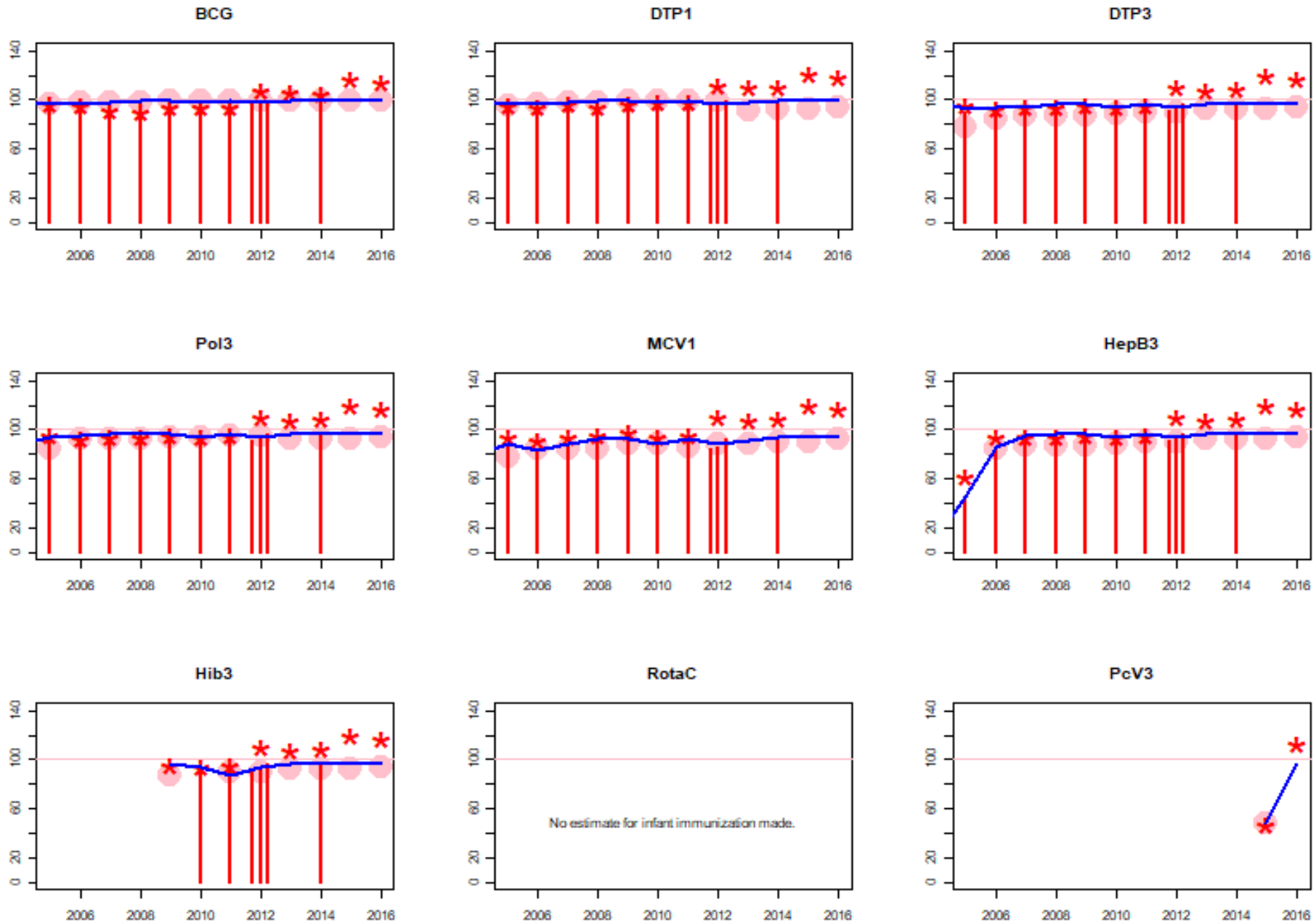


Bangladesh: WHO and UNICEF estimates of immunization coverage: 2016 revision



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.

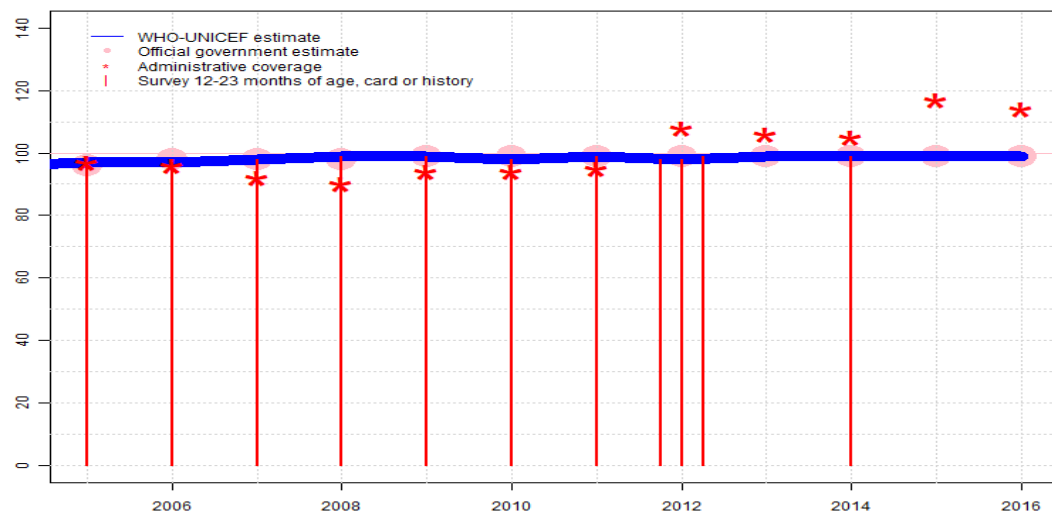
PcV3: percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect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

BGD - BCG



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	97	97	98	99	99	98	99	98	99	99	99	99
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	96	98	98	98	99	99	99	99	99	99	99	99
Administrative	97	96	92	90	94	94	95	108	106	105	117	114
Survey	97	97	98	99	99	98	99	*	NA	99	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:

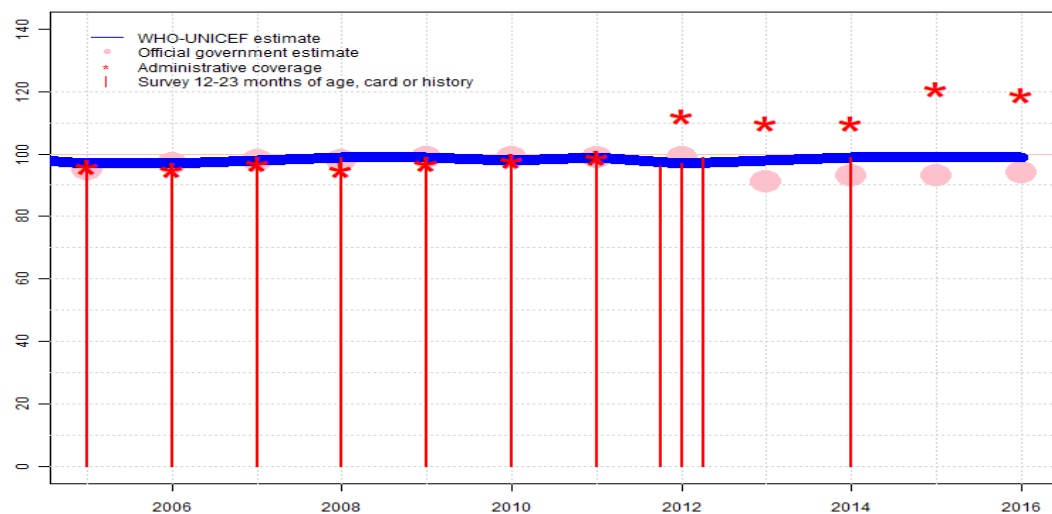
- 2016: Reported data calibrated to 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2015: Reported data calibrated to 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Programme reports 1 month national level stock-out. Estimate of 99 percent changed from previous revision value of 98 percent. Estimate challenged by: D-R-
- 2014: Estimate of 99 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate of 99 percent changed from previous revision value of 98 percent. Estimate challenged by: D-R-
- 2013: Reported data calibrated to 2012 and 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate of 99 percent changed from previous revision value of 98 percent. Estimate challenged by: D-R-
- 2012: Estimate of 98 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate challenged by: D-R-
- 2011: Estimate of 99 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2010: Estimate of 98 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2009: Estimate of 99 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2008: Estimate of 99 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

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- 2007: Estimate of 98 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2006: Estimate of 97 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2005: Estimate of 97 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: R-

Bangladesh - DTP1

BGD - DTP1



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	97	97	98	99	99	98	99	97	98	99	99	99
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	95	97	98	98	99	99	99	99	91	93	93	94
Administrative	96	95	97	95	97	98	99	112	110	110	121	119
Survey	97	97	98	99	99	98	99	*	NA	99	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: Reported data calibrated to 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2015: Reported data calibrated to 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate of 99 percent changed from previous revision value of 97 percent. Estimate challenged by: D-R-
- 2014: Estimate of 99 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate of 99 percent changed from previous revision value of 97 percent. Estimate challenged by: D-R-
- 2013: Reported data calibrated to 2012 and 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate of 98 percent changed from previous revision value of 97 percent. Estimate challenged by: D-R-
- 2012: Estimate of 97 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate challenged by: D-R-
- 2011: Estimate of 99 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2010: Estimate of 98 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2009: Estimate of 99 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2008: Estimate of 99 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2007: Estimate of 98 percent assigned by working group. Estimate based on survey result.

Bangladesh - DTP1

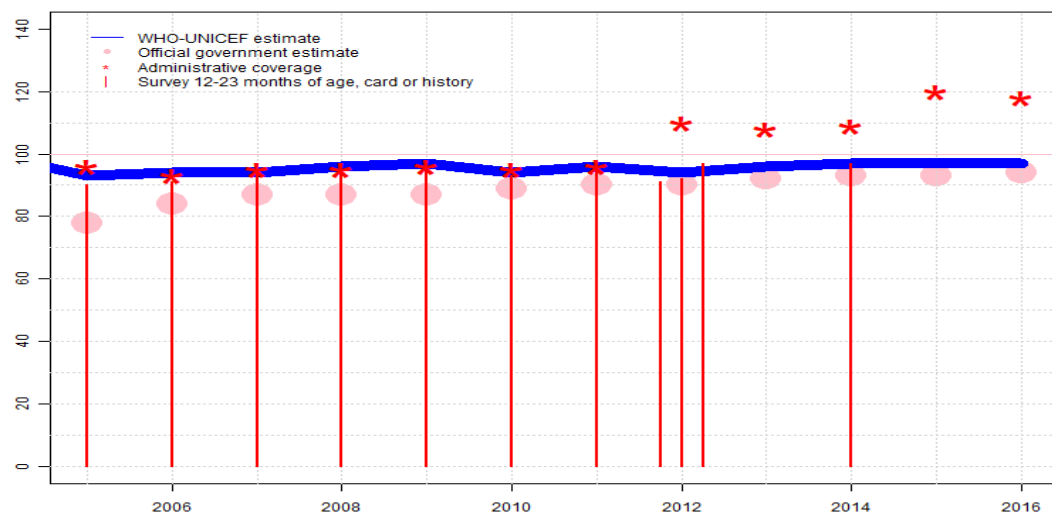
Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

2006: Estimate of 97 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

2005: Estimate of 97 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

Bangladesh - DTP3

BGD - DTP3



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	93	94	94	96	97	94	96	94	96	97	97	97
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	78	84	87	87	87	89	90	90	92	93	93	94
Administrative	96	93	95	95	96	95	96	110	108	109	120	118
Survey	90	91	95	97	97	93	97	*	NA	97	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: Reported data calibrated to 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2015: Reported data calibrated to 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate of 97 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- 2014: Estimate of 97 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate of 97 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- 2013: Reported data calibrated to 2012 and 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate of 96 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- 2012: Estimate of 94 percent assigned by working group. Estimate based on survey result. Bangladesh Utilization of Essential Service Delivery Survey 2013 card or history results of 92 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 71 percent and 3d dose card only coverage of 69 percent. Bangladesh Demographic and Health Survey, 2014 card or history results of 91 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 74 percent and 3d dose card only coverage of 71 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate challenged by: D-R-
- 2011: Estimate of 96 percent assigned by working group. Estimate based on survey result. EPI Coverage Evaluation Survey, 2013 card or history results of 97 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 78 percent and 3d dose card only coverage of 76 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2010: Estimate of 94 percent assigned by working group. Estimate based on survey result. Bangladesh Demographic and Health Survey 2011 card or history results of 93 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 67 percent and 3d dose card only coverage of 64

percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

2009: Estimate of 97 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

2008: Estimate of 96 percent assigned by working group. Estimate based on survey result. Bangladesh EPI Coverage Evaluation Survey 2009 card or history results of 97 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 70 percent and 3d dose card only coverage of 68 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

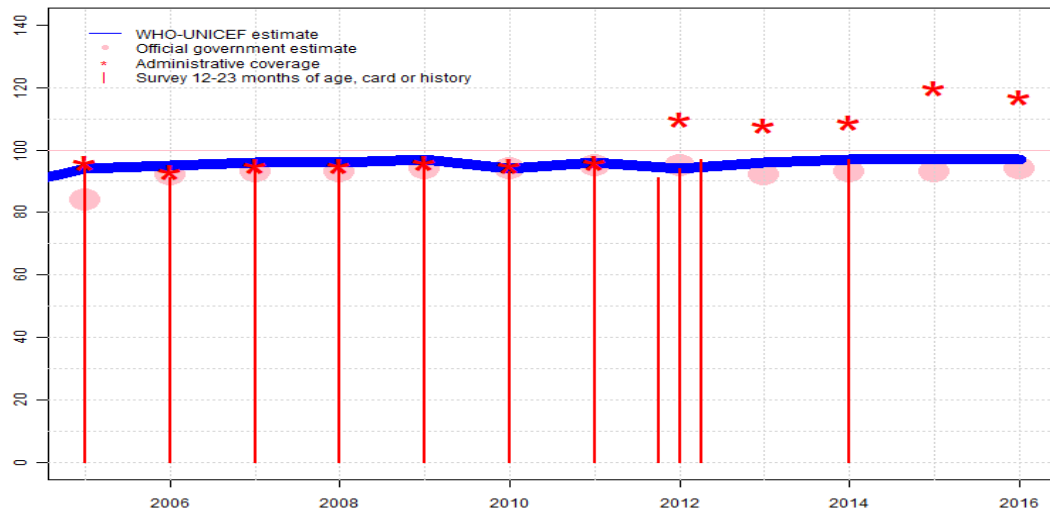
2007: Estimate of 94 percent assigned by working group. Estimate based on survey result. Bangladesh EPI Coverage Evaluation Survey 2007 card or history results of 95 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 66 percent and 3d dose card only coverage of 63 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

2006: Estimate of 94 percent assigned by working group. Estimate based on survey result. Bangladesh Demographic and Health Survey 2007 card or history results of 91 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 58 percent and 3d dose card only coverage of 56 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

2005: Estimate of 93 percent assigned by working group. Estimate based on survey result. Bangladesh Multiple Indicator Cluster Survey 2006 card or history results of 90 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 65 percent and 3d dose card only coverage of 62 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

Bangladesh - Pol3

BGD - Pol3



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	94	95	96	96	97	94	96	94	96	97	97	97
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	84	92	93	93	94	94	95	95	92	93	93	94
Administrative	96	93	95	95	96	95	96	110	108	109	120	117
Survey	96	91	95	97	97	93	97	*	NA	97	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:

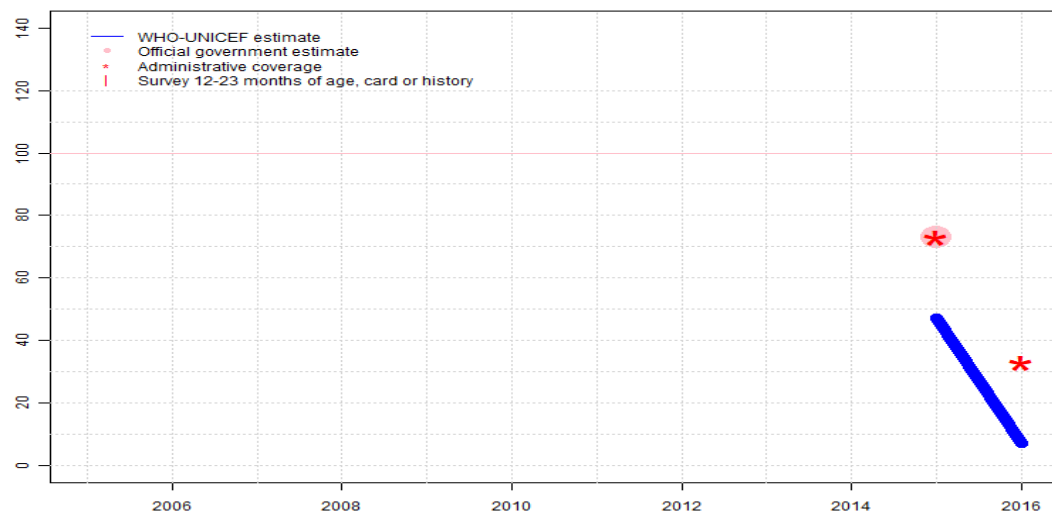
- 2016: Reported data calibrated to 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2015: Reported data calibrated to 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate of 97 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- 2014: Estimate of 97 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate of 97 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- 2013: Reported data calibrated to 2012 and 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate of 96 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- 2012: Estimate of 94 percent assigned by working group. Estimate based on survey result. Bangladesh Demographic and Health Survey, 2014 card or history results of 91 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 74 percent and 3d dose card only coverage of 70 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate challenged by: D-R-
- 2011: Estimate of 96 percent assigned by working group. Estimate based on survey result. EPI Coverage Evaluation Survey, 2013 card or history results of 97 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 78 percent and 3d dose card only coverage of 76 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2010: Estimate of 94 percent assigned by working group. Estimate based on survey result. Bangladesh Demographic and Health Survey 2011 card or history results of 93 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 67 percent and 3d dose card only coverage of 64 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. National reported estimate of Pol3 coverage is higher than

Bangladesh - Pol3

- reported DTP3 coverage as invalid Pol3 doses are corrected by a fourth dose of polio vaccine provided with MCV. Estimate challenged by: D-R-
- 2009: Estimate of 97 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. National reported estimate of Pol3 coverage is higher than reported DTP3 coverage as invalid Pol3 doses are corrected by a fourth dose of polio vaccine provided with MCV. Estimate challenged by: D-R-
- 2008: Estimate of 96 percent assigned by working group. Estimate based on survey result. Bangladesh EPI Coverage Evaluation Survey 2009 card or history results of 97 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 70 percent and 3d dose card only coverage of 68 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. National reported estimate of Pol3 coverage is higher than reported DTP3 coverage as invalid Pol3 doses are corrected by a fourth dose of polio vaccine provided with MCV. Estimate challenged by: D-R-
- 2007: Reported data calibrated to 2006 and 2008 levels. Bangladesh EPI Coverage Evaluation Survey 2007 results ignored by working group. Estimates based on reported data. Bangladesh EPI Coverage Evaluation Survey 2007 card or history results of 95 percent modified for recall bias to 84 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 65 percent and 3d dose card only coverage of 56 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. National reported estimate of Pol3 coverage is higher than reported DTP3 coverage as invalid Pol3 doses are corrected by a fourth dose of polio vaccine provided with MCV. Estimate challenged by: D-R-
- 2006: Estimate of 95 percent assigned by working group. Estimate based on survey result. Bangladesh Demographic and Health Survey 2007 card or history results of 91 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 58 percent and 3d dose card only coverage of 56 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. National reported estimate of Pol3 coverage is higher than reported DTP3 coverage as invalid Pol3 doses are corrected by a fourth dose of polio vaccine provided with MCV. Estimate challenged by: D-R-
- 2005: Estimate of 94 percent assigned by working group. Estimate based on survey result. Bangladesh Multiple Indicator Cluster Survey 2006 card or history results of 96 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 65 percent and 3d dose card only coverage of 62 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

Bangladesh - IPV1

BGD - IPV1



Description:

2016: Reported data calibrated to 2015 levels. Estimate based on reported data. Programme indicates a stockout of unspecified duration. Estimate challenged by: D-R-
 2015: Estimate of 47 percent assigned by working group. IPV introduced mid-year 2015. Programme reports 1.5 month stock-out. Estimate is based on difference between reported admin coverage and estimate for DTP3 administered at 14 weeks. GoC=Assigned by working group. Consistency with other vaccines.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	47	7
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	73	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	73	33
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

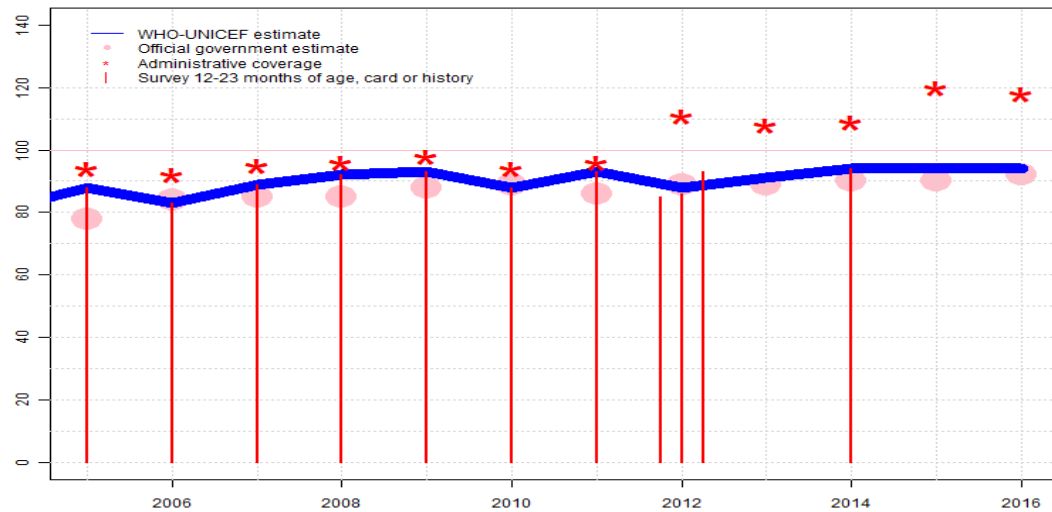
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Bangladesh - MCV1

BGD - MCV1



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	88	83	89	92	93	88	93	88	91	94	94	94
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	78	84	85	85	88	89	86	89	89	90	90	92
Administrative	94	92	95	96	98	94	96	111	108	109	120	118
Survey	88	83	89	92	93	88	93	*	NA	94	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: Reported data calibrated to 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2015: Reported data calibrated to 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate of 94 percent changed from previous revision value of 88 percent. Estimate challenged by: D-R-
- 2014: Estimate of 94 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate of 94 percent changed from previous revision value of 88 percent. Estimate challenged by: D-R-
- 2013: Reported data calibrated to 2012 and 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate of 91 percent changed from previous revision value of 88 percent. Estimate challenged by: D-R-
- 2012: Estimate of 88 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate challenged by: D-R-
- 2011: Estimate of 93 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2010: Estimate of 88 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2009: Estimate of 93 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2008: Estimate of 92 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2007: Estimate of 89 percent assigned by working group. Estimate based on survey result.

Bangladesh - MCV1

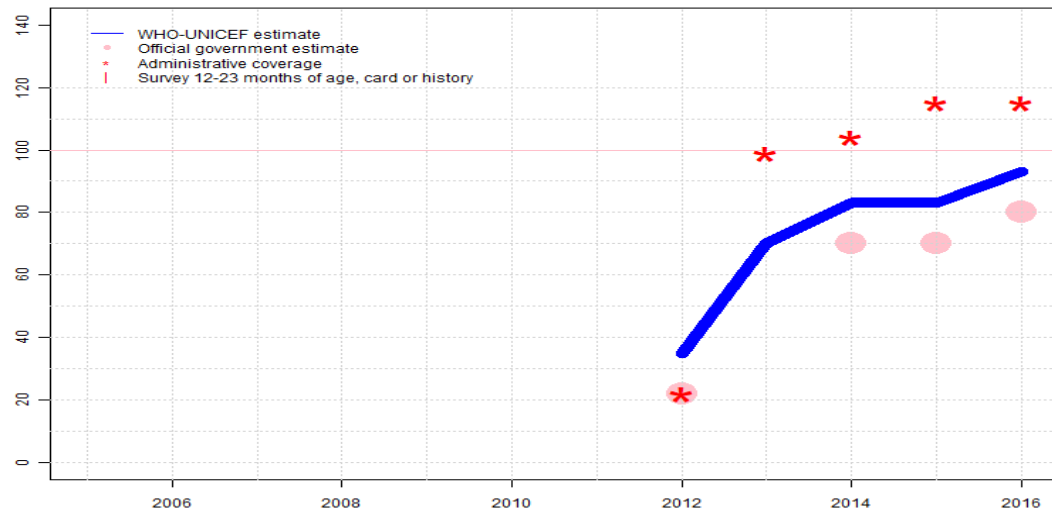
Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

2006: Estimate of 83 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

2005: Estimate of 88 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-S-

Bangladesh - MCV2

BGD - MCV2



Description:

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

- 2016: Reported data calibrated to 2015 levels. Estimate challenged by: D-R-
- 2015: Estimate of 83 percent assigned by working group. Estimate based on MCV1 coverage adjusted by the difference between administrative MCV1 and MCV2 coverage. Estimate challenged by: D-R-
- 2014: Estimate of 83 percent assigned by working group. Estimate based on MCV1 coverage adjusted by the difference between administrative MCV1 and MCV2 coverage. Target population revised downward based on 2011 census results. Estimate challenged by: D-R-
- 2013: Estimate based on trend in reported MCV1 level and reported levels for 2013-2014. Reported data excluded due to an unexplained increase from 22 percent to 99 percent with decrease 70 percent. Target population revised downward based on 2011 census results. Estimate challenged by: D-R-
- 2012: Reported data calibrated to 2014 levels. Target population revised downward based on 2011 census results. Estimate challenged by: D-R-

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	NA	NA	NA	NA	NA	NA	NA	35	70	83	83	93
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	•	•	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	22	NA	70	70	80
Administrative	NA	NA	NA	NA	NA	NA	NA	22	99	104	115	115
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

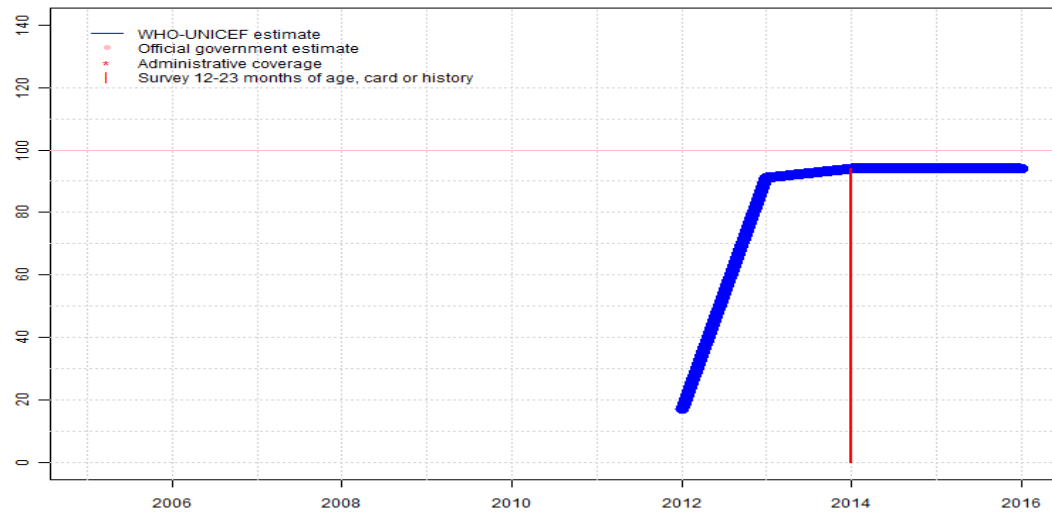
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Bangladesh - RCV1

BGD - 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. Estimate challenged by: D-R-
- 2015: Estimate based on estimated MCV1. Estimate of 94 percent changed from previous revision value of 88 percent. Estimate challenged by: D-R-
- 2014: Estimate based on estimated MCV1. Target population revised downward based on 2011 census results. Estimate of 94 percent changed from previous revision value of 88 percent. Estimate challenged by: D-R-
- 2013: Estimate based on estimated MCV1. Target population revised downward based on 2011 census results. Estimate of 91 percent changed from previous revision value of 88 percent. Estimate challenged by: D-R-
- 2012: Rubella vaccine introduced during 2012 as a combination measles plus rubella. Target population revised downward based on 2011 census results. Estimate challenged by: D-R-

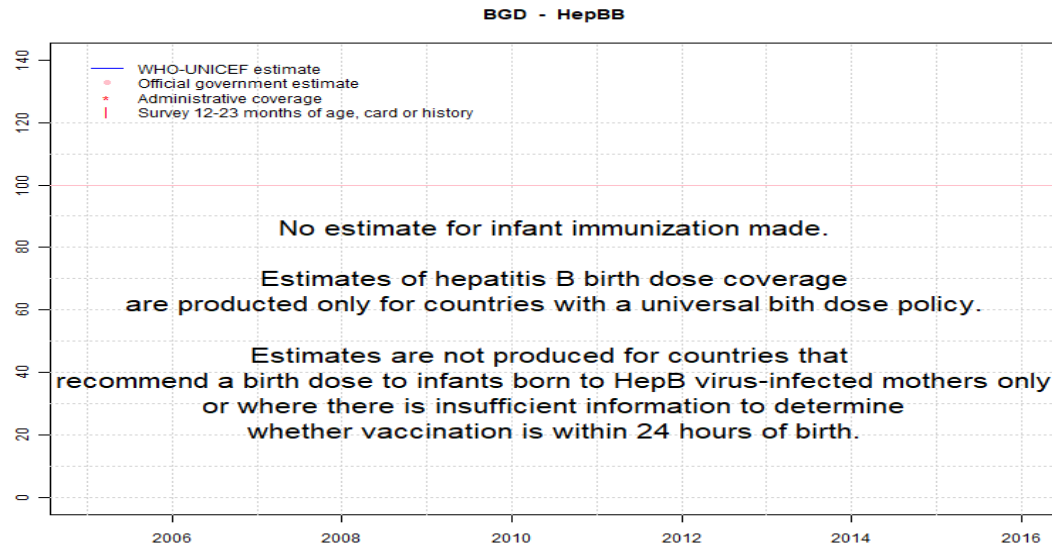
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	NA	NA	NA	NA	NA	NA	NA	17	91	94	94	94
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	•	•	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	94	NA	NA

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.

Bangladesh - HepBB



	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

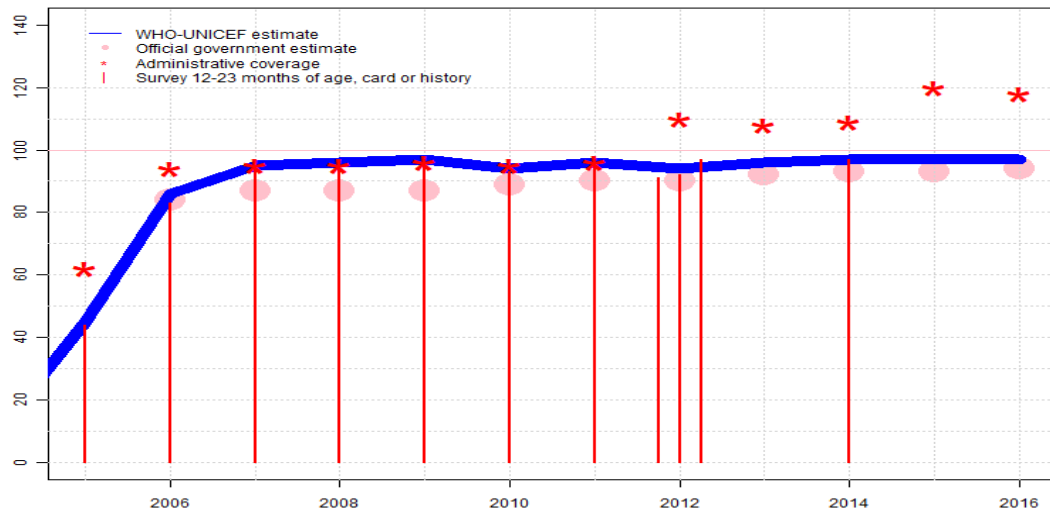
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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.

Bangladesh - HepB3

BGD - HepB3



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	45	86	95	96	97	94	96	94	96	97	97	97
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	NA	84	87	87	87	89	90	90	92	93	93	94
Administrative	62	94	95	95	96	95	96	110	108	109	120	118
Survey	44	83	95	97	97	93	97	*	NA	97	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: Reported data calibrated to 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2015: Reported data calibrated to 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate of 97 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- 2014: Estimate of 97 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate of 97 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- 2013: Reported data calibrated to 2012 and 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate of 96 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- 2012: Estimate of 94 percent assigned by working group. Estimate based on survey result. Bangladesh Utilization of Essential Service Delivery Survey 2013 card or history results of 92 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 71 percent and 3d dose card only coverage of 69 percent. Bangladesh Demographic and Health Survey, 2014 card or history results of 91 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 74 percent and 3d dose card only coverage of 71 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate challenged by: D-R-
- 2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 96 percent based on 1 survey(s). EPI Coverage Evaluation Survey, 2013 card or history results of 97 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 78 percent and 3d dose card only coverage of 76 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2010: Estimate of 94 percent assigned by working group. Estimate based on survey result. Bangladesh Demographic and Health Survey 2011 card or history results of 93 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 98

Bangladesh - HepB3

percent, 1st dose card only coverage of 67 percent and 3d dose card only coverage of 64 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

2009: Estimate of 97 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. DTP-HepB-Hib combination vaccine introduced in 2009. Estimate challenged by: D-R-

2008: Estimate of 96 percent assigned by working group. Estimate based on survey result. Bangladesh EPI Coverage Evaluation Survey 2009 card or history results of 97 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 70 percent and 3d dose card only coverage of 68 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

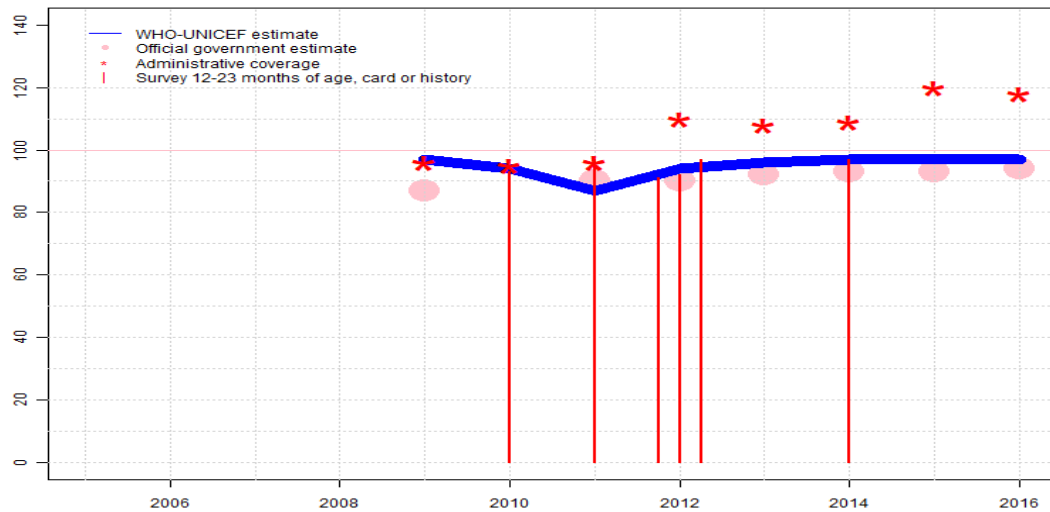
2007: Estimate of 95 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-S-

2006: Estimate of 86 percent assigned by working group. Estimate based on survey result. Bangladesh Demographic and Health Survey 2007 card or history results of 83 percent modified for recall bias to 86 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 56 percent and 3d dose card only coverage of 54 percent. Estimate challenged by: D-R-S-

2005: Estimate of 45 percent assigned by working group. Estimate based on survey result. Bangladesh Multiple Indicator Cluster Survey 2006 card or history results of 44 percent modified for recall bias to 45 percent based on 1st dose card or history coverage of 49 percent, 1st dose card only coverage of 46 percent and 3d dose card only coverage of 42 percent. Estimate challenged by: D-R-S-

Bangladesh - Hib3

BGD - Hib3



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	NA	NA	NA	NA	97	94	87	94	96	97	97	97
Estimate GoC	NA	NA	NA	NA	●	●	●	●	●	●	●	●
Official	NA	NA	NA	NA	87	NA	90	90	92	93	93	94
Administrative	NA	NA	NA	NA	96	95	96	110	108	109	120	118
Survey	NA	NA	NA	NA	NA	93	97	*	NA	97	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:

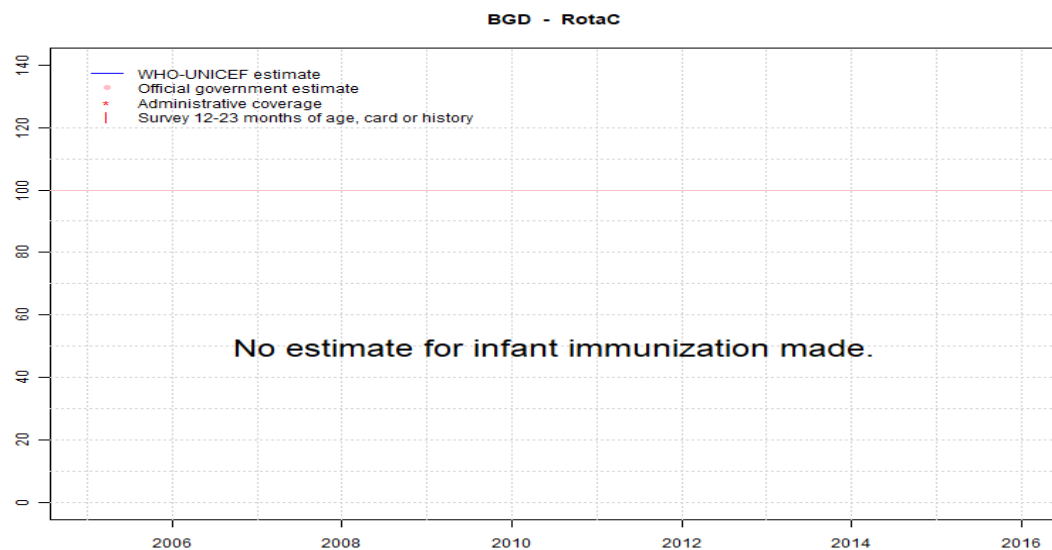
- 2016: Reported data calibrated to 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-
- 2015: Reported data calibrated to 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate of 97 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- 2014: Estimate of 97 percent assigned by working group. Estimate based on survey result. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate of 97 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- 2013: Reported data calibrated to 2012 and 2014 levels. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate of 96 percent changed from previous revision value of 94 percent. Estimate challenged by: D-R-
- 2012: Estimate of 94 percent assigned by working group. Estimate based on survey result. Bangladesh Utilization of Essential Service Delivery Survey 2013 card or history results of 92 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 71 percent and 3d dose card only coverage of 69 percent. Bangladesh Demographic and Health Survey, 2014 card or history results of 91 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 74 percent and 3d dose card only coverage of 71 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Target population revised downward based on 2011 census results. Estimate challenged by: D-R-
- 2011: Estimate based on extrapolation from data reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). EPI Coverage Evaluation Survey, 2013 card or history results of 97 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 78 percent and 3d dose card only coverage of 76 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-
- 2010: Estimate of 94 percent assigned by working group. Estimate based on survey result. Bangladesh Demographic and Health Survey 2011 card or history results of 93 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 98

Bangladesh - Hib3

percent, 1st dose card only coverage of 67 percent and 3d dose card only coverage of 64 percent. Reported data excluded. Nationally reported data for official coverage includes only valid doses administered. Recent evidence suggest administrative coverage data under estimated prior to 2012. Estimate challenged by: D-R-

2009: Estimate of 97 percent assigned by working group. Estimate based on DTP3 coverage. Estimate challenged by: D-R-

Bangladesh - RotaC



	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

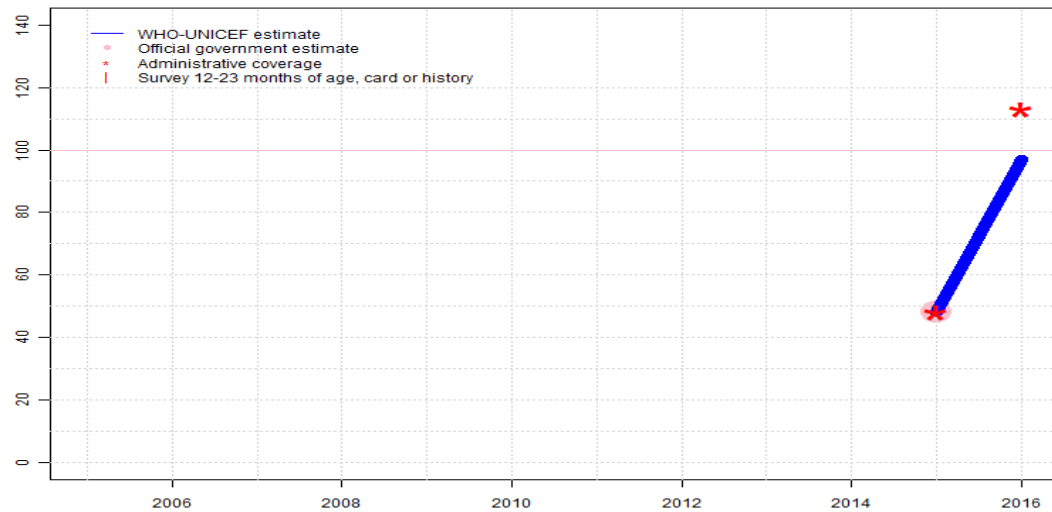
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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.

Bangladesh - PcV3

BGD - PcV3



Description:

- 2016: Estimate of 97 percent assigned by working group. Estimate based on survey result for DTP3 coverage. Reported data excluded because 113 percent greater than 100 percent. Estimate challenged by: D-R-
- 2015: Estimate based on reported data. Pneumococcal conjugate vaccine introduced during March 2015. Estimate challenged by: R-

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	48	97
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	●	●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	48	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	48	113
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.

Bangladesh - survey details

2014 Bangladesh EPI Coverage Evaluation Survey 2015

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	99	12-23 m	16170	82
BCG	Card	82	12-23 m	16170	82
BCG	Card <12 months	82	12-23 m	16170	82
BCG	Card or History	99	12-23 m	16170	82
DTP1	C or H <12 months	99	12-23 m	16170	82
DTP1	Card	82	12-23 m	16170	82
DTP1	Card <12 months	81	12-23 m	16170	82
DTP1	Card or History	99	12-23 m	16170	82
DTP3	C or H <12 months	97	12-23 m	16170	82
DTP3	Card	80	12-23 m	16170	82
DTP3	Card <12 months	79	12-23 m	16170	82
DTP3	Card or History	97	12-23 m	16170	82
HepB1	C or H <12 months	99	12-23 m	16170	82
HepB1	Card	82	12-23 m	16170	82
HepB1	Card <12 months	81	12-23 m	16170	82
HepB1	Card or History	99	12-23 m	16170	82
HepB3	C or H <12 months	97	12-23 m	16170	82
HepB3	Card	80	12-23 m	16170	82
HepB3	Card <12 months	79	12-23 m	16170	82
HepB3	Card or History	97	12-23 m	16170	82
Hib1	C or H <12 months	99	12-23 m	16170	82
Hib1	Card	82	12-23 m	16170	82
Hib1	Card <12 months	81	12-23 m	16170	82
Hib1	Card or History	99	12-23 m	16170	82
Hib3	C or H <12 months	97	12-23 m	16170	82
Hib3	Card	80	12-23 m	16170	82
Hib3	Card <12 months	79	12-23 m	16170	82
Hib3	Card or History	97	12-23 m	16170	82
MCV1	C or H <12 months	90	12-23 m	16170	82
MCV1	Card	77	12-23 m	16170	82
MCV1	Card <12 months	73	12-23 m	16170	82
MCV1	Card or History	94	12-23 m	16170	82
Pol1	C or H <12 months	99	12-23 m	16170	82
Pol1	Card	82	12-23 m	16170	82
Pol1	Card <12 months	81	12-23 m	16170	82
Pol1	Card or History	99	12-23 m	16170	82
Pol3	C or H <12 months	97	12-23 m	16170	82

Pol3	Card	80	12-23 m	16170	82
Pol3	Card <12 months	79	12-23 m	16170	82
Pol3	Card or History	97	12-23 m	16170	82

2012 Bangladesh Demographic and Health Survey, 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	98	12-23 m	1633	74
BCG	Card	74	12-23 m	1207	74
BCG	Card or History	98	12-23 m	1633	74
BCG	History	24	12-23 m	426	74
DTP1	C or H <12 months	97	12-23 m	1633	74
DTP1	Card	74	12-23 m	1207	74
DTP1	Card or History	97	12-23 m	1633	74
DTP1	History	23	12-23 m	426	74
DTP3	C or H <12 months	91	12-23 m	1633	74
DTP3	Card	71	12-23 m	1207	74
DTP3	Card or History	91	12-23 m	1633	74
DTP3	History	20	12-23 m	426	74
HepB1	C or H <12 months	97	12-23 m	1633	74
HepB1	Card	74	12-23 m	1207	74
HepB1	Card or History	97	12-23 m	1633	74
HepB1	History	23	12-23 m	426	74
HepB3	C or H <12 months	91	12-23 m	1633	74
HepB3	Card	71	12-23 m	1207	74
HepB3	Card or History	91	12-23 m	1633	74
HepB3	History	20	12-23 m	426	74
Hib1	C or H <12 months	97	12-23 m	1633	74
Hib1	Card	74	12-23 m	1207	74
Hib1	Card or History	97	12-23 m	1633	74
Hib1	History	23	12-23 m	426	74
Hib3	C or H <12 months	91	12-23 m	1633	74
Hib3	Card	71	12-23 m	1207	74
Hib3	Card or History	91	12-23 m	1633	74
Hib3	History	20	12-23 m	426	74
MCV1	C or H <12 months	80	12-23 m	1633	74
MCV1	Card	66	12-23 m	1207	74
MCV1	Card or History	86	12-23 m	1633	74
MCV1	History	20	12-23 m	426	74

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Pol1	C or H <12 months	97	12-23 m	1633	74
Pol1	Card	74	12-23 m	1207	74
Pol1	Card or History	97	12-23 m	1633	74
Pol1	History	24	12-23 m	426	74
Pol3	C or H <12 months	91	12-23 m	1633	74
Pol3	Card	70	12-23 m	1207	74
Pol3	Card or History	91	12-23 m	1633	74
Pol3	History	21	12-23 m	426	74

MCV1	Card < 12 months	72	12-23 m	16170	83
MCV1	Card or History	93	12-23 m	16170	83
Pol1	C or H <12 months	99	12-23 m	16170	83
Pol1	Card	82	12-23 m	16170	83
Pol1	Card < 12 months	82	12-23 m	16170	83
Pol1	Card or History	99	12-23 m	16170	83
Pol3	C or H <12 months	97	12-23 m	16170	83
Pol3	Card	80	12-23 m	16170	83
Pol3	Card < 12 months	79	12-23 m	16170	83
Pol3	Card or History	97	12-23 m	16170	83

2012 Bangladesh EPI Coverage Evaluation Survey 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	82	12-23 m	16170	83
BCG	Card or History	99	12-23 m	16170	83
DTP1	Card	82	12-23 m	16170	83
DTP1	Card < 12 months	82	12-23 m	16170	83
DTP1	Card or History	99	12-23 m	16170	83
DTP3	C or H <12 months	97	12-23 m	16170	83
DTP3	Card	80	12-23 m	16170	83
DTP3	Card < 12 months	79	12-23 m	16170	83
DTP3	Card or History	97	12-23 m	16170	83
HepB1	C or H <12 months	99	12-23 m	16170	83
HepB1	Card	82	12-23 m	16170	83
HepB1	Card < 12 months	82	12-23 m	16170	83
HepB1	Card or History	99	12-23 m	16170	83
HepB3	C or H <12 months	97	12-23 m	16170	83
HepB3	Card	80	12-23 m	16170	83
HepB3	Card < 12 months	79	12-23 m	16170	83
HepB3	Card or History	97	12-23 m	16170	83
Hib1	C or H <12 months	99	12-23 m	16170	83
Hib1	Card	82	12-23 m	16170	83
Hib1	Card < 12 months	82	12-23 m	16170	83
Hib1	Card or History	99	12-23 m	16170	83
Hib3	C or H <12 months	97	12-23 m	16170	83
Hib3	Card	80	12-23 m	16170	83
Hib3	Card < 12 months	79	12-23 m	16170	83
Hib3	Card or History	97	12-23 m	16170	83
MCV1	C or H <12 months	90	12-23 m	16170	83
MCV1	Card	75	12-23 m	16170	83

2012 Bangladesh Utilization of Essential Service Delivery Survey 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	98	12-23 m	887	74
BCG	Card	74	12-23 m	654	74
BCG	Card or History	98	12-23 m	887	74
BCG	History	25	12-23 m	233	74
DTP1	C or H <12 months	95	12-23 m	887	74
DTP1	Card	71	12-23 m	654	74
DTP1	Card or History	96	12-23 m	887	74
DTP1	History	24	12-23 m	233	74
DTP3	C or H <12 months	91	12-23 m	887	74
DTP3	Card	69	12-23 m	654	74
DTP3	Card or History	92	12-23 m	887	74
DTP3	History	23	12-23 m	233	74
HepB1	C or H <12 months	95	12-23 m	887	74
HepB1	Card	71	12-23 m	654	74
HepB1	Card or History	96	12-23 m	887	74
HepB1	History	24	12-23 m	233	74
HepB3	C or H <12 months	91	12-23 m	887	74
HepB3	Card	69	12-23 m	654	74
HepB3	Card or History	92	12-23 m	887	74
HepB3	History	23	12-23 m	233	74
Hib1	C or H <12 months	95	12-23 m	887	74
Hib1	Card	71	12-23 m	654	74
Hib1	Card or History	96	12-23 m	887	74
Hib1	History	24	12-23 m	233	74
Hib3	C or H <12 months	91	12-23 m	887	74

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Hib3	Card	69	12-23 m	654	74
Hib3	Card or History	92	12-23 m	887	74
Hib3	History	23	12-23 m	233	74
MCV1	C or H <12 months	82	12-23 m	887	74
MCV1	Card	64	12-23 m	654	74
MCV1	Card or History	85	12-23 m	887	74
MCV1	History	21	12-23 m	233	74
Pol1	C or H <12 months	97	12-23 m	887	74
Pol1	Card	74	12-23 m	654	74
Pol1	Card or History	98	12-23 m	887	74
Pol1	History	24	12-23 m	233	74
Pol3	C or H <12 months	92	12-23 m	887	74
Pol3	Card	71	12-23 m	654	74
Pol3	Card or History	94	12-23 m	887	74
Pol3	History	23	12-23 m	233	74

2011 EPI Coverage Evaluation Survey, 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	0	12-23 m	15960	81
BCG	Card	79	12-23 m	15960	81
BCG	Card or History	99	12-23 m	15960	81
BCG	History	21	12-23 m	15960	81
DTP1	C or H <12 months	0	12-23 m	15960	81
DTP1	Card	78	12-23 m	15960	81
DTP1	Card or History	99	12-23 m	15960	81
DTP1	History	21	12-23 m	15960	81
DTP3	C or H <12 months	0	12-23 m	15960	81
DTP3	Card	76	12-23 m	15960	81
DTP3	Card or History	97	12-23 m	15960	81
DTP3	History	21	12-23 m	15960	81
HepB1	C or H <12 months	0	12-23 m	15960	81
HepB1	Card	78	12-23 m	15960	81
HepB1	Card or History	99	12-23 m	15960	81
HepB1	History	21	12-23 m	15960	81
HepB3	C or H <12 months	0	12-23 m	15960	81
HepB3	Card	76	12-23 m	15960	81
HepB3	Card or History	97	12-23 m	15960	81
HepB3	History	21	12-23 m	15960	81

Hib1	C or H <12 months	0	12-23 m	15960	81
Hib1	Card	78	12-23 m	15960	81
Hib1	Card or History	99	12-23 m	15960	81
Hib1	History	21	12-23 m	15960	81
Hib3	C or H <12 months	0	12-23 m	15960	81
Hib3	Card	76	12-23 m	15960	81
Hib3	Card or History	97	12-23 m	15960	81
Hib3	History	21	12-23 m	15960	81
MCV1	C or H <12 months	0	12-23 m	15960	81
MCV1	Card	72	12-23 m	15960	81
MCV1	Card or History	93	12-23 m	15960	81
MCV1	History	21	12-23 m	15960	81
Pol1	C or H <12 months	0	12-23 m	15960	81
Pol1	Card	78	12-23 m	15960	81
Pol1	Card or History	99	12-23 m	15960	81
Pol1	History	21	12-23 m	15960	81
Pol3	C or H <12 months	0	12-23 m	15960	81
Pol3	Card	76	12-23 m	15960	81
Pol3	Card or History	97	12-23 m	15960	81
Pol3	History	21	12-23 m	15960	81

2010 Bangladesh Demographic and Health Survey 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	98	12-23 m	1547	67
BCG	Card	67	12-23 m	1032	67
BCG	Card or History	98	12-23 m	1547	67
BCG	History	31	12-23 m	515	67
DTP1	C or H <12 months	98	12-23 m	1547	67
DTP1	Card	67	12-23 m	1032	67
DTP1	Card or History	98	12-23 m	1547	67
DTP1	History	31	12-23 m	515	67
DTP3	C or H <12 months	93	12-23 m	1547	67
DTP3	Card	64	12-23 m	1032	67
DTP3	Card or History	93	12-23 m	1547	67
DTP3	History	29	12-23 m	515	67
HepB1	C or H <12 months	98	12-23 m	1547	67
HepB1	Card	67	12-23 m	1032	67
HepB1	Card or History	98	12-23 m	1547	67

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HepB1	History	31	12-23 m	515	67
HepB3	C or H <12 months	93	12-23 m	1547	67
HepB3	Card	64	12-23 m	1032	67
HepB3	Card or History	93	12-23 m	1547	67
HepB3	History	29	12-23 m	515	67
Hib1	C or H <12 months	98	12-23 m	1547	67
Hib1	Card	67	12-23 m	1032	67
Hib1	Card or History	98	12-23 m	1547	67
Hib1	History	31	12-23 m	515	67
Hib3	C or H <12 months	93	12-23 m	1547	67
Hib3	Card	64	12-23 m	1032	67
Hib3	Card or History	93	12-23 m	1547	67
Hib3	History	29	12-23 m	515	67
MCV1	C or H <12 months	84	12-23 m	1547	67
MCV1	Card	60	12-23 m	1032	67
MCV1	Card or History	88	12-23 m	1547	67
MCV1	History	28	12-23 m	515	67
Pol1	C or H <12 months	98	12-23 m	1547	67
Pol1	Card	67	12-23 m	1032	67
Pol1	Card or History	98	12-23 m	1547	67
Pol1	History	31	12-23 m	515	67
Pol3	C or H <12 months	93	12-23 m	1547	67
Pol3	Card	64	12-23 m	1032	67
Pol3	Card or History	93	12-23 m	1547	67
Pol3	History	29	12-23 m	515	67

2009 Bangladesh EPI Coverage Evaluation Survey 2010

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	99	12-23 m	14700	72
DTP1	Card or History	99	12-23 m	14700	72
DTP3	Card or History	97	12-23 m	14700	72
HepB1	Card or History	99	12-23 m	14700	72
HepB3	Card or History	97	12-23 m	14700	72
MCV1	Card or History	93	12-23 m	14700	72
Pol1	Card or History	99	12-23 m	14700	72
Pol3	Card or History	97	12-23 m	14700	72

2008 Bangladesh EPI Coverage Evaluation Survey 2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	70	12-23 m	15120	73
BCG	Card or History	99	12-23 m	15120	73
BCG	History	29	12-23 m	15120	73
DTP1	Card	70	12-23 m	15120	73
DTP1	Card or History	99	12-23 m	15120	73
DTP1	History	29	12-23 m	15120	73
DTP3	Card	68	12-23 m	15120	73
DTP3	Card or History	97	12-23 m	15120	73
DTP3	History	29	12-23 m	15120	73
HepB1	Card	70	12-23 m	15120	73
HepB1	Card or History	99	12-23 m	15120	73
HepB1	History	29	12-23 m	15120	73
HepB3	Card	68	12-23 m	15120	73
HepB3	Card or History	97	12-23 m	15120	73
HepB3	History	29	12-23 m	15120	73
MCV1	Card	62	12-23 m	15120	73
MCV1	Card or History	92	12-23 m	15120	73
MCV1	History	30	12-23 m	15120	73
Pol1	Card	70	12-23 m	15120	73
Pol1	Card or History	99	12-23 m	15120	73
Pol1	History	29	12-23 m	15120	73
Pol3	Card	68	12-23 m	15120	73
Pol3	Card or History	97	12-23 m	15120	73
Pol3	History	29	12-23 m	15120	73

2007 Bangladesh EPI Coverage Evaluation Survey 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	65	12-23 m	5670	68
BCG	Card or History	98	12-23 m	5670	68
BCG	History	33	12-23 m	5670	68
DTP1	Card	66	12-23 m	5670	68
DTP1	Card or History	98	12-23 m	5670	68
DTP1	History	33	12-23 m	5670	68
DTP3	Card	63	12-23 m	5670	68

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DTP3	Card or History	95	12-23 m	5670	68
DTP3	History	32	12-23 m	5670	68
HepB1	Card	65	12-23 m	5670	68
HepB1	Card or History	98	12-23 m	5670	68
HepB1	History	33	12-23 m	5670	68
HepB3	Card	63	12-23 m	5670	68
HepB3	Card or History	95	12-23 m	5670	68
HepB3	History	32	12-23 m	5670	68
MCV1	Card	57	12-23 m	5670	68
MCV1	Card or History	89	12-23 m	5670	68
MCV1	History	32	12-23 m	5670	68
Pol1	Card	65	12-23 m	5670	68
Pol1	Card or History	97	12-23 m	5670	68
Pol1	History	33	12-23 m	5670	68
Pol3	Card	56	12-23 m	5670	68
Pol3	Card or History	95	12-23 m	5670	68
Pol3	History	33	12-23 m	5670	68

HepB3	Card or History	83	12-23 m	1146	58
HepB3	History	29	12-23 m	1146	58
MCV1	C or H <12 months	77	12-23 m	1146	58
MCV1	Card	52	12-23 m	1146	58
MCV1	Card or History	83	12-23 m	1146	58
MCV1	History	31	12-23 m	1146	58
Pol1	C or H <12 months	98	12-23 m	1146	58
Pol1	Card	58	12-23 m	1146	58
Pol1	Card or History	98	12-23 m	1146	58
Pol1	History	40	12-23 m	1146	58
Pol3	C or H <12 months	90	12-23 m	1146	58
Pol3	Card	56	12-23 m	1146	58
Pol3	Card or History	91	12-23 m	1146	58
Pol3	History	35	12-23 m	1146	58

2005 Bangladesh Multiple Indicator Cluster Survey 2006

2006 Bangladesh Demographic and Health Survey 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	97	12-23 m	1146	58
BCG	Card	58	12-23 m	1146	58
BCG	Card or History	97	12-23 m	1146	58
BCG	History	39	12-23 m	1146	58
DTP1	C or H <12 months	97	12-23 m	1146	58
DTP1	Card	58	12-23 m	1146	58
DTP1	Card or History	97	12-23 m	1146	58
DTP1	History	39	12-23 m	1146	58
DTP3	C or H <12 months	90	12-23 m	1146	58
DTP3	Card	56	12-23 m	1146	58
DTP3	Card or History	91	12-23 m	1146	58
DTP3	History	35	12-23 m	1146	58
HepB1	C or H <12 months	89	12-23 m	1146	58
HepB1	Card	56	12-23 m	1146	58
HepB1	Card or History	89	12-23 m	1146	58
HepB1	History	33	12-23 m	1146	58
HepB3	C or H <12 months	81	12-23 m	1146	58
HepB3	Card	54	12-23 m	1146	58

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	97	12-23 m	6032	66
BCG	Card	65	12-23 m	6032	66
BCG	Card or History	97	12-23 m	6032	66
BCG	History	32	12-23 m	6032	66
DTP1	C or H <12 months	96	12-23 m	6032	66
DTP1	Card	65	12-23 m	6032	66
DTP1	Card or History	97	12-23 m	6032	66
DTP1	History	31	12-23 m	6032	66
DTP3	C or H <12 months	90	12-23 m	6032	66
DTP3	Card	62	12-23 m	6032	66
DTP3	Card or History	90	12-23 m	6032	66
DTP3	History	28	12-23 m	6032	66
HepB1	C or H <12 months	48	12-23 m	6032	66
HepB1	Card	46	12-23 m	6032	66
HepB1	Card or History	49	12-23 m	6032	66
HepB1	History	3	12-23 m	6032	66
HepB3	C or H <12 months	43	12-23 m	6032	66
HepB3	Card	42	12-23 m	6032	66
HepB3	Card or History	44	12-23 m	6032	66
HepB3	History	2	12-23 m	6032	66
MCV1	C or H <12 months	85	12-23 m	6032	66

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MCV1	Card	54	12-23 m	6032	66
MCV1	Card or History	88	12-23 m	6032	66
MCV1	History	33	12-23 m	6032	66
Pol1	C or H <12 months	99	12-23 m	6032	66
Pol1	Card	65	12-23 m	6032	66
Pol1	Card or History	99	12-23 m	6032	66
Pol1	History	34	12-23 m	6032	66
Pol3	C or H <12 months	95	12-23 m	6032	66
Pol3	Card	62	12-23 m	6032	66
Pol3	Card or History	96	12-23 m	6032	66
Pol3	History	34	12-23 m	6032	66

2004 Bangladesh EPI Coverage Evaluation Survey 2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	100	12-23 m	15120	65
BCG	Card or History	96	12-23 m	15120	65
DTP1	Card	88	12-23 m	15120	65
DTP1	Card or History	96	12-23 m	15120	65
DTP3	Card	100	12-23 m	15120	65
DTP3	Card or History	88	12-23 m	15120	65
MCV1	Card	88	12-23 m	15120	65
MCV1	Card or History	81	12-23 m	15120	65
Pol3	Card	98	12-23 m	15120	65
Pol3	Card or History	88	12-23 m	15120	65

2003 Bangladesh Demographic and Health Survey 2004

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93	12-23 m	1265	49
BCG	Card	49	12-23 m	1265	49
BCG	Card or history	93	12-23 m	1265	49
BCG	History	44	12-23 m	1265	49
DTP1	C or H <12 months	93	12-23 m	1265	49
DTP1	Card	49	12-23 m	1265	49
DTP1	Card or history	93	12-23 m	1265	49
DTP1	History	44	12-23 m	1265	49

DTP3	C or H <12 months	80	12-23 m	1265	49
DTP3	Card	46	12-23 m	1265	49
DTP3	Card or history	81	12-23 m	1265	49
DTP3	History	35	12-23 m	1265	49
MCV1	C or H <12 months	70	12-23 m	1265	49
MCV1	Card	42	12-23 m	1265	49
MCV1	Card or history	76	12-23 m	1265	49
MCV1	History	34	12-23 m	1265	49
Pol1	C or H <12 months	96	12-23 m	1265	49
Pol1	Card	49	12-23 m	1265	49
Pol1	Card or history	96	12-23 m	1265	49
Pol1	History	47	12-23 m	1265	49
Pol3	C or H <12 months	82	12-23 m	1265	49
Pol3	Card	46	12-23 m	1265	49
Pol3	Card or history	82	12-23 m	1265	49
Pol3	History	36	12-23 m	1265	49

2002 Bangladesh EPI Coverage Evaluation Survey 2003

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	95	12-23 m	3150	63
DTP1	Card or History	95	12-23 m	3150	63
DTP3	Card or History	83	12-23 m	3150	63
MCV1	Card or History	75	12-23 m	3150	63
Pol1	Card or History	94	12-23 m	3150	63
Pol3	Card or History	83	12-23 m	3150	63

2001 Bangladesh EPI Coverage Evaluation Survey 2002

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	95	12-23 m	15750	55
DTP1	Card or History	94	12-23 m	15750	55
DTP3	Card or History	85	12-23 m	15750	55
MCV1	Card or History	77	12-23 m	15750	55
Pol1	Card or History	94	12-23 m	15750	55
Pol3	Card or History	85	12-23 m	15750	55

Bangladesh - survey details

2000 National Coverage Evaluation Survey Bangladesh 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	94	12-23 m	-	52
DTP1	Card or History	93	12-23 m	-	52
DTP3	Card or History	83	12-23 m	-	52
MCV1	Card or History	76	12-23 m	-	52
Pol1	Card or History	92	12-23 m	-	52
Pol3	Card or History	83	12-23 m	-	52

1999 Bangladesh, Multiple Indicator Cluster Survey 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	92	12-23 m	-	-
DTP1	Card or History	91	12-23 m	-	-
DTP3	Card or History	74	12-23 m	-	-
MCV1	Card or History	76	12-23 m	-	-
Pol1	Card or History	97	12-23 m	-	-
Pol3	Card or History	90	12-23 m	-	-

1999 National Coverage Evaluation Survey Bangladesh 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	96	12-23 m	-	52
DTP1	Card or History	95	12-23 m	-	52
DTP3	Card or History	81	12-23 m	-	52
MCV1	Card or History	71	12-23 m	-	52
Pol1	Card or History	95	12-23 m	-	52
Pol3	Card or History	81	12-23 m	-	52

1998 Bangladesh Demographic and Health Survey 1999-2000, 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	90	12-23 m	1316	44

BCG	Card	43	12-23 m	1316	44
BCG	Card or History	91	12-23 m	1316	44
BCG	History	48	12-23 m	1316	44
DTP1	C or H <12 months	88	12-23 m	1316	44
DTP1	Card	44	12-23 m	1316	44
DTP1	Card or History	89	12-23 m	1316	44
DTP1	History	45	12-23 m	1316	44
DTP3	C or H <12 months	70	12-23 m	1316	44
DTP3	Card	38	12-23 m	1316	44
DTP3	Card or History	72	12-23 m	1316	44
DTP3	History	34	12-23 m	1316	44
MCV1	C or H <12 months	62	12-23 m	1316	44
MCV1	Card	34	12-23 m	1316	44
MCV1	Card or History	71	12-23 m	1316	44
MCV1	History	36	12-23 m	1316	44
Pol1	C or H <12 months	89	12-23 m	1316	44
Pol1	Card	43	12-23 m	1316	44
Pol1	Card or History	89	12-23 m	1316	44
Pol1	History	46	12-23 m	1316	44
Pol3	C or H <12 months	69	12-23 m	1316	44
Pol3	Card	38	12-23 m	1316	44
Pol3	Card or History	71	12-23 m	1316	44
Pol3	History	33	12-23 m	1316	44

1997 National Coverage Evaluation Survey Bangladesh 1998

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	91	12-23 m	-	54
BCG	Card	100	12-23 m	-	54
BCG	Card <12 months	99	12-23 m	-	54
BCG	Card or History	92	12-23 m	-	54
DTP3	C or H <12 months	68	12-23 m	-	54
DTP3	Card	91	12-23 m	-	54
DTP3	Card <12 months	77	12-23 m	-	54
DTP3	Card or History	78	12-23 m	-	54
MCV1	C or H <12 months	62	12-23 m	-	54
MCV1	Card	84	12-23 m	-	54
MCV1	Card <12 months	74	12-23 m	-	54
MCV1	Card or History	72	12-23 m	-	54

Bangladesh - survey details

Pol3	C or H <12 months	68	12-23 m	-	54	Pol3	Card or History	78	12-23 m	-	54
Pol3	Card	91	12-23 m	-	54						
Pol3	Card <12 months	77	12-23 m	-	54						

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