV2</td>
<td>Card</td>
<td>56.1</td>
<td>24-35 m 1095 82</td>
</tr>
<tr>
<td>MCV2</td>
<td>Card or History</td>
<td>72.1</td>
<td>24-35 m 1494 82</td>
</tr>
<tr>
<td>MCV2</td>
<td>History</td>
<td>16.1</td>
<td>24-35 m 399 82</td>
</tr>
<tr>
<td>PCV1</td>
<td>C or H &lt;12 months</td>
<td>91.1</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>PCV1</td>
<td>Card</td>
<td>79.1</td>
<td>12-23 m 1346 82</td>
</tr>
<tr>
<td>PCV1</td>
<td>Card or History</td>
<td>91.5</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>PCV1</td>
<td>History</td>
<td>12.5</td>
<td>12-23 m 295 82</td>
</tr>
<tr>
<td>PCV3</td>
<td>C or H &lt;12 months</td>
<td>82.5</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>PCV3</td>
<td>Card</td>
<td>74</td>
<td>12-23 m 1346 82</td>
</tr>
<tr>
<td>PCV3</td>
<td>Card or History</td>
<td>83</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>PCV3</td>
<td>History</td>
<td>9</td>
<td>12-23 m 295 82</td>
</tr>
<tr>
<td>PolI</td>
<td>C or H &lt;12 months</td>
<td>94.3</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>PolI</td>
<td>Card</td>
<td>80</td>
<td>12-23 m 1346 82</td>
</tr>
<tr>
<td>PolI</td>
<td>Card or History</td>
<td>94.5</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>PolI</td>
<td>History</td>
<td>14.5</td>
<td>12-23 m 295 82</td>
</tr>
<tr>
<td>Pol3</td>
<td>C or H &lt;12 months</td>
<td>85.6</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>Pol3</td>
<td>Card</td>
<td>75.1</td>
<td>12-23 m 1346 82</td>
</tr>
<tr>
<td>Pol3</td>
<td>Card or History</td>
<td>86</td>
<td>12-23 m 1641 82</td>
</tr>
<tr>
<td>Pol3</td>
<td>History</td>
<td>10.9</td>
<td>12-23 m 295 82</td>
</tr>
<tr>
<td>Vaccine</td>
<td>Confirmation method</td>
<td>Coverage</td>
<td>Age cohort</td>
</tr>
<tr>
<td>---------</td>
<td>---------------------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>BCG C or H</td>
<td>92.6</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>BCG Card</td>
<td>70.8</td>
<td>24-35 m</td>
<td>1095</td>
</tr>
<tr>
<td>BCG Card or History</td>
<td>93.8</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>BCG History</td>
<td>23.1</td>
<td>24-35 m</td>
<td>399</td>
</tr>
<tr>
<td>DTP1 C or H</td>
<td>92.6</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>DTP1 Card</td>
<td>70.9</td>
<td>24-35 m</td>
<td>1095</td>
</tr>
<tr>
<td>DTP1 Card or History</td>
<td>93.1</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>DTP1 History</td>
<td>22.2</td>
<td>24-35 m</td>
<td>399</td>
</tr>
<tr>
<td>DTP3 C or H</td>
<td>83</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>DTP3 Card</td>
<td>66.6</td>
<td>24-35 m</td>
<td>1095</td>
</tr>
<tr>
<td>DTP3 Card or History</td>
<td>84.2</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>DTP3 History</td>
<td>17.6</td>
<td>24-35 m</td>
<td>399</td>
</tr>
<tr>
<td>HepB1 C or H</td>
<td>92.6</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>HepB1 Card</td>
<td>70.9</td>
<td>24-35 m</td>
<td>1095</td>
</tr>
<tr>
<td>HepB1 Card or History</td>
<td>93.1</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>HepB1 History</td>
<td>22.2</td>
<td>24-35 m</td>
<td>399</td>
</tr>
<tr>
<td>HepB3 C or H</td>
<td>83</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>HepB3 Card</td>
<td>66.6</td>
<td>24-35 m</td>
<td>1095</td>
</tr>
<tr>
<td>HepB3 Card or History</td>
<td>84.2</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>HepB3 History</td>
<td>17.6</td>
<td>24-35 m</td>
<td>399</td>
</tr>
<tr>
<td>HepBB C or H</td>
<td>90.8</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>HepBB Card</td>
<td>69.2</td>
<td>24-35 m</td>
<td>1095</td>
</tr>
<tr>
<td>HepBB Card or History</td>
<td>92.1</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>HepBB History</td>
<td>22.9</td>
<td>24-35 m</td>
<td>399</td>
</tr>
<tr>
<td>Hib1 C or H</td>
<td>92.6</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>Hib1 Card</td>
<td>70.9</td>
<td>24-35 m</td>
<td>1095</td>
</tr>
<tr>
<td>Hib1 Card or History</td>
<td>93.1</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>Hib1 History</td>
<td>22.2</td>
<td>24-35 m</td>
<td>399</td>
</tr>
<tr>
<td>Hib3 C or H</td>
<td>83</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>Hib3 Card</td>
<td>66.6</td>
<td>24-35 m</td>
<td>1095</td>
</tr>
<tr>
<td>Hib3 Card or History</td>
<td>84.2</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>Hib3 History</td>
<td>17.6</td>
<td>24-35 m</td>
<td>399</td>
</tr>
<tr>
<td>IPV1 C or H</td>
<td>78.3</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>IPV1 Card</td>
<td>58.3</td>
<td>24-35 m</td>
<td>1095</td>
</tr>
<tr>
<td>IPV1 Card or History</td>
<td>79.9</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>IPV1 History</td>
<td>21.5</td>
<td>24-35 m</td>
<td>399</td>
</tr>
<tr>
<td>MCV1 C or H</td>
<td>81.6</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
<tr>
<td>MCV1 Card</td>
<td>66.7</td>
<td>24-35 m</td>
<td>1095</td>
</tr>
<tr>
<td>MCV1 Card or History</td>
<td>87.2</td>
<td>24-35 m</td>
<td>1494</td>
</tr>
</tbody>
</table>

2013 Cambodia Demographic and Health Survey, 2014

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Confirmation method</th>
<th>Coverage</th>
<th>Age cohort</th>
<th>Sample</th>
<th>Cards seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG C or H</td>
<td>95.9</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>BCG Card</td>
<td>76.4</td>
<td>12-23 m</td>
<td>1129</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>BCG Card or History</td>
<td>96.1</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>BCG History</td>
<td>19.7</td>
<td>12-23 m</td>
<td>332</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>DTP1 C or H</td>
<td>93.6</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>DTP1 Card</td>
<td>75.4</td>
<td>12-23 m</td>
<td>1129</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>DTP1 Card or History</td>
<td>94</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>DTP1 History</td>
<td>18.6</td>
<td>12-23 m</td>
<td>332</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>DTP3 C or H</td>
<td>81.9</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>DTP3 Card</td>
<td>68.6</td>
<td>12-23 m</td>
<td>1129</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>DTP3 Card or History</td>
<td>83.7</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>DTP3 History</td>
<td>15.1</td>
<td>12-23 m</td>
<td>332</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>HepB1 C or H</td>
<td>93.6</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>HepB1 Card</td>
<td>75.4</td>
<td>12-23 m</td>
<td>1129</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>HepB1 Card or History</td>
<td>94</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>HepB1 History</td>
<td>18.6</td>
<td>12-23 m</td>
<td>332</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>HepB3 C or H</td>
<td>81.9</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>HepB3 Card</td>
<td>68.6</td>
<td>12-23 m</td>
<td>1129</td>
<td>77</td>
<td></td>
</tr>
</tbody>
</table>
### Cambodia - survey details

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Confirmation method</th>
<th>Coverage</th>
<th>Age cohort</th>
<th>Sample</th>
<th>Cards seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>HepB3</td>
<td>Card or History</td>
<td>83.7</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
</tr>
<tr>
<td>HepB3</td>
<td>History</td>
<td>15.1</td>
<td>12-23 m</td>
<td>332</td>
<td>77</td>
</tr>
<tr>
<td>HepBB C or H &lt;12 months</td>
<td>82.6</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>HepBB</td>
<td>Card</td>
<td>65.1</td>
<td>12-23 m</td>
<td>1129</td>
<td>77</td>
</tr>
<tr>
<td>HepBB</td>
<td>Card or History</td>
<td>82.8</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
</tr>
<tr>
<td>HepBB</td>
<td>History</td>
<td>17.7</td>
<td>12-23 m</td>
<td>332</td>
<td>77</td>
</tr>
<tr>
<td>Hib1 C or H &lt;12 months</td>
<td>93.6</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Hib1</td>
<td>Card</td>
<td>75.4</td>
<td>12-23 m</td>
<td>1129</td>
<td>77</td>
</tr>
<tr>
<td>Hib1</td>
<td>Card or History</td>
<td>94</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
</tr>
<tr>
<td>Hib1</td>
<td>History</td>
<td>18.6</td>
<td>12-23 m</td>
<td>332</td>
<td>77</td>
</tr>
<tr>
<td>Hib3 C or H &lt;12 months</td>
<td>81.9</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Hib3</td>
<td>Card</td>
<td>68.6</td>
<td>12-23 m</td>
<td>1129</td>
<td>77</td>
</tr>
<tr>
<td>Hib3</td>
<td>Card or History</td>
<td>83.7</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
</tr>
<tr>
<td>Hib3</td>
<td>History</td>
<td>15.1</td>
<td>12-23 m</td>
<td>332</td>
<td>77</td>
</tr>
<tr>
<td>MCV1 C or H &lt;12 months</td>
<td>70.3</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>MCV1</td>
<td>Card</td>
<td>63.4</td>
<td>12-23 m</td>
<td>1129</td>
<td>77</td>
</tr>
<tr>
<td>MCV1</td>
<td>Card or History</td>
<td>78.6</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
</tr>
<tr>
<td>MCV1</td>
<td>History</td>
<td>15.2</td>
<td>12-23 m</td>
<td>332</td>
<td>77</td>
</tr>
<tr>
<td>Pol1 C or H &lt;12 months</td>
<td>94.5</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Pol1</td>
<td>Card</td>
<td>75.9</td>
<td>12-23 m</td>
<td>1129</td>
<td>77</td>
</tr>
<tr>
<td>Pol1</td>
<td>Card or History</td>
<td>94.8</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
</tr>
<tr>
<td>Pol1</td>
<td>History</td>
<td>18.9</td>
<td>12-23 m</td>
<td>332</td>
<td>77</td>
</tr>
<tr>
<td>Pol3 C or H &lt;12 months</td>
<td>80.2</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Pol3</td>
<td>Card</td>
<td>67.2</td>
<td>12-23 m</td>
<td>1129</td>
<td>77</td>
</tr>
<tr>
<td>Pol3</td>
<td>Card or History</td>
<td>82.3</td>
<td>12-23 m</td>
<td>1460</td>
<td>77</td>
</tr>
<tr>
<td>Pol3</td>
<td>History</td>
<td>15.1</td>
<td>12-23 m</td>
<td>332</td>
<td>77</td>
</tr>
</tbody>
</table>

#### 2009 Cambodia Demographic and Health Survey 2010

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Confirmation method</th>
<th>Coverage</th>
<th>Age cohort</th>
<th>Sample</th>
<th>Cards seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTP3</td>
<td>Card or History</td>
<td>70.9</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>DTP3</td>
<td>History</td>
<td>14</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>HepB1 C or H &lt;12 months</td>
<td>92.6</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>HepB1</td>
<td>Card</td>
<td>75.6</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>HepB1</td>
<td>Card or History</td>
<td>93.1</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>HepB1</td>
<td>History</td>
<td>17.6</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>HepB3 C or H &lt;12 months</td>
<td>83.6</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>HepB3</td>
<td>Card</td>
<td>70.9</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>HepB3</td>
<td>Card or History</td>
<td>84.8</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>HepB3</td>
<td>History</td>
<td>14</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>HepBB C or H &lt;12 months</td>
<td>73</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>HepBB</td>
<td>Card</td>
<td>60.9</td>
<td>12-23 m</td>
<td>1249</td>
<td>77</td>
</tr>
<tr>
<td>HepBB</td>
<td>Card or History</td>
<td>73</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>HepBB</td>
<td>History</td>
<td>12</td>
<td>12-23 m</td>
<td>364</td>
<td>77</td>
</tr>
<tr>
<td>Hib1 C or H &lt;12 months</td>
<td>92.6</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Hib1</td>
<td>Card</td>
<td>75.6</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>Hib1</td>
<td>Card or History</td>
<td>93.1</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>Hib1</td>
<td>History</td>
<td>17.6</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>Hib3 C or H &lt;12 months</td>
<td>83.6</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Hib3</td>
<td>Card</td>
<td>70.9</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>Hib3</td>
<td>Card or History</td>
<td>84.8</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>Hib3</td>
<td>History</td>
<td>14</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>MCV1 C or H &lt;12 months</td>
<td>77</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>MCV1</td>
<td>Card</td>
<td>66.8</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>MCV1</td>
<td>Card or History</td>
<td>81.9</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>MCV1</td>
<td>History</td>
<td>15</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>Pol1 C or H &lt;12 months</td>
<td>93</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Pol1</td>
<td>Card</td>
<td>75.6</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>Pol1</td>
<td>Card or History</td>
<td>93.6</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>Pol1</td>
<td>History</td>
<td>17.9</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>Pol3 C or H &lt;12 months</td>
<td>83.8</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Pol3</td>
<td>Card</td>
<td>70.8</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>Pol3</td>
<td>Card or History</td>
<td>85</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>Pol3</td>
<td>History</td>
<td>14.2</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
</tbody>
</table>

#### 2008 Cambodia Socio-Economic Survey 2009

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Confirmation method</th>
<th>Coverage</th>
<th>Age cohort</th>
<th>Sample</th>
<th>Cards seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG C or H &lt;12 months</td>
<td>94.2</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>BCG</td>
<td>Card</td>
<td>77.1</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>BCG Card or History</td>
<td>94.3</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>BCG</td>
<td>History</td>
<td>17.3</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>DTP1 C or H &lt;12 months</td>
<td>92.6</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>DTP1</td>
<td>Card</td>
<td>75.6</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>DTP1 Card or History</td>
<td>93.1</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>DTP1</td>
<td>History</td>
<td>17.6</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
</tr>
<tr>
<td>DTP3 C or H &lt;12 months</td>
<td>83.6</td>
<td>12-23 m</td>
<td>1614</td>
<td>77</td>
<td></td>
</tr>
</tbody>
</table>

July 1, 2023; page 23

WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2024

data received as of June 26, 2023
### 2004 Cambodia Demographic and Health Survey 2005

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

### 1997 National Health Survey Cambodia 1998, 1999

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Confirmation method</th>
<th>Coverage</th>
<th>Age cohort</th>
<th>Sample</th>
<th>Cards seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>Card</td>
<td>33.4</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
</tr>
<tr>
<td>BCG</td>
<td>Card or History</td>
<td>66.7</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
</tr>
<tr>
<td>BCG</td>
<td>History</td>
<td>33.4</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
</tr>
<tr>
<td>DTP1</td>
<td>C or H &lt;12 months</td>
<td>60.9</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card</td>
<td>33</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card or History</td>
<td>62</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
</tr>
<tr>
<td>DTP1</td>
<td>History</td>
<td>29</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
</tr>
<tr>
<td>DTP3</td>
<td>C or H &lt;12 months</td>
<td>44.4</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card</td>
<td>26.8</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card or History</td>
<td>46.5</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
</tr>
<tr>
<td>DTP3</td>
<td>History</td>
<td>19.7</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
</tr>
</tbody>
</table>

### 1999 Cambodia Demographic and Health Survey 2000, 2001

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Confirmation method</th>
<th>Coverage</th>
<th>Age cohort</th>
<th>Sample</th>
<th>Cards seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>Card</td>
<td>77.7</td>
<td>12-23 m</td>
<td>1068</td>
<td>79</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card</td>
<td>76.9</td>
<td>12-23 m</td>
<td>1068</td>
<td>79</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card</td>
<td>55.8</td>
<td>12-23 m</td>
<td>1068</td>
<td>79</td>
</tr>
<tr>
<td>HepBB</td>
<td>Card</td>
<td>61.1</td>
<td>12-23 m</td>
<td>1068</td>
<td>79</td>
</tr>
<tr>
<td>MCV1</td>
<td>Card</td>
<td>59.3</td>
<td>12-23 m</td>
<td>1068</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>C or H &lt;12 months</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------</td>
<td>---------</td>
<td>-----</td>
<td>--------------------</td>
<td></td>
</tr>
<tr>
<td>MCV1 C or H</td>
<td>45.4</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>MCV1 Card</td>
<td>25.7</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>MCV1 Card or History</td>
<td>49.5</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>MCV1 History</td>
<td>23.8</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Pol1 C or H</td>
<td>79.6</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Pol1 Card</td>
<td>33</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Pol1 Card or History</td>
<td>81.1</td>
<td>12-23 m</td>
<td>804</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2024
data received as of June 26, 2023
Further information and estimates for previous years are available at:
https://data.unicef.org/topic/child-health/immunization/
https://immunizationdata.who.int/listing.html