

**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:

\*Burton et al. 2009. WHO and UNICEF estimates of national infant immunization coverage: methods and processes.

\*Burton et al. 2012. A formal representation of the WHO and UNICEF estimates of national immunization coverage: a computational logic approach.

\*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.

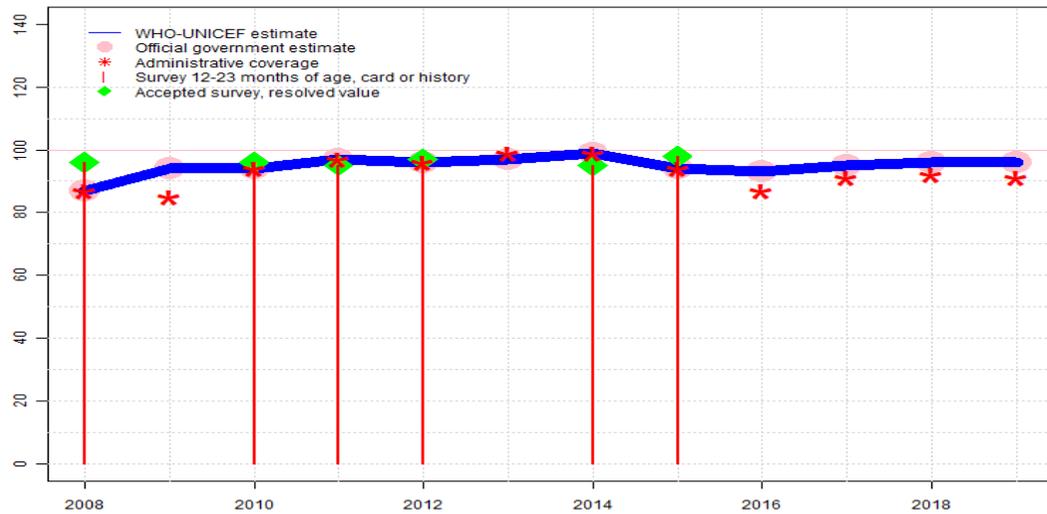
**PcV3:** percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect 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.

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# Nepal - BCG

NPL - BCG



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	87	94	94	97	96	97	99	94	93	95	96	96
Estimate GoC	●	●●●	●●●	●●●	●	●●●	●●●	●●●	●●●	●●●	●●	●●
Official	87	94	94	97	96	97	99	94	93	95	96	96
Administrative	87	85	94	97	96	99	99	94	87	91	92	91
Survey	96	NA	96	95	97	NA	95	98	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: 2019 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.

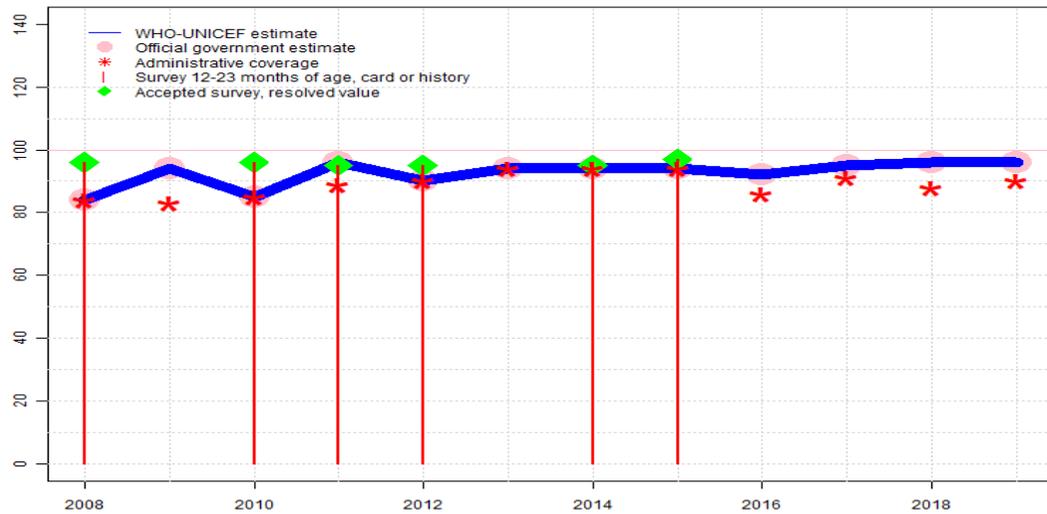
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2019: Estimate based on coverage reported by national government. Reported official estimates have been adjusted for incomplete reporting from subnational units reflected in the administrative data. WHO and UNICEF are aware of a 2019 Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. Programme notes that administrative reporting completeness is 83 percent which may be partly explained by ongoing changes in the Health Management Information System (HMIS) of the country. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government. Official estimates differ from admin data due to adjustments in the denominator to reflect a 2.5 percent year to year increase. Apparent decline in administrative coverage reflects, at least in part, the increase in the target population of 8.5 percent between 2015 and 2016. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 98 percent based on 1 survey(s). Programme reports three month national level stock-out. GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). Programme reports two month stock-out at national level. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 97 percent based on 1 survey(s). Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). Coverage reported by the government is based on the Nepal DHS 2011. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). DQSA conducted in 7 priority districts during May-June 2010 identified some data recording problems at health facility level including inconsistencies between tally sheets, registers and HMIS. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. Nationally reported data based on the results of a 2009 survey. GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). Estimate challenged by: D-

# Nepal - DTP1

NPL - DTP1



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	84	94	85	96	90	94	94	94	92	95	96	96
Estimate GoC	●	●	●	●●●	●	●	●●●	●●●	●	●●●	●●	●●
Official	84	94	85	96	90	94	94	94	92	95	96	96
Administrative	84	83	85	89	90	94	94	94	86	91	88	90
Survey	96	NA	96	95	95	NA	95	97	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: 2019 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.

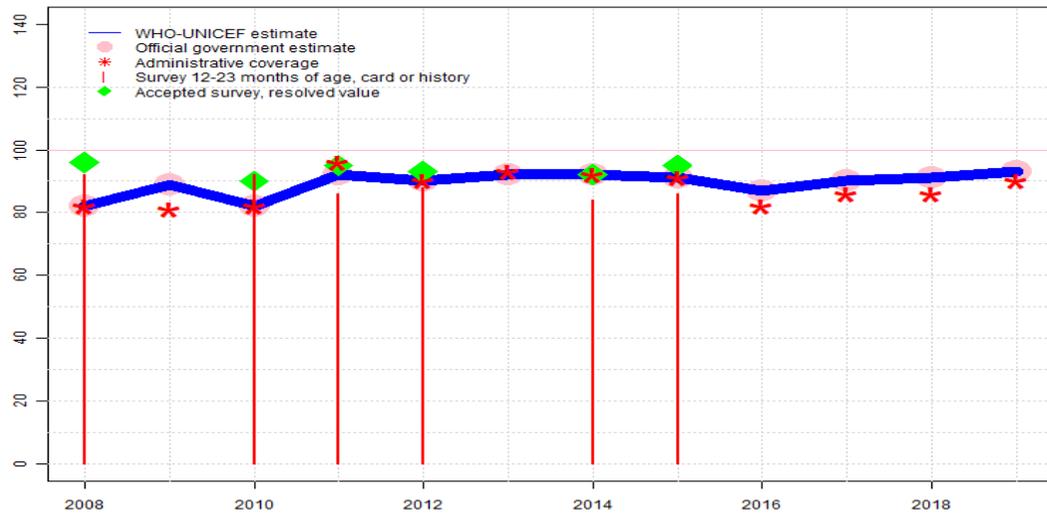
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2019: Estimate based on coverage reported by national government. Reported official estimates have been adjusted for incomplete reporting from subnational units reflected in the administrative data. WHO and UNICEF are aware of a 2019 Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. Programme notes that administrative reporting completeness is 83 percent which may be partly explained by ongoing changes in the Health Management Information System (HMIS) of the country. The official coverage takes into account the upward trend observed within the available data. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government. Official estimates differ from admin data due to adjustments in the denominator to reflect a 2.5 percent year to year increase. Apparent decline in administrative coverage reflects, at least in part, the increase in the target population of 8.5 percent between 2015 and 2016. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 97 percent based on 1 survey(s). GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). Coverage reported by the government is based on the Nepal DHS 2011.. GoC=R+ S+ D+
- 2010: Estimate is based on reported data. DQSA conducted in 7 priority districts during May-June 2010 identified some data recording problems at health facility level including inconsistencies between tally sheets, registers and HMIS. Decline in coverage attributed to 2 months vaccine stock out. Estimate challenged by: S-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2008: Estimate is based on reported data. Estimate challenged by: D-S-

# Nepal - DTP3

NPL - DTP3



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	82	89	82	92	90	92	92	91	87	90	91	93
Estimate GoC	•	•	•	•	•	•	•	•••	•	•••	••	••
Official	82	89	82	92	90	92	92	91	87	90	91	93
Administrative	82	81	82	96	90	93	92	91	82	86	86	90
Survey	92	NA	92	86	88	NA	84	86	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: 2019 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:

2019: Estimate based on coverage reported by national government. Reported official estimates have been adjusted for incomplete reporting from subnational units reflected in the administrative data. WHO and UNICEF are aware of a 2019 Multiple Indicator Cluster Survey and await the final results. Programme notes that administrative data suggest around four percent of children receive the third dose of DTP-HepB-Hib after their first birthday are included in the reported coverage. GoC=R+ D+

2018: Estimate based on coverage reported by national government. Programme notes that administrative reporting completeness is 83 percent which may be partly explained by ongoing changes in the Health Management Information System (HMIS) of the country. The official coverage takes into account the upward trend observed within the available data. GoC=R+ D+

2017: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2016: Estimate based on coverage reported by national government. Official estimates differ from admin data due to adjustments in the denominator to reflect a 2.5 percent year to year increase. Apparent decline in administrative coverage reflects, at least in part, the increase in the target population of 8.5 percent between 2015 and 2016. Estimate challenged by: D-

2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). Nepal Demographic and Health Survey 2016 card or history results of 86 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 52 percent and 3rd dose card only coverage of 51 percent. GoC=R+ S+ D+

2014: Estimate based on coverage reported by national government supported by survey. Survey evidence of 92 percent based on 1 survey(s). Nepal Demographic and Health Survey 2016 card or history results of 84 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 31 percent and 3rd dose card only coverage of 30 percent. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government. Estimate challenged by: D-

2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 1 survey(s). Nepal Multiple Indicator Cluster Survey, 2014 card or history results of 88 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 39 percent and 3rd dose card only coverage of 38 percent. Estimate challenged by: D-

2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). Nepal Multiple Indicator Cluster Survey, 2014 card or history results of 86 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 17 percent and 3rd dose card only coverage of 17 percent. Coverage reported by the government is based on the Nepal DHS 2011. Estimate challenged by: D-

2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). Nepal Demographic and Health Survey 2011

# Nepal - DTP3

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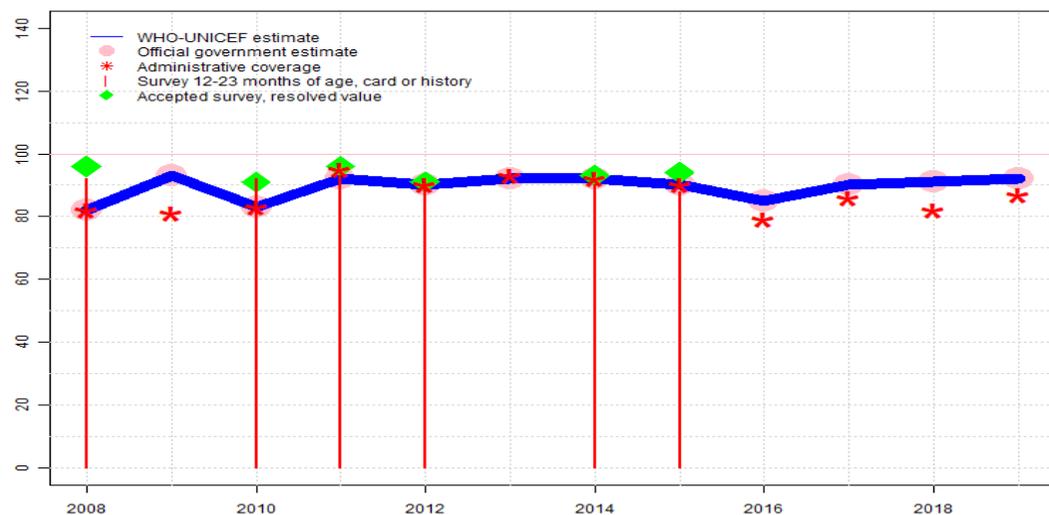
card or history results of 92 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 34 percent and 3rd dose card only coverage of 32 percent. DQSA conducted in 7 priority districts during May-June 2010 identified some data recording problems at health facility level including inconsistencies between tally sheets, registers and HMIS. Decline in coverage attributed to 2 months vaccine stock out. Estimate challenged by: S-

2009: Estimate based on coverage reported by national government. Estimate challenged by: D-

2008: Estimate is based on reported data. Immunization Coverage Survey Nepal, 2009 card or history results of 92 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 32 percent and 3rd dose card only coverage of 32 percent. Estimate challenged by: D-S-

# Nepal - Pol3

NPL - Pol3



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	82	93	83	92	90	92	92	90	85	90	91	92
Estimate GoC	•	•	•	•	•	•	•	•••	•	•••	••	••
Official	82	93	83	92	90	92	92	90	85	90	91	92
Administrative	82	81	83	95	90	93	92	90	79	86	82	87
Survey	92	NA	92	93	92	NA	90	88	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: 2019 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:

- 2019: Estimate based on coverage reported by national government. Reported official estimates have been adjusted for incomplete reporting from subnational units reflected in the administrative data. WHO and UNICEF are aware of a 2019 Multiple Indicator Cluster Survey and await the final results. Programme notes that administrative data suggest around four percent of children receive the third dose of oral polio vaccine after their first birthday are included in the reported coverage. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. Programme notes that administrative reporting completeness is 83 percent which may be partly explained by ongoing changes in the Health Management Information System (HMIS) of the country. The official coverage takes into account the upward trend observed within the available data. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government. Official estimates differ from admin data due to adjustments in the denominator to reflect a 2.5 percent year to year increase. Apparent decline in administrative coverage reflects, at least in part, the increase in the target population of 8.5 percent between 2015 and 2016. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). Nepal Demographic and Health Survey 2016 card or history results of 88 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 52 percent and 3rd dose card only coverage of 50 percent. GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 1 survey(s). Nepal Demographic and Health Survey 2016 card or history results of 90 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 30 percent and 3rd dose card only coverage of 29 percent. Estimate challenged by: D-
- 2013: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 91 percent based on 1 survey(s). Nepal Multiple Indicator Cluster Survey, 2014 card or history results of 92 percent modified for recall bias to 91 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 39 percent and 3rd dose card only coverage of 37 percent. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). Nepal Multiple Indicator Cluster Survey, 2014 card or history results of 93 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 17 percent and 3rd dose card only coverage of 17 percent. Coverage reported by the government is based on the Nepal DHS 2011. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 91 percent based on 1 survey(s). Nepal Demographic and Health Survey 2011

# Nepal - Pol3

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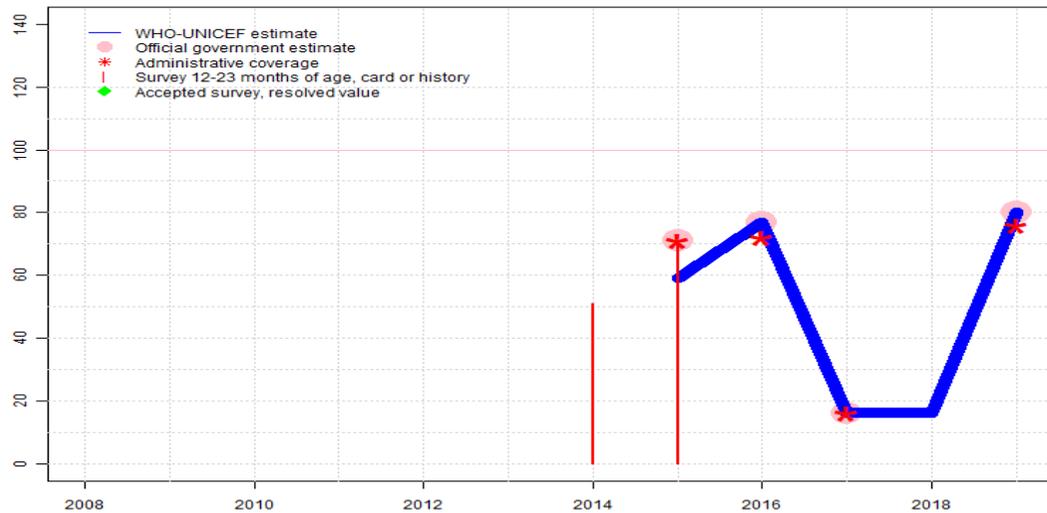
card or history results of 92 percent modified for recall bias to 91 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 34 percent and 3rd dose card only coverage of 32 percent. DQSA conducted in 7 priority districts during May-June 2010 identified some data recording problems at health facility level including inconsistencies between tally sheets, registers and HMIS. Estimate challenged by: S-

2009: Estimate based on coverage reported by national government. Estimate is based on reported data. Estimate challenged by: D-

2008: Estimate is based on reported data. Immunization Coverage Survey Nepal, 2009 card or history results of 92 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 32 percent and 3rd dose card only coverage of 32 percent. Estimate challenged by: D-S-

# Nepal - IPV1

NPL - IPV1



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	NA	59	77	16	16	80						
Estimate GoC	NA	•	••	••	•	•						
Official	NA	71	77	16	NA	80						
Administrative	NA	71	72	16	NA	76						
Survey	NA	NA	NA	NA	NA	NA	51	70	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: 2019 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).

2019: Estimate based on coverage reported by national government. Reported official estimates have been adjusted for incomplete reporting from subnational units reflected in the administrative data. WHO and UNICEF are aware of a 2019 Multiple Indicator Cluster Survey and await the final results. Estimate challenged by: D-

2018: Due to global shortage, IPV was not administered in most of 2017 and 2018. Estimate may represent an overestimation. Fractional IPV doses were introduced in October 2018. GoC=No accepted empirical data

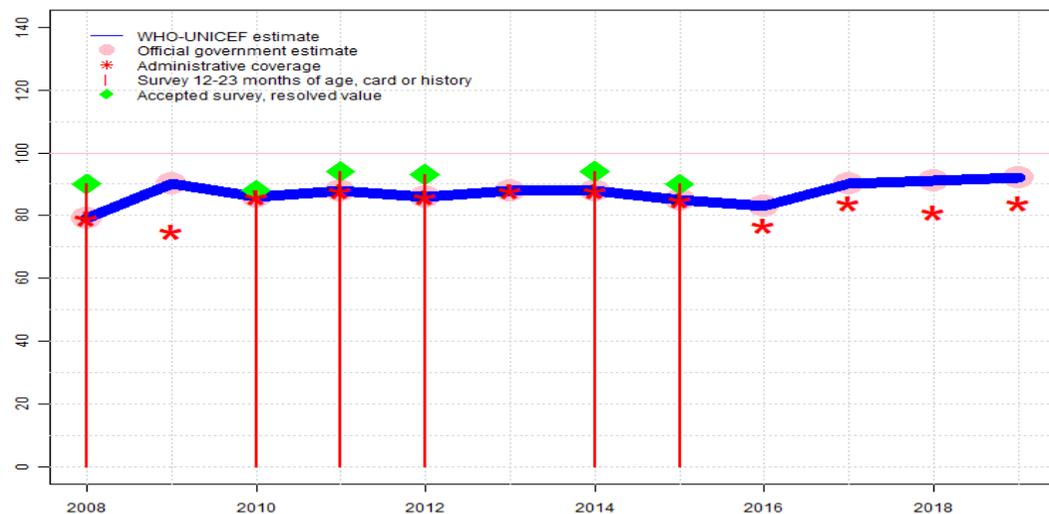
2017: Estimate based on coverage reported by national government. Programme reports stock out of unspecified duration. GoC=R+ D+

2016: Estimate based on coverage reported by national government. Official estimates differ from admin data due to adjustments in the denominator to reflect a 2.5 percent year to year increase. Apparent decline in administrative coverage reflects, at least in part, the increase in the target population of 8.5 percent between 2015 and 2016. 2016 IPV used in the entire country. GoC=R+ D+

2015: Inactivated polio vaccine introduced in September 2014. Programme reports 71 percent coverage in 83 percent of the target population. Estimate reflects coverage achieved in the total annual national target population. Nepal Demographic and Health Survey 2016 results ignored by working group. Cohort represented in survey was during vaccine introduction. Estimate challenged by: R-

# Nepal - MCV1

NPL - MCV1



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	79	90	86	88	86	88	88	85	83	90	91	92
Estimate GoC	•	•••	•••	•	•	•	•	•••	•	•••	••	••
Official	79	90	86	88	86	88	88	85	83	90	91	92
Administrative	79	75	86	88	86	88	88	85	77	84	81	84
Survey	90	NA	88	94	93	NA	94	90	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: 2019 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.

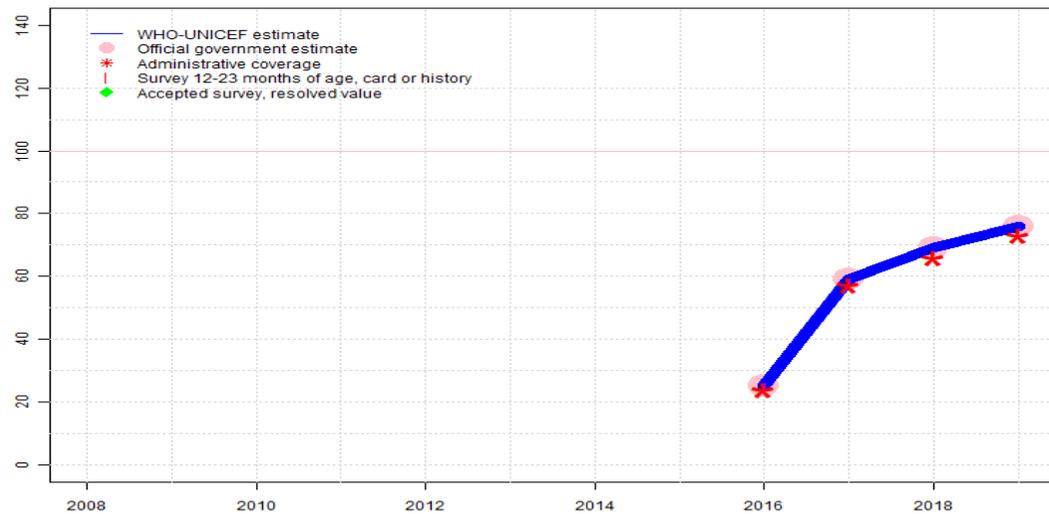
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2019: Estimate based on coverage reported by national government. Reported official estimates have been adjusted for incomplete reporting from subnational units reflected in the administrative data. WHO and UNICEF are aware of a 2019 Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. Programme notes that administrative reporting completeness is 83 percent which may be partly explained by ongoing changes in the Health Management Information System (HMIS) of the country. The official coverage takes into account the upward trend observed within the available data. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government. Official estimates differ from admin data due to adjustments in the denominator to reflect a 2.5 percent year to year increase. Apparent decline in administrative coverage reflects, at least in part, the increase in the target population of 8.5 percent between 2015 and 2016. Estimate challenged by: S-
- 2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). Estimate challenged by: D-
- 2013: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 1 survey(s). Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). Coverage reported by the government is based on the Nepal DHS 2011. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 88 percent based on 1 survey(s). DQSA conducted in 7 priority districts during May-June 2010 identified some data recording problems at health facility level including inconsistencies between tally sheets, registers and HMIS. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. . GoC=R+ S+ D+
- 2008: Estimate is based on reported data. Estimate challenged by: D-S-

# Nepal - MCV2

NPL - MCV2



## Description:

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

2019: Estimate based on coverage reported by national government. Reported official estimates have been adjusted for incomplete reporting from subnational units reflected in the administrative data. WHO and UNICEF are aware of a 2019 Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+

2018: Estimate based on coverage reported by national government. GoC=R+ D+

2017: Estimate based on coverage reported by national government. Increase due to roll out after introduction. GoC=R+ D+

2016: Estimate based on coverage reported by national government. Official estimates differ from admin data due to adjustments in the denominator to reflect a 2.5 percent year to year increase. Apparent decline in administrative coverage reflects, at least in part, the increase in the target population of 8.5 percent between 2015 and 2016. Second dose of measles containing vaccine introduced as measles-rubella vaccine in 2015. Reporting started in 2016. GoC=R+ D+

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	NA	25	59	69	76							
Estimate GoC	NA	••	••	••	••							
Official	NA	25	59	69	76							
Administrative	NA	24	57	66	73							
Survey	NA											

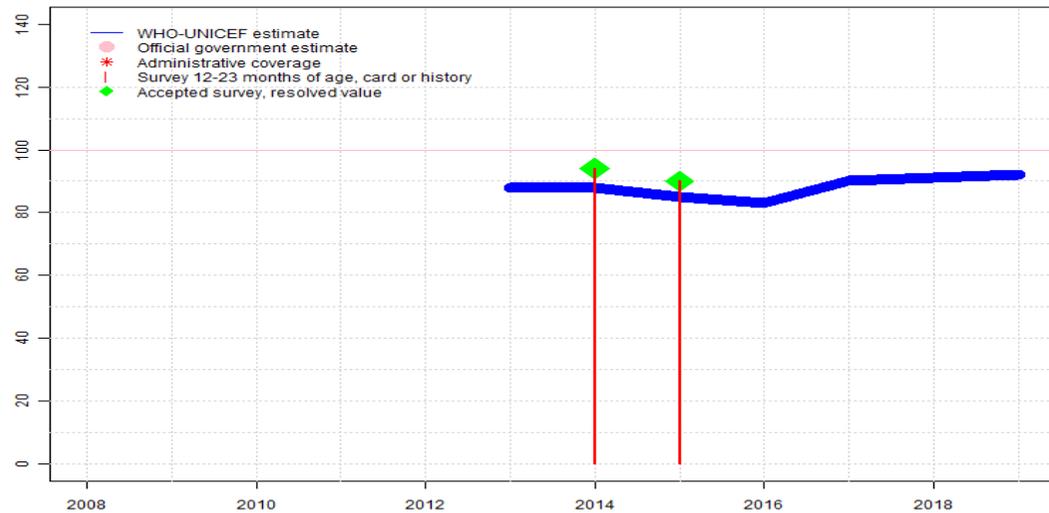
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2019 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.

# Nepal - RCV1

NPL - RCV1



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	NA	NA	NA	NA	NA	88	88	85	83	90	91	92
Estimate GoC	NA	NA	NA	NA	NA	•	•	•••	•	•••	••	••
Official	NA											
Administrative	NA											
Survey	NA	NA	NA	NA	NA	NA	94	90	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: 2019 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.

2019: Estimate based on estimated MCV1. Reported official estimates have been adjusted for incomplete reporting from subnational units reflected in the administrative data. WHO and UNICEF are aware of a 2019 Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+

2018: Estimate based on estimated MCV1. Programme notes that administrative reporting completeness is 83 percent which may be partly explained by ongoing changes in the Health Management Information System (HMIS) of the country. The official coverage takes into account the upward trend observed within the available data. GoC=R+ D+

2017: Estimate based on estimated MCV1. GoC=R+ S+ D+

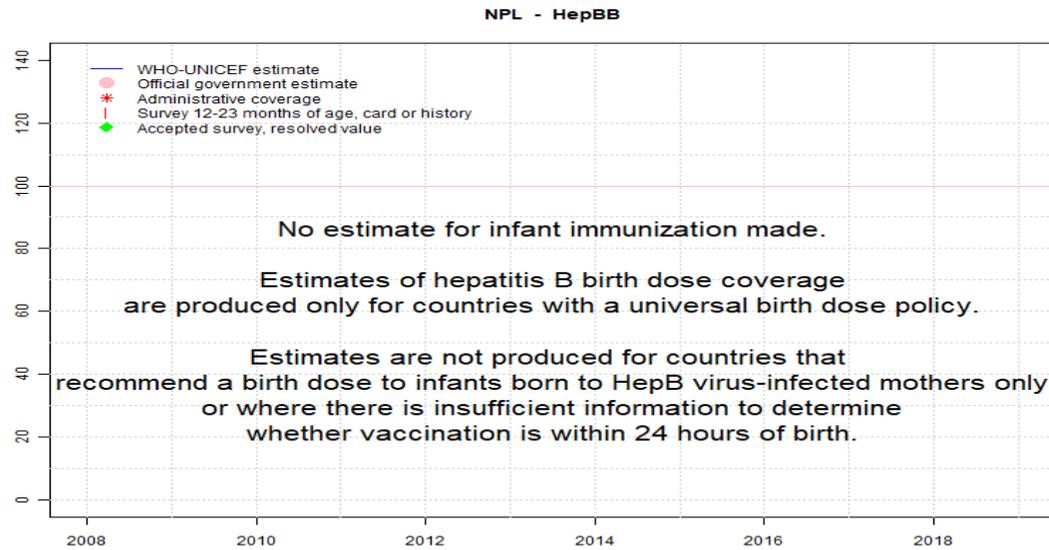
2016: Estimate based on estimated MCV1. Official estimates differ from admin data due to adjustments in the denominator to reflect a 2.5 percent year to year increase. Apparent decline in administrative coverage reflects, at least in part, the increase in the target population of 8.5 percent between 2015 and 2016. Estimate challenged by: S-

2015: Estimate based on estimated MCV1. GoC=R+ S+ D+

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

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

# Nepal - HepBB



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	NA											

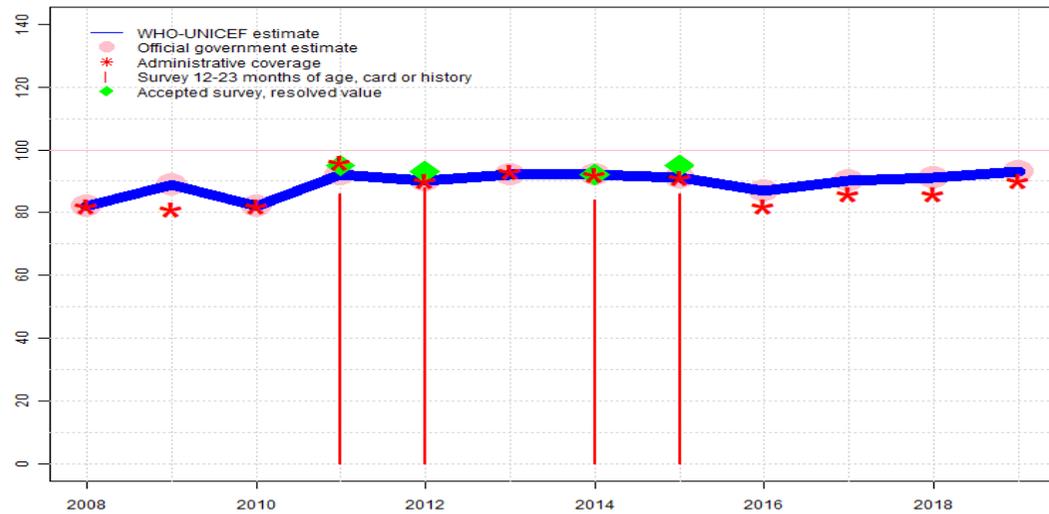
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2019 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.

# Nepal - HepB3

NPL - HepB3



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	82	89	82	92	90	92	92	91	87	90	91	93
Estimate GoC	•	•	•	•	•	•	•	•••	•	•••	••	••
Official	82	89	82	92	90	92	92	91	87	90	91	93
Administrative	82	81	82	96	90	93	92	91	82	86	86	90
Survey	NA	NA	NA	86	88	NA	84	86	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: 2019 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:

2019: Estimate based on coverage reported by national government. Reported official estimates have been adjusted for incomplete reporting from subnational units reflected in the administrative data. WHO and UNICEF are aware of a 2019 Multiple Indicator Cluster Survey and await the final results. Programme notes that administrative data suggest around four percent of children receive the third dose of DTP-HepB-Hib after their first birthday are included in the reported coverage. GoC=R+ D+

2018: Estimate based on coverage reported by national government. Programme notes that administrative reporting completeness is 83 percent which may be partly explained by ongoing changes in the Health Management Information System (HMIS) of the country. The official coverage takes into account the upward trend observed within the available data. GoC=R+ D+

2017: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2016: Estimate based on coverage reported by national government. Official estimates differ from admin data due to adjustments in the denominator to reflect a 2.5 percent year to year increase. Apparent decline in administrative coverage reflects, at least in part, the increase in the target population of 8.5 percent between 2015 and 2016. Estimate challenged by: D-

2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). Nepal Demographic and Health Survey 2016 card or history results of 86 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 52 percent and 3rd dose card only coverage of 51 percent. GoC=R+ S+ D+

2014: Estimate based on coverage reported by national government supported by survey. Survey evidence of 92 percent based on 1 survey(s). Nepal Demographic and Health Survey 2016 card or history results of 84 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 31 percent and 3rd dose card only coverage of 30 percent. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government. Estimate challenged by: D-

2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 1 survey(s). Nepal Multiple Indicator Cluster Survey, 2014 card or history results of 88 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 39 percent and 3rd dose card only coverage of 38 percent. Estimate challenged by: D-

2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). Nepal Multiple Indicator Cluster Survey, 2014 card or history results of 86 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 17 percent and 3rd dose card only coverage of 17 percent. Coverage reported by the government is based on the Nepal DHS 2011. Estimate challenged by: D-

2010: Estimate based on coverage reported by national government. DQSA conducted in 7 priority districts during May-June 2010 identified some data recording problems at health

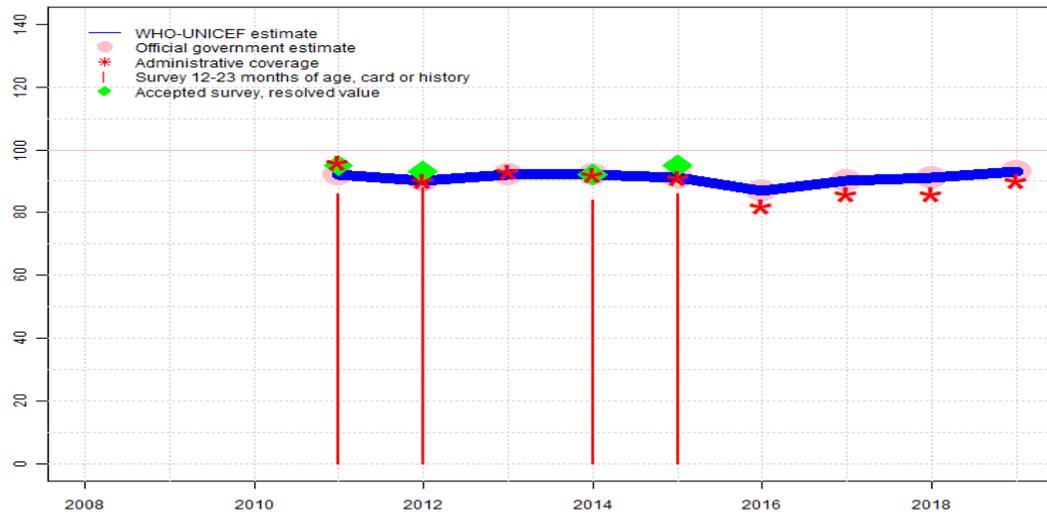
# Nepal - HepB3

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facility level including inconsistencies between tally sheets, registers and HMIS. Decline in coverage attributed to 2 months vaccine stock out. Estimate challenged by: S-2009: Estimate based on coverage reported by national government. Estimate challenged by: D-2008: Estimate based on coverage reported by national government. Estimate challenged by: D-

# Nepal - Hib3

NPL - Hib3



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	NA	NA	NA	92	90	92	92	91	87	90	91	93
Estimate GoC	NA	NA	NA	•	•	•	•	•••	•	•••	••	••
Official	NA	NA	NA	92	90	92	92	91	87	90	91	93
Administrative	NA	NA	NA	96	90	93	92	91	82	86	86	90
Survey	NA	NA	NA	86	88	NA	84	86	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: 2019 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:

2019: Estimate based on coverage reported by national government. Reported official estimates have been adjusted for incomplete reporting from subnational units reflected in the administrative data. WHO and UNICEF are aware of a 2019 Multiple Indicator Cluster Survey and await the final results. Programme notes that administrative data suggest around four percent of children receive the third dose of DTP-HepB-Hib after their first birthday are included in the reported coverage. GoC=R+ D+

2018: Estimate based on coverage reported by national government. Programme notes that administrative reporting completeness is 83 percent which may be partly explained by ongoing changes in the Health Management Information System (HMIS) of the country. The official coverage takes into account the upward trend observed within the available data. GoC=R+ D+

2017: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2016: Estimate based on coverage reported by national government. Official estimates differ from admin data due to adjustments in the denominator to reflect a 2.5 percent year to year increase. Apparent decline in administrative coverage reflects, at least in part, the increase in the target population of 8.5 percent between 2015 and 2016. Estimate challenged by: D-

2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). Nepal Demographic and Health Survey 2016 card or history results of 86 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 52 percent and 3rd dose card only coverage of 51 percent. GoC=R+ S+ D+

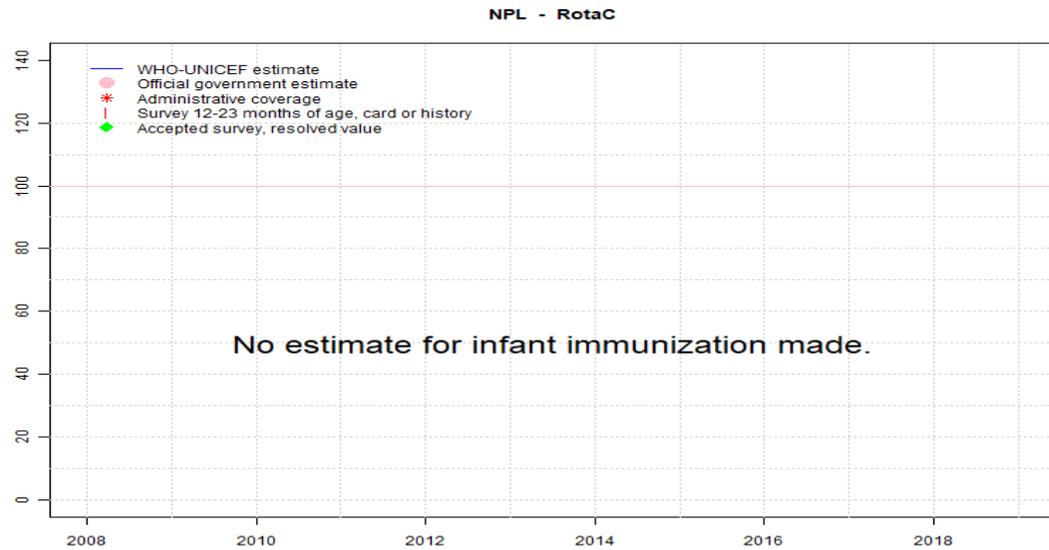
2014: Estimate based on coverage reported by national government supported by survey. Survey evidence of 92 percent based on 1 survey(s). Nepal Demographic and Health Survey 2016 card or history results of 84 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 31 percent and 3rd dose card only coverage of 30 percent. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government. Estimate challenged by: D-

2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 1 survey(s). Nepal Multiple Indicator Cluster Survey, 2014 card or history results of 88 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 39 percent and 3rd dose card only coverage of 38 percent. Estimate challenged by: D-

2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). Nepal Multiple Indicator Cluster Survey, 2014 card or history results of 86 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 17 percent and 3rd dose card only coverage of 17 percent. Estimate challenged by: D-

# Nepal - RotaC



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	NA											

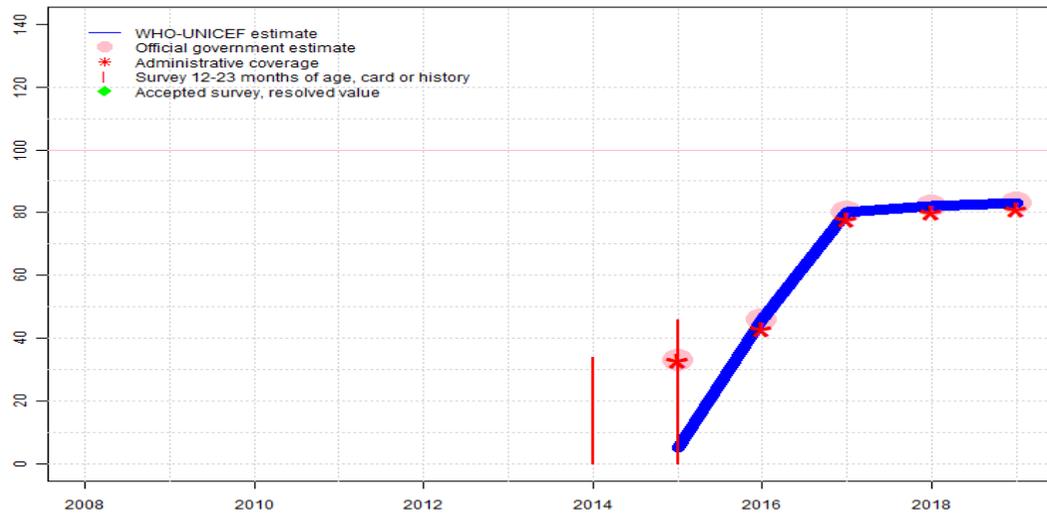
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2019 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.

# Nepal - PcV3

NPL - PcV3



## Description:

- 2019: Estimate based on coverage reported by national government. Reported official estimates have been adjusted for incomplete reporting from subnational units reflected in the administrative data. WHO and UNICEF are aware of a 2019 Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. GoC=R+ D+
- 2016: Estimate based on coverage reported by national government. Official estimates differ from admin data due to adjustments in the denominator to reflect a 2.5 percent year to year increase. Apparent decline in administrative coverage reflects, at least in part, the increase in the target population of 8.5 percent between 2015 and 2016. GoC=R+ D+
- 2015: Pneumococcal conjugate vaccine introduced in 2015. Coverage of 33 percent reported for 14 of the national target population. Estimate based on annualized coverage achieved. Nepal Demographic and Health Survey 2016 results ignored by working group. Cohort represented in survey was during vaccine introduction. Nepal Demographic and Health Survey 2016 card or history results of 46 percent modified for recall bias to 50 percent based on 1st dose card or history coverage of 73 percent, 1st dose card only coverage of 38 percent and 3rd dose card only coverage of 26 percent. Estimate challenged by: R-

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	NA	5	46	80	82	83						
Estimate GoC	NA	•	••	••	••	••						
Official	NA	33	46	80	82	83						
Administrative	NA	33	43	78	80	81						
Survey	NA	NA	NA	NA	NA	NA	34	46	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: 2019 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.

# Nepal - survey details

## 2015 Nepal Demographic and Health Survey 2016

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	97	12-23 m	1034	52
BCG	Card	52.2	12-23 m	541	52
BCG	Card or History	97.5	12-23 m	1034	52
BCG	History	45.3	12-23 m	493	52
DTP1	C or H <12 months	96.4	12-23 m	1034	52
DTP1	Card	52	12-23 m	541	52
DTP1	Card or History	96.6	12-23 m	1034	52
DTP1	History	44.6	12-23 m	493	52
DTP3	C or H <12 months	85.7	12-23 m	1034	52
DTP3	Card	51.1	12-23 m	541	52
DTP3	Card or History	85.9	12-23 m	1034	52
DTP3	History	34.8	12-23 m	493	52
HepB1	C or H <12 months	96.4	12-23 m	1034	52
HepB1	Card	52	12-23 m	541	52
HepB1	Card or History	96.6	12-23 m	1034	52
HepB1	History	44.6	12-23 m	493	52
HepB3	C or H <12 months	85.7	12-23 m	1034	52
HepB3	Card	51.1	12-23 m	541	52
HepB3	Card or History	85.9	12-23 m	1034	52
HepB3	History	34.8	12-23 m	493	52
Hib1	C or H <12 months	96.4	12-23 m	1034	52
Hib1	Card	52	12-23 m	541	52
Hib1	Card or History	96.6	12-23 m	1034	52
Hib1	History	44.6	12-23 m	493	52
Hib3	C or H <12 months	85.7	12-23 m	1034	52
Hib3	Card	51.1	12-23 m	541	52
Hib3	Card or History	85.9	12-23 m	1034	52
Hib3	History	34.8	12-23 m	493	52
IPV1	C or H <12 months	68.4	12-23 m	1034	52
IPV1	Card	38.3	12-23 m	541	52
IPV1	Card or History	69.7	12-23 m	1034	52
IPV1	History	31.3	12-23 m	493	52
MCV1	C or H <12 months	82.7	12-23 m	1034	52
MCV1	Card	49.8	12-23 m	541	52
MCV1	Card or History	90.4	12-23 m	1034	52
MCV1	History	40.6	12-23 m	493	52
PCV1	C or H <12 months	71.4	12-23 m	1034	52

PCV1	Card	37.6	12-23 m	541	52
PCV1	Card or History	72.8	12-23 m	1034	52
PCV1	History	35.2	12-23 m	493	52
PCV3	C or H <12 months	43.8	12-23 m	1034	52
PCV3	Card	26.5	12-23 m	541	52
PCV3	Card or History	45.5	12-23 m	1034	52
PCV3	History	19	12-23 m	493	52
Pol1	C or H <12 months	97.5	12-23 m	1034	52
Pol1	Card	51.8	12-23 m	541	52
Pol1	Card or History	97.7	12-23 m	1034	52
Pol1	History	45.9	12-23 m	493	52
Pol3	C or H <12 months	87.7	12-23 m	1034	52
Pol3	Card	50.3	12-23 m	541	52
Pol3	Card or History	88	12-23 m	1034	52
Pol3	History	37.7	12-23 m	493	52

## 2014 Nepal Demographic and Health Survey 2016

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93.7	24-35 m	919	52
BCG	Card	30.5	24-35 m	284	52
BCG	Card or History	95.4	24-35 m	919	52
BCG	History	64.9	24-35 m	635	52
DTP1	C or H <12 months	93.9	24-35 m	919	52
DTP1	Card	30.6	24-35 m	284	52
DTP1	Card or History	95.3	24-35 m	919	52
DTP1	History	64.7	24-35 m	635	52
DTP3	C or H <12 months	80.6	24-35 m	919	52
DTP3	Card	30	24-35 m	284	52
DTP3	Card or History	84	24-35 m	919	52
DTP3	History	54	24-35 m	635	52
HepB1	C or H <12 months	93.9	24-35 m	919	52
HepB1	Card	30.6	24-35 m	284	52
HepB1	Card or History	95.3	24-35 m	919	52
HepB1	History	64.7	24-35 m	635	52
HepB3	C or H <12 months	80.6	24-35 m	919	52
HepB3	Card	30	24-35 m	284	52
HepB3	Card or History	84	24-35 m	919	52
HepB3	History	54	24-35 m	635	52

# Nepal - survey details

Hib1	C or H <12 months	93.9	24-35 m	919	52	BCG	History	56.3	12-23 m	1008	40
Hib1	Card	30.6	24-35 m	284	52	DTP1	C or H <12 months	88.7	12-23 m	1008	40
Hib1	Card or History	95.3	24-35 m	919	52	DTP1	Card	39.4	12-23 m	1008	40
Hib1	History	64.7	24-35 m	635	52	DTP1	Card or History	95.3	12-23 m	1008	40
Hib3	C or H <12 months	80.6	24-35 m	919	52	DTP1	History	55.9	12-23 m	1008	40
Hib3	Card	30	24-35 m	284	52	DTP3	C or H <12 months	83.1	12-23 m	1008	40
Hib3	Card or History	84	24-35 m	919	52	DTP3	Card	37.5	12-23 m	1008	40
Hib3	History	54	24-35 m	635	52	DTP3	Card or History	88.3	12-23 m	1008	40
IPV1	C or H <12 months	45.3	24-35 m	919	52	DTP3	History	50.8	12-23 m	1008	40
IPV1	Card	9.9	24-35 m	284	52	HepB1	C or H <12 months	88.7	12-23 m	1008	40
IPV1	Card or History	51.3	24-35 m	919	52	HepB1	Card	39.4	12-23 m	1008	40
IPV1	History	41.4	24-35 m	635	52	HepB1	Card or History	95.3	12-23 m	1008	40
MCV1	C or H <12 months	81.6	24-35 m	919	52	HepB1	History	55.9	12-23 m	1008	40
MCV1	Card	29.9	24-35 m	284	52	HepB3	C or H <12 months	83.1	12-23 m	1008	40
MCV1	Card or History	94.3	24-35 m	919	52	HepB3	Card	37.5	12-23 m	1008	40
MCV1	History	64.4	24-35 m	635	52	HepB3	Card or History	88.3	12-23 m	1008	40
PCV1	C or H <12 months	46.4	24-35 m	919	52	HepB3	History	50.8	12-23 m	1008	40
PCV1	Card	9.2	24-35 m	284	52	Hib1	C or H <12 months	88.7	12-23 m	1008	40
PCV1	Card or History	52.4	24-35 m	919	52	Hib1	Card	39.4	12-23 m	1008	40
PCV1	History	43.2	24-35 m	635	52	Hib1	Card or History	95.3	12-23 m	1008	40
PCV3	C or H <12 months	28.9	24-35 m	919	52	Hib1	History	55.9	12-23 m	1008	40
PCV3	Card	5.3	24-35 m	284	52	Hib3	C or H <12 months	83.1	12-23 m	1008	40
PCV3	Card or History	33.5	24-35 m	919	52	Hib3	Card	37.5	12-23 m	1008	40
PCV3	History	28.1	24-35 m	635	52	Hib3	Card or History	88.3	12-23 m	1008	40
Pol1	C or H <12 months	95.3	24-35 m	919	52	Hib3	History	50.8	12-23 m	1008	40
Pol1	Card	30.4	24-35 m	284	52	MCV1	C or H <12 months	84.5	12-23 m	1008	40
Pol1	Card or History	96.2	24-35 m	919	52	MCV1	Card	38	12-23 m	1008	40
Pol1	History	65.9	24-35 m	635	52	MCV1	Card or History	92.6	12-23 m	1008	40
Pol3	C or H <12 months	87.2	24-35 m	919	52	MCV1	History	54.6	12-23 m	1008	40
Pol3	Card	29.3	24-35 m	284	52	Pol1	C or H <12 months	89.1	12-23 m	1008	40
Pol3	Card or History	90.3	24-35 m	919	52	Pol1	Card	39.3	12-23 m	1008	40
Pol3	History	61	24-35 m	635	52	Pol1	Card or History	96.4	12-23 m	1008	40
						Pol1	History	57.1	12-23 m	1008	40
						Pol3	C or H <12 months	85.2	12-23 m	1008	40
						Pol3	Card	37.4	12-23 m	1008	40
						Pol3	Card or History	91.8	12-23 m	1008	40
						Pol3	History	54.3	12-23 m	1008	40
Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen						
BCG	C or H <12 months	87.5	12-23 m	1008	40						
BCG	Card	39.4	12-23 m	1008	40						
BCG	Card or History	96.7	12-23 m	1008	40						

2012 Nepal Multiple Indicator Cluster Survey, 2014

2011 Nepal Multiple Indicator Cluster Survey, 2014

# Nepal - survey details

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	85.7	24-35 m	1079	40
BCG	Card	17.3	24-35 m	1079	40
BCG	Card or History	95.2	24-35 m	1079	40
BCG	History	77.9	24-35 m	1079	40
DTP1	C or H <12 months	85.9	24-35 m	1079	40
DTP1	Card	17.3	24-35 m	1079	40
DTP1	Card or History	94.9	24-35 m	1079	40
DTP1	History	77.6	24-35 m	1079	40
DTP3	C or H <12 months	77.3	24-35 m	1079	40
DTP3	Card	16.6	24-35 m	1079	40
DTP3	Card or History	86	24-35 m	1079	40
DTP3	History	69.5	24-35 m	1079	40
HepB1	C or H <12 months	85.9	24-35 m	1079	40
HepB1	Card	17.3	24-35 m	1079	40
HepB1	Card or History	94.9	24-35 m	1079	40
HepB1	History	77.6	24-35 m	1079	40
HepB3	C or H <12 months	77.3	24-35 m	1079	40
HepB3	Card	16.6	24-35 m	1079	40
HepB3	Card or History	86	24-35 m	1079	40
HepB3	History	69.5	24-35 m	1079	40
Hib1	C or H <12 months	85.9	24-35 m	1079	40
Hib1	Card	17.3	24-35 m	1079	40
Hib1	Card or History	94.9	24-35 m	1079	40
Hib1	History	77.6	24-35 m	1079	40
Hib3	C or H <12 months	77.3	24-35 m	1079	40
Hib3	Card	16.6	24-35 m	1079	40
Hib3	Card or History	86	24-35 m	1079	40
Hib3	History	69.5	24-35 m	1079	40
MCV1	C or H <12 months	82.2	24-35 m	1079	40
MCV1	Card	16.1	24-35 m	1079	40
MCV1	Card or History	93.9	24-35 m	1079	40
MCV1	History	77.7	24-35 m	1079	40
Pol1	C or H <12 months	86.6	24-35 m	1079	40
Pol1	Card	17.3	24-35 m	1079	40
Pol1	Card or History	95.6	24-35 m	1079	40
Pol1	History	78.3	24-35 m	1079	40
Pol3	C or H <12 months	82.4	24-35 m	1079	40
Pol3	Card	16.6	24-35 m	1079	40

Pol3	Card or History	93.4	24-35 m	1079	40
Pol3	History	76.8	24-35 m	1079	40

## 2010 Nepal Demographic and Health Survey 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	96.5	12-23 m	1000	34
BCG	Card	33.7	12-23 m	1000	34
BCG	Card or History	96.5	12-23 m	1000	34
BCG	History	62.8	12-23 m	1000	34
DTP1	C or H <12 months	96.4	12-23 m	1000	34
DTP1	Card	33.8	12-23 m	1000	34
DTP1	Card or History	96.4	12-23 m	1000	34
DTP1	History	62.6	12-23 m	1000	34
DTP3	C or H <12 months	91.4	12-23 m	1000	34
DTP3	Card	32.5	12-23 m	1000	34
DTP3	Card or History	91.7	12-23 m	1000	34
DTP3	History	59.2	12-23 m	1000	34
MCV1	C or H <12 months	82.3	12-23 m	1000	34
MCV1	Card	31	12-23 m	1000	34
MCV1	Card or History	88	12-23 m	1000	34
MCV1	History	57	12-23 m	1000	34
Pol1	C or H <12 months	96.6	12-23 m	1000	34
Pol1	Card	33.8	12-23 m	1000	34
Pol1	Card or History	96.6	12-23 m	1000	34
Pol1	History	62.7	12-23 m	1000	34
Pol3	C or H <12 months	92.1	12-23 m	1000	34
Pol3	Card	32.5	12-23 m	1000	34
Pol3	Card or History	92.5	12-23 m	1000	34
Pol3	History	60	12-23 m	1000	34

## 2008 Immunization Coverage Survey Nepal, 2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	32.4	12-23 m	9775	32
BCG	Card or History	96.1	12-23 m	9775	32
BCG	History	63.8	12-23 m	9775	32

# Nepal - survey details

DTP1	Card	32.3	12-23 m	9775	32
DTP1	Card or History	95.8	12-23 m	9775	32
DTP1	History	63.4	12-23 m	9775	32
DTP3	Card	31.7	12-23 m	9775	32
DTP3	Card or History	91.7	12-23 m	9775	32
DTP3	History	60	12-23 m	9775	32
MCV1	Card	31.1	12-23 m	9775	32
MCV1	Card or History	89.9	12-23 m	9775	32
MCV1	History	58.8	12-23 m	9775	32
Pol1	Card	32.4	12-23 m	9775	32
Pol1	Card or History	96.2	12-23 m	9775	32
Pol1	History	63.8	12-23 m	9775	32
Pol3	Card	31.9	12-23 m	9775	32
Pol3	Card or History	92.1	12-23 m	9775	32
Pol3	History	60.2	12-23 m	9775	32

MCV1	C or H <12 months	80	12-23 m	984	32
MCV1	Card	28.5	12-23 m	984	32
MCV1	Card or History	85	12-23 m	984	32
MCV1	History	56.5	12-23 m	984	32
Pol1	C or H <12 months	96.7	12-23 m	984	32
Pol1	Card	31.8	12-23 m	984	32
Pol1	Card or History	96.9	12-23 m	984	32
Pol1	History	65	12-23 m	984	32
Pol3	C or H <12 months	90.5	12-23 m	984	32
Pol3	Card	31.3	12-23 m	984	32
Pol3	Card or History	91.1	12-23 m	984	32
Pol3	History	59.8	12-23 m	984	32

## 2000 Nepal Demographic and Health Survey 2001

## 2005 Nepal Demographic and Health Survey 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93.2	12-23 m	984	32
BCG	Card	31.7	12-23 m	984	32
BCG	Card or History	93.4	12-23 m	984	32
BCG	History	61.7	12-23 m	984	32
DTP1	C or H <12 months	92.5	12-23 m	984	32
DTP1	Card	31.8	12-23 m	984	32
DTP1	Card or History	92.7	12-23 m	984	32
DTP1	History	60.8	12-23 m	984	32
DTP3	C or H <12 months	88	12-23 m	984	32
DTP3	Card	31.3	12-23 m	984	32
DTP3	Card or History	88.6	12-23 m	984	32
DTP3	History	57.4	12-23 m	984	32
HepB1	C or H <12 months	76	12-23 m	984	32
HepB1	Card	29.6	12-23 m	984	32
HepB1	Card or History	76.3	12-23 m	984	32
HepB1	History	46.6	12-23 m	984	32
HepB3	C or H <12 months	68.4	12-23 m	984	32
HepB3	Card	27.1	12-23 m	984	32
HepB3	Card or History	69.4	12-23 m	984	32
HepB3	History	42.4	12-23 m	984	32

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	82.9	12-23 m	1313	16
BCG	Card	16.1	12-23 m	1313	16
BCG	Card or History	84.5	12-23 m	1313	16
BCG	History	68.3	12-23 m	1313	16
DTP1	C or H <12 months	82.5	12-23 m	1313	16
DTP1	Card	15.8	12-23 m	1313	16
DTP1	Card or History	84	12-23 m	1313	16
DTP1	History	68.1	12-23 m	1313	16
DTP3	C or H <12 months	70.6	12-23 m	1313	16
DTP3	Card	14.2	12-23 m	1313	16
DTP3	Card or History	72.1	12-23 m	1313	16
DTP3	History	58	12-23 m	1313	16
MCV1	C or H <12 months	63.6	12-23 m	1313	16
MCV1	Card	12.9	12-23 m	1313	16
MCV1	Card or History	70.6	12-23 m	1313	16
MCV1	History	57.7	12-23 m	1313	16
Pol1	C or H <12 months	97.3	12-23 m	1313	16
Pol1	Card	16	12-23 m	1313	16
Pol1	Card or History	99	12-23 m	1313	16
Pol1	History	83	12-23 m	1313	16
Pol3	C or H <12 months	90.4	12-23 m	1313	16
Pol3	Card	15.5	12-23 m	1313	16
Pol3	Card or History	91.5	12-23 m	1313	16

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Pol3 History 76 12-23 m 1313 16

1999 Report on the Situation of Women, Children and Households 2000, 2001

1997 Nepal, Routine Immunization and NID Coverage Survey Report 1998

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	86.8	12-23 m	1068	79
DTP1	Card or History	86.8	12-23 m	1068	79
DTP3	Card or History	65.4	12-23 m	1068	79
MCV1	Card or History	81.8	12-23 m	1068	79
Pol1	Card or History	93.2	12-23 m	1068	79
Pol3	Card or History	74.4	12-23 m	1068	79

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	86.3	12-23 m	-	17
DTP1	C or H <12 months	86.8	12-23 m	-	17
DTP3	C or H <12 months	75.9	12-23 m	-	17
MCV1	C or H <12 months	73.1	12-23 m	-	17
Pol1	C or H <12 months	86.5	12-23 m	-	17
Pol3	C or H <12 months	70.2	12-23 m	-	17

Further information and estimates for previous years are available at:

<http://www.data.unicef.org/child-health/immunization>

[http://www.who.int/immunization/monitoring\\_surveillance/routine/coverage/en/index4.html](http://www.who.int/immunization/monitoring_surveillance/routine/coverage/en/index4.html)