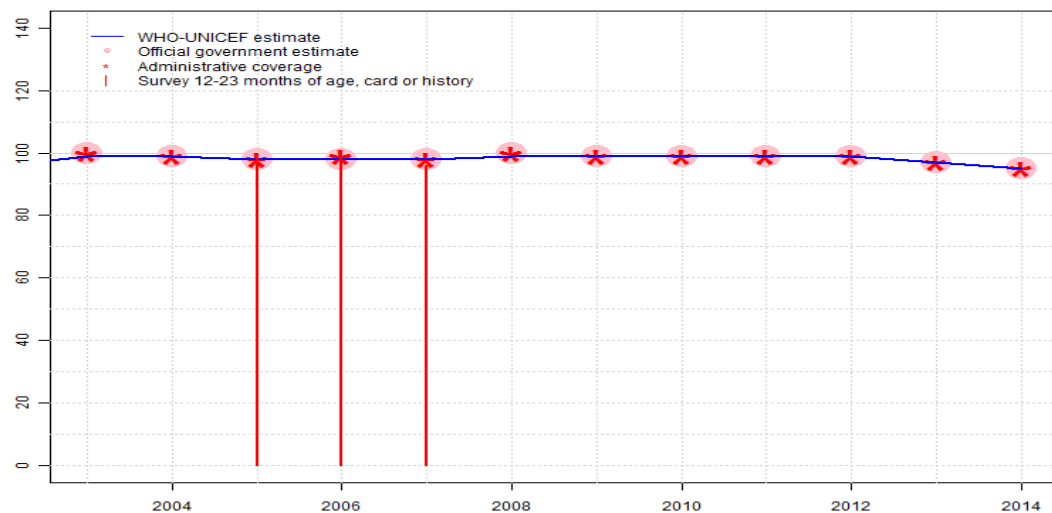


Sao Tome and Principe - BCG

STP - BCG



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	99	99	98	98	98	99	99	99	99	99	97	95
Estimate GoC	●	●	●	●●●	●●●	●	●	●	●	●	●●	●●
Official	100	99	98	98	98	100	99	99	99	99	97	95
Administrative	100	99	98	99	98	100	99	99	99	99	97	95
Survey	NA	NA	98.2	99.5	96.1	NA	NA	NA	NA	NA	NA	NA

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

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

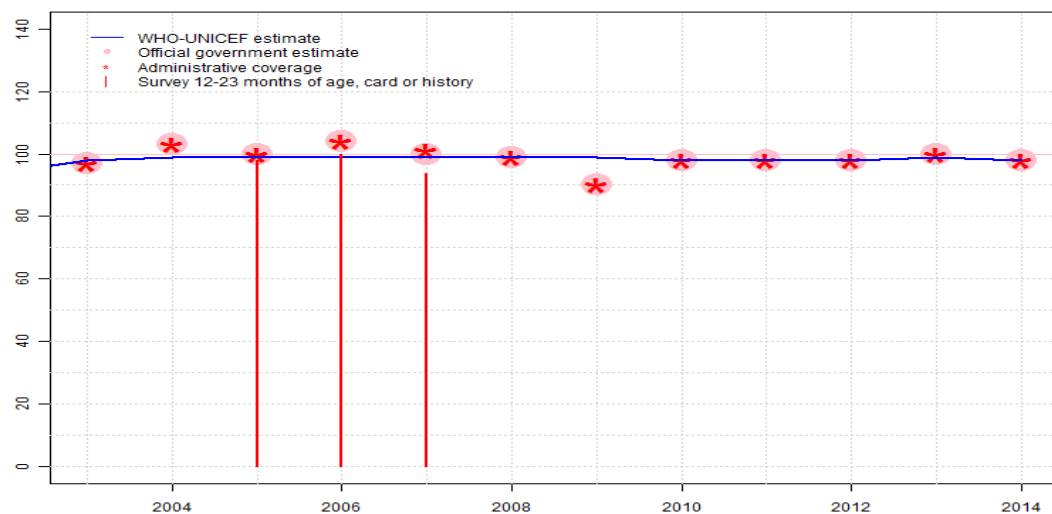
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2004: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 98 percent based on 1 survey(s). Estimate challenged by: D-
- 2006: Estimate based on coverage reported by national government. Survey results ignored. Sample size 220 less than 300. GoC=R+ S+ D+
- 2007: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF are aware of the conduct of a Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+

Sao Tome and Principe - DTP1

STP - DTP1



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	98	99	99	99	99	99	99	98	98	98	99	98
Estimate GoC	●●	●●	●●●	●●	●●●	●	●	●	●	●●	●●	●●
Official	97	103	100	104	100	99	90	98	98	98	100	98
Administrative	97	103	100	104	101	99	90	98	98	98	100	98
Survey	NA	NA	97.9	100.0	93.6	NA	NA	NA	NA	NA	NA	NA

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

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

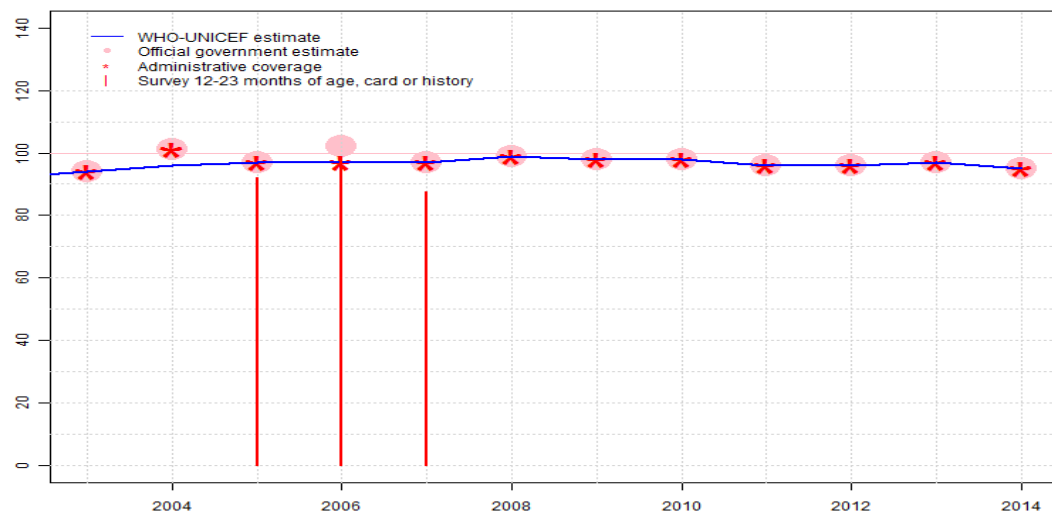
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Reported data calibrated to 1997 and 2005 levels. GoC=S+ D+
- 2004: Reported data calibrated to 1997 and 2005 levels. Reported data excluded. 103 percent greater than 100 percent. GoC=S+ D+
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 98 percent based on 1 survey(s). GoC=R+ S+ D+
- 2006: Estimate based on interpolation between coverage reported by national government. Survey results ignored. Sample size 220 less than 300. Reported data excluded. 104 percent greater than 100 percent. GoC=S+ D+
- 2007: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: DTP1 coverage estimated based on DTP3 coverage of 98. Estimate challenged by: D-R-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF are aware of the conduct of a Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+

Sao Tome and Principe - DTP3

STP - DTP3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	94	96	97	97	97	99	98	98	96	96	97	95
Estimate GoC	●●●	●●	●●●	●●	●●●	●	●	●	●●	●●	●●	●●
Official	94	101	97	102	97	99	98	98	96	96	97	95
Administrative	94	101	97	97	97	99	98	98	96	96	97	95
Survey	NA	NA	92.1	98.6	87.4	NA	NA	NA	NA	NA	NA	NA

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

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

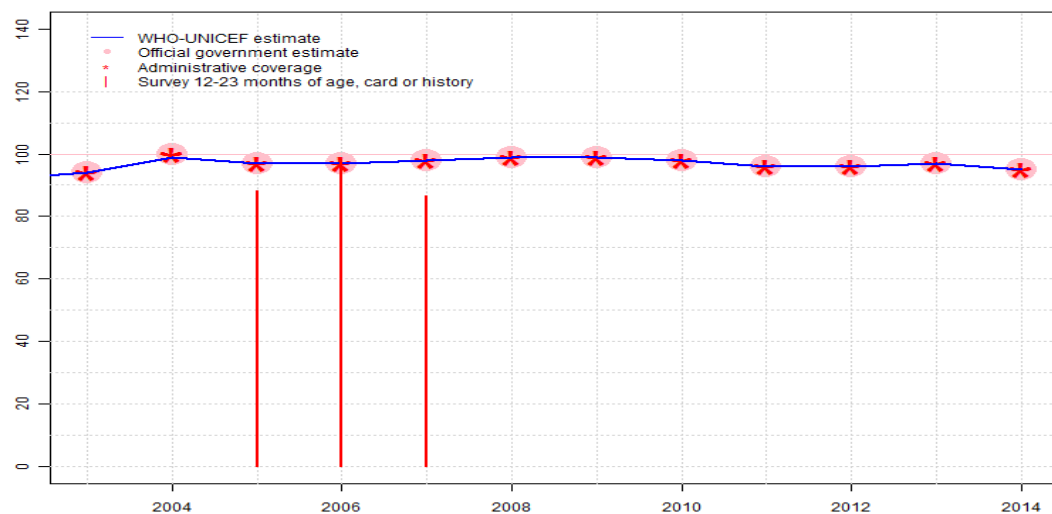
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2004: Estimate based on interpolation between coverage reported by national government. Reported data excluded. 101 percent greater than 100 percent. GoC=S+ D+
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). The 2006 São Tomé e Príncipe Multiple Indicator Cluster Survey: Final Report card or history results of 92 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 91 percent and 3d dose card only coverage of 88 percent. GoC=R+ S+ D+
- 2006: Estimate based on interpolation between coverage reported by national government. Survey results ignored. Sample size 220 less than 300. Enquête nationale de couverture vaccinale 2007 card or history results of 99 percent modified for recall bias to 99 percent based on 1st dose card or history coverage of 100 percent, 1st dose card only coverage of 97 percent and 3d dose card only coverage of 96 percent. Reported data excluded. 102 percent greater than 100 percent. GoC=S+ D+
- 2007: Estimate based on coverage reported by national government supported by survey. Survey evidence of 89 percent based on 1 survey(s). Sao Tome and Principe Demographic and Health Survey 2008-2009 card or history results of 87 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 90 percent and 3d dose card only coverage of 86 percent. GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF are aware of the conduct of a Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+

Sao Tome and Principe - Pol3

STP - Pol3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	94	99	97	97	98	99	99	98	96	96	97	95
Estimate GoC	●●●	●	●●●	●●●	●●●	●	●	●	●	●●	●●	●●
Official	94	100	97	97	98	99	99	98	96	96	97	95
Administrative	94	100	97	97	98	99	99	98	96	96	97	95
Survey	NA	NA	88.1	98.2	86.7	NA	NA	NA	NA	NA	NA	NA

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

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

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

Description:

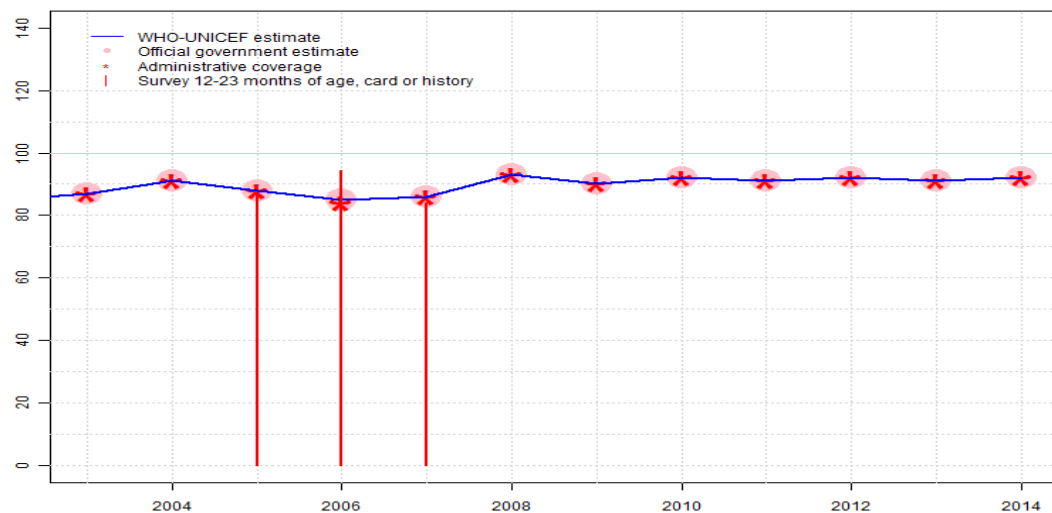
- 2003: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2004: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 1 survey(s). The 2006 São Tomé e Príncipe Multiple Indicator Cluster Survey: Final Report card or history results of 88 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 91 percent and 3d dose card only coverage of 88 percent. GoC=R+ S+ D+
- 2006: Estimate based on coverage reported by national government. Survey results ignored. Sample size 220 less than 300. Enquête nationale de couverture vaccinale 2007 card or history results of 98 percent modified for recall bias to 98 percent based on 1st dose card or history coverage of 100 percent, 1st dose card only coverage of 97 percent and 3d dose card only coverage of 96 percent. GoC=R+ S+ D+
- 2006: Estimate based on coverage reported by national government. Survey results ignored. Sample size 220 less than 300. Enquête nationale de couverture vaccinale 2007 card or history results of 98 percent modified for recall bias to 98 percent based on 1st dose card or history coverage of 100 percent, 1st dose card only coverage of 97 percent and 3d dose card only coverage of 96 percent. GoC=R+ S+ D+
- 2007: Estimate based on coverage reported by national government supported by survey. Survey evidence of 89 percent based on 1 survey(s). Sao Tome and Principe Demographic and Health Survey 2008-2009 card or history results of 87 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 91 percent and 3d dose card only coverage of 86 percent. GoC=R+ S+ D+
- 2007: Estimate based on coverage reported by national government supported by survey. Survey evidence of 89 percent based on 1 survey(s). Sao Tome and Principe Demographic and Health Survey 2008-2009 card or history results of 87 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 91 percent and 3d dose card only coverage of 86 percent. GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-

Sao Tome and Principe - Pol3

- 2011: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF are aware of the conduct of a Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+

Sao Tome and Principe - MCV1

STP - MCV1



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	87	91	88	85	86	93	90	92	91	92	91	92
Estimate GoC	●●●	●	●●●	●●●	●●●	●	●	●	●	●●	●●	●●
Official	87	91	88	85	86	93	90	92	91	92	91	92
Administrative	87	91	88	84	86	93	90	92	91	92	91	92
Survey	NA	NA	86.9	94.5	84.0	NA	NA	NA	NA	NA	NA	NA

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

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

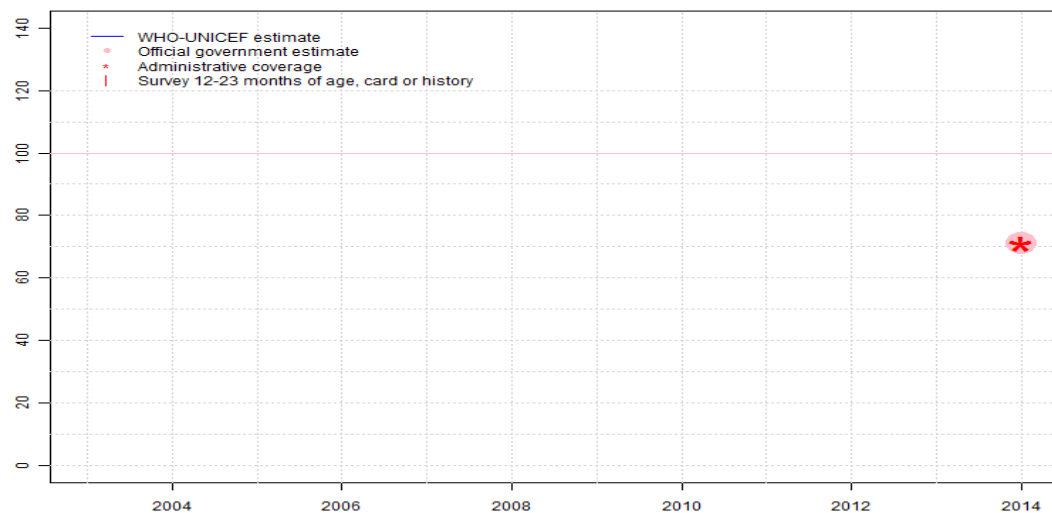
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2004: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 87 percent based on 1 survey(s). GoC=R+ S+ D+
- 2006: Estimate based on coverage reported by national government. Survey results ignored. Sample size 220 less than 300. GoC=R+ S+ D+
- 2007: Estimate based on coverage reported by national government supported by survey. Survey evidence of 84 percent based on 1 survey(s). GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF are aware of the conduct of a Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+

Sao Tome and Principe - MCV2

STP - 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	71
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	71
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	71
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.

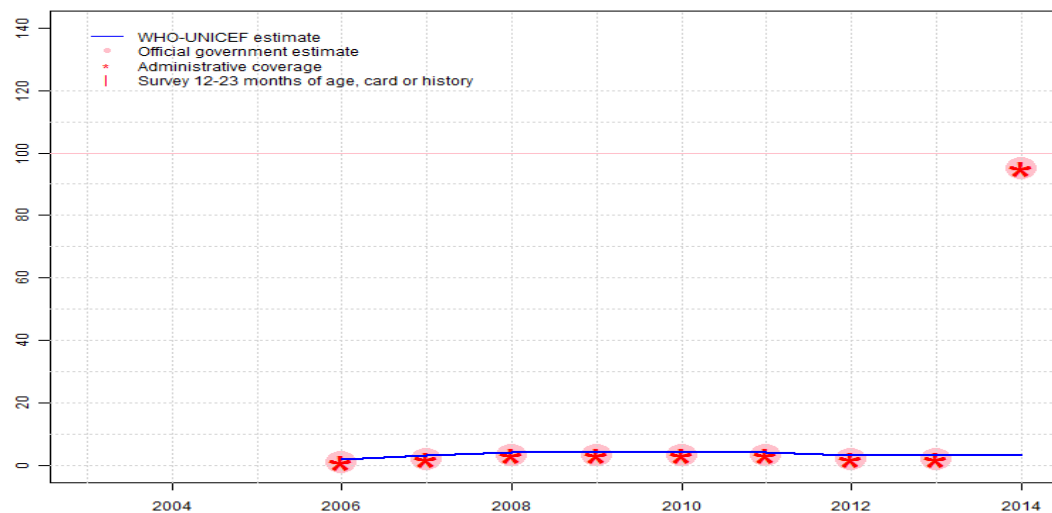
Description:

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

2014: Estimate based on coverage reported by national government. WHO and UNICEF are aware of the conduct of a Multiple Indicator Cluster Survey and await the final results. The second dose of MCV was introduced during 2013. Reporting began in 2014. GoC=R+ D+

Sao Tome and Principe - HepBB

STP - HepBB



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	NA	NA	NA	2	3	4	4	4	4	3	3	3
Estimate GoC	NA	NA	NA	••	••	••	••	••	••	••	••	•
Official	NA	NA	NA	1	2	3	3	3	3	2	2	95
Administrative	NA	NA	NA	1	2	3	3	3	3	2	2	95
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.

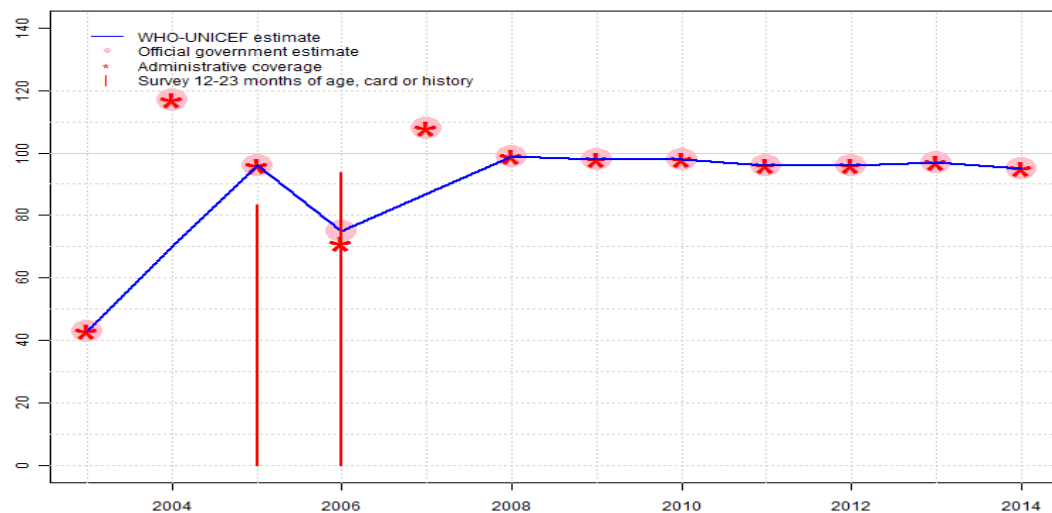
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2006: Reported data calibrated to 2014 levels. Estimate of 2 percent changed from previous revision value of 1 percent. GoC=D+
- 2007: Reported data calibrated to 2014 levels. Estimate of 3 percent changed from previous revision value of 2 percent. GoC=D+
- 2008: Reported data calibrated to 2014 levels. Estimate of 4 percent changed from previous revision value of 3 percent. GoC=D+
- 2009: Reported data calibrated to 2014 levels. Estimate of 4 percent changed from previous revision value of 3 percent. GoC=D+
- 2010: Reported data calibrated to 2014 levels. Estimate of 4 percent changed from previous revision value of 3 percent. GoC=D+
- 2011: Reported data calibrated to 2014 levels. Estimate of 4 percent changed from previous revision value of 3 percent. GoC=D+
- 2012: Reported data calibrated to 2014 levels. Estimate of 3 percent changed from previous revision value of 2 percent. GoC=D+
- 2013: Reported data calibrated to 2014 levels. Estimate of 3 percent changed from previous revision value of 2 percent. GoC=D+
- 2014: Estimate is based on coverage among the national target population. Reported data excluded. Change in reported coverage from 2 level to 95 percent. WHO and UNICEF are aware of the conduct of a Multiple Indicator Cluster Survey and await the final results. Estimate challenged by: R-

Sao Tome and Principe - HepB3

STP - HepB3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	43	70	96	75	87	99	98	98	96	96	97	95
Estimate GoC	•	•	•	•	•	•	•	•	•	••	••	•
Official	43	117	96	75	108	99	98	98	96	96	97	95
Administrative	43	117	96	71	108	99	98	98	96	96	97	95
Survey	NA	NA	83.2	93.6	NA	NA	NA	NA	NA	NA	NA	NA

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

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

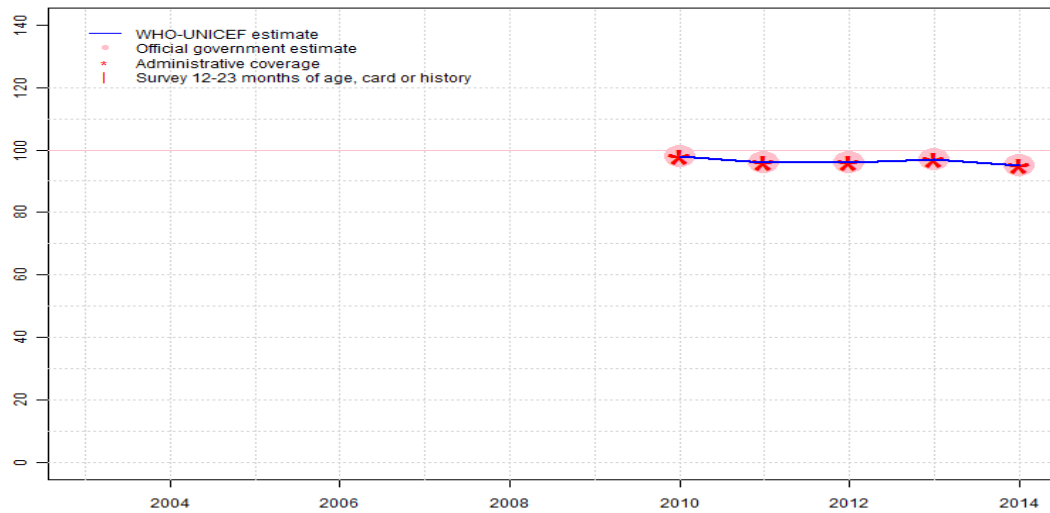
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on coverage reported by national government. HepB vaccine introduced in 2003. Estimate challenged by: S-
- 2004: Estimate based on interpolation between reported values. Reported data excluded. 117 percent greater than 100 percent. Reported data excluded. Unexplained increase from 43 percent to 117 percent with decrease 96 percent. Estimate challenged by: D-S-
- 2005: Estimate based on coverage reported by national government. The 2006 São Tomé e Príncipe Multiple Indicator Cluster Survey: Final Report results ignored by working group. Survey supports reported data for all other antigens. The 2006 São Tomé e Príncipe Multiple Indicator Cluster Survey: Final Report card or history results of 83 percent modified for recall bias to 83 percent based on 1st dose card or history coverage of 88 percent, 1st dose card only coverage of 88 percent and 3d dose card only coverage of 83 percent. Estimate challenged by: S-
- 2006: Estimate based on coverage reported by national government. Survey results ignored. Sample size 220 less than 300. Enquête nationale de couverture vaccinale 2007 card or history results of 94 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 100 percent, 1st dose card only coverage of 97 percent and 3d dose card only coverage of 91 percent. Decline is due to eight months vaccine stock out. Estimate challenged by: S-
- 2007: Estimate based on interpolation between reported values. Reported data excluded. 108 percent greater than 100 percent. Estimate challenged by: D-S-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF are aware of the conduct of a Multiple Indicator Cluster Survey and await the final results. Estimate challenged by: D-

Sao Tome and Principe - Hib3

STP - Hib3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	NA	NA	NA	NA	NA	NA	NA	98	96	96	97	95
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	•	•	••	••	••
Official	NA	NA	NA	NA	NA	NA	NA	98	96	96	97	95
Administrative	NA	NA	NA	NA	NA	NA	NA	98	96	96	97	95
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.

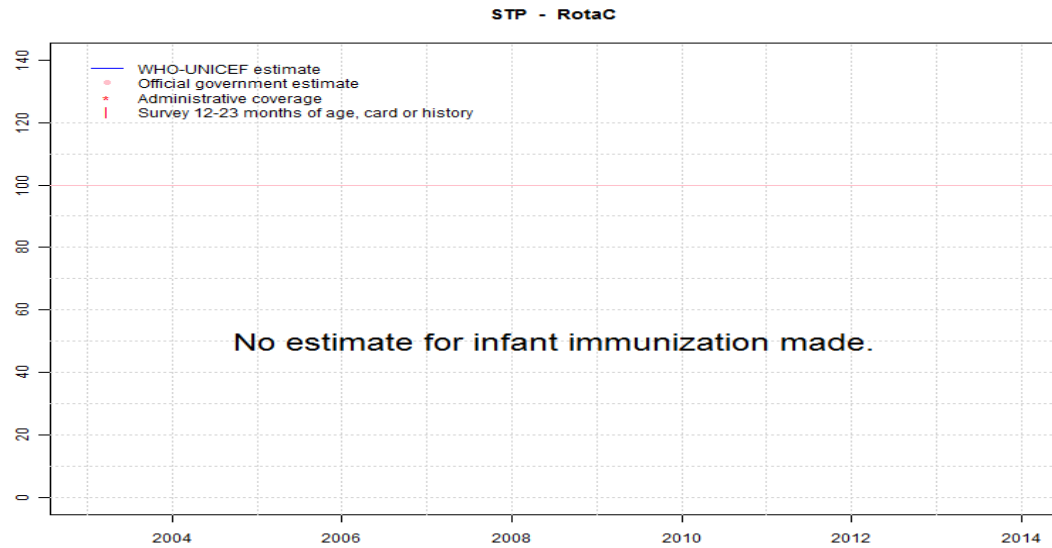
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2010: Estimate based on coverage reported by national government. DTP-HepB-Hib pentavalent vaccine introduced in 2009. Reporting began in 2010. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF are aware of the conduct of a Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+

Sao Tome and Principe - RotaC



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

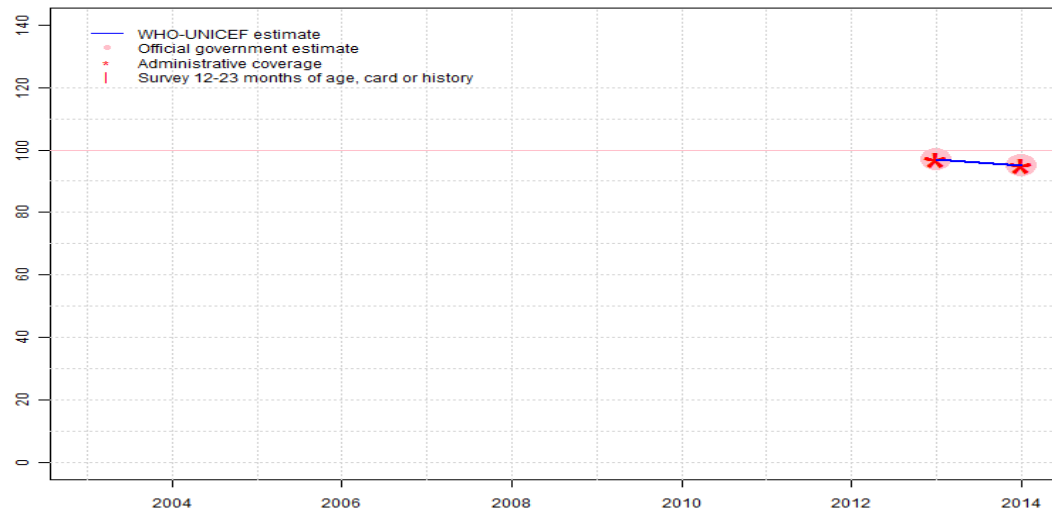
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

Sao Tome and Principe - PcV3

STP - PcV3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	97	95
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	●●	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	97	95
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	97	95
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.

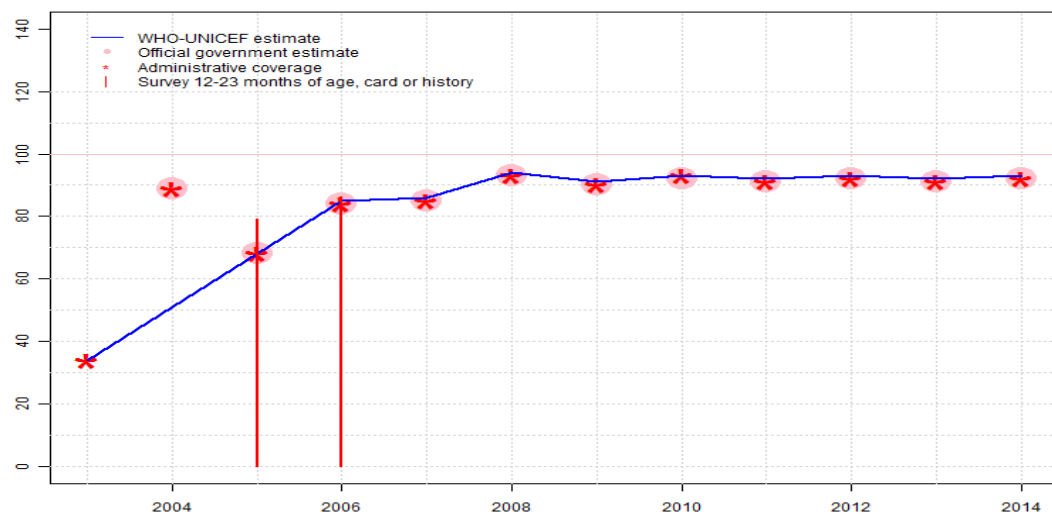
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2013: Estimate based on coverage reported by national government. Pneumococcal conjugate vaccine introduced in 2012. National reporting began in 2013. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF are aware of the conduct of a Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+

Sao Tome and Principe - YFV

STP - YFV



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	34	51	68	85	86	94	91	93	92	93	92	93
Estimate GoC	••	•	•	••	••	•	•	•	•	•	••	••
Official	NA	89	68	84	85	93	90	92	91	92	91	92
Administrative	34	89	68	84	85	93	90	93	91	92	91	92
Survey	NA	NA	79.3	86.4	NA	NA	NA	NA	NA	NA	NA	NA

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

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

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

Description:

- 2003: Estimate is based on reported data. YFV introduced in 2003. GoC=R+ D+
- 2004: Reported data calibrated to 2003 and 2005 levels. Reported data excluded. Unexplained increase from 34 percent to 89 percent with decrease 68 percent. Estimate challenged by: D-
- 2005: Survey supports reported. Reported data excluded. Decline in reported coverage from 89 percent to 68 percent with increase to 84 percent. Estimate challenged by: R-
- 2006: Reported data calibrated to 2005 levels. Survey results ignored. Sample size 220 less than 300. GoC=S+ D+
- 2007: Reported data calibrated to 2005 levels. GoC=S+ D+
- 2008: Reported data calibrated to 2005 levels. Estimate challenged by: D-
- 2009: Reported data calibrated to 2005 levels. Estimate challenged by: D-
- 2010: Reported data calibrated to 2005 levels. Estimate challenged by: D-
- 2011: Reported data calibrated to 2005 levels. Estimate challenged by: D-
- 2012: Reported data calibrated to 2005 levels. Estimate challenged by: D-
- 2013: Reported data calibrated to 2005 levels. GoC=D+
- 2014: Reported data calibrated to 2005 levels. WHO and UNICEF are aware of the conduct of a Multiple Indicator Cluster Survey and await the final results. GoC=D+

Sao Tome and Principe - survey details

2007 São Tomé e Príncipe Inquérito Demográfico e Sanitário (IDS STP 2008-2009)

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	95.2	12-23 m	341	93
BCG	Card	92.7	12-23 m	341	93
BCG	Card or History	96.1	12-23 m	341	93
DTP1	C or H <12 months	93.6	12-23 m	341	93
DTP1	Card	90.4	12-23 m	341	93
DTP1	Card or History	93.6	12-23 m	341	93
DTP3	C or H <12 months	86.4	12-23 m	341	93
DTP3	Card	85.8	12-23 m	341	93
DTP3	Card or History	87.4	12-23 m	341	93
MCV1	C or H <12 months	75.3	12-23 m	341	93
MCV1	Card	81.1	12-23 m	341	93
MCV1	Card or History	84	12-23 m	341	93
Pol1	C or H <12 months	94.6	12-23 m	341	93
Pol1	Card	91.3	12-23 m	341	93
Pol1	Card or History	94.6	12-23 m	341	93
Pol3	C or H <12 months	85.7	12-23 m	341	93
Pol3	Card	86.3	12-23 m	341	93
Pol3	Card or History	86.7	12-23 m	341	93

2006 Enquête nationale de couverture vaccinale 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	98.6	12-23 m	220	97
BCG	Card or History	99.5	12-23 m	220	97
DTP1	Card	97.3	12-23 m	220	97
DTP1	Card or History	100	12-23 m	220	97
DTP3	Card	95.9	12-23 m	220	97
DTP3	Card or History	98.6	12-23 m	220	97
HepB1	Card	96.8	12-23 m	220	97
HepB1	Card or History	99.5	12-23 m	220	97
HepB3	Card	91.4	12-23 m	220	97
HepB3	Card or History	93.6	12-23 m	220	97
MCV1	Card	91.8	12-23 m	220	97
MCV1	Card or History	94.5	12-23 m	220	97

Pol1	Card	97.3	12-23 m	220	97
Pol1	Card or History	100	12-23 m	220	97
Pol3	Card	95.5	12-23 m	220	97
Pol3	Card or History	98.2	12-23 m	220	97
YFV	Card	83.6	12-23 m	220	97
YFV	Card or History	86.4	12-23 m	220	97

2005 The 2006 São Tomé e Príncipe Multiple Indicator Cluster Survey: Final Report

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	98.1	12-23 m	673	91
BCG	Card	90.8	12-23 m	673	91
BCG	Card or History	98.2	12-23 m	673	91
BCG	History	7.5	12-23 m	673	91
DTP1	C or H <12 months	97.9	12-23 m	673	91
DTP1	Card	90.8	12-23 m	673	91
DTP1	Card or History	97.9	12-23 m	673	91
DTP1	History	7.2	12-23 m	673	91
DTP3	C or H <12 months	91.4	12-23 m	673	91
DTP3	Card	87.5	12-23 m	673	91
DTP3	Card or History	92.1	12-23 m	673	91
DTP3	History	4.7	12-23 m	673	91
HepB1	C or H <12 months	87.6	12-23 m	673	91
HepB1	Card	88	12-23 m	673	91
HepB1	Card or History	88	12-23 m	673	91
HepB1	History	0	12-23 m	673	91
HepB3	C or H <12 months	82.9	12-23 m	673	91
HepB3	Card	83.2	12-23 m	673	91
HepB3	Card or History	83.2	12-23 m	673	91
HepB3	History	0	12-23 m	673	91
MCV1	C or H <12 months	83.4	12-23 m	673	91
MCV1	Card	80	12-23 m	673	91
MCV1	Card or History	86.9	12-23 m	673	91
MCV1	History	6.8	12-23 m	673	91
Pol1	C or H <12 months	97	12-23 m	673	91
Pol1	Card	90.9	12-23 m	673	91
Pol1	Card or History	97.1	12-23 m	673	91
Pol1	History	6.2	12-23 m	673	91

Sao Tome and Principe - survey details

Pol3	C or H <12 months	87.4	12-23 m	673	91
Pol3	Card	87.5	12-23 m	673	91
Pol3	Card or History	88.1	12-23 m	673	91
Pol3	History	0.6	12-23 m	673	91
YFV	C or H <12 months	76.9	12-23 m	673	91
YFV	Card	73.9	12-23 m	673	91
YFV	Card or History	79.3	12-23 m	673	91
YFV	History	5.4	12-23 m	673	91

multiples MICS, Rapport d'analyse, 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card <12 months	99	12-23 m	-	-
DTP1	Card <12 months	97	12-23 m	-	-
DTP3	Card <12 months	94	12-23 m	-	-
MCV1	Card <12 months	89	12-23 m	-	-
Pol1	Card <12 months	99	12-23 m	-	-
Pol3	Card <12 months	92	12-23 m	-	-

1999 Sao Tome and Principe Enquête de grappes à indicateurs

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

Sao Tome and Principe

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	
2004	
2005	
2006	98
2007	98
2008	98
2009	98
2010	99
2011	99
2012	99
2013	99
2014	99

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.