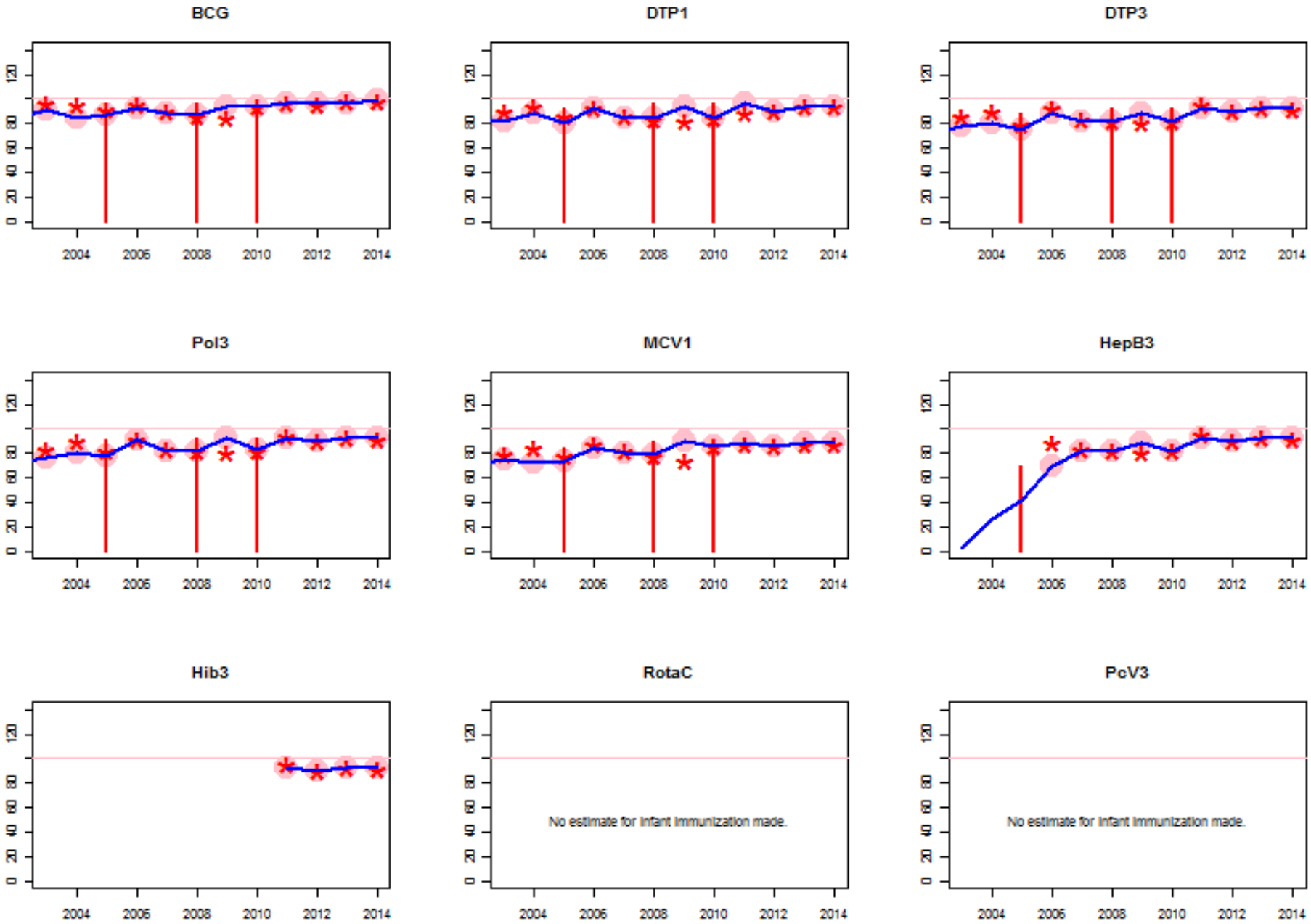
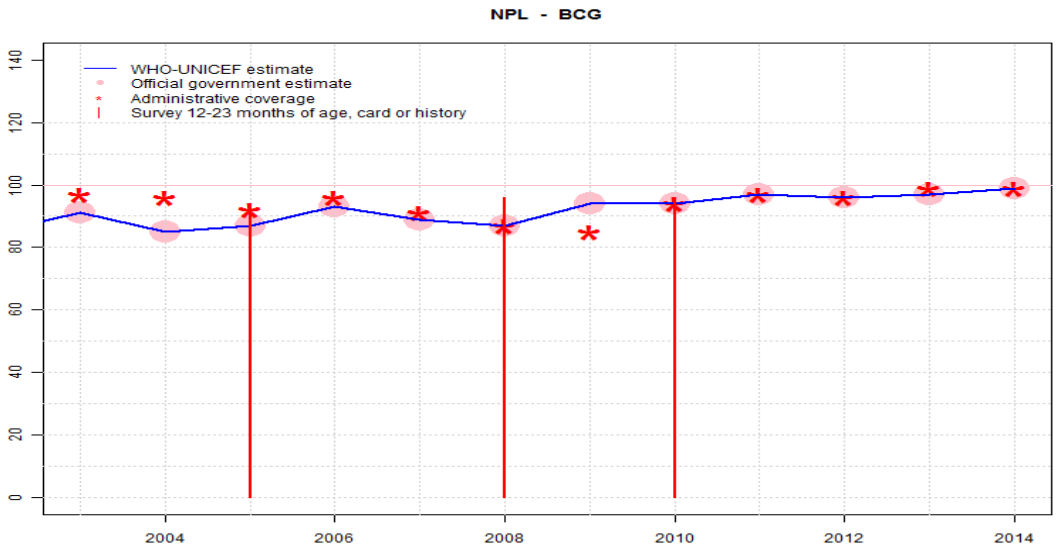

BCG
DTP1
DTP3
Pol3
MCV1
HepB3
Hib3
RotaC
PcV3
No estimate for infant immunization made.
No estimate for infant immunization made.
0
20
40
60
80
120
2004
2006
2008
2010
2012
2014

Nepal - BCG



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	91	85	87	93	89	87	94	94	97	96	97	99
Estimate GoC	●●●	●	●●●	●●●	●	●	●●●	●●●	●●●	●	●●	●●
Official	91	85	87	93	89	87	94	94	97	96	97	99
Administrative	97	96	92	96	91	87	85	94	97	96	99	99
Survey	NA	NA	93	NA	NA	96	NA	96	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: 2012 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:

2003: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2004: Estimate based on coverage reported by national government. Estimate challenged by: D-

2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+ S+ D+

2006: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2007: Estimate based on coverage reported by national government. Estimate challenged by: D-

2008: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). Estimate challenged by: D-

2009: Estimate based on coverage reported by national government. Nationally reported data based on the results of a 2009 survey. GoC=R+ S+ D+

2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). DQSA conducted in 7 priority districts during May-June 2010 identified some data recording problems at health facility level including inconsistencies between tally sheets, registers and HMIS. GoC=R+ S+ D+

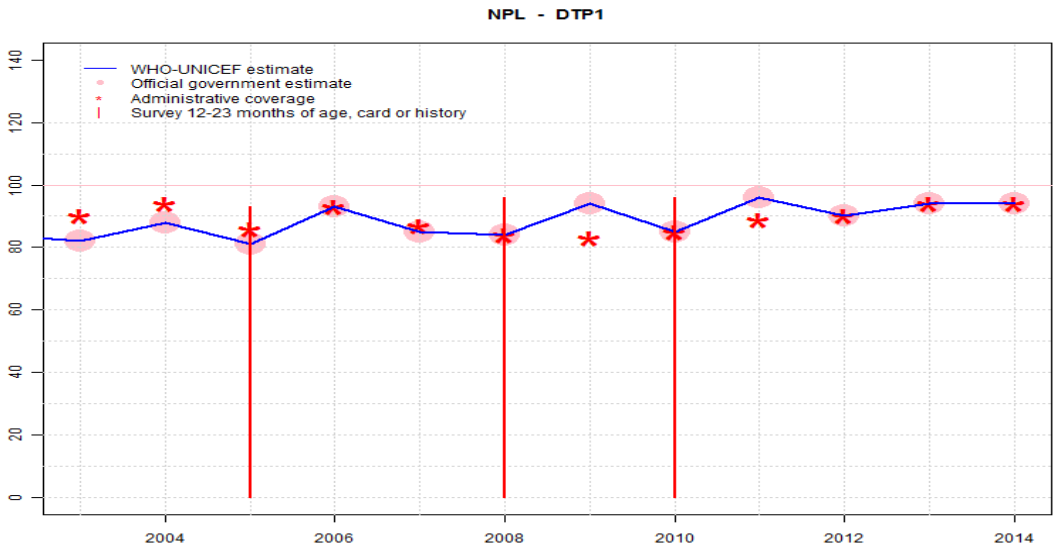
2011: Estimate based on coverage reported by national government. Coverage reported by the government is based on the Nepal DHS 2011. GoC=R+ S+ D+

2012: Estimate based on coverage reported by national government. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government. Preliminary results from the 2014 Multiple Indicator Cluster Survey suggests coverage of 96 percent for the 2013 birth cohort. GoC=R+ D+

2014: Estimate based on coverage reported by national government. Programme reports two month stock-out at national level. GoC=R+ D+

Nepal - DTP1



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	82	88	81	93	85	84	94	85	96	90	94	94
Estimate GoC	•	•	•	•	•	•	•••	••	•••	•	•	••
Official	82	88	81	93	85	84	94	85	96	90	94	94
Administrative	90	94	86	93	87	84	83	85	89	90	94	94
Survey	NA	NA	93	NA	NA	96	NA	96	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: 2012 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:

2003: Estimate based on coverage reported by national government. Estimate challenged by: D-

2004: Estimate based on coverage reported by national government. Estimate challenged by: D-

2005: Estimate is based on reported data. Estimate challenged by: D-

2006: Estimate based on coverage reported by national government. Estimate challenged by: D-

2007: Estimate based on coverage reported by national government. Estimate challenged by: D-

2008: Estimate is based on reported data. Estimate challenged by: D-

2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2010: Estimate is based on reported data. DQSA conducted in 7 priority districts during May-June 2010 identified some data recording problems at health facility level including inconsistencies between tally sheets, registers and HMIS. Decline in coverage attributed to 2 months vaccine stock out. GoC=R+ D+

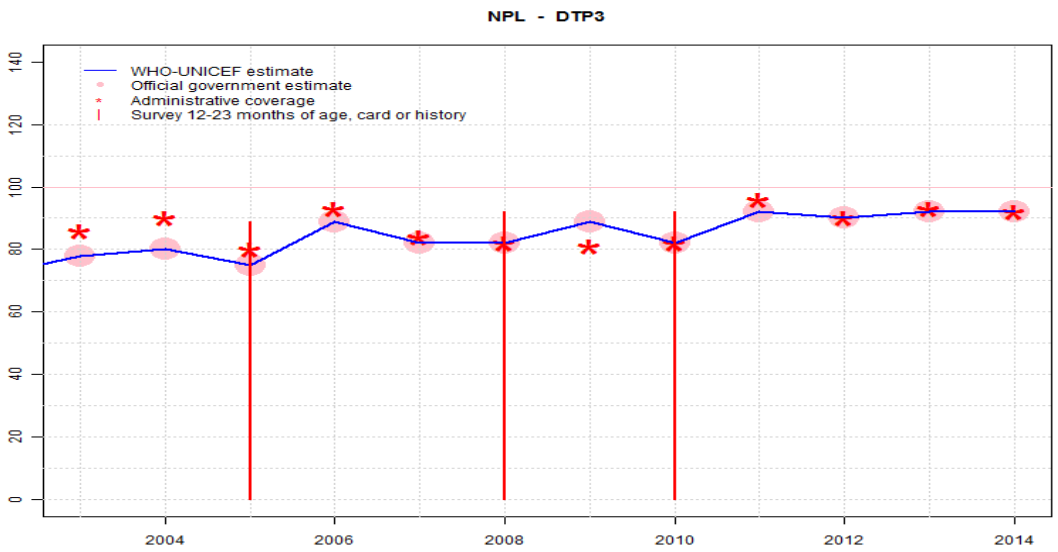
2011: Estimate based on coverage reported by national government. Coverage reported by the government is based on the Nepal DHS 2011. Estimate is based on reported data. GoC=R+ S+ D+

2012: Estimate based on coverage reported by national government. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government. Preliminary results from the 2014 Multiple Indicator Cluster Survey suggests coverage of 95 percent for the 2013 birth cohort. Estimate challenged by: D-

2014: Estimate based on coverage reported by national government. GoC=R+ D+

Nepal - DTP3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	78	80	75	89	82	82	89	82	92	90	92	92
Estimate GoC	•	•	•	•	•	•	•	•••	•	•	•	•
Official	78	80	75	89	82	82	89	82	92	90	92	92
Administrative	86	90	80	93	84	82	81	82	96	90	93	92
Survey	NA	NA	89	NA	NA	92	NA	92	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: 2012 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:

2003: Estimate based on coverage reported by national government. Estimate challenged by: D-

2004: Estimate based on coverage reported by national government. Estimate challenged by: D-

2005: Estimate is based on reported data. Nepal Demographic and Health Survey 2006 card or history results of 89 percent modifed for recall bias to 90 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 32 percent and 3d dose card only coverage of 31 percent. Estimate challenged by: D-

2006: Estimate based on coverage reported by national government. Estimate challenged by: D-

2007: Estimate based on coverage reported by national government. Estimate challenged by: D-

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

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

2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). Nepal Demographic and Health Survey 2011 card or history results of 92 percent modifed for recall bias to 90 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 34 percent and 3d dose card only coverage of 32 percent. DQSA conducted in 7 priority districts during May-June 2010 identified some data recording problems at health facility level including inconsistencies between tally sheets, registers and HMIS. Decline in coverage attributed to 2 months vaccine stock out. GoC=R+ S+ D+

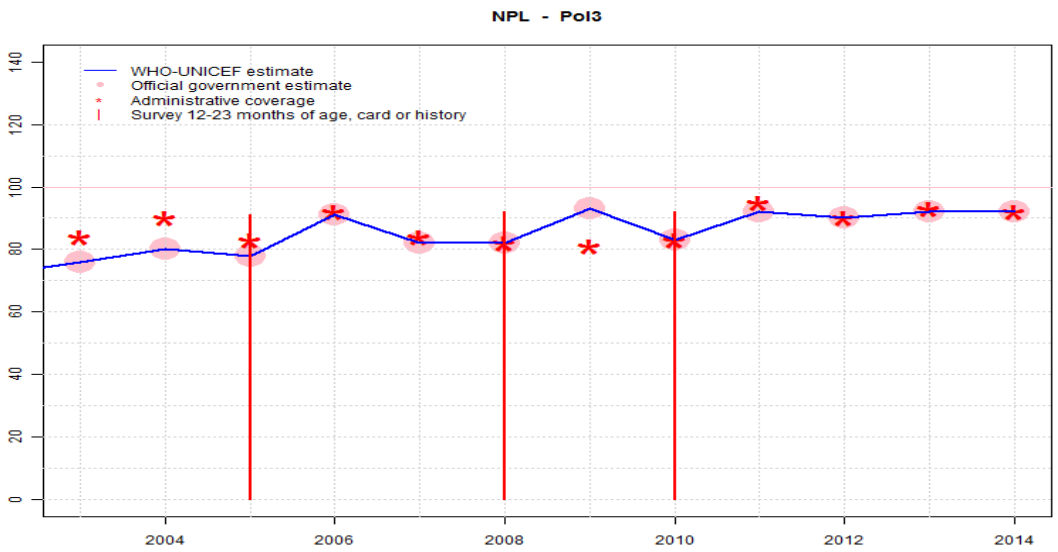
2011: Estimate based on coverage reported by national government. Coverage reported by the government is based on the Nepal DHS 2011. Estimate challenged by: D-

2012: Estimate based on coverage reported by national government. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government. Preliminary results from the 2014 Multiple Indicator Cluster Survey suggests coverage supporting reported data for the 2013 birth cohort. Estimate challenged by: D-

2014: Estimate based on coverage reported by national government. Estimate challenged by: D-

Nepal - Pol3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	76	80	78	91	82	82	93	83	92	90	92	92
Estimate GoC	•	•	•	•	•	•	•••	•••	•	•	•	•
Official	76	80	78	91	82	82	93	83	92	90	92	92
Administrative	84	90	83	92	84	82	81	83	95	90	93	92
Survey	NA	NA	91	NA	NA	92	NA	92	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: 2012 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:

2003: Estimate based on coverage reported by national government. Estimate challenged by: D-

2004: Estimate based on coverage reported by national government. Estimate challenged by: D-

2005: Estimate is based on reported data. Nepal Demographic and Health Survey 2006 card or history results of 91 percent modifed for recall bias to 94 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 32 percent and 3d dose card only coverage of 31 percent. Estimate challenged by: D-

2006: Estimate based on coverage reported by national government. Estimate challenged by: D-

2007: Estimate based on coverage reported by national government. Estimate challenged by: D-

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

2009: Estimate based on coverage reported by national government. Estimate is based on reported data. GoC=R+ S+ D+

2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 91 percent based on 1 survey(s). Nepal Demographic and Health Survey 2011 card or history results of 92 percent modifed for recall bias to 91 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 34 percent and 3d dose card only coverage of 32 percent. DQSA conducted in 7 priority districts during May-June 2010 identified some data recording problems at health facility level including inconsistencies between tally sheets, registers and HMIS. GoC=R+ S+ D+

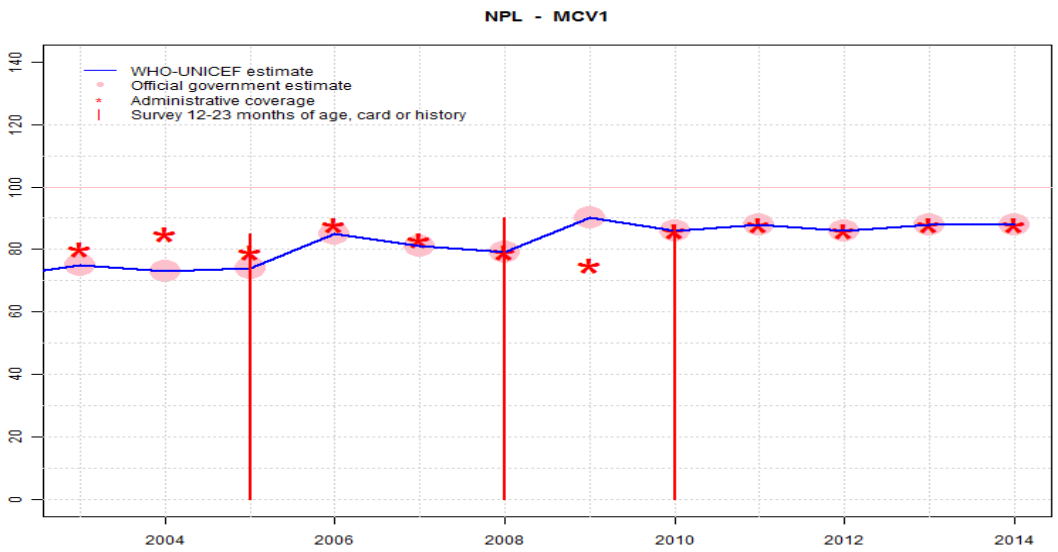
2011: Estimate based on coverage reported by national government. Coverage reported by the government is based on the Nepal DHS 2011. Estimate challenged by: D-

2012: Estimate based on coverage reported by national government. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government. Preliminary results from the 2014 Multiple Indicator Cluster Survey suggests coverage supporting reported data for the 2013 birth cohort. Estimate challenged by: D-

2014: Estimate based on coverage reported by national government. Estimate challenged by: D-

Nepal - MCV1



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	75	73	74	85	81	79	90	86	88	86	88	88
Estimate GoC	•	•	•	•	•	•	•••	•••	•	•	•	•
Official	75	73	74	85	81	79	90	86	88	86	88	88
Administrative	80	85	79	88	83	79	75	86	88	86	88	88
Survey	NA	NA	85	NA	NA	90	NA	88	NA	NA	NA	NA

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

••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 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:

2003: Estimate based on coverage reported by national government. Estimate challenged by: D-

2004: Estimate based on coverage reported by national government. Estimate challenged by: D-

2005: Estimate is based on reported data. Estimate challenged by: D-

2006: Estimate based on coverage reported by national government. Estimate challenged by: D-

2007: Estimate based on coverage reported by national government. Estimate challenged by: D-

2008: Estimate is based on reported data. Estimate challenged by: D-

2009: Estimate based on coverage reported by national government. Estimate is based on reported data. GoC=R+ S+ D+

2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 88 percent based on 1 survey(s). DQSA conducted in 7 priority districts during May-June 2010 identified some data recording problems at health facility level including inconsistencies between tally sheets, registers and HMIS. GoC=R+ S+ D+

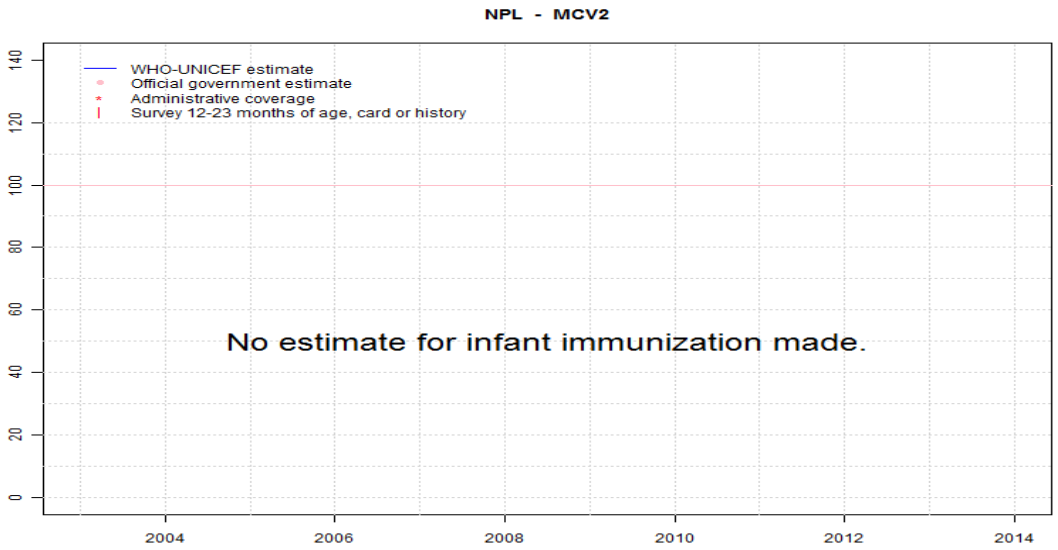
2011: Estimate based on coverage reported by national government. Coverage reported by the government is based on the Nepal DHS 2011. Estimate challenged by: D-

2012: Estimate based on coverage reported by national government. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government. Preliminary results from the 2014 Multiple Indicator Cluster Survey suggests coverage of 93 percent for the 2013 birth cohort. Estimate challenged by: D-

2014: Estimate based on coverage reported by national government. Estimate challenged by: D-

Nepal - MCV2



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
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.

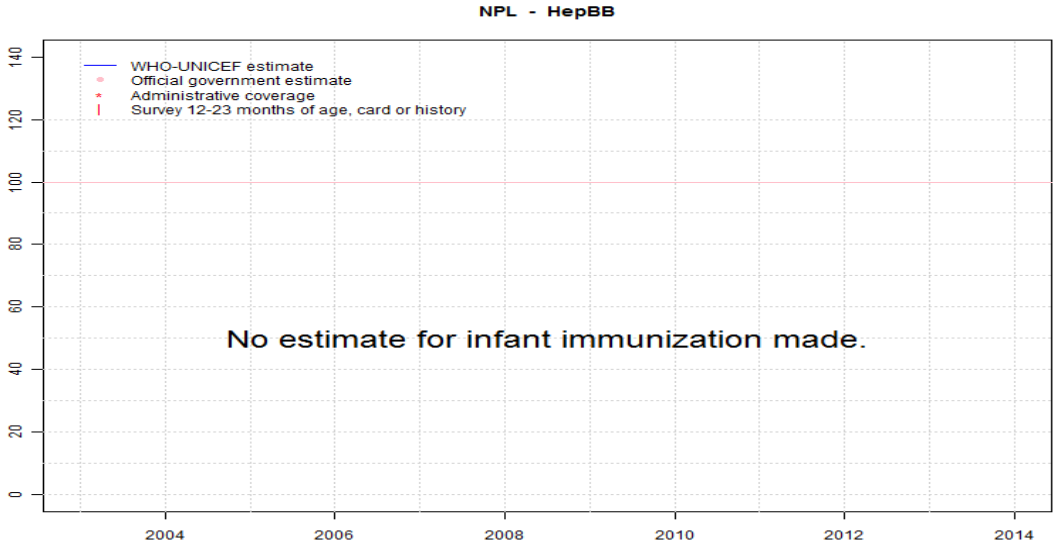
●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Nepal - HepBB



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
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.

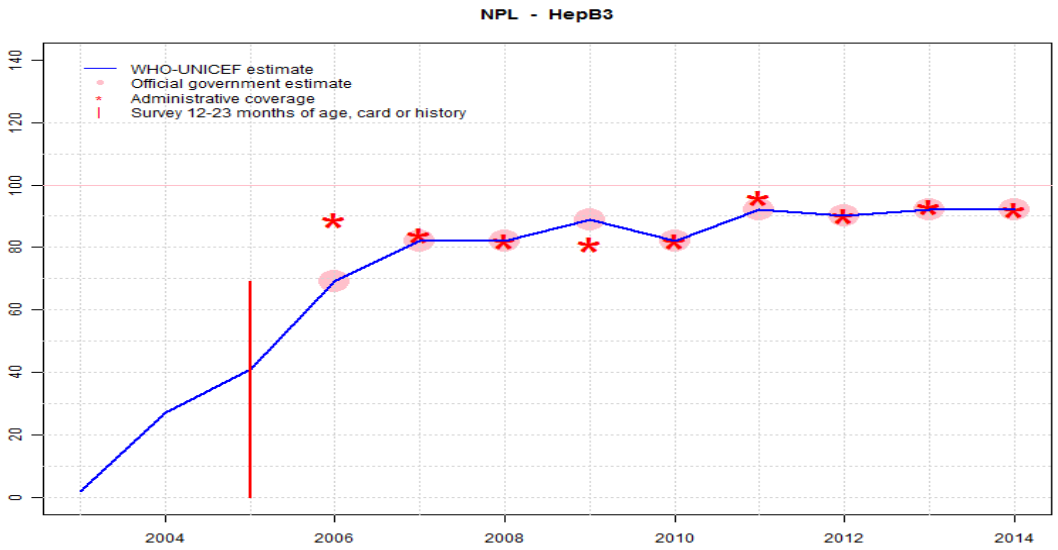
●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Nepal - HepB3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	2	27	41	69	82	82	89	82	92	90	92	92
Estimate GoC	●●	●●	●	●	●	●	●	●●	●	●	●	●
Official	NA	NA	NA	69	82	82	89	82	92	90	92	92
Administrative	NA	NA	NA	89	84	82	81	82	96	90	93	92
Survey	NA	NA	69	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: 2012 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:

2003: In 2003, hepatitis B vaccine introduced in part of the country and 15 percent coverage was achieved in 17 percent of the national target population. HepB vaccine partially introduced in 2002 and nationally in 2005. Reporting started in 2003. Vaccine presentation was HepB monovalent in 2003-04, DTP-HepB in 2005-2008, and DTP-HepB-Hib from 2009 onward. GoC=D+

2004: Eighty-seven percent coverage achieved in 31 percent of the national target population. GoC=D+

2005: Fifty-two percent coverage achieved in 41 percent of the national target population. Nepal Demographic and Health Survey 2006 card or history results of 69 percent modifed for recall bias to 68 percent based on 1st dose card or history coverage of 76 percent, 1st dose card only coverage of 30 percent and 3d dose card only coverage of 27 percent. Estimate challenged by: D-

2006: Estimate based on coverage reported by national government. Estimate challenged by: D-

2007: Estimate based on coverage reported by national government. Estimate challenged by: D-

2008: Estimate based on coverage reported by national government. Estimate challenged by: D-

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

2010: Estimate based on coverage reported by national government. DQSA conducted in 7 priority districts during May-June 2010 identified some data recording problems at health facility level including inconsistencies between tally sheets, registers and HMIS. Decline in coverage attributed to 2 months vaccine stock out. GoC=R+ D+

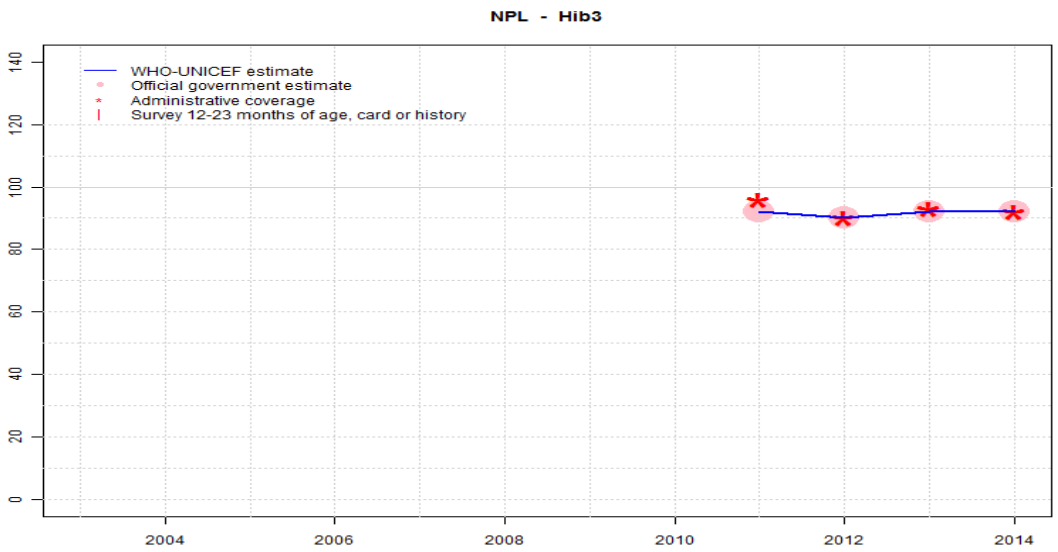
2011: Estimate based on coverage reported by national government. Coverage reported by the government is based on the Nepal DHS 2011. Estimate challenged by: D-

2012: Estimate based on coverage reported by national government. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government. Preliminary results from the 2014 Multiple Indicator Cluster Survey suggests coverage supporting reported data for the 2013 birth cohort. Estimate challenged by: D-

2014: Estimate based on coverage reported by national government. Estimate challenged by: D-

Nepal - Hib3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	92	90	92	92
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	•	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	92	90	92	92
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	96	90	93	92
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: 2012 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:

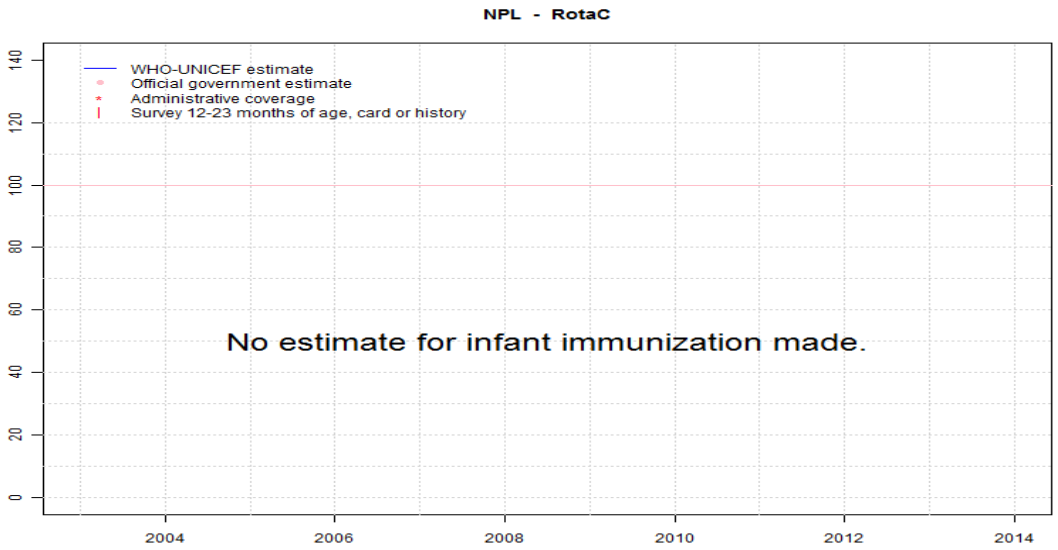
2011: Estimate based on coverage reported by national government. Estimate challenged by: D-

2012: Estimate based on coverage reported by national government. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government. Preliminary results from the 2014 Multiple Indicator Cluster Survey suggests coverage supporting reported data for the 2013 birth cohort. Estimate challenged by: D-

2014: Estimate based on coverage reported by national government. Estimate challenged by: D-

Nepal - RotaC



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
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.

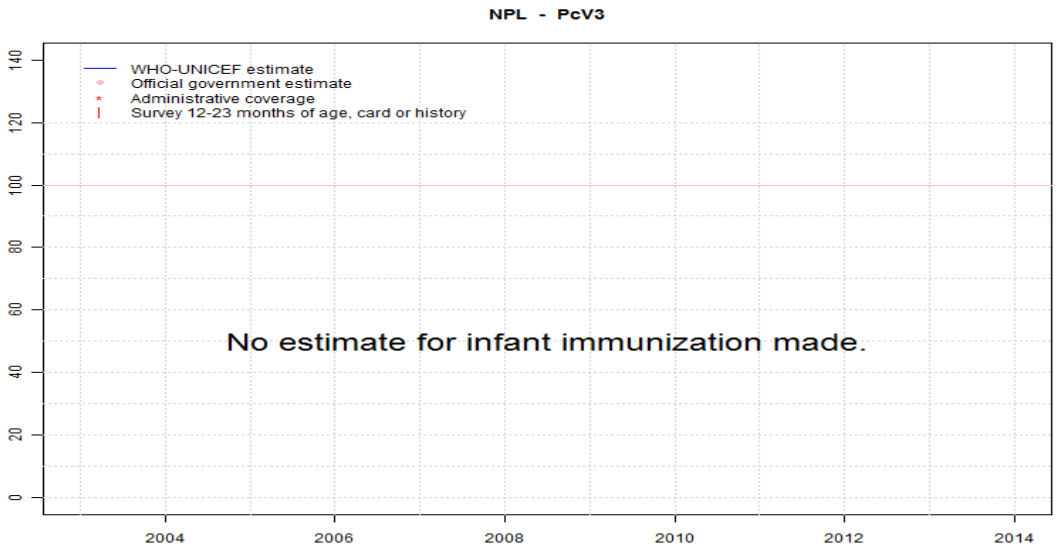
●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Nepal - PcV3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
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: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Nepal - survey details

2010 Nepal Demographic and Health Survey 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	96	12-23 m	1000	34
BCG	Card	34	12-23 m	1000	34
BCG	Card or History	96	12-23 m	1000	34
BCG	History	63	12-23 m	1000	34
DTP1	C or H <12 months	96	12-23 m	1000	34
DTP1	Card	34	12-23 m	1000	34
DTP1	Card or History	96	12-23 m	1000	34
DTP1	History	63	12-23 m	1000	34
DTP3	C or H <12 months	91	12-23 m	1000	34
DTP3	Card	32	12-23 m	1000	34
DTP3	Card or History	92	12-23 m	1000	34
DTP3	History	59	12-23 m	1000	34
MCV1	C or H <12 months	82	12-23 m	1000	34
MCV1	Card	31	12-23 m	1000	34
MCV1	Card or History	88	12-23 m	1000	34
MCV1	History	57	12-23 m	1000	34
Pol1	C or H <12 months	97	12-23 m	1000	34
Pol1	Card	34	12-23 m	1000	34
Pol1	Card or History	97	12-23 m	1000	34
Pol1	History	63	12-23 m	1000	34
Pol3	C or H <12 months	92	12-23 m	1000	34
Pol3	Card	32	12-23 m	1000	34
Pol3	Card or History	92	12-23 m	1000	34
Pol3	History	60	12-23 m	1000	34

2008 Immunization Coverage Survey Nepal, 2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	32	12-23 m	9775	32
BCG	Card or History	96	12-23 m	9775	32
BCG	History	64	12-23 m	9775	32
DTP1	Card	32	12-23 m	9775	32
DTP1	Card or History	96	12-23 m	9775	32
DTP1	History	63	12-23 m	9775	32
DTP3	Card	32	12-23 m	9775	32
DTP3	Card or History	92	12-23 m	9775	32
DTP3	History	60	12-23 m	9775	32
MCV1	Card	31	12-23 m	9775	32
MCV1	Card or History	90	12-23 m	9775	32
MCV1	History	59	12-23 m	9775	32
Pol1	Card	32	12-23 m	9775	32
Pol1	Card or History	96	12-23 m	9775	32
Pol1	History	64	12-23 m	9775	32
Pol3	Card	32	12-23 m	9775	32
Pol3	Card or History	92	12-23 m	9775	32
Pol3	History	60	12-23 m	9775	32

2005 Nepal Demographic and Health Survey 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93	12-23 m	984	32
BCG	Card	32	12-23 m	984	32
BCG	Card or History	93	12-23 m	984	32
BCG	History	62	12-23 m	984	32
DTP1	C or H <12 months	92	12-23 m	984	32
DTP1	Card	32	12-23 m	984	32
DTP1	Card or History	93	12-23 m	984	32
DTP1	History	61	12-23 m	984	32
DTP3	C or H <12 months	88	12-23 m	984	32
DTP3	Card	31	12-23 m	984	32
DTP3	Card or History	89	12-23 m	984	32
DTP3	History	57	12-23 m	984	32
HepB1	C or H <12 months	76	12-23 m	984	32
HepB1	Card	30	12-23 m	984	32
HepB1	Card or History	76	12-23 m	984	32
HepB1	History	47	12-23 m	984	32
HepB3	C or H <12 months	68	12-23 m	984	32
HepB3	Card	27	12-23 m	984	32
HepB3	Card or History	69	12-23 m	984	32
HepB3	History	42	12-23 m	984	32
MCV1	C or H <12 months	80	12-23 m	984	32
MCV1	Card	28	12-23 m	984	32
MCV1	Card or History	85	12-23 m	984	32
MCV1	History	56	12-23 m	984	32

Nepal - survey details

Pol1	C or H <12 months	97	12-23 m	984	32
Pol1	Card	32	12-23 m	984	32
Pol1	Card or History	97	12-23 m	984	32
Pol1	History	65	12-23 m	984	32
Pol3	C or H <12 months	90	12-23 m	984	32
Pol3	Card	31	12-23 m	984	32
Pol3	Card or History	91	12-23 m	984	32
Pol3	History	60	12-23 m	984	32

2000 Nepal Demographic and Health Survey 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	83	12-23 m	1313	16
BCG	Card	16	12-23 m	1313	16
BCG	Card or History	84	12-23 m	1313	16
BCG	History	68	12-23 m	1313	16
DTP1	C or H <12 months	82	12-23 m	1313	16
DTP1	Card	16	12-23 m	1313	16
DTP1	Card or History	84	12-23 m	1313	16
DTP1	History	68	12-23 m	1313	16
DTP3	C or H <12 months	71	12-23 m	1313	16
DTP3	Card	14	12-23 m	1313	16
DTP3	Card or History	72	12-23 m	1313	16
DTP3	History	58	12-23 m	1313	16
MCV1	C or H <12 months	64	12-23 m	1313	16
MCV1	Card	13	12-23 m	1313	16
MCV1	Card or History	71	12-23 m	1313	16
MCV1	History	58	12-23 m	1313	16
Pol1	C or H <12 months	97	12-23 m	1313	16
Pol1	Card	16	12-23 m	1313	16
Pol1	Card or History	99	12-23 m	1313	16
Pol1	History	83	12-23 m	1313	16
Pol3	C or H <12 months	90	12-23 m	1313	16
Pol3	Card	16	12-23 m	1313	16
Pol3	Card or History	92	12-23 m	1313	16
Pol3	History	76	12-23 m	1313	16

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

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	87	12-23 m	1068	79
DTP1	Card or History	87	12-23 m	1068	79
DTP3	Card or History	65	12-23 m	1068	79
MCV1	Card or History	82	12-23 m	1068	79
Pol1	Card or History	93	12-23 m	1068	79
Pol3	Card or History	74	12-23 m	1068	79

1997 Nepal, Routine Immunization and NID Coverage Survey Report 1998

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	86	12-23 m	-	17
DTP1	C or H <12 months	87	12-23 m	-	17
DTP3	C or H <12 months	76	12-23 m	-	17
MCV1	C or H <12 months	73	12-23 m	-	17
Pol1	C or H <12 months	86	12-23 m	-	17
Pol3	C or H <12 months	70	12-23 m	-	17

Further information and estimates for previous years are available at:
http://www.data.unicef.org/child-health/immunization
http://www.who.int/immunization/monitoring_surveillance/routine/coverage/en/index4.html

Nepal
WHO/UNICEF Estimates of Protection at Birth (PAB) against tetanus

In countries where tetanus is recommended for girls and women coverage is usually reported as "TT2+", i.e. the proportion of (pregnant) women who have received their second or superior TT dose in a given year. TT2 + coverage, however, can under-represent the actual proportion of births that are protected against tetanus as it does not include women who have previously received protective doses, women who received one dose without documentation of previous doses, and women who received doses in TT (or Td) supplemental immunization activities (SIA). In addition, girls who have received DTP in their childhood and are entering childbearing age, may be protected with TT booster doses.

WHO and UNICEF have developed a model that takes into account the above scenarios, and calculates the proportion of births in a given year that can be considered as having been protected against tetanus - "Protection at Birth".

In this model, annual cohorts of women are followed from infancy through their life. A proportion receives DTP in infancy (estimated based on the WHO-UNICEF estimates of DTP3 coverage). In addition some of these women also receive TT through routine services when they are pregnant and may also receive TT during SIAs. The model also adjusts reported data, taking into account coverage patterns in other years, and/or results available through surveys. The duration of protection is then calculated, based on WHO estimates of the duration of protection by doses ever received. The proportion of births that are protected against tetanus as a result of maternal immunization reflects the tetanus immunization received by the mother throughout her life rather than simply the TT immunizations received during the current pregnancy.

The model was used in the mid to late 2000. Currently, the coverage series developed by the model is used as the baseline, and efforts are made to obtain data from all sources that include the JRF and reported trend over the years, routine PAB reporting and its trend over the years, data from surveys (DHS, MICS, EPI), whether countries have been validated for the attainment of maternal and neonatal tetanus elimination and what the TT coverage figures are from the survey etc and all the information is used to arrive at an estimate of the protection-at-birth from TT vaccination.

Year	PAB coverage estimate (%)
2003	90
2004	90
2005	88
2006	86
2007	84
2008	81
2009	81
2010	81
2011	82
2012	82
2013	82
2014	82

[1] This model is described in: Griffiths U., Wolfson L., Quddus A., Younus M., Hafiz R.. Incremental cost-effectiveness of supplementary immunization activities to prevent neo-natal tetanus in Pakistan. Bulletin of the World Health Organization 2004; 82:643-651.