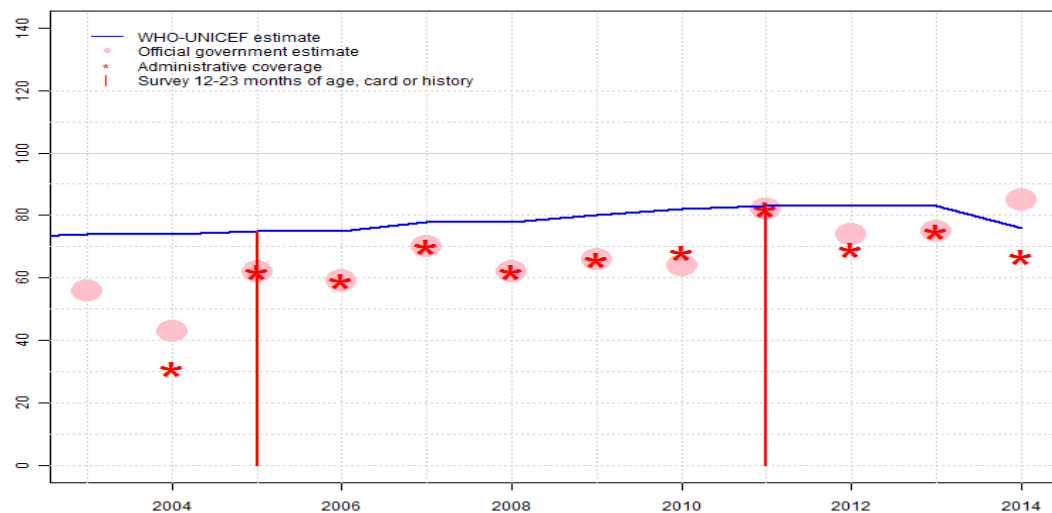


HTI - BCG



| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 74 | 74 | 75 | 75 | 78 | 78 | 80 | 82 | 83 | 83 | 83 | 76 |
| Estimate GoC | • | • | • | • | •• | • | • | •• | • | •• | • | • |
| Official | 56 | 43 | 62 | 59 | 70 | 62 | 66 | 64 | 82 | 74 | 75 | 85 |
| Administrative | NA | 31 | 62 | 59 | 70 | 62 | 66 | 68 | 82 | 69 | 75 | 67 |
| Survey | NA | NA | 75 | NA | NA | NA | NA | NA | 83 | NA | NA | NA |

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Description:

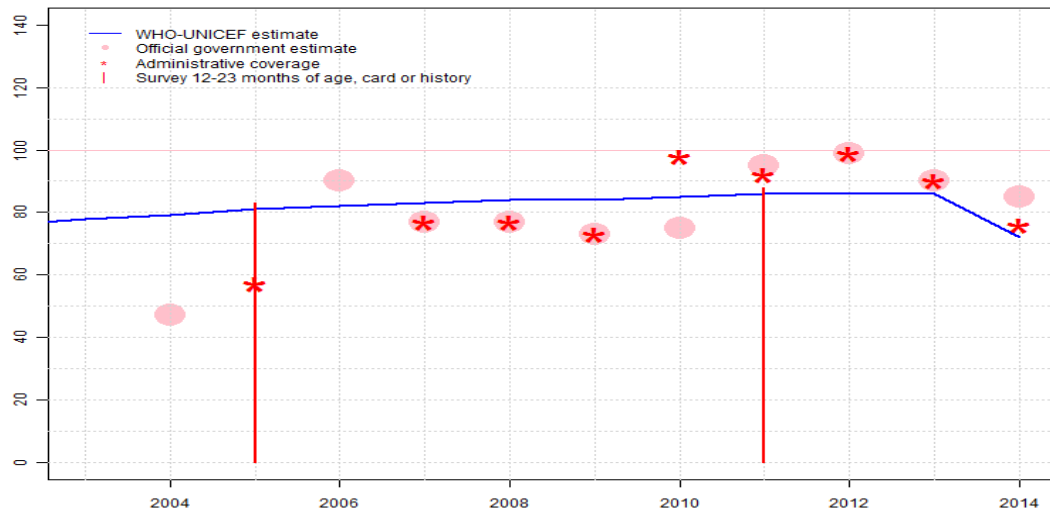
- 2003: Reported data calibrated to 1999 and 2005 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Unexplained increase from 45 percent to 56 percent with decrease 43 percent. Estimate challenged by: D-
- 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 of 75 percent changed from previous revision value of 76 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. 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 78 percent changed from previous revision value of 79 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 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. GoC=S+ 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 co-

hort. 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 month stock-out at national level. Programme reports their target coverage levels rather than coverage level achieved. Estimate challenged by: R-

Haiti - DTP1

HTI - DTP1



| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 78 | 79 | 81 | 82 | 83 | 84 | 84 | 85 | 86 | 86 | 86 | 72 |
| Estimate GoC | •• | • | • | • | • | • | • | • | • | • | • | • |
| Official | NA | 47 | NA | 90 | 77 | 77 | 73 | 75 | 95 | 99 | 90 | 85 |
| Administrative | NA | NA | 57 | NA | 77 | 77 | 73 | 98 | 92 | 99 | 90 | 76 |
| Survey | NA | NA | 83 | NA | NA | NA | NA | NA | 88 | NA | NA | NA |

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

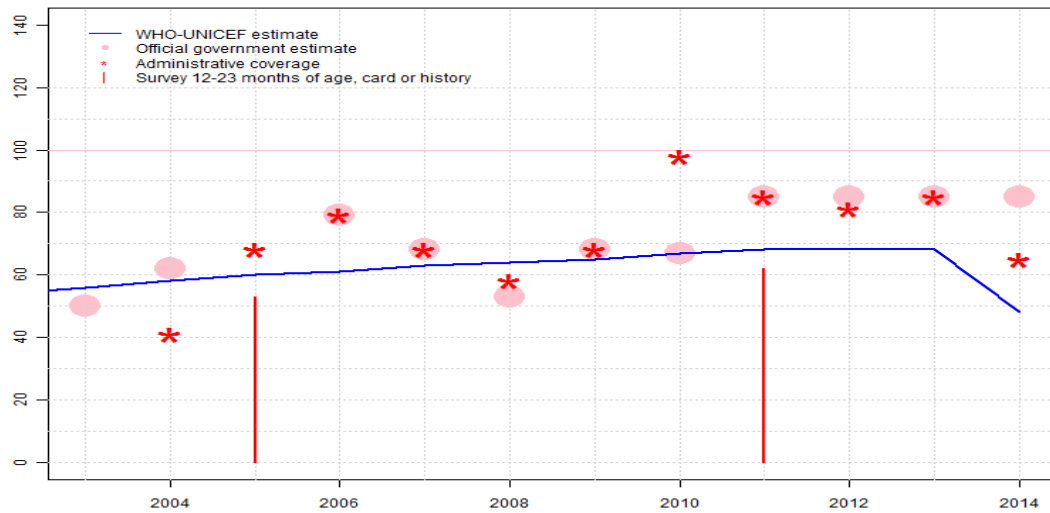
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on DTP3 coverage of 56. GoC=S+
- 2004: Estimate based on DTP3 coverage of 58. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-
- 2005: Estimate based on DTP3 coverage of 60. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-
- 2006: Estimate based on DTP3 coverage of 61. 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 challenged by: D-R-
- 2007: Estimate based on DTP3 coverage of 63. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: R-
- 2008: Estimate based on DTP3 coverage of 64. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-
- 2009: Estimate based on DTP3 coverage of 65. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-
- 2010: Estimate based on DTP3 coverage of 67. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-
- 2011: Estimate based on DTP3 coverage of 68. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-
- 2012: Estimate based on DTP3 coverage of 68. 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 challenged by: D-R-
- 2013: Estimate based on DTP3 coverage of 68. 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 based on DTP3 coverage of 48. Reported data excluded. Change in reported coverage from 90 level to 76 percent. Programme reports a one month stock-out at national level. Programme reports their target coverage levels rather than coverage level achieved. Estimate challenged by: D-R-

Haiti - DTP3

HTI - DTP3



| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 56 | 58 | 60 | 61 | 63 | 64 | 65 | 67 | 68 | 68 | 68 | 48 |
| Estimate GoC | •• | •• | • | •• | •• | •• | •• | • | • | • | • | • |
| Official | 50 | 62 | NA | 79 | 68 | 53 | 68 | 67 | 85 | 85 | 85 | 85 |
| Administrative | NA | 41 | 68 | 79 | 68 | 58 | 68 | 98 | 85 | 81 | 85 | 65 |
| Survey | NA | NA | 53 | NA | NA | NA | NA | NA | 62 | NA | NA | NA |

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Description:

- 2003: 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+
- 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 60 percent based on 1 survey(s). 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. 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. 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 challenged by: D-
- 2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 68 percent based on 1 survey(s). 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.

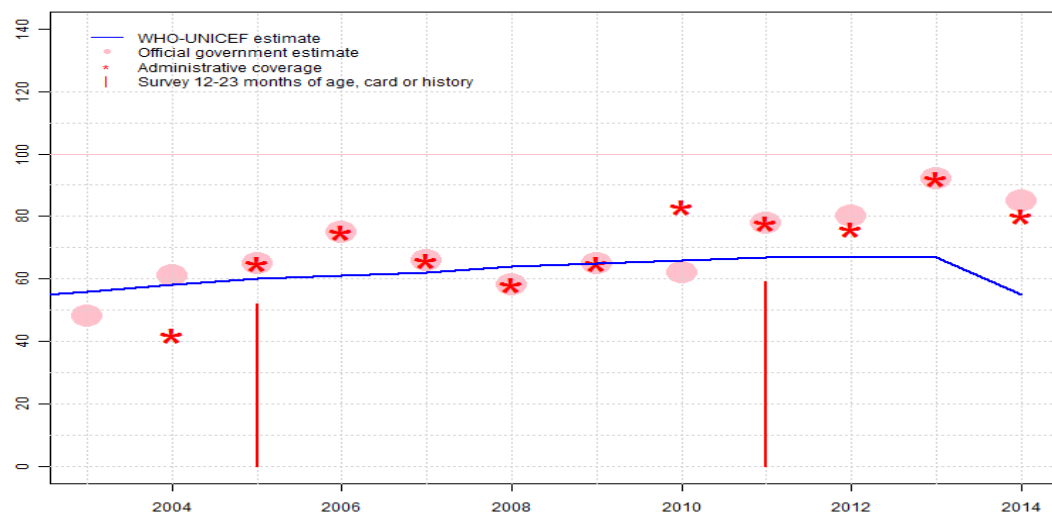
ing and reporting. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. Pentavalent DTP-HepB-Hib vaccine introduced during 2012. Estimate challenged by: D-

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. Reported data excluded. Change in reported coverage from 85 level to 65 percent. Programme reports a one month stock-out at national level. Programme reports their target coverage levels rather than coverage level achieved. Estimate challenged by: D-R-

Haiti - Pol3

HTI - Pol3



| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 56 | 58 | 60 | 61 | 62 | 64 | 65 | 66 | 67 | 67 | 67 | 55 |
| Estimate GoC | •• | •• | • | •• | •• | •• | •• | • | • | • | • | • |
| Official | 48 | 61 | 65 | 75 | 66 | 58 | 65 | 62 | 78 | 80 | 92 | 85 |
| Administrative | NA | 42 | 65 | 75 | 66 | 58 | 65 | 83 | 78 | 76 | 92 | 80 |
| Survey | NA | NA | 52 | NA | NA | NA | NA | NA | 59 | NA | NA | NA |

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Description:

- 2003: 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+
- 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 60 percent based on 1 survey(s). 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. Estimate challenged by: D-
- 2011: Survey evidence does not support reported data. Estimate based on survey results. 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-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.

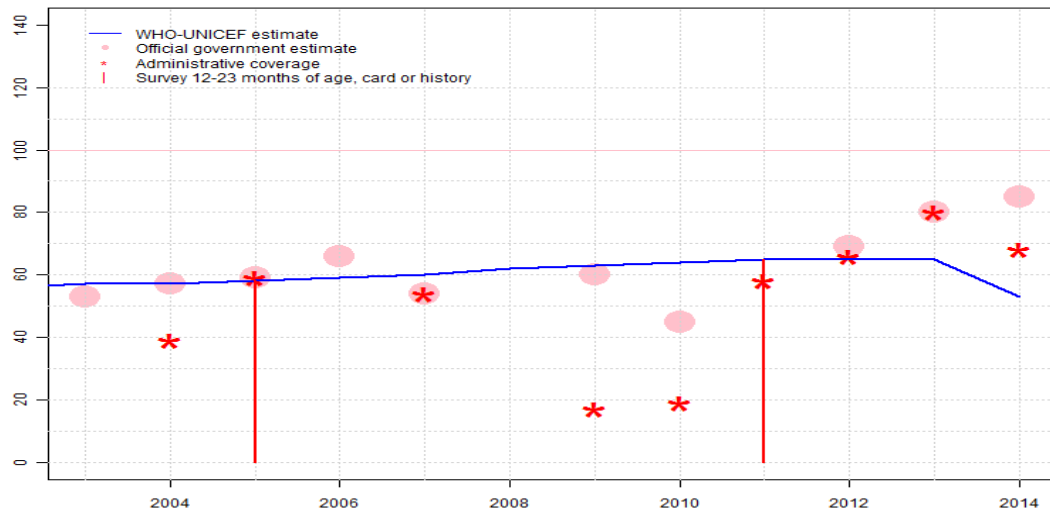
Estimate challenged by: D-

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 80 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. Reported data excluded. Change in reported coverage from 92 level to 80 percent. Programme reports their target coverage levels rather than coverage level achieved. Estimate challenged by: D-R-

Haiti - MCV1

HTI - MCV1



| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 57 | 57 | 58 | 59 | 60 | 62 | 63 | 64 | 65 | 65 | 65 | 53 |
| Estimate GoC | •• | •• | • | • | •• | • | • | • | • | •• | • | • |
| Official | 53 | 57 | 59 | 66 | 54 | NA | 60 | 45 | NA | 69 | 80 | 85 |
| Administrative | NA | 39 | 59 | NA | 54 | NA | 17 | 19 | 58 | 66 | 80 | 68 |
| Survey | NA | NA | 58 | NA | NA | NA | NA | NA | 65 | NA | NA | NA |

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Description:

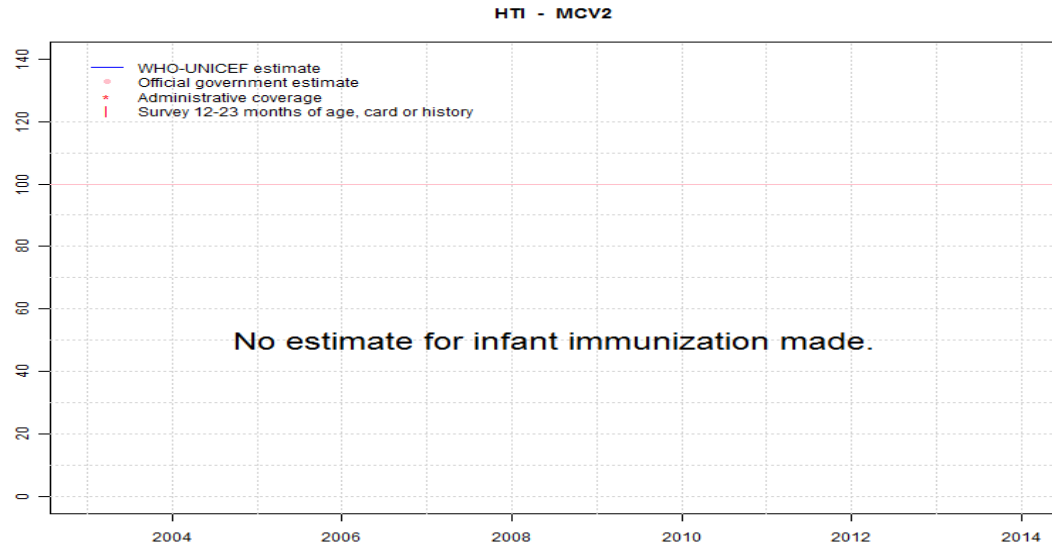
- 2003: Reported data calibrated to 1999 and 2005 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=S+ D+
- 2004: Reported data calibrated to 1999 and 2005 levels. Reported data excluded. Fluctuations in reported data suggest 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: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 65 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 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 68 percent. The Ministry of Health, Haiti does not agree with the WHO and UNICEF coverage estimates. Programme reports 6 month stockout of AD

Haiti - MCV1

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. Reported data excluded. Change in reported coverage from 80 level to 68 percent. Programme reports a two month stock-out at national level. Programme reports their target coverage levels rather than coverage level achieved. Estimate challenged by: D-R-

Haiti - MCV2



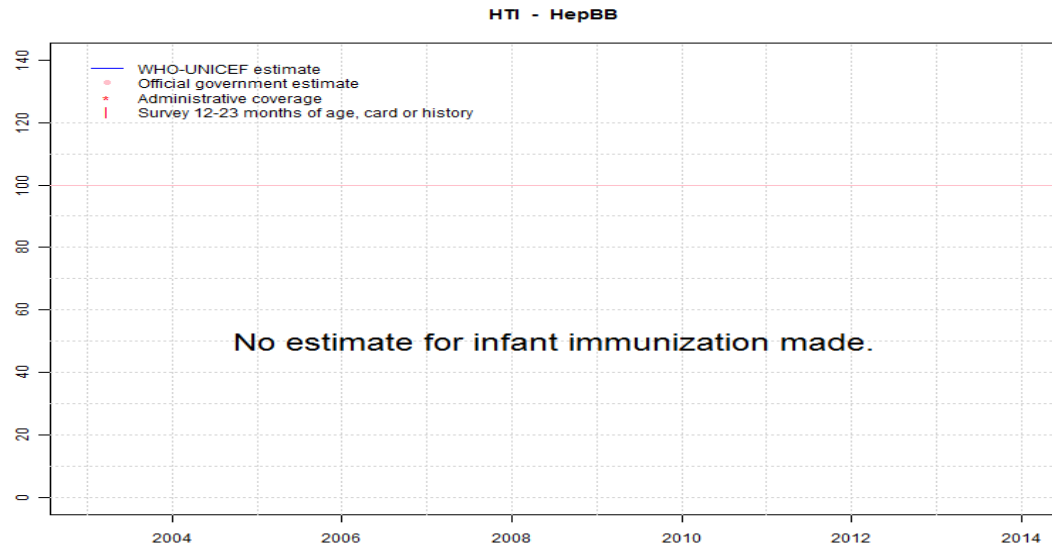
| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Survey | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Haiti - HepBB



| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Survey | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

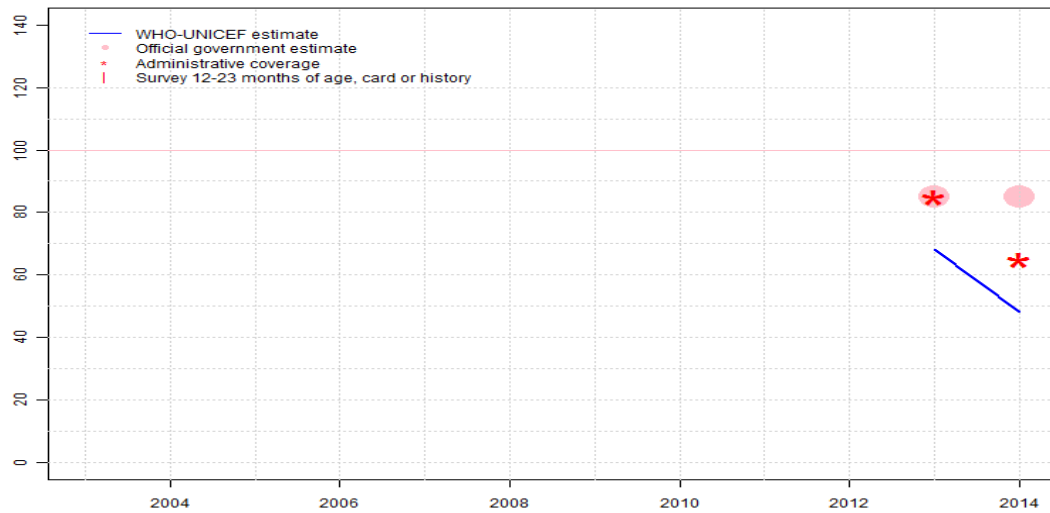
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Haiti - HepB3

HTI - HepB3



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. Reported data excluded. Decline in reported coverage from 85 level to 65 percent. Programme reports a one month stock-out at national level. Programme reports their target coverage levels rather than coverage level achieved. Estimate challenged by: D-R-

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 68 | 48 |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | ● | ● |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 85 | 85 |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 85 | 65 |
| Survey | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

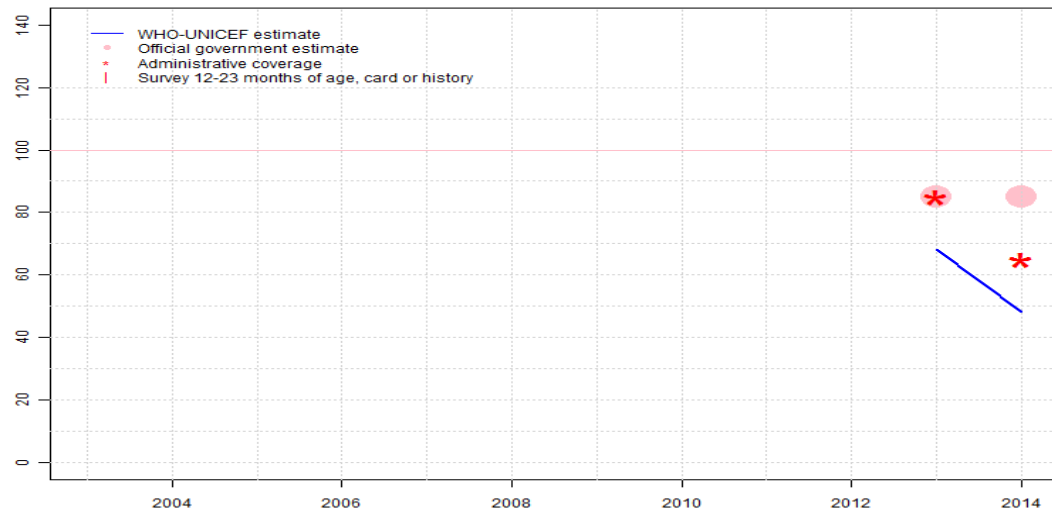
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Haiti - Hib3

HTI - Hib3



| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 68 | 48 |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | ● | ● |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 85 | 85 |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 85 | 65 |
| 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.

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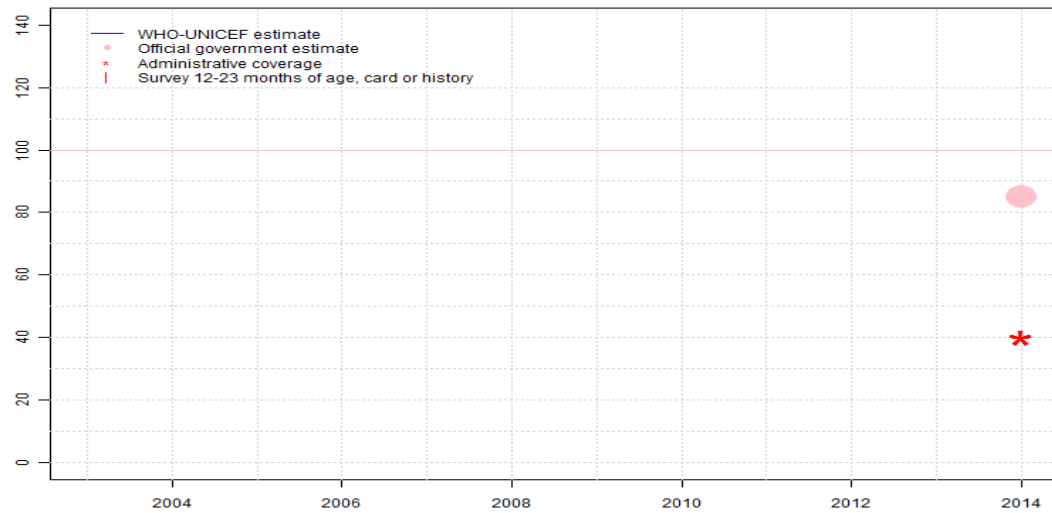
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Description:

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- 2014: Estimate is based on difference between administrative coverage between 2013 and 2014 applied to the estimate for 2013. Reported data excluded. Decline in reported coverage from 85 level to 65 percent. Programme reports a one month stock-out at national level. Programme reports their target coverage levels rather than coverage level achieved. Estimate challenged by: D-R-

Haiti - RotaC

HTI - RotaC



| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 40 |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | ● |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 85 |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 40 |
| Survey | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

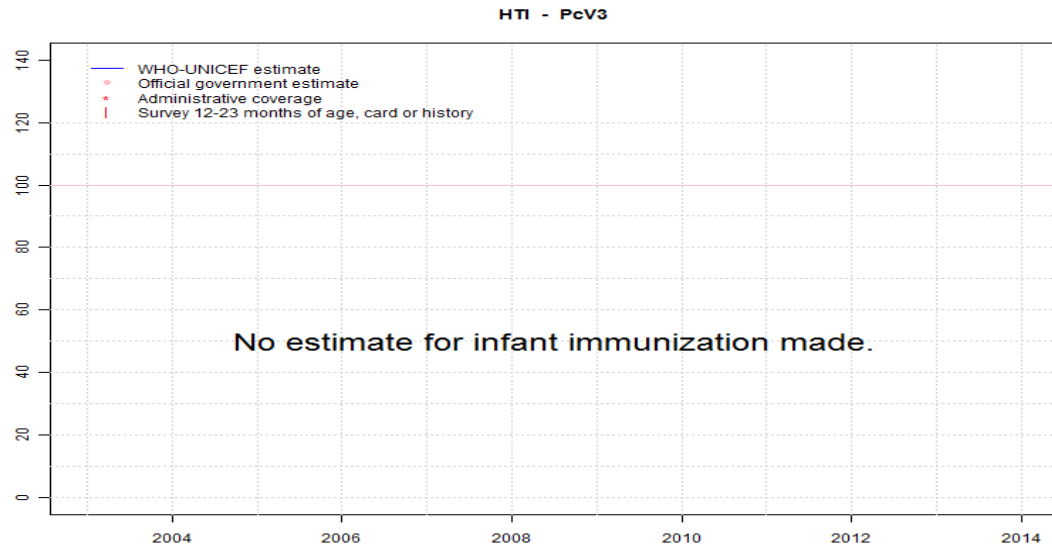
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

2014: Estimate based on reported administrative estimate. Rotavirus vaccine introduced during 2014. Programme reports their target coverage levels rather than coverage level achieved. Estimate challenged by: D-



| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Survey | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

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 (%) |
|------|---------------------------|
| 2003 | 42 |
| 2004 | 48 |
| 2005 | 37 |
| 2006 | 31 |
| 2007 | 43 |
| 2008 | 50 |
| 2009 | 70 |
| 2010 | 70 |
| 2011 | 70 |
| 2012 | 76 |
| 2013 | 76 |
| 2014 | 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.
WHO and UNICEF estimates of national immunization coverage