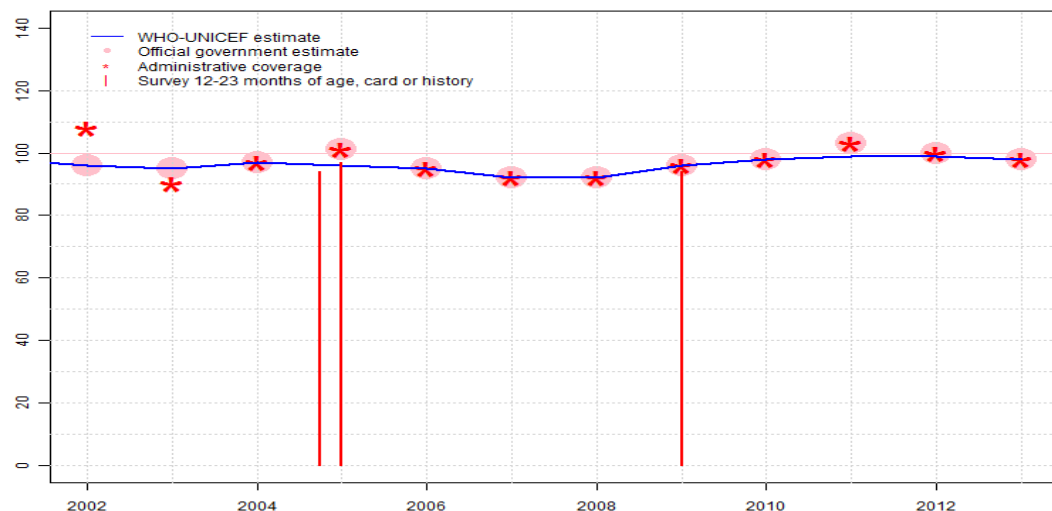


Dominican Republic - BCG

DOM - BCG



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	96	95	97	96	95	92	92	96	98	99	99	98
Estimate GoC	●●●	●●●	●●●	●●	●●●	●●	●●●	●●●	●●●	●●	●●	●●
Official	96	95	97	101	95	92	92	96	98	103	100	98
Administrative	108	90	97	101	95	92	92	96	98	103	100	98
Survey	NA	NA	NA	*	NA	NA	NA	94	NA	NA	NA	NA

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

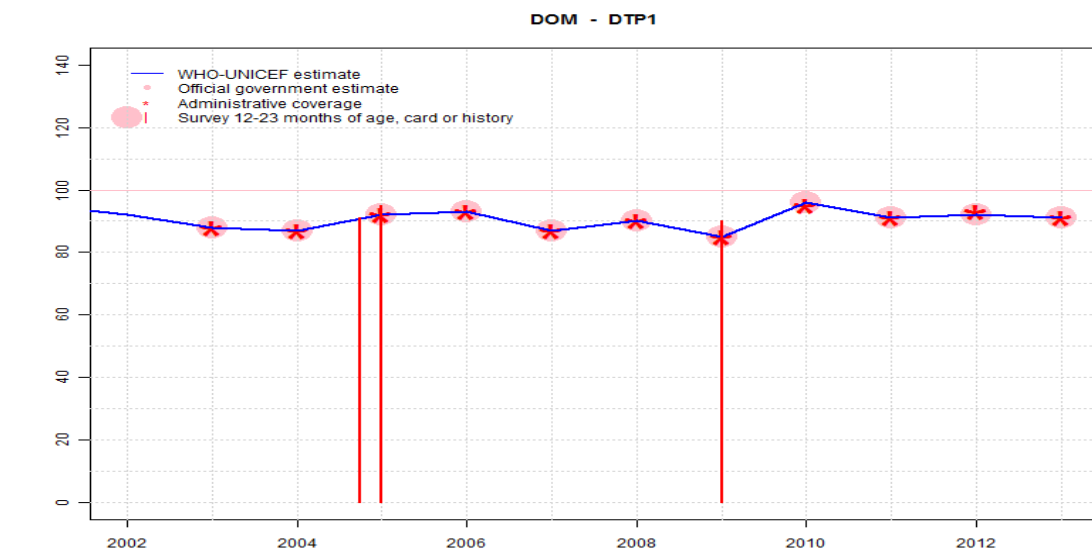
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2002: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2003: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2004: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2005: Estimate based on interpolation between data reported by national government supported by survey. Survey evidence of 96 percent based on 2 survey(s). Reported data excluded. 101 percent greater than 100 percent. GoC=S+ D+
- 2006: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2007: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2011: Estimate based on interpolation between data reported by national government. Reported data excluded. 103 percent greater than 100 percent. GoC=S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+

Dominican Republic - DTP1



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	92	88	87	92	93	87	90	85	96	91	92	91
Estimate GoC	•	•••	•••	•••	•••	••	•••	•••	•••	•••	••	••
Official	123	88	87	92	93	87	90	85	96	91	92	91
Administrative	NA	88	87	92	93	87	90	85	95	91	93	91
Survey	NA	NA	NA	*	NA	NA	NA	90	NA	NA	NA	NA

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

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

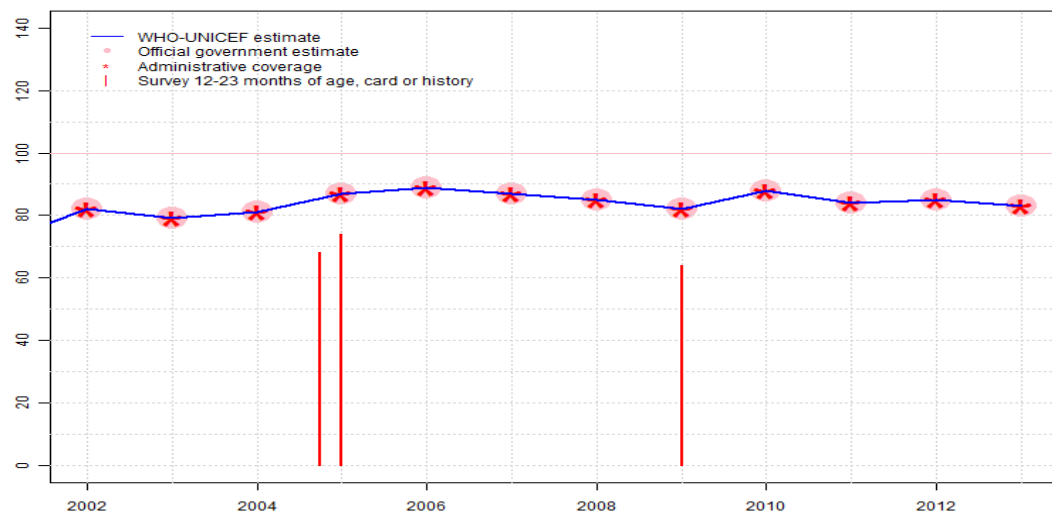
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2002: Estimate based on interpolation between coverage reported by national government. Reported data excluded. 123 percent greater than 100 percent. Reported data excluded. Unexplained increase from 95 percent to 123 percent with decrease 88 percent. Estimate challenged by: D-
- 2003: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2004: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 2 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. GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+

Dominican Republic - DTP3

DOM - DTP3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	82	79	81	87	89	87	85	82	88	84	85	83
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●	●●●	●●●	●●●	●●●	●●	●●
Official	82	79	81	87	89	87	85	82	88	84	85	83
Administrative	82	79	81	87	89	87	85	82	88	84	85	83
Survey	NA	NA	NA	*	NA	NA	NA	64	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.

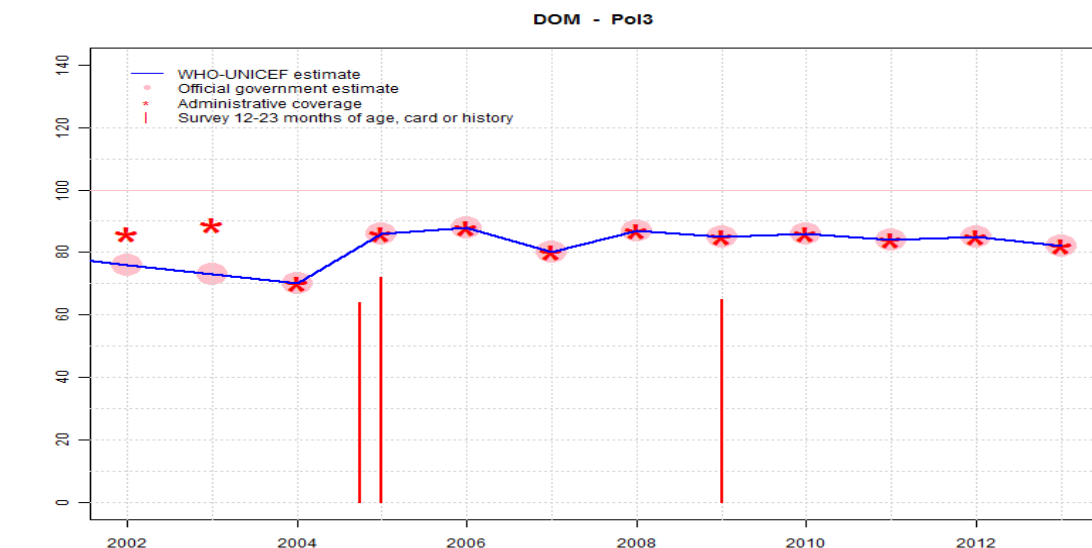
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2002: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2003: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2004: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 83 percent based on 2 survey(s). Dominican Republic Multiple Indicator Cluster Survey 2006 card or history results of 68 percent modified for recall bias to 84 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 68 percent and 3d dose card only coverage of 60 percent. Dominican Republic Demographic and Health Survey 2007 card or history results of 74 percent modified for recall bias to 81 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 61 percent and 3d dose card only coverage of 54 percent. 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. GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government supported by survey. Survey evidence of 79 percent based on 1 survey(s). Dominican Republic Multiple Indicator Cluster Survey 2009-2010 card or history results of 64 percent modified for recall bias to 79 percent based on 1st dose card or history coverage of 90 percent, 1st dose card only coverage of 59 percent and 3d dose card only coverage of 52 percent. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+

Dominican Republic - Pol3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	76	73	70	86	88	80	87	85	86	84	85	82
Estimate GoC	●●●	●	●●	●●●	●●●	●●	●●●	●●●	●●●	●●●	●●	●●
Official	76	73	70	86	88	80	87	85	86	84	85	82
Administrative	86	89	70	86	88	80	87	85	86	84	85	82
Survey	NA	NA	NA	*	NA	NA	NA	65	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.

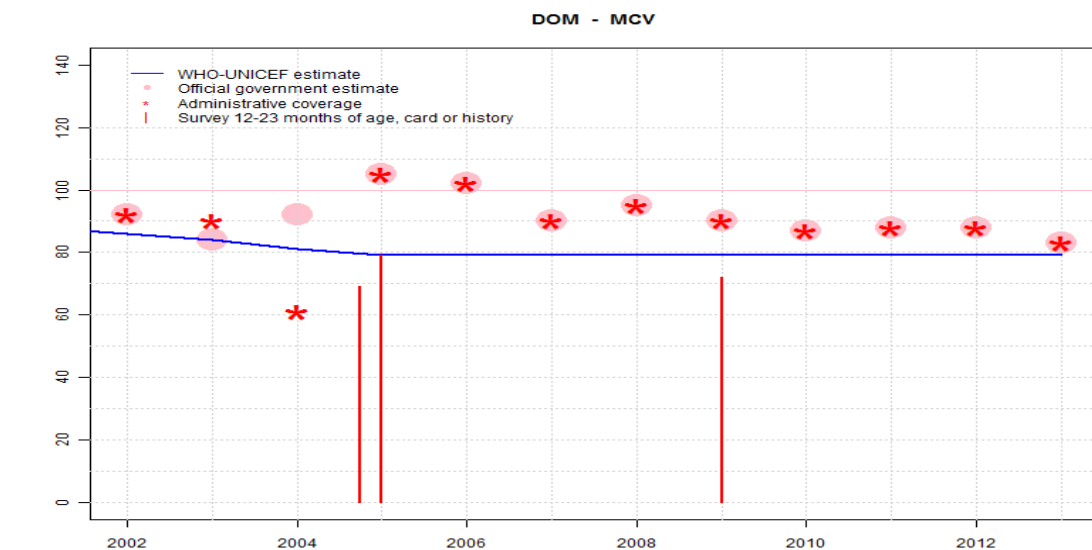
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2002: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2003: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2004: Estimate based on coverage reported by national government. GoC=R+ D+
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 83 percent based on 2 survey(s). Dominican Republic Multiple Indicator Cluster Survey 2006 card or history results of 72 percent modified for recall bias to 85 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 68 percent and 3d dose card only coverage of 60 percent. Dominican Republic Demographic and Health Survey 2007 card or history results of 64 percent modified for recall bias to 81 percent based on 1st dose card or history coverage of 90 percent, 1st dose card only coverage of 62 percent and 3d dose card only coverage of 56 percent. 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. GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government supported by survey. Survey evidence of 82 percent based on 1 survey(s). Dominican Republic Multiple Indicator Cluster Survey 2009-2010 card or history results of 65 percent modified for recall bias to 82 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 62 percent and 3d dose card only coverage of 54 percent. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+

Dominican Republic - MCV



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	86	84	81	79	79	79	79	79	79	79	79	79
Estimate GoC	••	•	•	•	•	•	•	•	•	•	••	••
Official	92	84	92	105	102	90	95	90	87	88	88	83
Administrative	92	90	61	105	102	90	95	90	87	88	88	83
Survey	NA	NA	NA	*	NA	NA	NA	72	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.

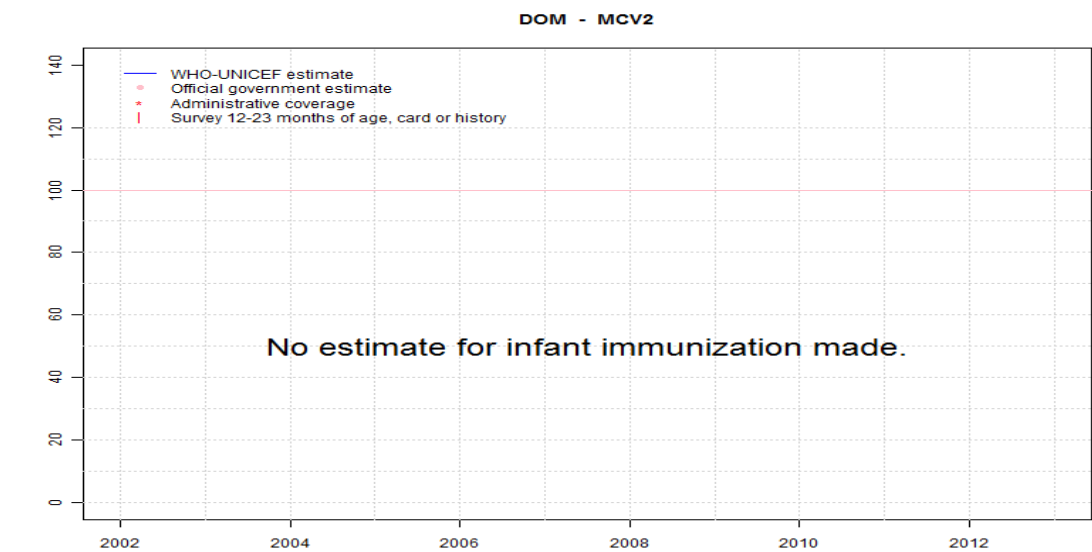
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2002: Reported data calibrated to 2001 and 2005 levels. Reported data excluded. Fluctuating and inconsistent data suggest poor reporting. GoC=S+ D+
- 2003: Reported data calibrated to 2001 and 2005 levels. Reported data excluded. Fluctuating and inconsistent data suggest poor reporting. Estimate challenged by: D-S-
- 2004: Reported data calibrated to 2001 and 2005 levels. Reported data excluded. Fluctuating and inconsistent data suggest poor reporting. Estimate challenged by: D-S-
- 2005: Estimate is based on survey results. Dominican Republic Multiple Indicator Cluster Survey 2006 results ignored by working group. 2005 survey results are for children 12-23 months of age and underestimate immunization recommended at 12 months.Dominican Republic Demographic and Health Survey 2007 results ignored by working group. 2005 survey results are for children 12-23 months of age and underestimate immunization recommended at 12 months.Reported data excluded. Fluctuating and inconsistent data suggest poor reporting.Reported data excluded. 105 percent greater than 100 percent. Estimate challenged by: D-R-S-
- 2006: Reported data calibrated to 2005 levels. Reported data excluded. Fluctuating and inconsistent data suggest poor reporting.Reported data excluded. 102 percent greater than 100 percent. Estimate challenged by: D-S-
- 2007: Reported data calibrated to 2005 levels. Reported data excluded. Fluctuating and inconsistent data suggest poor reporting. Estimate challenged by: D-S-
- 2008: Reported data calibrated to 2005 levels. Reported data excluded. Fluctuating and inconsistent data suggest poor reporting. Estimate challenged by: D-S-
- 2009: Reported data calibrated to 2005 levels. Dominican Republic Multiple Indicator Cluster Survey 2009-2010 results ignored by working group. 2009 survey results are for children 12-23 months of age and underestimate immunization recommended at 12 months.Reported data excluded. Fluctuating and inconsistent data suggest poor reporting. Estimate challenged by: S-
- 2010: Reported data calibrated to 2005 levels. Reported data excluded. . Estimate challenged by: S-
- 2011: Reported data calibrated to 2005 levels. Reported data excluded. . Estimate challenged by: S-
- 2012: Reported data calibrated to 2005 levels. Reported data excluded. . GoC=D+
- 2013: Reported data calibrated to 2005 levels. Reported data excluded. . GoC=D+

Dominican Republic - MCV2



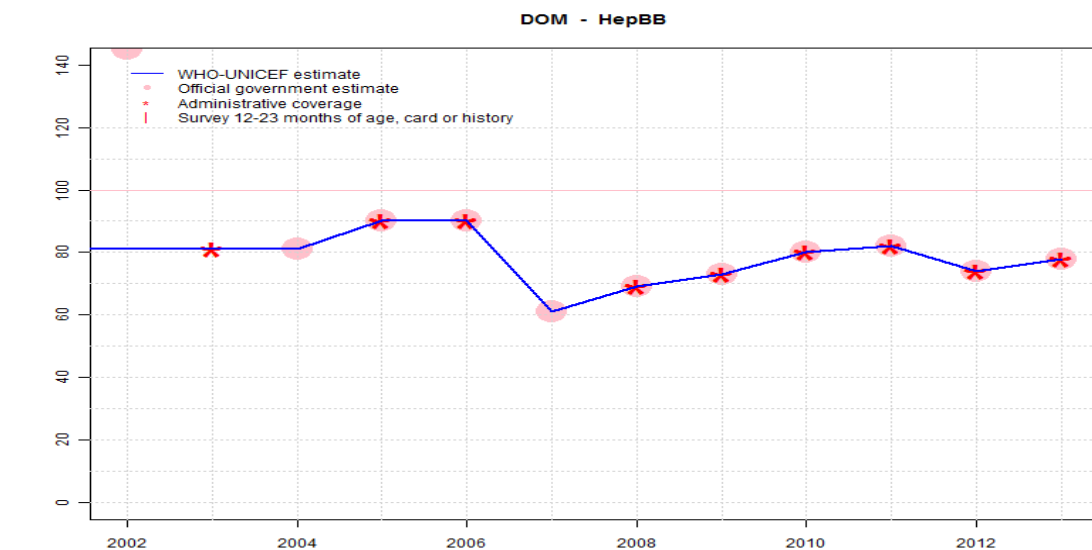
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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.

Dominican Republic - HepBB



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	81	81	81	90	90	61	69	73	80	82	74	78
Estimate GoC	•	••	••	••	••	••	••	••	••	••	••	••
Official	145	NA	81	90	90	61	69	73	80	82	74	78
Administrative	NA	81	NA	90	90	NA	69	73	80	82	74	78
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.

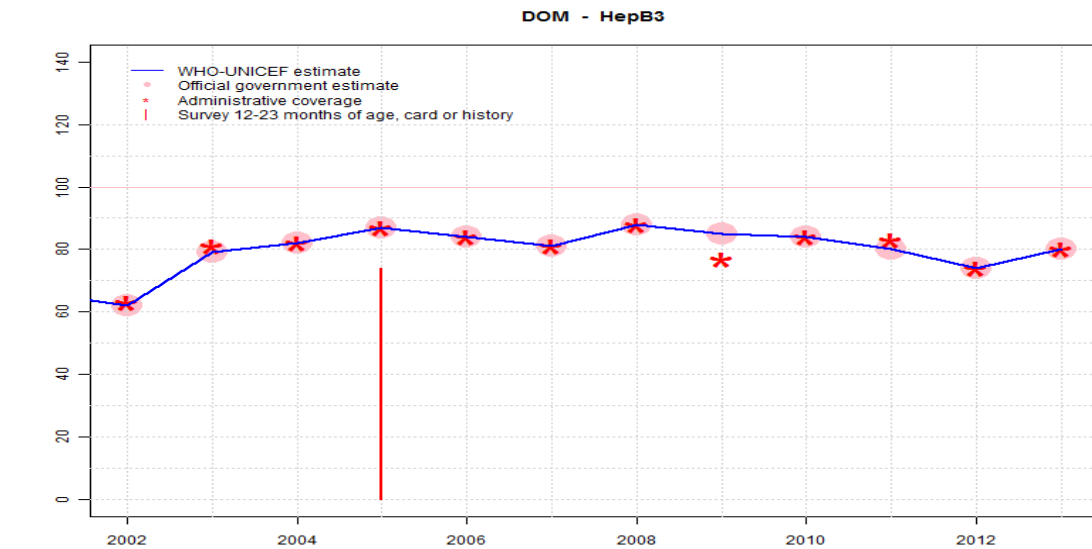
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2002: Estimate based on interpolation between reported values. Reported data excluded. 145 percent greater than 100 percent. Reported data excluded. Unexplained increase from 81 percent to 145 percent with decrease 81 percent. GoC=No accepted empirical data
- 2003: Estimate based on reported administrative estimate. GoC=R+ D+
- 2004: Estimate based on coverage reported by national government. GoC=R+
- 2005: Estimate based on coverage reported by national government. GoC=R+ D+
- 2006: Estimate based on coverage reported by national government. GoC=R+ D+
- 2007: Estimate based on coverage reported by national government. GoC=R+
- 2008: Estimate based on coverage reported by national government. GoC=R+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+

Dominican Republic - HepB3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	62	79	82	87	84	81	88	85	84	80	74	80
Estimate GoC	••	•••	•••	•••	•••	••	••	••	••	••	••	••
Official	62	79	82	87	84	81	88	85	84	80	74	80
Administrative	63	81	82	87	84	81	88	77	84	83	74	80
Survey	NA	NA	NA	74	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.

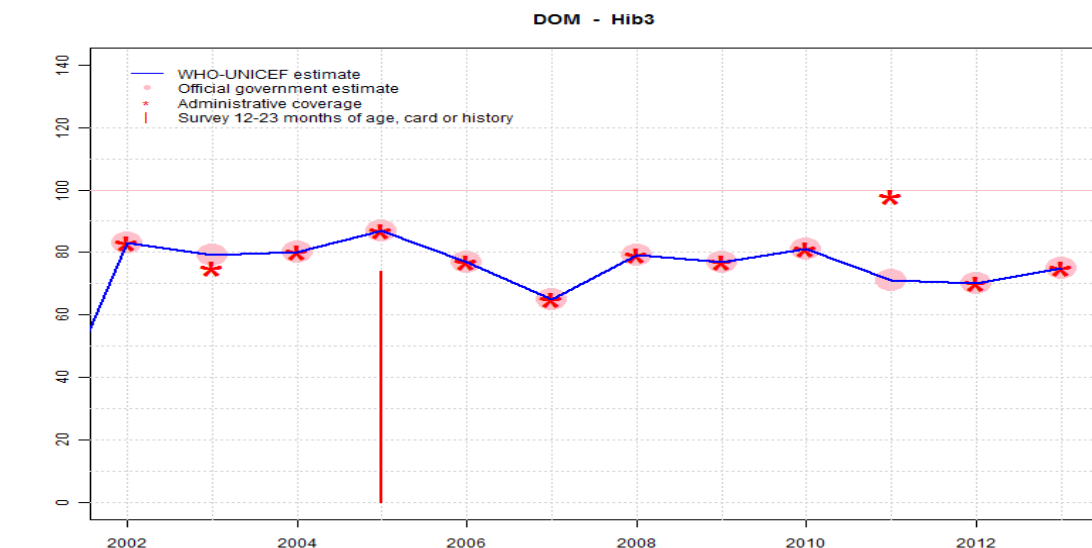
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2002: Estimate based on reported data. GoC=R+ D+
- 2003: Estimate based on reported data. GoC=R+ S+ D+
- 2004: Estimate based on reported data. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 81 percent based on 1 survey(s). Dominican Republic Demographic and Health Survey 2007 card or history results of 74 percent modified for recall bias to 81 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 61 percent and 3d dose card only coverage of 54 percent. 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. Decline attributed to three months stock out of DTP-HepB-Hib vaccine. Pentavalent vaccine replaced with monovalent HepB vaccine. GoC=R+ S+
- 2008: Estimate based on coverage reported by national government. GoC=R+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+

Dominican Republic - Hib3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	83	79	80	87	77	65	79	77	81	71	70	75
Estimate GoC	••	•••	•••	•••	•••	••	••	••	••	•	••	••
Official	83	79	80	87	77	65	79	77	81	71	70	75
Administrative	83	75	80	87	77	65	79	77	81	98	70	75
Survey	NA	NA	NA	74	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.

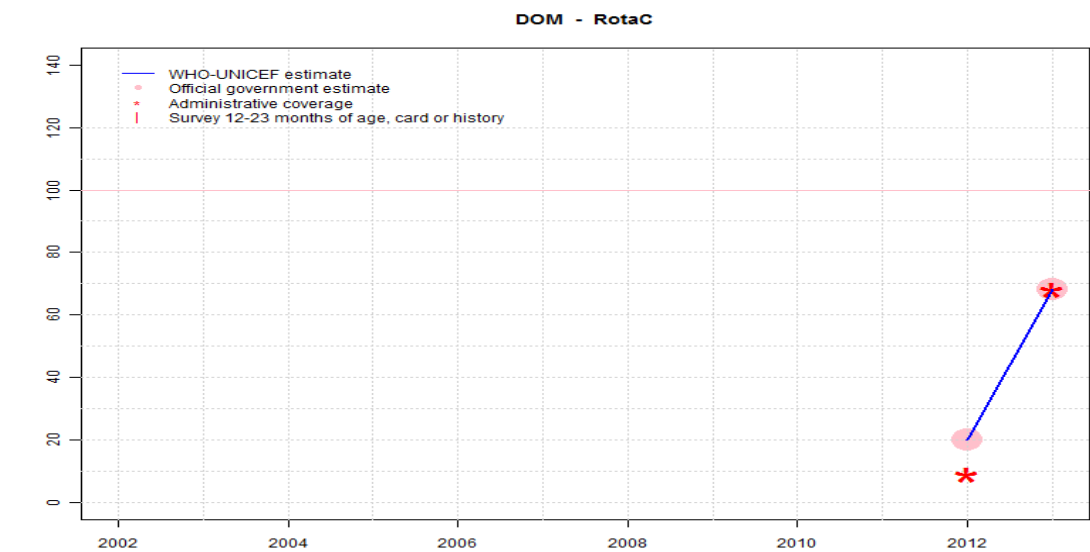
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2002: Estimate based on reported data. GoC=R+
- 2003: Estimate based on reported data. GoC=R+ S+ D+
- 2004: Estimate based on reported data. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 81 percent based on 1 survey(s). Dominican Republic Demographic and Health Survey 2007 card or history results of 74 percent modified for recall bias to 81 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 61 percent and 3d dose card only coverage of 54 percent. 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. Decline attributed to three months stock out of DTP-HepB-Hib vaccine. Pentavalent vaccine replaced with DTP. GoC=R+
- 2008: Estimate is based on the reported data. GoC=R+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+

Dominican Republic - RotaC



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20	68
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	●	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20	68
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9	68
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.

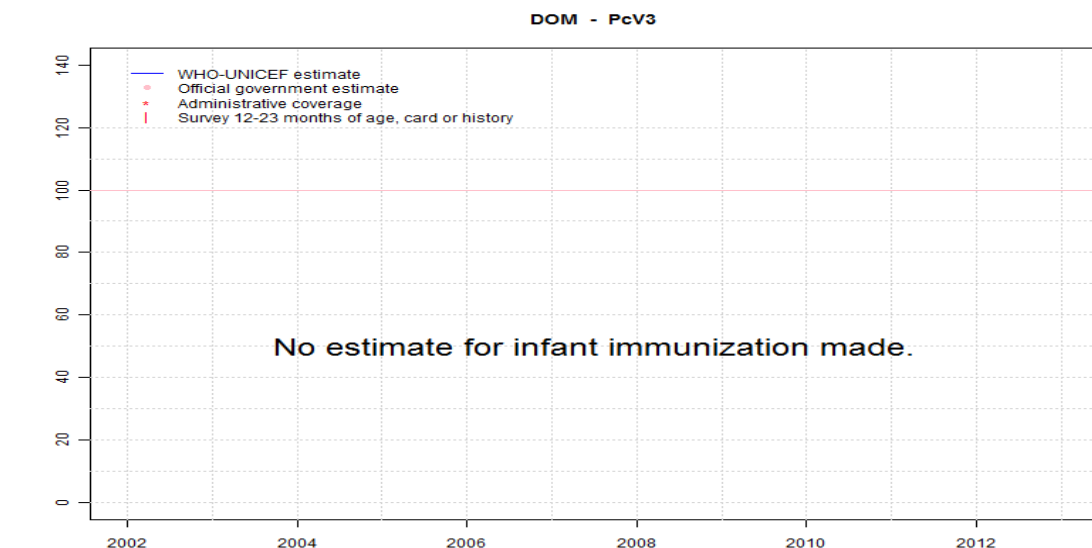
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

2012: Estimate based on coverage reported by national government. Rotavirus vaccine introduced in 2012. Estimate challenged by: D-
2013: Estimate based on coverage reported by national government. GoC=R+D+

Dominican Republic - PcV3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
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.

Dominican Republic - survey details

2009 República Dominicana Encuesta Nacional de Hogares de Propósitos Múltiples ENHOGAR 2009-2010

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93	12-23 m	-	-
BCG	Card	60	12-23 m	-	-
BCG	Card or History	94	12-23 m	594	-
BCG	History	34	12-23 m	-	-
DTP1	C or H <12 months	72	12-23 m	-	-
DTP1	Card	59	12-23 m	-	-
DTP1	Card or History	90	12-23 m	594	-
DTP1	History	31	12-23 m	-	-
DTP3	C or H <12 months	55	12-23 m	-	-
DTP3	Card	52	12-23 m	-	-
DTP3	Card or History	64	12-23 m	594	-
DTP3	History	12	12-23 m	-	-
MCV	C or H <12 months	63	12-23 m	-	-
MCV	Card	44	12-23 m	-	-
MCV	Card or History	72	12-23 m	594	-
MCV	History	27	12-23 m	-	-
Pol1	C or H <12 months	91	12-23 m	-	-
Pol1	Card	62	12-23 m	-	-
Pol1	Card or History	94	12-23 m	594	-
Pol1	History	32	12-23 m	-	-
Pol3	C or H <12 months	62	12-23 m	-	-
Pol3	Card	54	12-23 m	-	-
Pol3	Card or History	65	12-23 m	594	-
Pol3	History	11	12-23 m	-	-

2005 República Dominicana Encuesta Demográfica y de Salud 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94	18-29 m	2120	62
BCG	Card	62	18-29 m	2120	62
BCG	Card or History	94	18-29 m	2120	62
BCG	History	32	18-29 m	2120	62
DTP1	C or H <12 months	90	18-29 m	2120	62

DTP1	Card	61	18-29 m	2120	62
DTP1	Card or History	91	18-29 m	2120	62
DTP1	History	30	18-29 m	2120	62
DTP3	C or H <12 months	73	18-29 m	2120	62
DTP3	Card	54	18-29 m	2120	62
DTP3	Card or History	74	18-29 m	2120	62
DTP3	History	20	18-29 m	2120	62
HepB1	C or H <12 months	90	18-29 m	2120	62
HepB1	Card	61	18-29 m	2120	62
HepB1	Card or History	91	18-29 m	2120	62
HepB1	History	30	18-29 m	2120	62
HepB3	C or H <12 months	73	18-29 m	2120	62
HepB3	Card	54	18-29 m	2120	62
HepB3	Card or History	74	18-29 m	2120	62
HepB3	History	20	18-29 m	2120	62
Hib1	C or H <12 months	90	18-29 m	2120	62
Hib1	Card	61	18-29 m	2120	62
Hib1	Card or History	91	18-29 m	2120	62
Hib1	History	30	18-29 m	2120	62
Hib3	C or H <12 months	73	18-29 m	2120	62
Hib3	Card	54	18-29 m	2120	62
Hib3	Card or History	74	18-29 m	2120	62
Hib3	History	20	18-29 m	2120	62
MCV	C or H <12 months	74	18-29 m	2120	62
MCV	Card	52	18-29 m	2120	62
MCV	Card or History	79	18-29 m	2120	62
MCV	History	27	18-29 m	2120	62
Pol1	C or H <12 months	90	18-29 m	2120	62
Pol1	Card	62	18-29 m	2120	62
Pol1	Card or History	90	18-29 m	2120	62
Pol1	History	29	18-29 m	2120	62
Pol3	C or H <12 months	62	18-29 m	2120	62
Pol3	Card	56	18-29 m	2120	62
Pol3	Card or History	64	18-29 m	2120	62
Pol3	History	8	18-29 m	2120	62

2005 República Dominicana, Encuesta Nacional de Hogares de Propósitos Múltiples ENHOGAR 2006

Dominican Republic - survey details

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	96	12-23 m	756	58
BCG	Card	68	12-23 m	756	58
BCG	Card or History	97	12-23 m	756	58
BCG	History	29	12-23 m	756	58
DTP1	C or H <12 months	90	12-23 m	756	58
DTP1	Card	68	12-23 m	756	58
DTP1	Card or History	95	12-23 m	756	58
DTP1	History	27	12-23 m	756	58
DTP3	C or H <12 months	68	12-23 m	756	58
DTP3	Card	60	12-23 m	756	58
DTP3	Card or History	68	12-23 m	756	58
DTP3	History	8	12-23 m	756	58
MCV	C or H <12 months	66	12-23 m	756	58
MCV	Card	45	12-23 m	756	58
MCV	Card or History	69	12-23 m	756	58
MCV	History	24	12-23 m	756	58
Pol1	C or H <12 months	95	12-23 m	756	58
Pol1	Card	68	12-23 m	756	58
Pol1	Card or History	96	12-23 m	756	58
Pol1	History	29	12-23 m	756	58
Pol3	C or H <12 months	68	12-23 m	756	58
Pol3	Card	60	12-23 m	756	58
Pol3	Card or History	72	12-23 m	756	58
Pol3	History	12	12-23 m	756	58

2001 Encuesta Demográfica y de Salud 2002

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93	12-23 m	2184	50
BCG	Card	47	12-23 m	2184	50
BCG	Card or History	94	12-23 m	2184	50
BCG	History	46	12-23 m	2184	50
DTP1	C or H <12 months	92	12-23 m	2184	50
DTP1	Card	48	12-23 m	2184	50
DTP1	Card or History	94	12-23 m	2184	50
DTP1	History	46	12-23 m	2184	50
DTP3	C or H <12 months	52	12-23 m	2184	50
DTP3	Card	39	12-23 m	2184	50

DTP3	Card or History	56	12-23 m	2184	50
DTP3	History	18	12-23 m	2184	50
MCV	C or H <12 months	75	12-23 m	2184	50
MCV	Card	43	12-23 m	2184	50
MCV	Card or History	88	12-23 m	2184	50
MCV	History	45	12-23 m	2184	50
Pol1	C or H <12 months	90	12-23 m	2184	50
Pol1	Card	49	12-23 m	2184	50
Pol1	Card or History	92	12-23 m	2184	50
Pol1	History	43	12-23 m	2184	50
Pol3	C or H <12 months	39	12-23 m	2184	50
Pol3	Card	38	12-23 m	2184	50
Pol3	Card or History	44	12-23 m	2184	50
Pol3	History	6	12-23 m	2184	50

1999 Encuesta de Agrupación de Indicadores Múltiples (MICS-2000), 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93	12-23 m	431	65
BCG	Card	60	12-23 m	431	65
BCG	Card or History	94	12-23 m	431	65
BCG	History	33	12-23 m	431	65
DTP1	C or H <12 months	90	12-23 m	431	65
DTP1	Card	60	12-23 m	431	65
DTP1	Card or History	92	12-23 m	431	65
DTP1	History	32	12-23 m	431	65
DTP3	C or H <12 months	59	12-23 m	431	65
DTP3	Card	49	12-23 m	431	65
DTP3	Card or History	62	12-23 m	431	65
DTP3	History	12	12-23 m	431	65
HepB3	C or H <12 months	29	12-23 m	431	65
HepB3	Card	31	12-23 m	431	65
HepB3	Card or History	31	12-23 m	431	65
HepB3	History	0	12-23 m	431	65
MCV	C or H <12 months	73	12-23 m	431	65
MCV	Card	53	12-23 m	431	65
MCV	Card or History	80	12-23 m	431	65
MCV	History	27	12-23 m	431	65

Dominican Republic - survey details

Pol1	C or H <12 months	89	12-23 m	431	65
Pol1	Card	60	12-23 m	431	65
Pol1	Card or History	91	12-23 m	431	65
Pol1	History	31	12-23 m	431	65
Pol3	C or H <12 months	56	12-23 m	431	65
Pol3	Card	47	12-23 m	431	65
Pol3	Card or History	59	12-23 m	431	65
Pol3	History	12	12-23 m	431	65

1998 República Dominicana Encuesta Experimental de Demografía y Salud 1999

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card <12 months	88	12-23 m	73	48
BCG	Card or History	88	12-23 m	73	48
DTP1	Card <12 months	97	12-23 m	73	48
DTP1	Card or History	97	12-23 m	73	48
DTP3	Card <12 months	54	12-23 m	73	48
DTP3	Card or History	62	12-23 m	73	48

MCV	Card <12 months	61	12-23 m	73	48
MCV	Card or History	83	12-23 m	73	48
Pol1	Card <12 months	94	12-23 m	73	48
Pol1	Card or History	95	12-23 m	73	48
Pol3	Card <12 months	37	12-23 m	73	48
Pol3	Card or History	40	12-23 m	73	48

1997 República Dominicana Encuesta Experimental de Demografía y Salud 1999

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card <12 months	94	24-35 m	119	48
DTP1	Card <12 months	93	24-35 m	119	48
DTP3	Card <12 months	66	24-35 m	119	48
MCV	Card <12 months	63	24-35 m	119	48
Pol1	Card <12 months	95	24-35 m	119	48
Pol3	Card <12 months	42	24-35 m	119	48

Further information and estimates prior to 2002 are available at:

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

http://www.who.int/immunization/monitoring_surveillance/routine/coverage/en/index4.html

Dominican Republic

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 receive 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.

Year	PAB coverage estimate (%)
2002	83
2003	84
2004	86
2005	75
2006	85
2007	85
2008	86
2009	86
2010	87
2011	90
2012	90
2013	90

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.