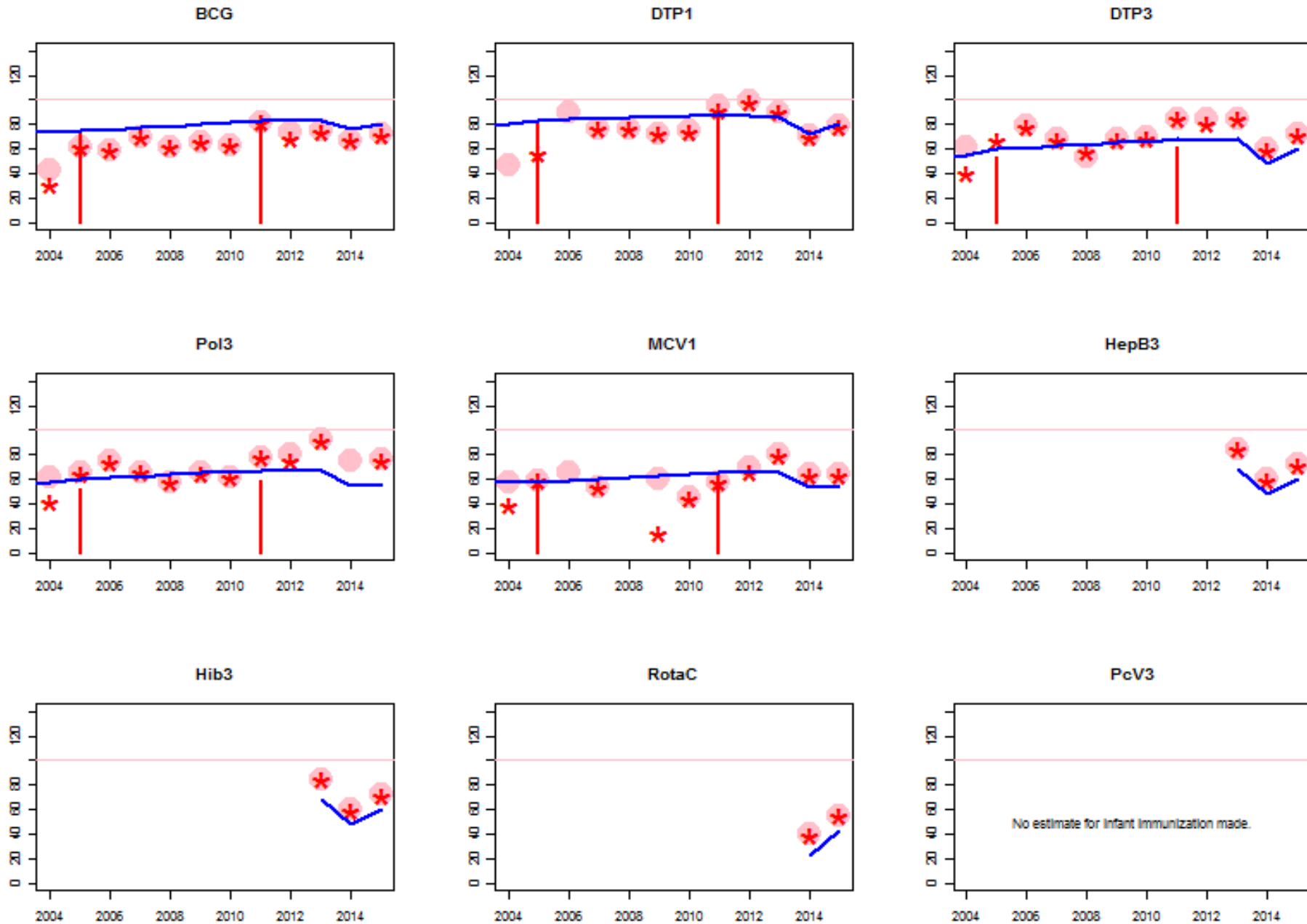
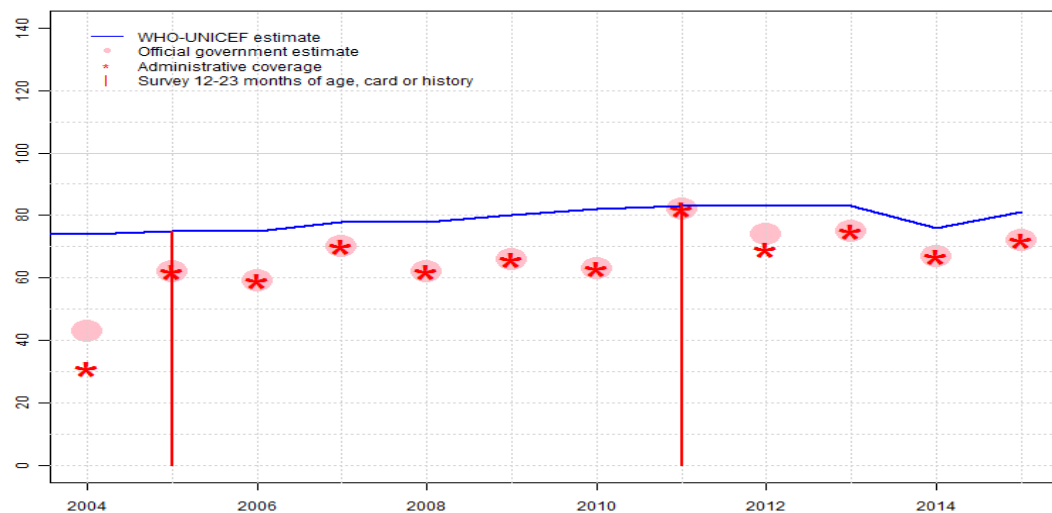


Haiti: WHO and UNICEF estimates of immunization coverage: 2015 revision



HTI - BCG



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	74	75	75	78	78	80	82	83	83	83	76	81
Estimate GoC	•	•	•	••	•	•	•	•	••	•	•	••
Official	43	62	59	70	62	66	63	82	74	75	67	72
Administrative	31	62	59	70	62	66	63	82	69	75	67	72
Survey	NA	75	NA	NA	NA	NA	NA	83	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Description:

- 2004: Reported data calibrated to 1999 and 2005 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 56 percent to 43 percent with increase to 62 percent. Estimate challenged by: D-
- 2005: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 75 percent based on 1 survey(s). Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-
- 2006: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-
- 2007: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=S+ D+
- 2008: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-
- 2009: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-
- 2010: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-
- 2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 83 percent based on 1 survey(s). Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: R-
- 2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. Vaccine stock out for 5 months in all districts. GoC=S+ D+
- 2013: Estimate is based on extrapolation from survey results for 2011 birth cohort. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. Programme reports 6 month stockout of AD syringes at national level. Estimate challenged by: R-
- 2014: Estimate is based on difference between administrative coverage between 2013 and 2014 applied to the estimate for 2013. Programme reports a two

Haiti - BCG

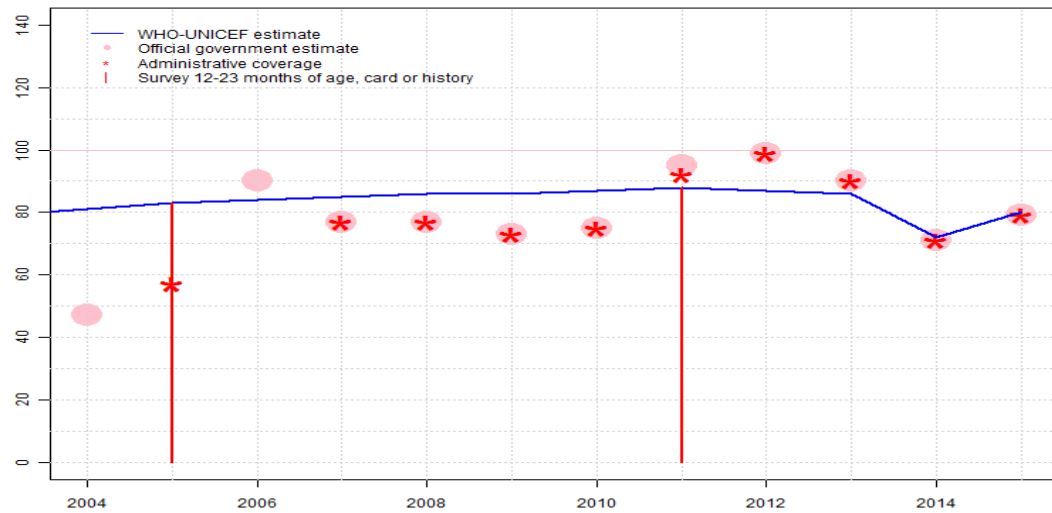
month stock-out of BCG syringes at national level. Estimate challenged

by: R-

2015: Reported data calibrated to 2014 levels. GoC=D+

Haiti - DTP1

HTI - DTP1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	81	83	84	85	86	86	87	88	87	86	72	80
Estimate GoC	•	•	•	••	•	•	••	•	•	•	•	•
Official	47	NA	90	77	77	73	75	95	99	90	71	79
Administrative	NA	57	NA	77	77	73	75	92	99	90	71	79
Survey	NA	83	NA	NA	NA	NA	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: 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:

- 2004: Reported data calibrated to 1999 and 2005 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 81 percent changed from previous revision value of 79 percent. Estimate challenged by: D-
- 2005: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 83 percent based on 1 survey(s). Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 83 percent changed from previous revision value of 81 percent. Estimate challenged by: D-R-
- 2006: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Unexplained increase from 57 percent to 90 percent with decrease 77 percent. Estimate of 84 percent changed from previous revision value of 82 percent. Estimate challenged by: D-
- 2007: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 85 percent changed from previous revision value of 83 percent. GoC=S+ D+
- 2008: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 86 percent changed from previous revision value of 84 percent. Estimate challenged by: D-
- 2009: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 86 percent changed from previous revision value of 84 percent. Estimate challenged by: D-
- 2010: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 87 percent changed from previous revision value of 85 percent. GoC=S+ D+
- 2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 88 percent based on 1 survey(s). Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 88 percent changed from previous revision value of 86 percent. Estimate challenged by: D-R-
- 2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. Pentavalent DTP-HepB-Hib vaccine introduced during 2012. Estimate of 87 percent changed from previous

Haiti - DTP1

revision value of 86 percent. Estimate challenged by: D-

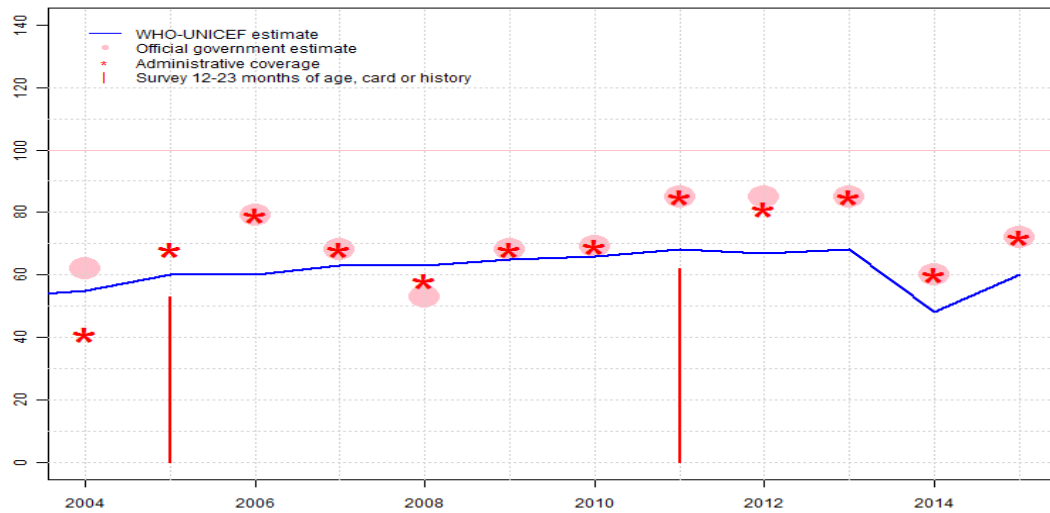
2013: Estimate is based on extrapolation from survey results for 2011 birth cohort. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. Programme reports 6 month stockout of AD syringes at national level. Estimate challenged by: D-R-

2014: Estimate is based on difference between administrative coverage between 2013 and 2014 applied to the estimate for 2013. Programme reports a one month stock-out at national level. Estimate challenged by: D-R-

2015: Reported data calibrated to 2014 levels. Programme recovered from prior year stock-out. Estimate challenged by: D-

Haiti - DTP3

HTI - DTP3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	55	60	60	63	63	65	66	68	67	68	48	60
Estimate GoC	••	•	••	••	••	••	••	•	•	•	•	•
Official	62	NA	79	68	53	68	69	85	85	85	60	72
Administrative	41	68	79	68	58	68	69	85	81	85	60	72
Survey	NA	53	NA	NA	NA	NA	NA	62	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Description:

- 2004: Reported data calibrated to 1999 and 2005 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 55 percent changed from previous revision value of 58 percent. GoC=S+ D+
- 2005: Estimate based on survey results. Survey on Mortality, Morbidity and Service Utilisation, Haiti 2005-2006 card or history results of 53 percent modified for recall bias to 60 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 68 percent and 3d dose card only coverage of 49 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: R-
- 2006: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Unexplained increase from 68 percent to 79 percent with decrease 68 percent. Estimate of 60 percent changed from previous revision value of 61 percent. GoC=S+ D+
- 2007: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=S+ D+
- 2008: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 68 percent to 53 percent with increase to 68 percent. Estimate of 63 percent changed from previous revision value of 64 percent. GoC=D+
- 2009: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=S+ D+
- 2010: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 66 percent changed from previous revision value of 67 percent. GoC=S+ D+
- 2011: Estimate is based on survey result. Survey on Mortality, Morbidity and Service Utilisation, Haiti 2012 card or history results of 62 percent modified for recall bias to 68 percent based on 1st dose card or history coverage of 88 percent, 1st dose card only coverage of 70 percent and 3d dose card only coverage of 54 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-
- 2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. The Ministry of Health, Haiti does not agree with the

WHO and UNICEF coverage estimates. Pentavalent DTP-HepB-Hib vaccine introduced during 2012. Estimate of 67 percent changed from previous revision value of 68 percent. Estimate challenged by: D-

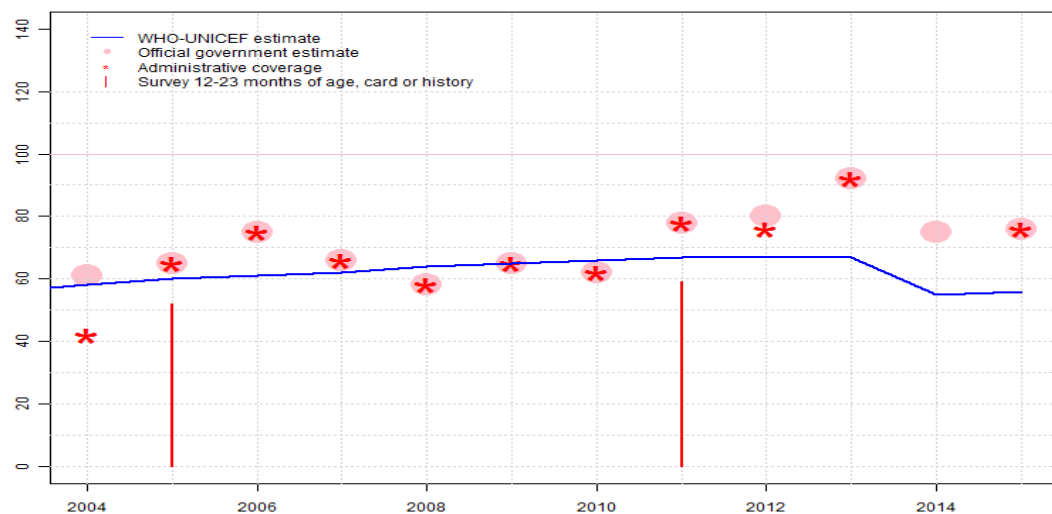
2013: Estimate is based on extrapolation from survey results for 2011 birth cohort. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. Programme reports 6 month stockout of AD syringes at national level. Estimate challenged by: D-R-

2014: Estimate is based on difference between administrative coverage between 2013 and 2014 applied to the estimate for 2013. Programme reports a one month stock-out at national level.. Estimate challenged by: D-R-

2015: Reported data calibrated to 2014 levels. Programme recovered from prior year stock-out. Estimate challenged by: D-

Haiti - Pol3

HTI - Pol3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	58	60	61	62	64	65	66	67	67	67	55	56
Estimate GoC	••	•	••	••	••	••	••	•	•	•	•	•
Official	61	65	75	66	58	65	62	78	80	92	75	76
Administrative	42	65	75	66	58	65	62	78	76	92	NA	76
Survey	NA	52	NA	NA	NA	NA	NA	59	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Description:

- 2004: Reported data calibrated to 1999 and 2005 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=S+ D+
- 2005: Estimate based on survey results. Survey on Mortality, Morbidity and Service Utilisation, Haiti 2005-2006 card or history results of 52 percent modified for recall bias to 60 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 70 percent and 3d dose card only coverage of 49 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: R-
- 2006: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=S+ D+
- 2007: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=S+ D+
- 2008: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=D+
- 2009: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=S+ D+
- 2010: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=S+ D+
- 2011: Estimate based on interpolation between data reported by national government supported by survey. Survey evidence of 67 percent based on 1 survey(s). Survey on Mortality, Morbidity and Service Utilisation, Haiti 2012 card or history results of 59 percent modified for recall bias to 67 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 72 percent and 3d dose card only coverage of 53 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-
- 2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. Vaccine stock out for 1 month. Estimate challenged by: D-
- 2013: Estimate is based on extrapolation from survey results for 2011 birth cohort. Reported data excluded. Fluctuations in reported data suggest poor

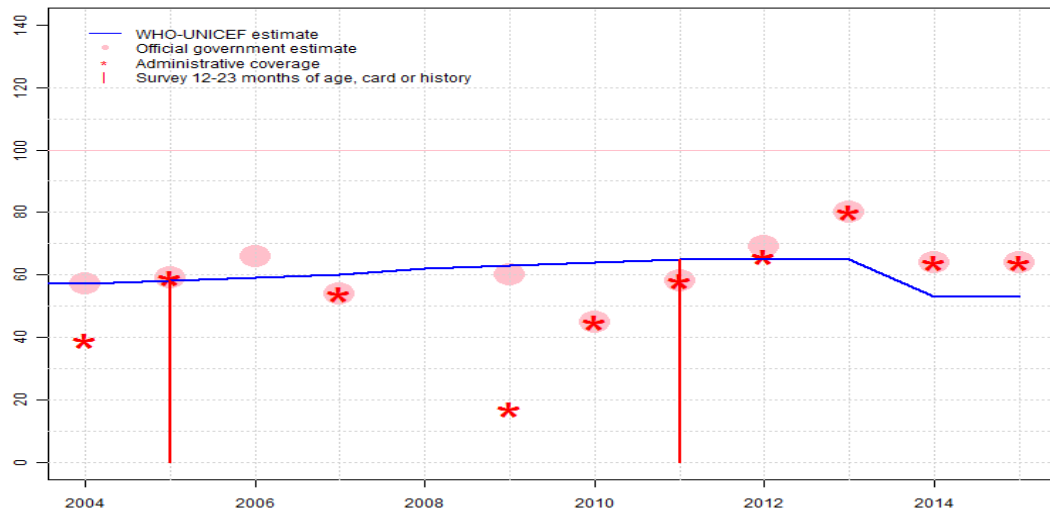
quality administrative recording and reporting. Reported data excluded. Unexplained increase from 80 percent to 92 percent with decrease 75 percent. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. Programme reports 6 month stockout of AD syringes at national level. Estimate challenged by: D-R-

2014: Estimate is based on difference between administrative coverage between 2013 and 2014 applied to the estimate for 2013. Estimate challenged by: R-

2015: Reported data calibrated to 2014 levels. Estimate challenged by: D-

Haiti - MCV1

HTI - MCV1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	57	58	59	60	62	63	64	65	65	65	53	53
Estimate GoC	••	•	•	••	•	•	•	•	••	•	•	•
Official	57	59	66	54	NA	60	45	58	69	80	64	64
Administrative	39	59	NA	54	NA	17	45	58	66	80	64	64
Survey	NA	58	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: 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.

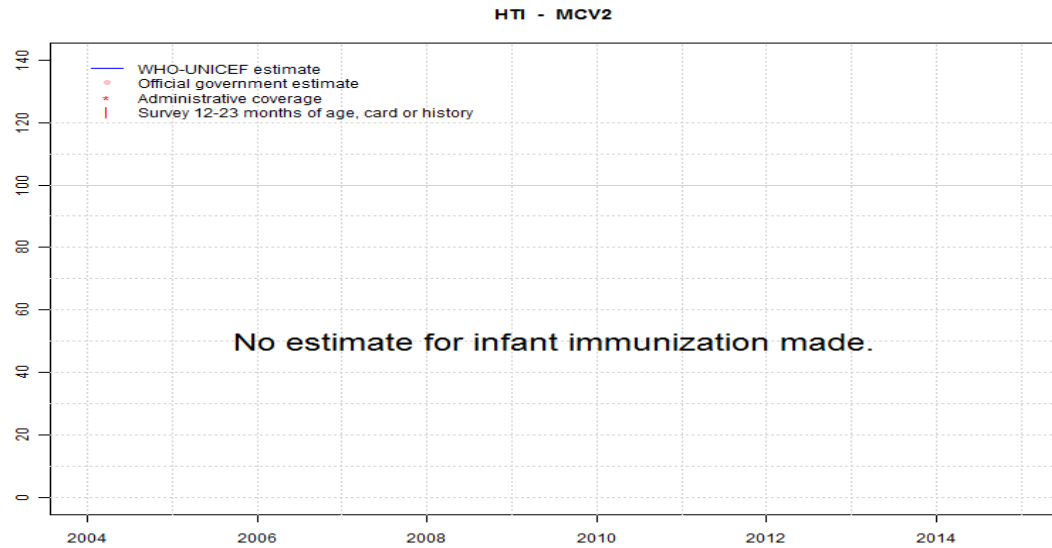
Description:

- 2004: Reported data calibrated to 1999 and 2005 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=S+ D+
- 2005: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 58 percent based on 1 survey(s). Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: R-
- 2006: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-
- 2007: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=S+ D+
- 2008: Reported data calibrated to 2005 and 2011 levels. GoC=No accepted empirical data
- 2009: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-
- 2010: Reported data calibrated to 2005 and 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 60 percent to 45 percent with increase to 58 percent. Estimate challenged by: D-
- 2011: Estimate based on Survey level. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: R-
- 2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. Vaccine stock out for 1 month in all districts. GoC=S+ D+
- 2013: Estimate is based on extrapolation from survey results for 2011 birth cohort. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Unexplained increase from 69 percent to 80 percent with decrease 64 percent. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. Programme reports 6 month stockout of AD syringes at national level. Estimate challenged by: D-R-
- 2014: Estimate is based on difference between administrative coverage between 2013 and 2014 applied to the estimate for 2013. Programme reports a two month stock-out at national level. Estimate challenged by: D-R-

Haiti - MCV1

2015: Reported data calibrated to 2014 levels. Estimate challenged by: D-

Haiti - MCV2



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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

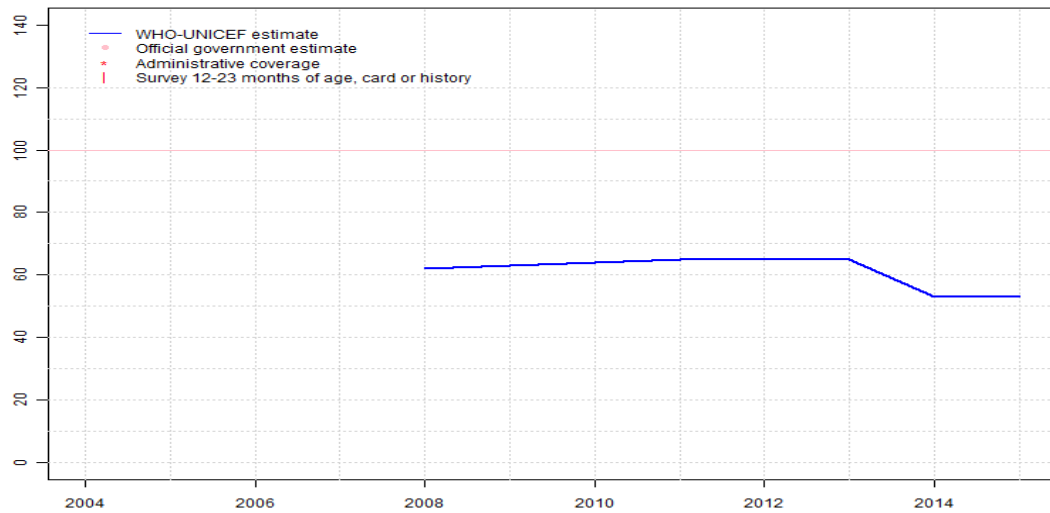
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Haiti - RCV1

HTI - RCV1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	62	63	64	65	65	65	53	53
Estimate GoC	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.

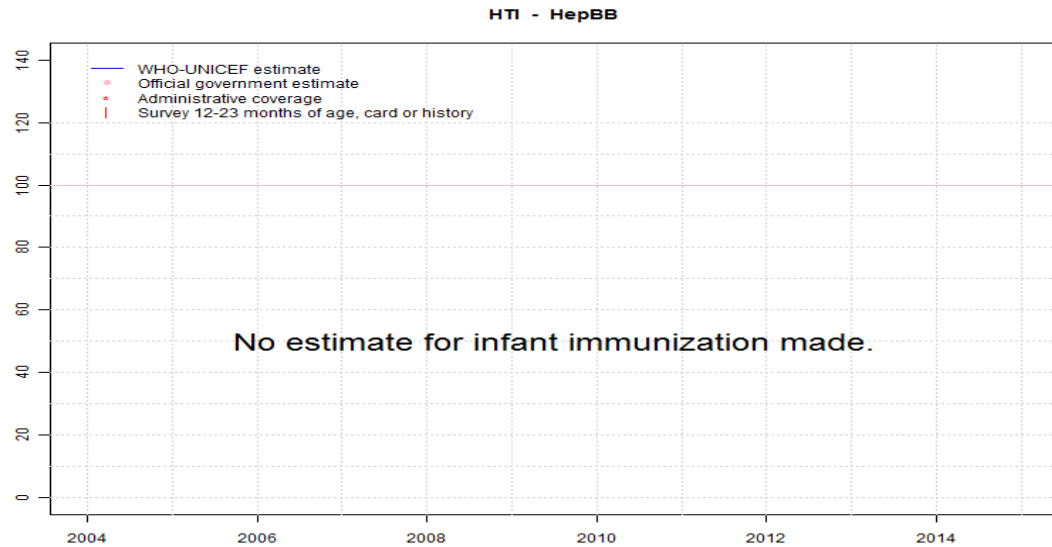
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

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 accompanying graph and data table.

- 2008: Estimate based on estimated MCV1. GoC=No accepted empirical data
 2009: Estimate based on estimated MCV1. Estimate challenged by: D-
 2010: Estimate based on estimated MCV1. Estimate challenged by: D-
 2011: Estimate based on estimated MCV1. Estimate challenged by: R-
 2012: Estimate based on estimated MCV1. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. GoC=S+ D+
 2013: Estimate based on estimated MCV1. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. Programme reports 6 month stockout of AD syringes at national level. Estimate challenged by: D-R-
 2014: Estimate based on estimated MCV1. Estimate challenged by: D-R-
 2015: Estimate based on estimated MCV1. Estimate challenged by: D-

Haiti - HepBB



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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

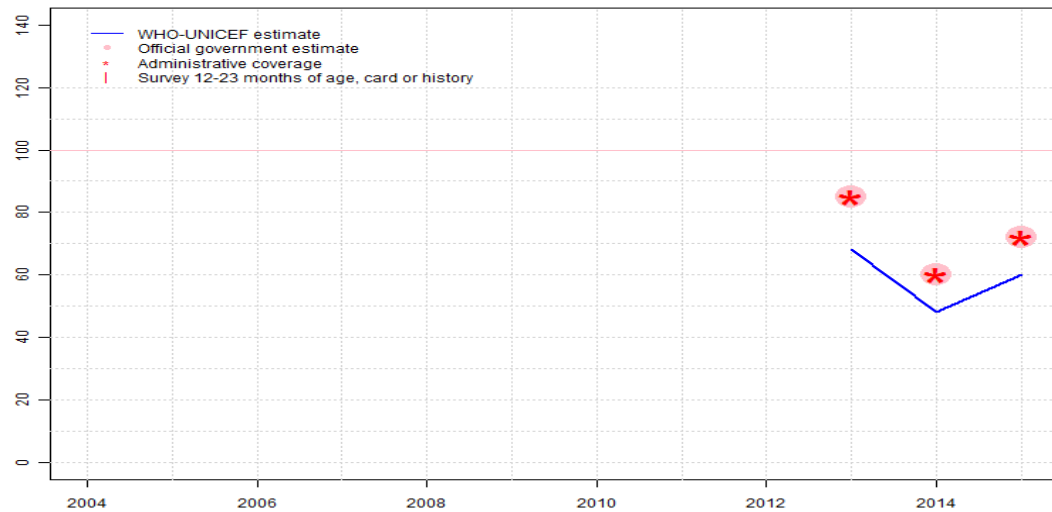
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Haiti - HepB3

HTI - HepB3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	68	48	60
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	85	60	72
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	85	60	72
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.

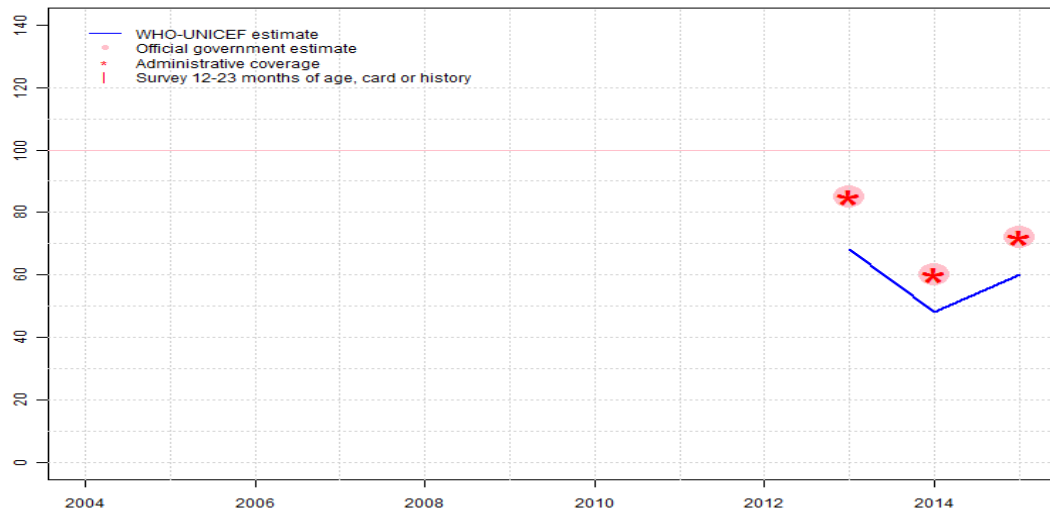
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2013: Pentavalent DTP-HepB-Hib vaccine introduced during 2012, reporting started in 2013. Estimate follows DTP3 coverage. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. Programme reports 6 month stockout of AD syringes at national level. Estimate challenged by: D-R-
- 2014: Estimate is based on difference between administrative coverage between 2013 and 2014 applied to the estimate for 2013. Programme reports a one month stock-out at national level.. Estimate challenged by: D-R-
- 2015: Reported data calibrated to 2014 levels. Programme recovered from prior year stock-out.. Estimate challenged by: D-

Haiti - Hib3

HTI - Hib3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	68	48	60
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	85	60	72
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	85	60	72
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.
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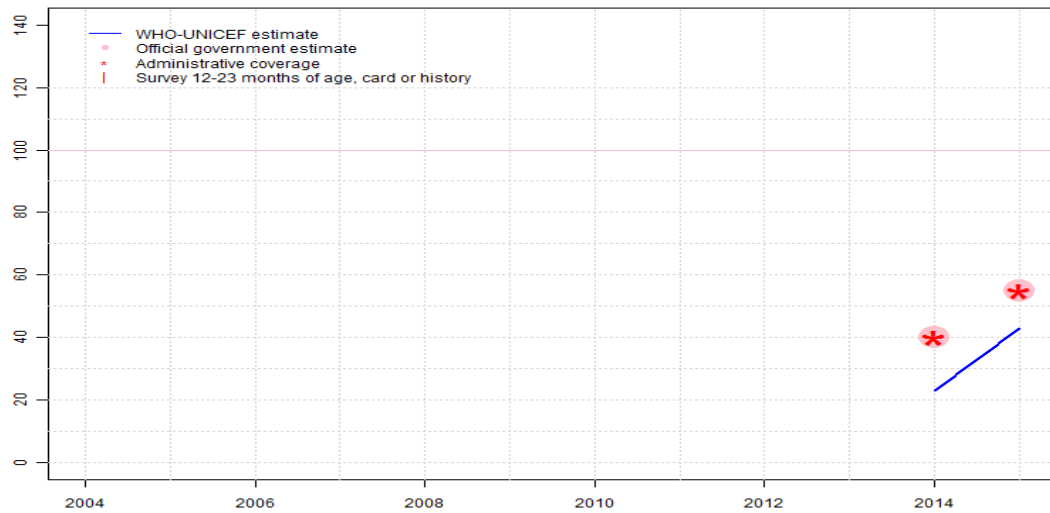
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2013: Pentavalent DTP-HepB-Hib vaccine introduced during 2012, reporting started in 2013. Estimate follows DTP3 coverage. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. Programme reports 6 month stockout of AD syringes at national level. Estimate challenged by: D-R-
- 2014: Estimate is based on difference between administrative coverage between 2013 and 2014 applied to the estimate for 2013. Programme reports a one month stock-out at national level.. Estimate challenged by: D-R-
- 2015: Reported data calibrated to 2014 levels. Programme recovered from prior year stock-out.. Estimate challenged by: D-

Haiti - RotaC

HTI - RotaC



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23	43
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	●	●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40	55
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40	55
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

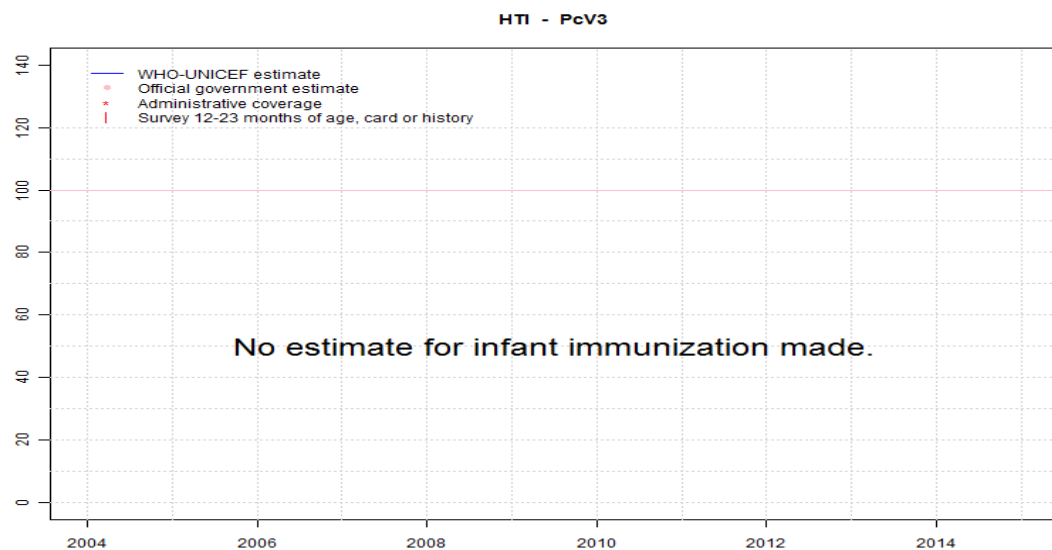
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- 2014: Programme reports 40 percent coverage for 58 percent of the target population. Estimate based on coverage achieved in total annual national target population. Rotavirus vaccine introduced during 2014. Estimate of 23 percent changed from previous revision value of 40 percent. Estimate challenged by: R-
- 2015: Estimate is based on difference between estimated and reported coverage for the third dose of DTP. Rotavirus vaccine 2nd dose is recommended 10 weeks of age. Estimate challenged by: D-R-



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
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.
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Haiti - survey details

2011 Enquête Mortalité, Morbidité et Utilisation des Services (EMMUS-V), Haiti 2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	81	12-23 m	1288	73
BCG	Card	65	12-23 m	943	73
BCG	Card or History	83	12-23 m	1288	73
BCG	History	18	12-23 m	345	73
DTP1	C or H <12 months	83	12-23 m	1288	73
DTP1	Card	70	12-23 m	943	73
DTP1	Card or History	88	12-23 m	1288	73
DTP1	History	18	12-23 m	345	73
DTP3	C or H <12 months	55	12-23 m	1288	73
DTP3	Card	54	12-23 m	943	73
DTP3	Card or History	62	12-23 m	1288	73
DTP3	History	8	12-23 m	345	73
MCV1	C or H <12 months	38	12-23 m	1288	73
MCV1	Card	51	12-23 m	943	73
MCV1	Card or History	65	12-23 m	1288	73
MCV1	History	14	12-23 m	345	73
Pol1	C or H <12 months	84	12-23 m	1288	73
Pol1	Card	72	12-23 m	943	73
Pol1	Card or History	91	12-23 m	1288	73
Pol1	History	19	12-23 m	345	73
Pol3	C or H <12 months	51	12-23 m	1288	73
Pol3	Card	53	12-23 m	943	73
Pol3	Card or History	59	12-23 m	1288	73
Pol3	History	5	12-23 m	345	73

2008 Vaccination Coverage in Haiti: Results from the 2009 National Survey

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	54	12-23 m	1345	62
DTP1	Card	58	12-23 m	1345	62
DTP3	Card	47	12-23 m	1345	62
MCV1	Card	29	12-23 m	1345	62
Pol1	Card	58	12-23 m	1345	62

Pol3 Card 46 12-23 m 1345 62

2005 Enquête Mortalité, Morbidité et Utilisation des Services (EMMUS-IV), Haiti 2005-2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	73	12-23 m	1135	73
BCG	Card	60	12-23 m	1135	73
BCG	Card or History	75	12-23 m	1135	73
BCG	History	15	12-23 m	1135	73
DTP1	C or H <12 months	78	12-23 m	1135	73
DTP1	Card	68	12-23 m	1135	73
DTP1	Card or History	83	12-23 m	1135	73
DTP1	History	15	12-23 m	1135	73
DTP3	C or H <12 months	48	12-23 m	1135	73
DTP3	Card	49	12-23 m	1135	73
DTP3	Card or History	53	12-23 m	1135	73
DTP3	History	4	12-23 m	1135	73
MCV1	C or H <12 months	45	12-23 m	1135	73
MCV1	Card	49	12-23 m	1135	73
MCV1	Card or History	58	12-23 m	1135	73
MCV1	History	9	12-23 m	1135	73
Pol1	C or H <12 months	81	12-23 m	1135	73
Pol1	Card	70	12-23 m	1135	73
Pol1	Card or History	86	12-23 m	1135	73
Pol1	History	15	12-23 m	1135	73
Pol3	C or H <12 months	47	12-23 m	1135	73
Pol3	Card	49	12-23 m	1135	73
Pol3	Card or History	52	12-23 m	1135	73
Pol3	History	3	12-23 m	1135	73

1999 Enquête Mortalité, Morbidité et Utilisation des Services (EMMUS-III), Haiti 2000, 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	68	12-23 m	1225	66
BCG	Card	53	12-23 m	1225	66
BCG	Card or History	71	12-23 m	1225	66

Haiti - survey details

BCG	History	18	12-23 m	1225	66	MCV1	Card or History	54	12-23 m	1225	66
DTP1	C or H <12 months	71	12-23 m	1225	66	MCV1	History	10	12-23 m	1225	66
DTP1	Card	60	12-23 m	1225	66	Pol1	C or H <12 months	72	12-23 m	1225	66
DTP1	Card or History	76	12-23 m	1225	66	Pol1	Card	61	12-23 m	1225	66
DTP1	History	15	12-23 m	1225	66	Pol1	Card or History	77	12-23 m	1225	66
DTP3	C or H <12 months	36	12-23 m	1225	66	Pol1	History	15	12-23 m	1225	66
DTP3	Card	37	12-23 m	1225	66	Pol3	C or H <12 months	38	12-23 m	1225	66
DTP3	Card or History	43	12-23 m	1225	66	Pol3	Card	38	12-23 m	1225	66
DTP3	History	6	12-23 m	1225	66	Pol3	Card or History	43	12-23 m	1225	66
MCV1	C or H <12 months	34	12-23 m	1225	66	Pol3	History	4	12-23 m	1225	66
MCV1	Card	44	12-23 m	1225	66						

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

Haiti

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 (%)
2004	48
2005	37
2006	31
2007	43
2008	50
2009	70
2010	70
2011	70
2012	76
2013	76
2014	81
2015	81

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.