

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.

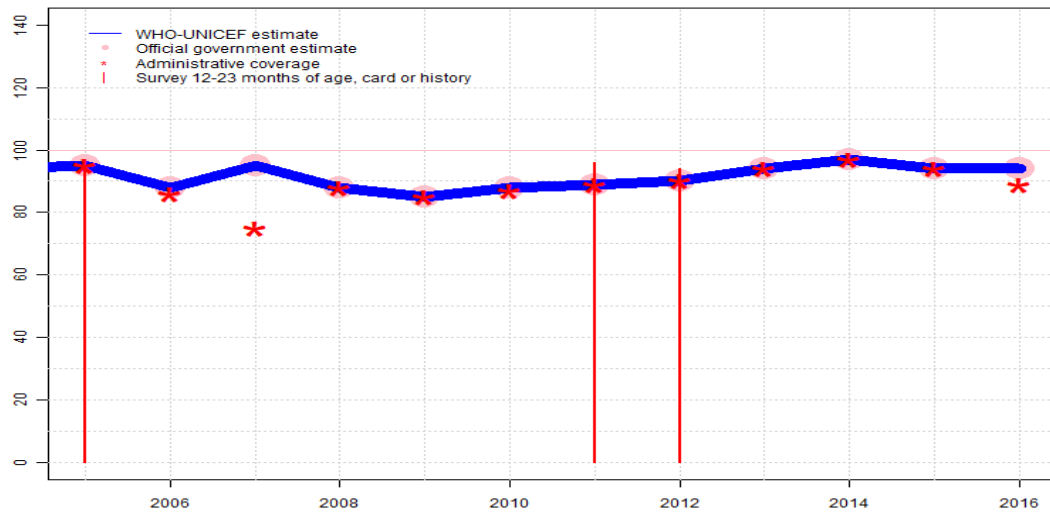
PcV3: percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect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

NAM - BCG



Description:

- 2016: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. Namibia conducted a census in 2011 and the data were released in 2013, hence population figures were adjusted according to the new census data. Growth of the country decreased from 2.6 to 1.4 and fertility rate also decreased from 4.1 to 3.6. Estimate challenged by: D-
- 2012: 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-
- 2011: 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-
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-S-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2007: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2006: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). GoC=R+ S+

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	95	88	95	88	85	88	89	90	94	97	94	94
Estimate GoC	●●	●●●	●●●	●	●	●●●	●	●	●	●●●	●	●
Official	95	88	95	88	85	88	89	90	94	97	94	94
Administrative	95	86	75	88	85	87	89	90	94	97	94	89
Survey	95	NA	NA	NA	NA	NA	96	94	NA	NA	NA	NA

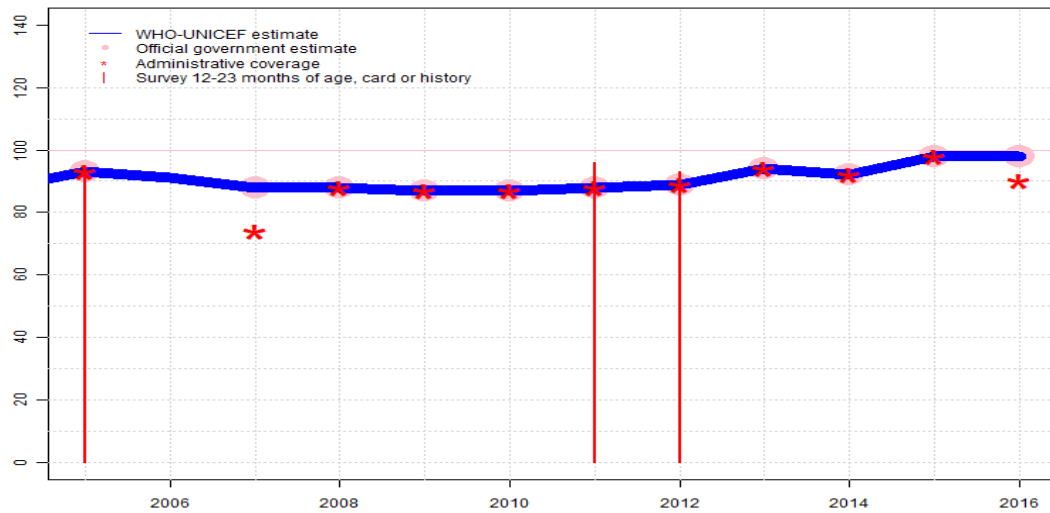
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2015 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.

Namibia - DTP1

NAM - DTP1



Description:

- 2016: Estimate based on coverage reported by national government. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2014: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on coverage reported by national government. Namibia conducted a census in 2011 and the data were released in 2013, hence population figures were adjusted according to the new census data. Growth of the country decreased from 2.6 to 1.4 and fertility rate also decreased from 4.1 to 3.6. GoC=R+ S+ 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 96 percent based on 1 survey(s). Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. GoC=R+ D+
- 2007: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2006: Estimate based on interpolation between coverage reported by national government. GoC=S+
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). GoC=R+ S+

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	93	91	88	88	87	87	88	89	94	92	98	98
Estimate GoC	●●	●●	●●●	●●	●●●	●●●	●	●	●●●	●	●	●●
Official	93	NA	88	88	87	87	88	89	94	92	98	98
Administrative	93	NA	74	88	87	87	88	89	94	92	98	90
Survey	95	NA	NA	NA	NA	NA	96	93	NA	NA	NA	NA

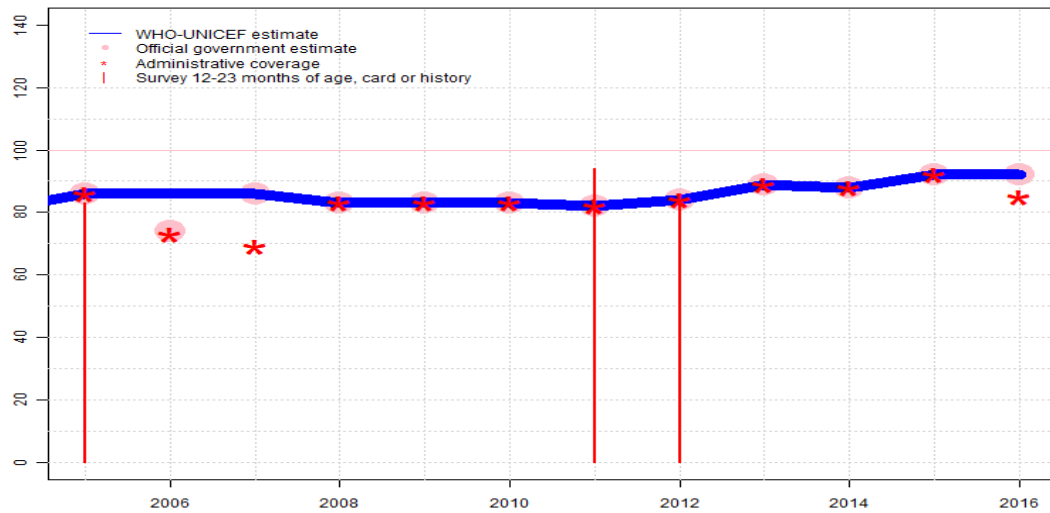
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2015 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.

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Namibia - DTP3

NAM - DTP3



Description:

- 2016: Estimate based on coverage reported by national government. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. Namibia conducted a census in 2011 and the data were released in 2013, hence population figures were adjusted according to the new census data. Growth of the country decreased from 2.6 to 1.4 and fertility rate also decreased from 4.1 to 3.6. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). Namibia Demographic and Health Survey 2013 card or history results of 84 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 69 percent and 3d dose card only coverage of 67 percent. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 92 percent based on 1 survey(s). Report of the Post Measles Supplemental Immunisation and EPI Coverage Survey in Namibia, September 2012 card or history results of 94 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 79 percent and 3d dose card only coverage of 76 percent. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. GoC=R+ D+
- 2007: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2006: Estimate based on interpolation between coverage reported by national government. Reported data excluded due to decline in reported coverage from 86 percent to 74 percent with increase to 86 percent. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 88 percent based on 1 survey(s). Namibia Demographic and Health Survey 2006 card or history results of 83 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 73 percent and 3d dose card only coverage of 68 percent. GoC=R+ S+

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	86	86	86	83	83	83	82	84	89	88	92	92
Estimate GoC	••	•••	•••	••	•••	•••	•	•	•••	•••	•	••
Official	86	74	86	83	83	83	82	84	89	88	92	92
Administrative	86	73	69	83	83	83	82	84	89	88	92	85
Survey	83	NA	NA	NA	NA	NA	94	84	NA	NA	NA	NA

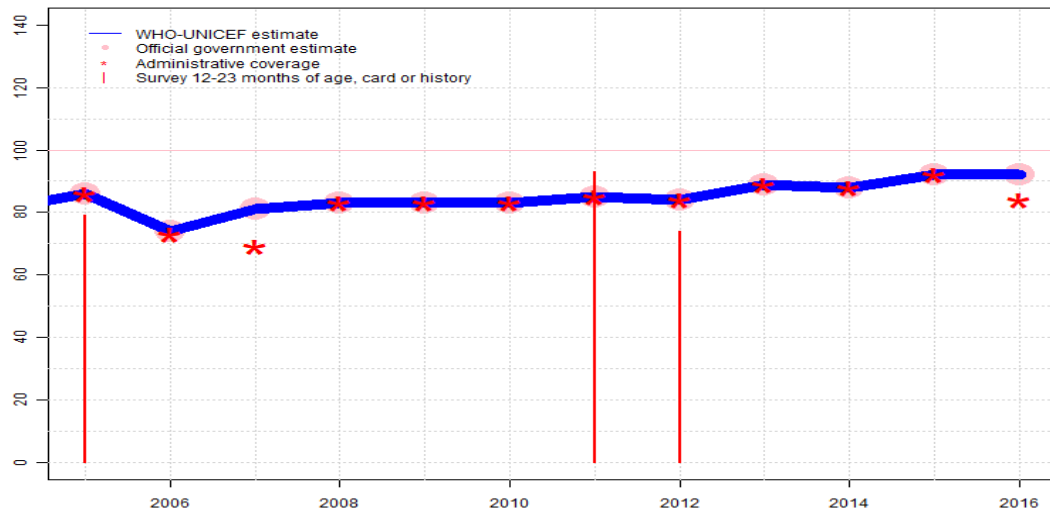
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2015 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.

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Namibia - Pol3

NAM - Pol3



Description:

- 2016: Estimate based on coverage reported by national government. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. Namibia conducted a census in 2011 and the data were released in 2013, hence population figures were adjusted according to the new census data. Growth of the country decreased from 2.6 to 1.4 and fertility rate also decreased from 4.1 to 3.6. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). Namibia Demographic and Health Survey 2013 card or history results of 74 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 70 percent and 3d dose card only coverage of 68 percent. Estimate challenged by: D-
- 2011: 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-
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. GoC=R+ D+
- 2007: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2006: Estimate based on coverage reported by national government. Estimate challenged by: D-S-
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 88 percent based on 1 survey(s). Namibia Demographic and Health Survey 2006 card or history results of 79 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 73 percent and 3d dose card only coverage of 68 percent. GoC=R+ S+

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	86	74	81	83	83	83	85	84	89	88	92	92
Estimate GoC	••	•	•••	••	•••	•••	•	•	•••	•••	•	••
Official	86	74	81	83	83	83	85	84	89	88	92	92
Administrative	86	73	69	83	83	83	85	84	89	88	92	84
Survey	79	NA	NA	NA	NA	NA	93	74	NA	NA	NA	NA

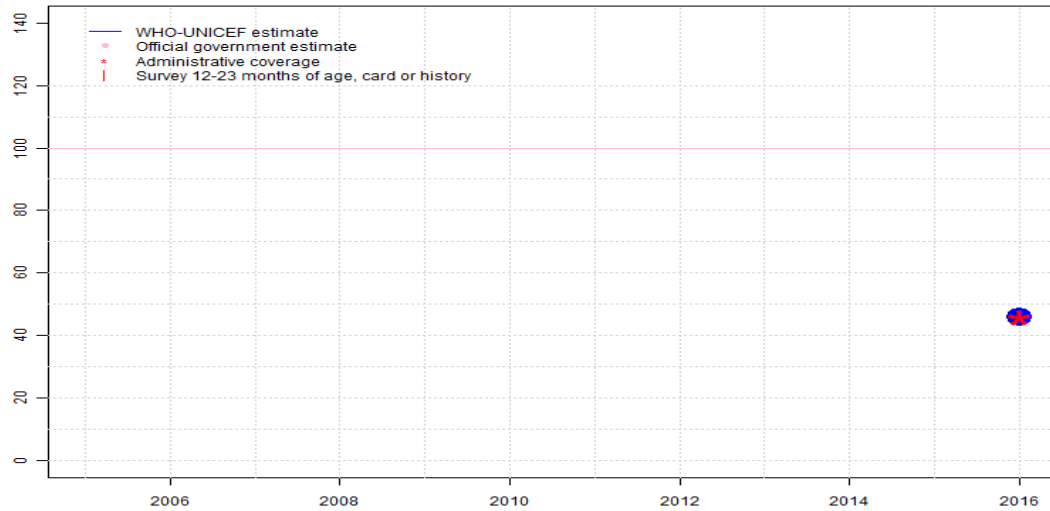
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2015 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.

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Namibia - IPV1

NAM - IPV1



Description:

2016: Estimate based on reported administrative estimate. Inactivated polio vaccine introduced in November 2015. Reporting started in 2016. Programme reports a 1-month IPV stock-out in 2016. GoC=R+ D+

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

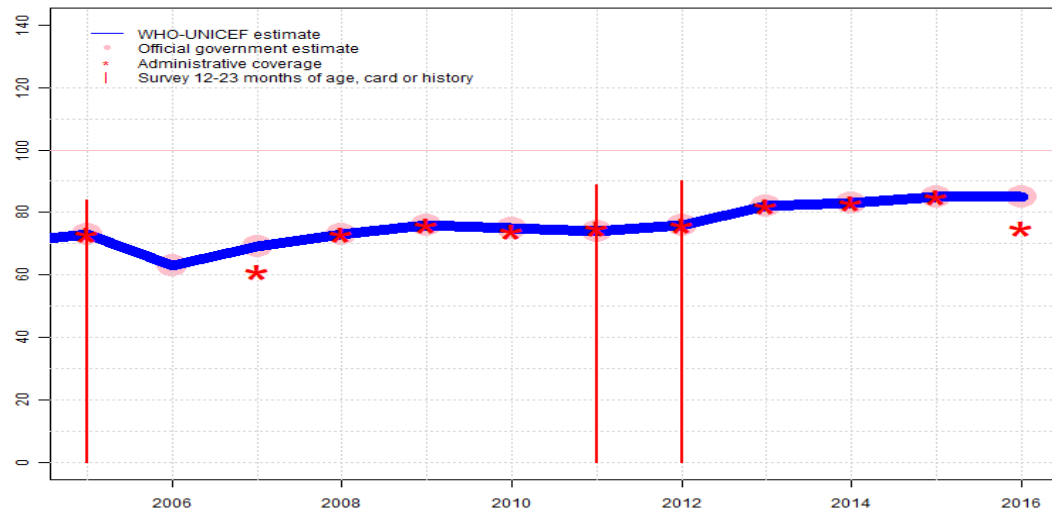
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 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.

Namibia - MCV1

NAM - MCV1



Description:

- 2016: Estimate based on coverage reported by national government. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. Namibia conducted a census in 2011 and the data were released in 2013, hence population figures were adjusted according to the new census data. Growth of the country decreased from 2.6 to 1.4 and fertility rate also decreased from 4.1 to 3.6. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. Namibia Demographic and Health Survey 2013 results ignored by working group. Survey results likely include vaccination administered during supplementary immunization activities following outbreaks during 2009 and 2010. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. Report of the Post Measles Supplemental Immunisation and EPI Coverage Survey in Namibia, September 2012 results ignored by working group. Survey results likely include vaccination administered during supplementary immunization activities following outbreaks during 2009 and 2010. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government. GoC=R+ D+
- 2009: Estimate based on coverage reported by national government. Nationally reported estimates accepted for other vaccines. GoC=R+ D+
- 2008: Estimate based on coverage reported by national government. GoC=R+ D+
- 2007: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2006: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2005: Survey supports reported for all other antigens. Estimate challenged by: S-

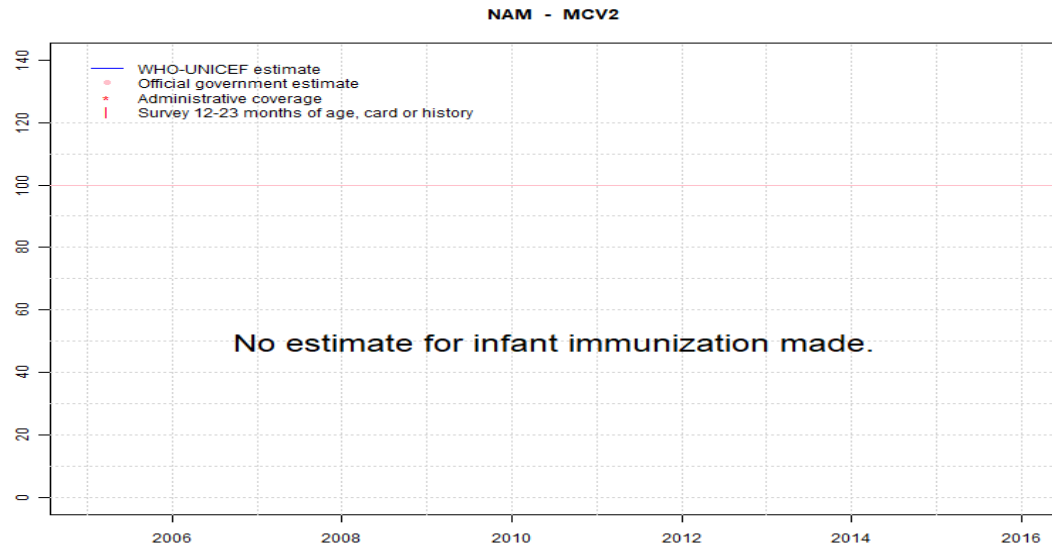
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	73	63	69	73	76	75	74	76	82	83	85	85
Estimate GoC	•	•	•	••	••	••	•	••	••	••	••	••
Official	73	63	69	73	76	75	74	76	82	83	85	85
Administrative	73	NA	61	73	76	74	75	76	82	83	85	75
Survey	84	NA	NA	NA	NA	NA	89	90	NA	NA	NA	NA

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: 2015 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.

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Namibia - MCV2



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

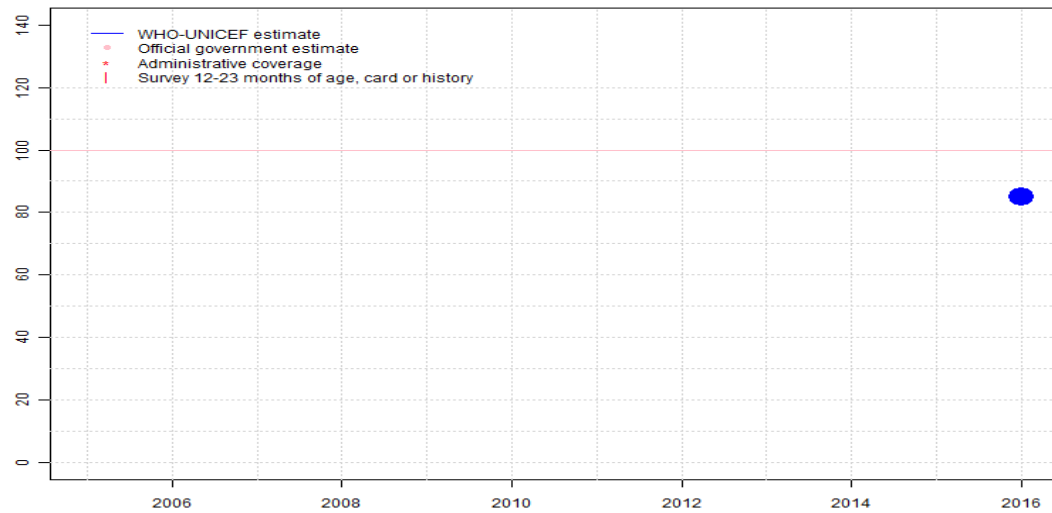
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 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.

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Namibia - RCV1

NAM - RCV1



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.

2016: Estimate based on estimated MCV1. GoC=R+ D+

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	85
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

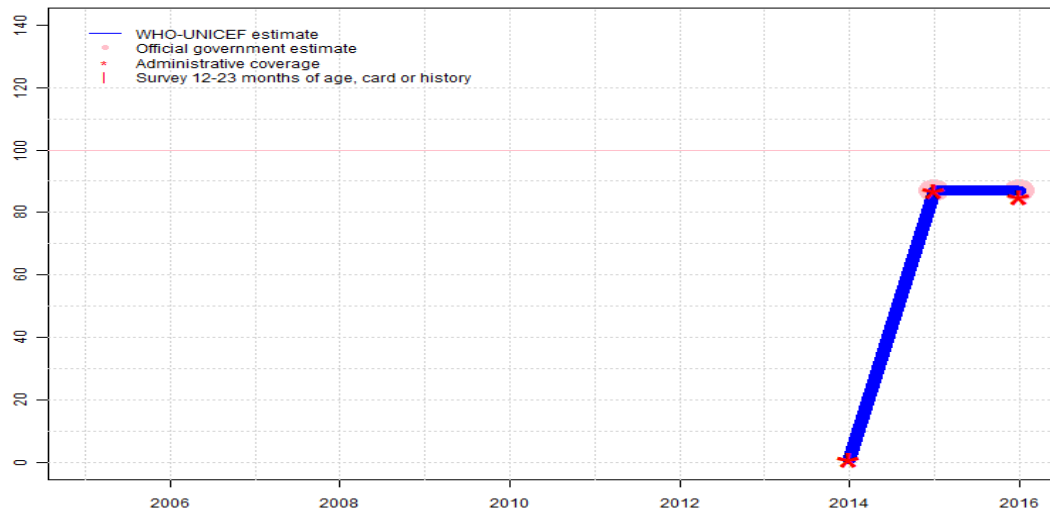
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 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.

Namibia - HepBB

NAM - HepBB



Description:

2016: Estimate based on coverage reported by national government. Estimate challenged by: D-
 2015: Estimate based on coverage reported by national government. Estimate based on reported coverage following introduction. Estimate challenged by: D-
 2014: Estimate based on reported administrative estimate. HepB birth dose introduced during 2014. GoC=Assigned by working group. Consistency with other vaccines during an introduction period.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	87	87
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	87	87
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	87	85
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

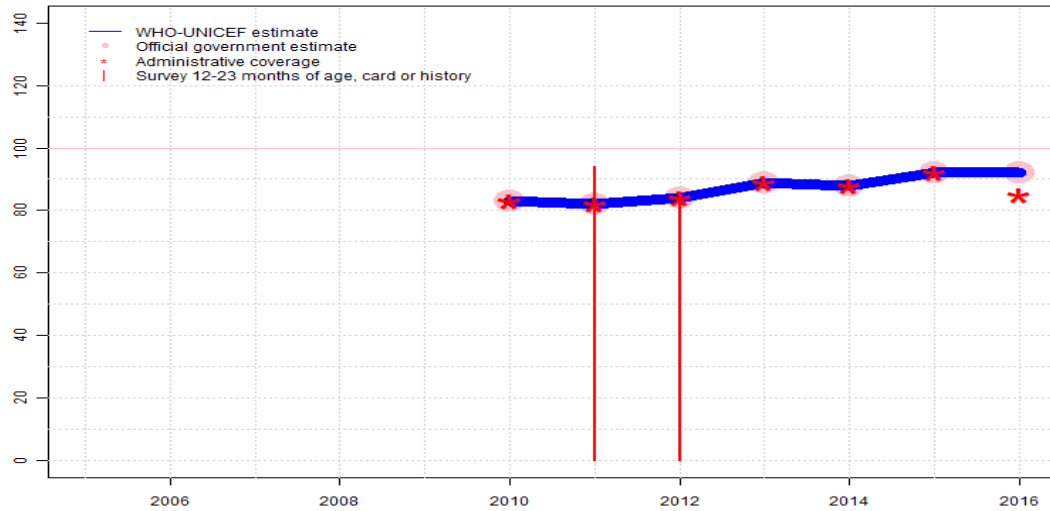
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 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.

Namibia - HepB3

NAM - HepB3



Description:

- 2016: Estimate based on coverage reported by national government. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. Namibia conducted a census in 2011 and the data were released in 2013, hence population figures were adjusted according to the new census data. Growth of the country decreased from 2.6 to 1.4 and fertility rate also decreased from 4.1 to 3.6. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). Namibia Demographic and Health Survey 2013 card or history results of 84 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 69 percent and 3d dose card only coverage of 67 percent. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 92 percent based on 1 survey(s). Report of the Post Measles Supplemental Immunisation and EPI Coverage Survey in Namibia, September 2012 card or history results of 94 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 79 percent and 3d dose card only coverage of 76 percent. Estimate challenged by: D-
- 2010: Estimate based on reported data. DTP-HepB-Hib pentavalent vaccine was introduced in 2009. Reporting started in 2010. GoC=R+ S+ D+

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	NA	NA	NA	NA	NA	83	82	84	89	88	92	92
Estimate GoC	NA	NA	NA	NA	NA	•••	•	•	•••	•••	•	••
Official	NA	NA	NA	NA	NA	83	82	84	89	88	92	92
Administrative	NA	NA	NA	NA	NA	83	82	84	89	88	92	85
Survey	NA	NA	NA	NA	NA	NA	94	84	NA	NA	NA	NA

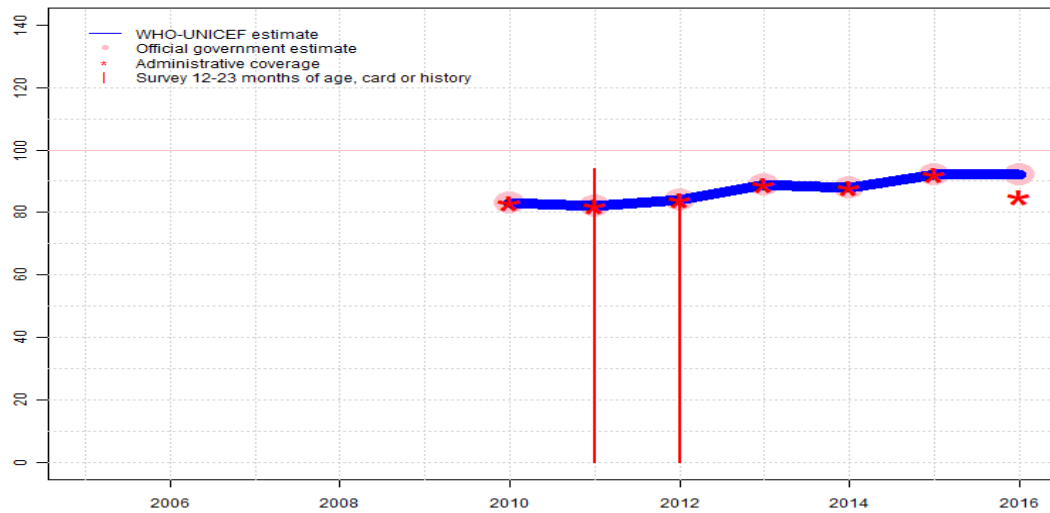
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2015 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.

Namibia - Hib3

NAM - Hib3



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	NA	NA	NA	NA	NA	83	82	84	89	88	92	92
Estimate GoC	NA	NA	NA	NA	NA	●●●	●	●	●●●	●●●	●	●●
Official	NA	NA	NA	NA	NA	83	82	84	89	88	92	92
Administrative	NA	NA	NA	NA	NA	83	82	84	89	88	92	85
Survey	NA	NA	NA	NA	NA	NA	94	84	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: 2015 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.

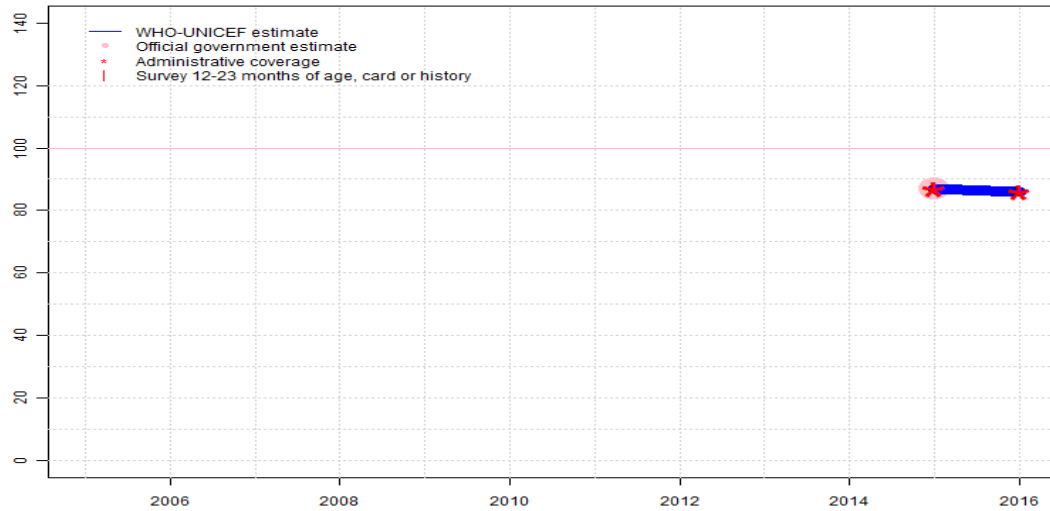
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2016: Estimate based on coverage reported by national government. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. Namibia conducted a census in 2011 and the data were released in 2013, hence population figures were adjusted according to the new census data. Growth of the country decreased from 2.6 to 1.4 and fertility rate also decreased from 4.1 to 3.6. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). Namibia Demographic and Health Survey 2013 card or history results of 84 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 69 percent and 3d dose card only coverage of 67 percent. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 92 percent based on 1 survey(s). Report of the Post Measles Supplemental Immunisation and EPI Coverage Survey in Namibia, September 2012 card or history results of 94 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 79 percent and 3d dose card only coverage of 76 percent. Estimate challenged by: D-
- 2010: Estimate based on reported data. DTP-HepB-Hib pentavalent vaccine was introduced in 2009. Reporting started in 2010. GoC=R+ S+ D+

Namibia - RotaC

NAM - RotaC



Description:

2016: Estimate based on reported administrative estimate. Programme reports a 1-month rotavirus vaccine stock-out in 2016. Estimate challenged by: D-

2015: Estimate based on coverage reported by national government. Rotavirus vaccine introduced during 2014. Reporting started in 2015. Estimate challenged by: D-

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	87	86
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	●	●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	87	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	87	86
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

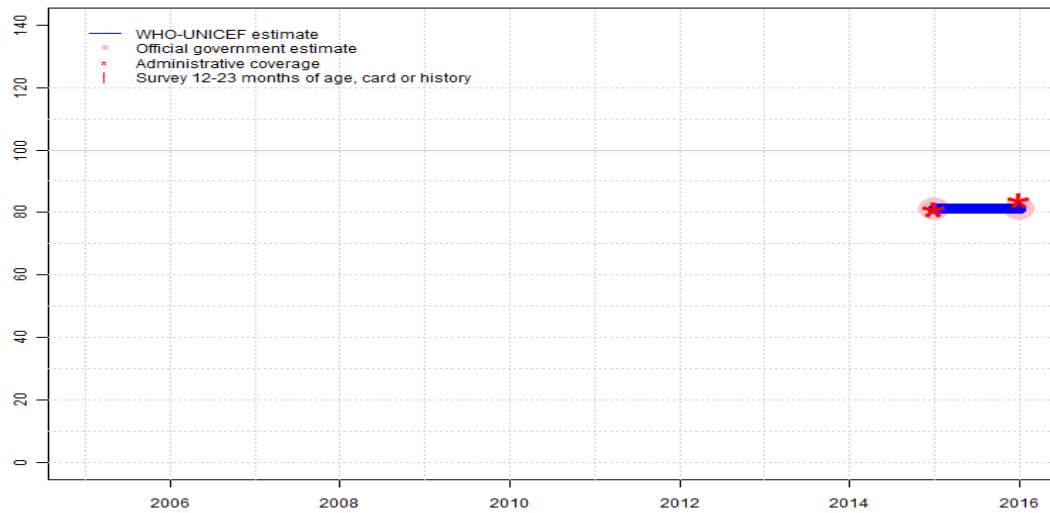
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 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.

Namibia - PcV3

NAM - PcV3



Description:

2016: Estimate based on coverage reported by national government. Estimate challenged by: D-
 2015: Estimate based on coverage reported by national government. Pneumococcal conjugate vaccine introduced during 2014. Reporting started in 2015. GoC=R+ D+

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	81	81
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	●●	●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	81	81
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	81	84
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 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.

Namibia - survey details

2012 Namibia Demographic and Health Survey 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94	12-23 m	938	70
BCG	Card	69	12-23 m	652	70
BCG	Card or History	94	12-23 m	938	70
BCG	History	25	12-23 m	286	70
DTP1	C or H <12 months	92	12-23 m	938	70
DTP1	Card	69	12-23 m	652	70
DTP1	Card or History	93	12-23 m	938	70
DTP1	History	24	12-23 m	286	70
DTP3	C or H <12 months	82	12-23 m	938	70
DTP3	Card	67	12-23 m	652	70
DTP3	Card or History	84	12-23 m	938	70
DTP3	History	16	12-23 m	286	70
HepB1	C or H <12 months	92	12-23 m	938	70
HepB1	Card	69	12-23 m	652	70
HepB1	Card or History	93	12-23 m	938	70
HepB1	History	24	12-23 m	286	70
HepB3	C or H <12 months	82	12-23 m	938	70
HepB3	Card	67	12-23 m	652	70
HepB3	Card or History	84	12-23 m	938	70
HepB3	History	16	12-23 m	286	70
Hib1	C or H <12 months	92	12-23 m	938	70
Hib1	Card	69	12-23 m	652	70
Hib1	Card or History	93	12-23 m	938	70
Hib1	History	24	12-23 m	286	70
Hib3	C or H <12 months	82	12-23 m	938	70
Hib3	Card	67	12-23 m	652	70
Hib3	Card or History	84	12-23 m	938	70
Hib3	History	16	12-23 m	286	70
MCV1	C or H <12 months	83	12-23 m	938	70
MCV1	Card	66	12-23 m	652	70
MCV1	Card or History	90	12-23 m	938	70
MCV1	History	23	12-23 m	286	70
Pol1	C or H <12 months	92	12-23 m	938	70
Pol1	Card	70	12-23 m	652	70
Pol1	Card or History	93	12-23 m	938	70
Pol1	History	23	12-23 m	286	70
Pol3	C or H <12 months	73	12-23 m	938	70

Pol3	Card	68	12-23 m	652	70
Pol3	Card or History	74	12-23 m	938	70
Pol3	History	6	12-23 m	286	70

2011 Namibia Demographic and Health Survey 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93	24-35 m	926	70
DTP1	C or H <12 months	92	24-35 m	926	70
DTP3	C or H <12 months	72	24-35 m	926	70
HepB1	C or H <12 months	92	24-35 m	926	70
HepB3	C or H <12 months	72	24-35 m	926	70
Hib1	C or H <12 months	92	24-35 m	926	70
Hib3	C or H <12 months	72	24-35 m	926	70
MCV1	C or H <12 months	74	24-35 m	926	70
Pol1	C or H <12 months	91	24-35 m	926	70
Pol3	C or H <12 months	65	24-35 m	926	70

2011 Report of the Post Measles Supplemental Immunisation and EPI Coverage Survey in Namibia, September 2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	79	12-23 m	-	88
BCG	Card or History	96	12-23 m	1470	88
DTP1	Card	79	12-23 m	-	88
DTP1	Card or History	96	12-23 m	1470	88
DTP3	Card	76	12-23 m	-	88
DTP3	Card or History	94	12-23 m	1470	88
HepB1	Card	79	12-23 m	-	88
HepB1	Card or History	96	12-23 m	1470	88
HepB3	Card	76	12-23 m	-	88
HepB3	Card or History	94	12-23 m	1470	88
Hib1	Card	79	12-23 m	-	88
Hib1	Card or History	96	12-23 m	1470	88
Hib3	Card	76	12-23 m	-	88
Hib3	Card or History	94	12-23 m	1470	88
MCV1	Card	72	12-23 m	-	88
MCV1	Card or History	89	12-23 m	1470	88

Namibia - survey details

Pol3	Card	75	12-23 m	-	88
Pol3	Card or History	93	12-23 m	1470	88

2010 Namibia Demographic and Health Survey 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93	36-47 m	883	70
DTP1	C or H <12 months	91	36-47 m	883	70
DTP3	C or H <12 months	71	36-47 m	883	70
HepB1	C or H <12 months	91	36-47 m	883	70
HepB3	C or H <12 months	71	36-47 m	883	70
Hib1	C or H <12 months	91	36-47 m	883	70
Hib3	C or H <12 months	71	36-47 m	883	70
MCV1	C or H <12 months	77	36-47 m	883	70
Pol1	C or H <12 months	90	36-47 m	883	70
Pol3	C or H <12 months	58	36-47 m	883	70

2009 Namibia Demographic and Health Survey 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	92	48-59 m	830	70
DTP1	C or H <12 months	90	48-59 m	830	70
DTP3	C or H <12 months	72	48-59 m	830	70
HepB1	C or H <12 months	90	48-59 m	830	70
HepB3	C or H <12 months	72	48-59 m	830	70
Hib1	C or H <12 months	90	48-59 m	830	70
Hib3	C or H <12 months	72	48-59 m	830	70
MCV1	C or H <12 months	75	48-59 m	830	70
Pol1	C or H <12 months	91	48-59 m	830	70
Pol3	C or H <12 months	60	48-59 m	830	70

2005 Namibia Demographic and Health Survey 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	95	12-23 m	987	73

BCG	Card	72	12-23 m	987	73
BCG	Card or History	95	12-23 m	987	73
BCG	History	22	12-23 m	987	73
DTP1	C or H <12 months	93	12-23 m	987	73
DTP1	Card	73	12-23 m	987	73
DTP1	Card or History	95	12-23 m	987	73
DTP1	History	22	12-23 m	987	73
DTP3	C or H <12 months	81	12-23 m	987	73
DTP3	Card	68	12-23 m	987	73
DTP3	Card or History	83	12-23 m	987	73
DTP3	History	15	12-23 m	987	73
MCV1	C or H <12 months	78	12-23 m	987	73
MCV1	Card	63	12-23 m	987	73
MCV1	Card or History	84	12-23 m	987	73
MCV1	History	21	12-23 m	987	73
Pol1	C or H <12 months	94	12-23 m	987	73
Pol1	Card	73	12-23 m	987	73
Pol1	Card or History	95	12-23 m	987	73
Pol1	History	23	12-23 m	987	73
Pol3	C or H <12 months	76	12-23 m	987	73
Pol3	Card	68	12-23 m	987	73
Pol3	Card or History	79	12-23 m	987	73
Pol3	History	10	12-23 m	987	73

1999 Namibia Demographic and Health Survey 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	90	12-23 m	816	74
BCG	History	19	12-23 m	816	74
DTP1	Card	72	12-23 m	816	74
DTP1	Card or History	92	12-23 m	816	74
DTP1	History	20	12-23 m	816	74
DTP3	Card	69	12-23 m	816	74
DTP3	Card or History	79	12-23 m	816	74
DTP3	History	10	12-23 m	816	74
MCV1	Card	64	12-23 m	816	74
MCV1	Card or History	80	12-23 m	816	74
MCV1	History	16	12-23 m	816	74
Pol1	Card	73	12-23 m	816	74

Namibia - survey details

Pol1	Card or History	94	12-23 m	816	74	Pol3	Card or History	77	12-23 m	816	74
Pol1	History	20	12-23 m	816	74	Pol3	History	8	12-23 m	816	74
Pol3	Card	69	12-23 m	816	74						

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