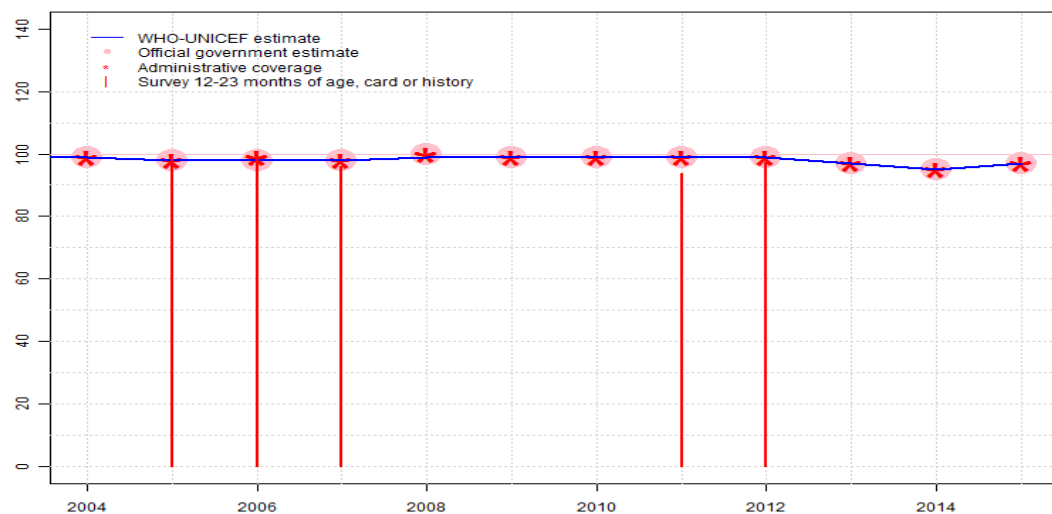


Sao Tome and Principe - BCG

STP - BCG



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 99 | 98 | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 97 | 95 | 97 |
| Estimate GoC | • | ••• | ••• | ••• | ••• | ••• | ••• | ••• | ••• | ••• | ••• | • |
| Official | 99 | 98 | 98 | 98 | 100 | 99 | 99 | 99 | 99 | 97 | 95 | 97 |
| Administrative | 99 | 98 | 99 | 98 | 100 | 99 | 99 | 99 | 99 | 97 | 95 | 97 |
| Survey | NA | 98.2 | 99.5 | 96.1 | NA | NA | NA | 93.8 | 97.3 | NA | NA | NA |

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

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

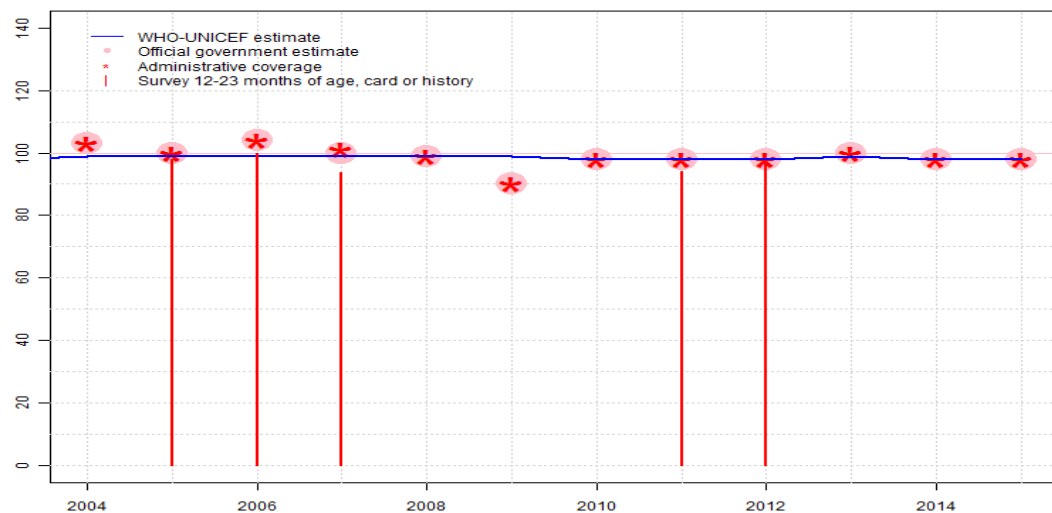
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: 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). 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 96 percent based on 1 survey(s). GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 97 percent based on 1 survey(s). GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government. Estimate challenged by: D-

Sao Tome and Principe - DTP1

STP - DTP1



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 99 | 99 | 99 | 99 | 99 | 99 | 98 | 98 | 98 | 99 | 98 | 98 |
| Estimate GoC | ●● | ●●● | ●● | ●●● | ●●● | ● | ●●● | ●●● | ●●● | ●●● | ●●● | ● |
| Official | 103 | 100 | 104 | 100 | 99 | 90 | 98 | 98 | 98 | 100 | 98 | 98 |
| Administrative | 103 | 100 | 104 | 101 | 99 | 90 | 98 | 98 | 98 | 100 | 98 | 98 |
| Survey | NA | 97.9 | 100 | 93.6 | NA | NA | NA | 94.1 | 97.2 | NA | NA | NA |

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

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

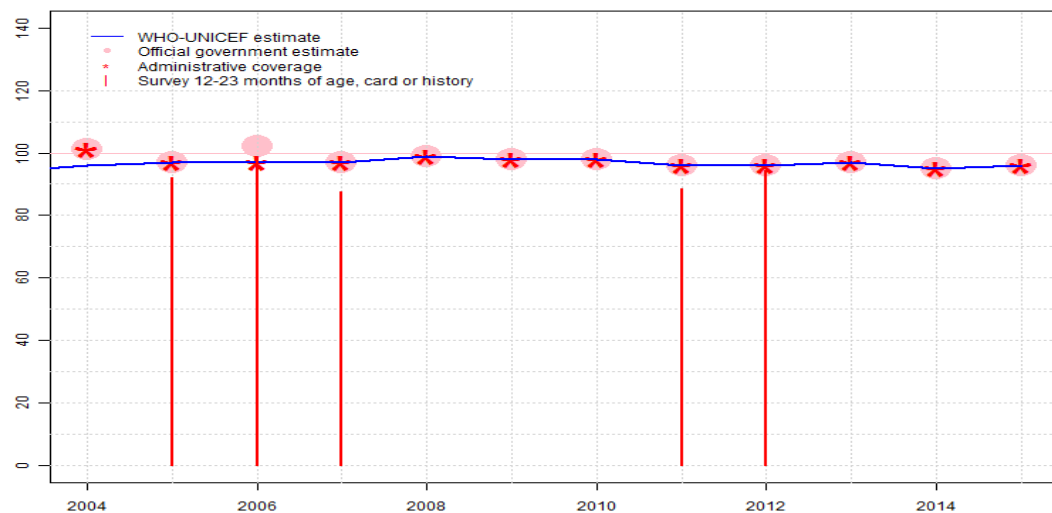
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Reported data calibrated to 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. GoC=R+ S+ 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. GoC=R+ S+ D+
- 2011: 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+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 97 percent based on 1 survey(s). GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government. Estimate challenged by: D-

Sao Tome and Principe - DTP3

STP - DTP3



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 96 | 97 | 97 | 97 | 99 | 98 | 98 | 96 | 96 | 97 | 95 | 96 |
| Estimate GoC | •• | ••• | •• | ••• | ••• | ••• | ••• | ••• | ••• | ••• | ••• | •• |
| Official | 101 | 97 | 102 | 97 | 99 | 98 | 98 | 96 | 96 | 97 | 95 | 96 |
| Administrative | 101 | 97 | 97 | 97 | 99 | 98 | 98 | 96 | 96 | 97 | 95 | 96 |
| Survey | NA | 92.1 | 98.6 | 87.4 | NA | NA | NA | 88.5 | 94.5 | NA | NA | NA |

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

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

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

Description:

- 2004: 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. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). Sao Tome and Principe Multiple Indicator Cluster Survey, 2014 card or history results of 89 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 87 percent and 3d dose card only coverage of 84 percent. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). Sao Tome and Principe Multiple Indicator Cluster Survey, 2014 card or history results of 95 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 92 percent and 3d dose card only coverage of 91 percent. GoC=R+ S+ D+

Sao Tome and Principe - DTP3

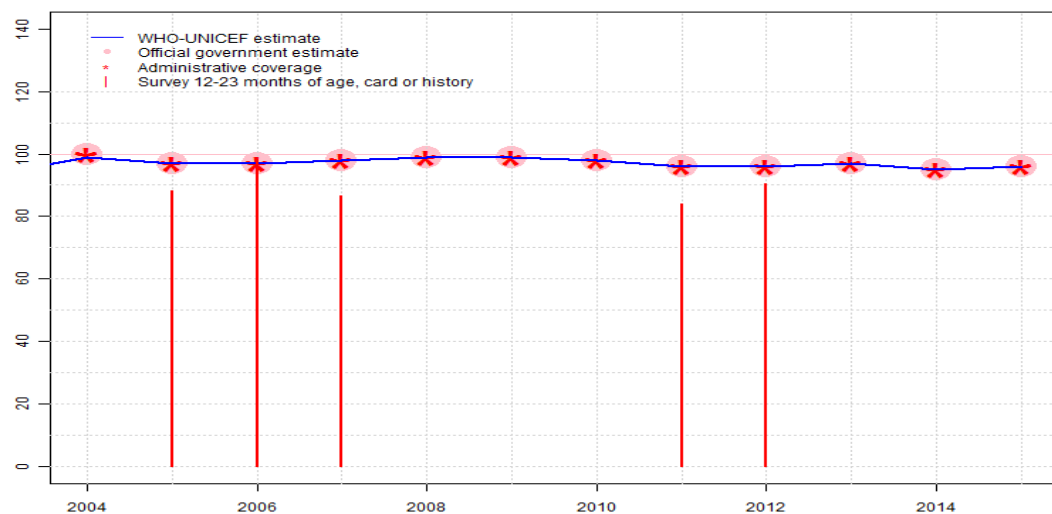
2013: Estimate based on coverage reported by national government. GoC=R+ S+
D+

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

2015: Estimate based on coverage reported by national government. GoC=R+
D+

Sao Tome and Principe - Pol3

STP - Pol3



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 99 | 97 | 97 | 98 | 99 | 99 | 98 | 96 | 96 | 97 | 95 | 96 |
| Estimate GoC | • | ••• | ••• | ••• | ••• | ••• | ••• | ••• | ••• | ••• | ••• | •• |
| Official | 100 | 97 | 97 | 98 | 99 | 99 | 98 | 96 | 96 | 97 | 95 | 96 |
| Administrative | 100 | 97 | 97 | 98 | 99 | 99 | 98 | 96 | 96 | 97 | 95 | 96 |
| Survey | NA | 88.1 | 98.2 | 86.7 | NA | NA | NA | 84 | 90.4 | NA | NA | NA |

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

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

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

Description:

- 2004: 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+
- 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. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). Sao Tome and Principe Multiple Indicator Cluster Survey, 2014 card or history results of 84 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 85 percent and 3d dose card only coverage of 83 percent. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). Sao Tome and Principe Multiple Indicator Cluster Survey, 2014 card or history results of 90 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 91 percent and 3d dose card only coverage of 90 percent. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+

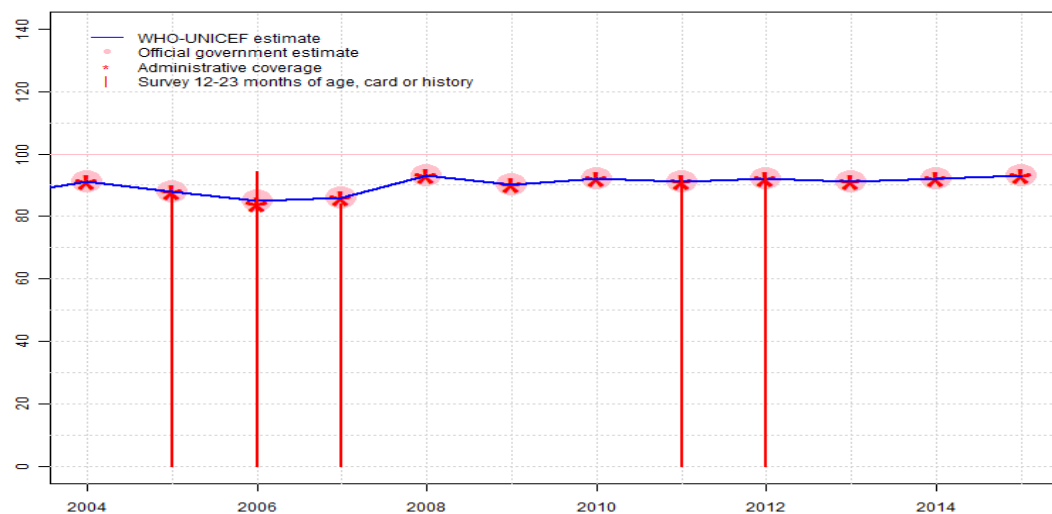
Sao Tome and Principe - Pol3

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

2015: Estimate based on coverage reported by national government. GoC=R+
D+

Sao Tome and Principe - MCV1

STP - MCV1



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 91 | 88 | 85 | 86 | 93 | 90 | 92 | 91 | 92 | 91 | 92 | 93 |
| Estimate GoC | ●●● | ●●● | ●●● | ●●● | ●●● | ●●● | ●●● | ●●● | ●●● | ●●● | ●●● | ●● |
| Official | 91 | 88 | 85 | 86 | 93 | 90 | 92 | 91 | 92 | 91 | 92 | 93 |
| Administrative | 91 | 88 | 84 | 86 | 93 | 90 | 92 | 91 | 92 | 91 | 92 | 93 |
| Survey | NA | 86.9 | 94.5 | 84 | NA | NA | NA | 92 | 93 | NA | NA | NA |

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

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

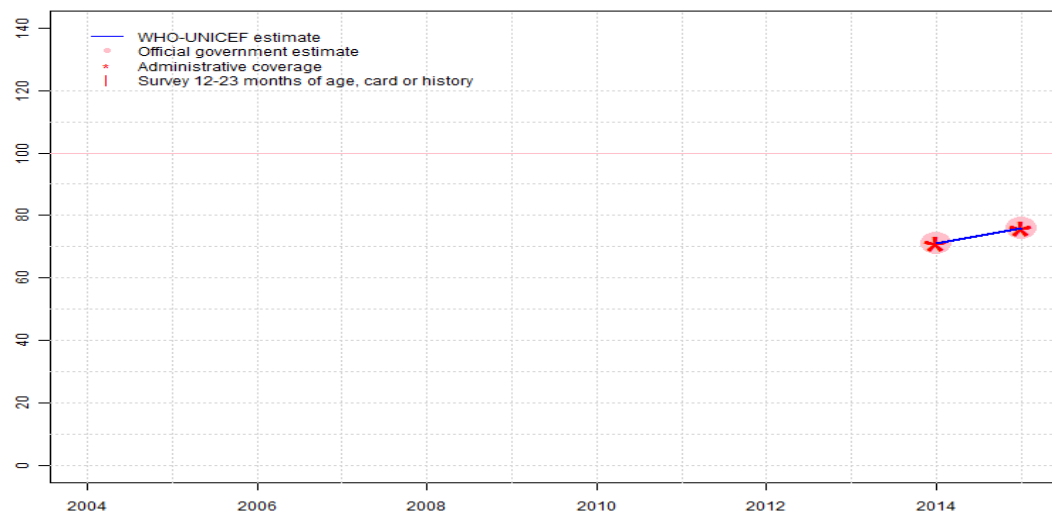
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 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. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 92 percent based on 1 survey(s). GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ S+ D+

Sao Tome and Principe - MCV2

STP - MCV2



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 71 | 76 |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | ●● | ●● |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 71 | 76 |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 71 | 76 |
| Survey | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

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

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

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

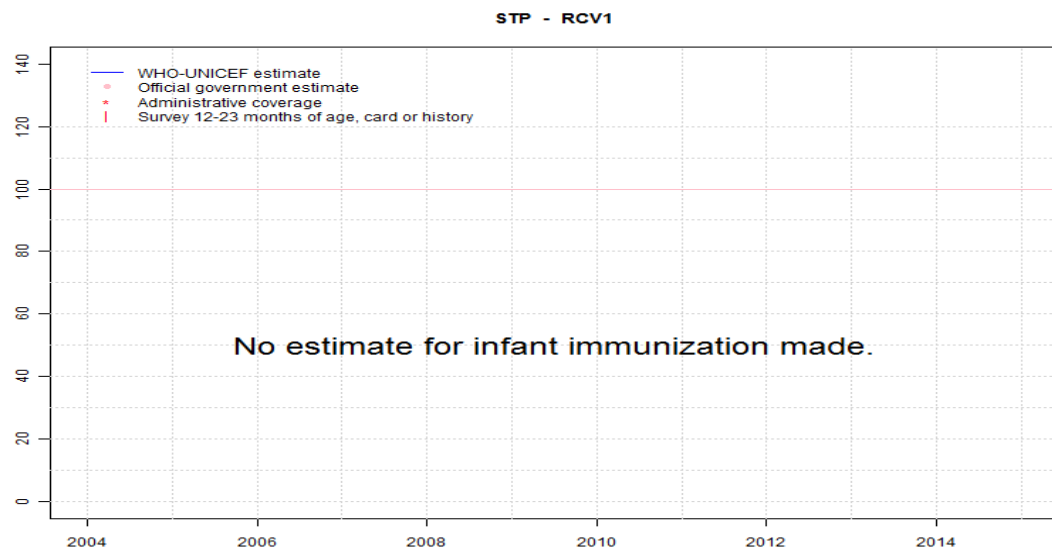
Description:

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. Second dose of MCV was introduced during 2013. Reporting began in 2014. GoC=R+D+

2015: Estimate based on coverage reported by national government. GoC=R+D+

Sao Tome and Principe - RCV1



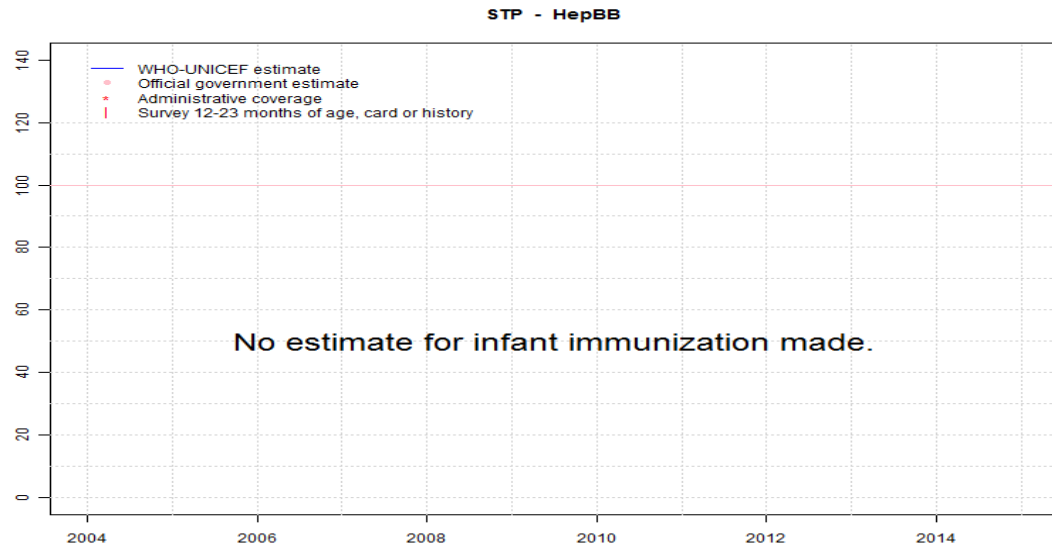
| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Survey | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

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

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

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

Sao Tome and Principe - HepBB



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Survey | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

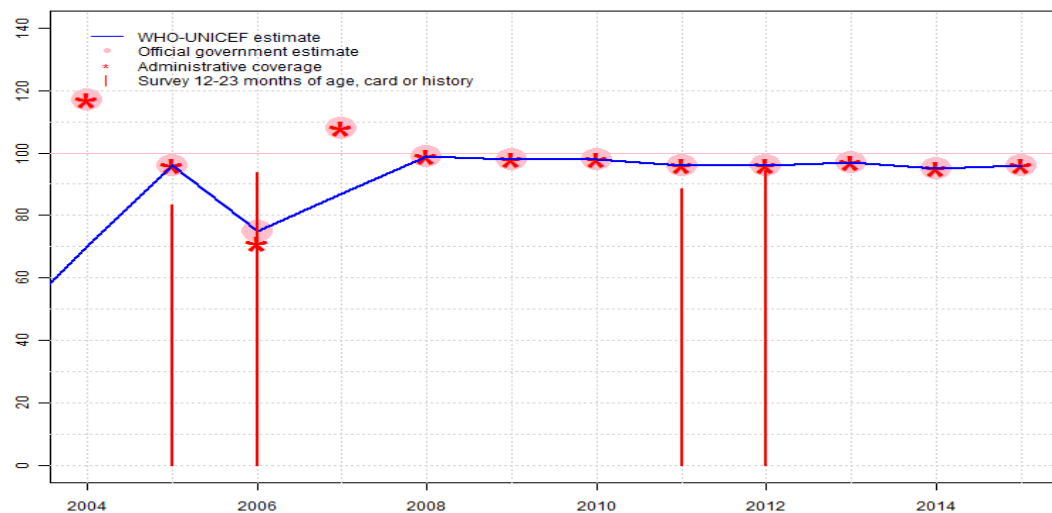
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

Sao Tome and Principe - HepB3

STP - HepB3



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 70 | 96 | 75 | 87 | 99 | 98 | 98 | 96 | 96 | 97 | 95 | 96 |
| Estimate GoC | • | • | • | • | •• | ••• | ••• | ••• | ••• | ••• | ••• | •• |
| Official | 117 | 96 | 75 | 108 | 99 | 98 | 98 | 96 | 96 | 97 | 95 | 96 |
| Administrative | 117 | 96 | 71 | 108 | 99 | 98 | 98 | 96 | 96 | 97 | 95 | 96 |
| Survey | NA | 83.2 | 93.6 | NA | NA | NA | NA | 88.5 | 94.5 | NA | NA | NA |

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

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

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

Description:

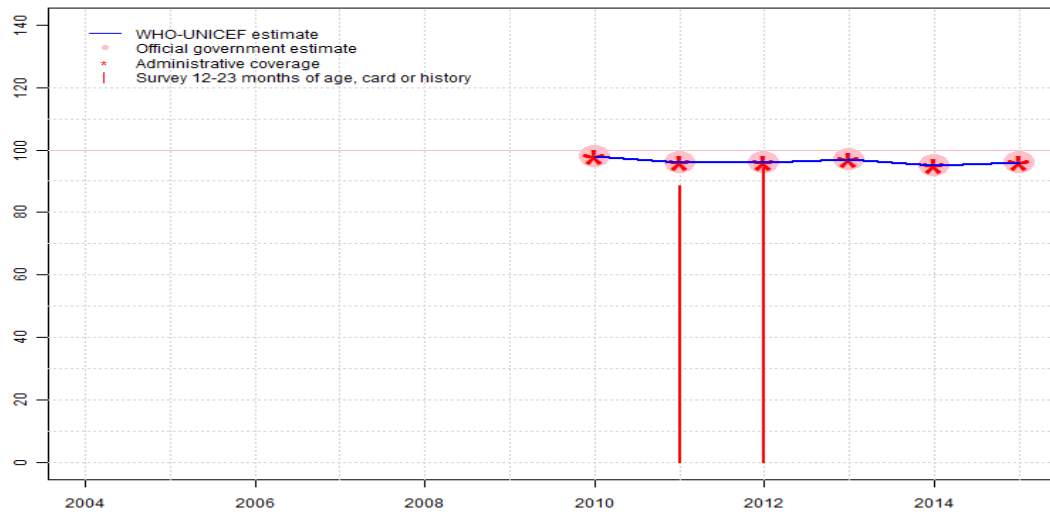
- 2004: Estimate based on interpolation between data reported by national government. Reported data excluded. 117 percent greater than 100 percent. Reported data excluded. Unexplained increase from 43 percent to 117 percent with decrease 96 percent. Estimate challenged by: D-S-
- 2005: Estimate based on reported data. 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 reported data. 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 data reported by national government. Reported data excluded. 108 percent greater than 100 percent. Estimate challenged by: D-S-
- 2008: Estimate based on reported data. GoC=R+ D+
- 2009: Estimate based on reported data. GoC=R+ S+ D+
- 2010: Estimate based on reported data. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). Sao Tome and Principe Multiple Indicator Cluster Survey, 2014 card or history results of 89 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 87 percent and 3d dose card only coverage of 84 percent. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). Sao Tome and Principe Multiple Indicator Cluster Survey, 2014 card or history results of 95 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 92 percent and 3d dose card only coverage of 91 percent. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+

Sao Tome and Principe - HepB3

D+

Sao Tome and Principe - Hib3

STP - Hib3



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | 98 | 96 | 96 | 97 | 95 | 96 |
| Estimate GoC | NA | NA | NA | NA | NA | NA | ●●● | ●●● | ●●● | ●●● | ●●● | ●● |
| Official | NA | NA | NA | NA | NA | NA | 98 | 96 | 96 | 97 | 95 | 96 |
| Administrative | NA | NA | NA | NA | NA | NA | 98 | 96 | 96 | 97 | 95 | 96 |
| Survey | NA | NA | NA | NA | NA | NA | NA | 88.5 | 94.5 | NA | NA | NA |

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

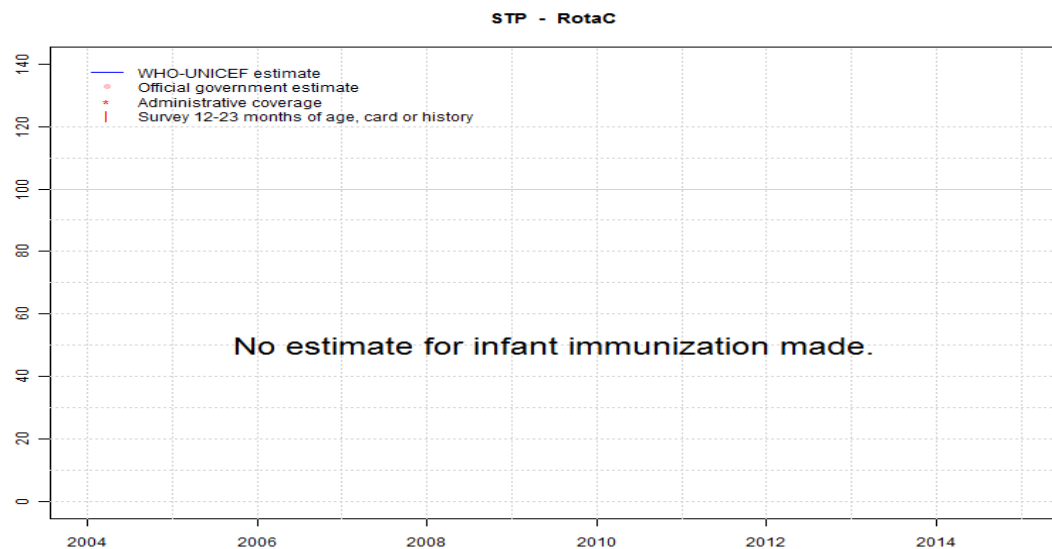
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

Description:

- 2010: Estimate based on reported data. DTP-HepB-Hib pentavalent vaccine introduced in 2009. Reporting began in 2010. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). Sao Tome and Principe Multiple Indicator Cluster Survey, 2014 card or history results of 89 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 87 percent and 3d dose card only coverage of 84 percent. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). Sao Tome and Principe Multiple Indicator Cluster Survey, 2014 card or history results of 95 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 92 percent and 3d dose card only coverage of 91 percent. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

Sao Tome and Principe - RotaC



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Survey | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

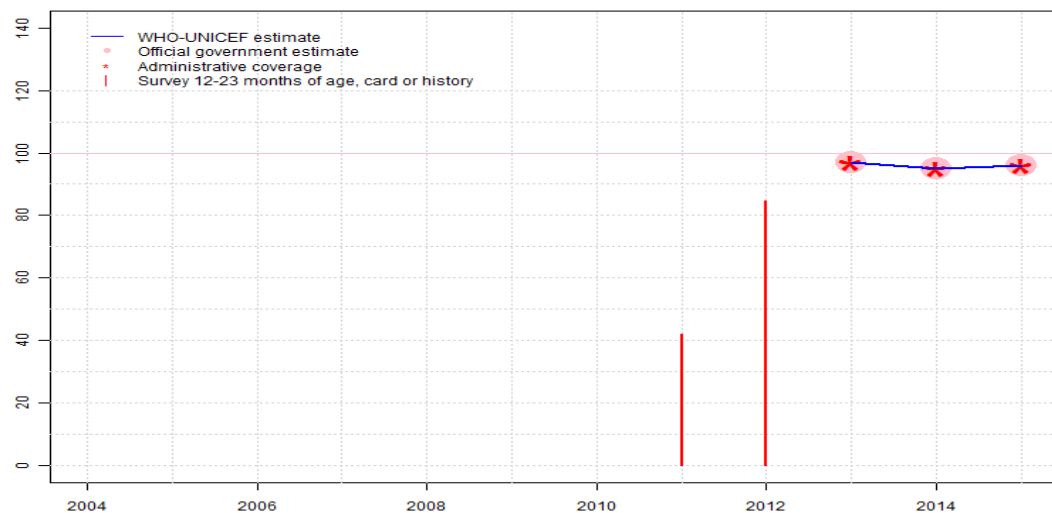
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

Sao Tome and Principe - PcV3

STP - PcV3



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | 97 | 95 | 96 |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | ●● | ●● | ●● |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | 97 | 95 | 96 |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | 97 | 95 | 96 |
| Survey | NA | NA | NA | NA | NA | NA | NA | 42 | 84.8 | NA | NA | NA |

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

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

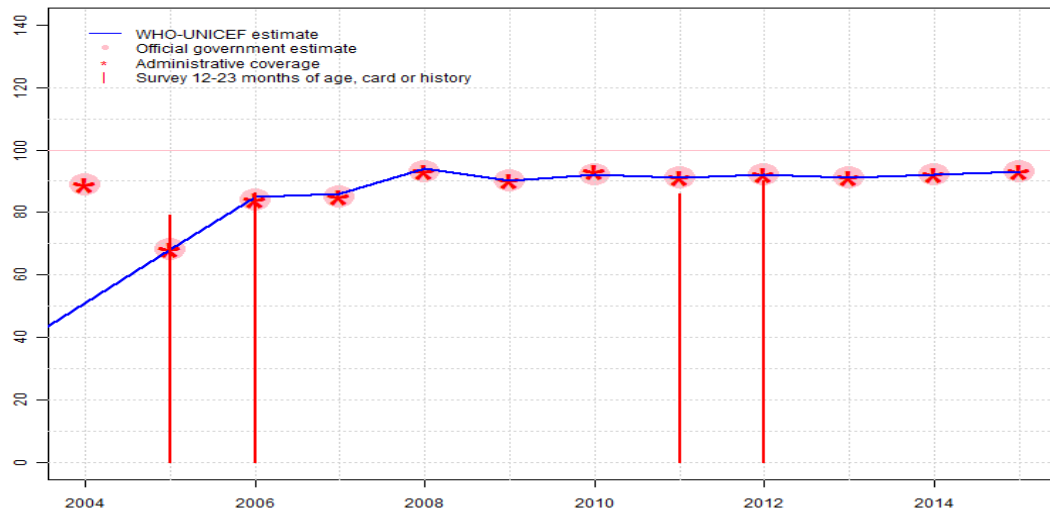
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2013: 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. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

Sao Tome and Principe - YFV

STP - YFV



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 51 | 68 | 85 | 86 | 94 | 90 | 92 | 91 | 92 | 91 | 92 | 93 |
| Estimate GoC | • | • | •• | •• | •• | •• | •• | ••• | ••• | ••• | ••• | •• |
| Official | 89 | 68 | 84 | 85 | 93 | 90 | 92 | 91 | 92 | 91 | 92 | 93 |
| Administrative | 89 | 68 | 84 | 85 | 93 | 90 | 93 | 91 | 92 | 91 | 92 | 93 |
| Survey | NA | 79.3 | 86.4 | NA | NA | NA | NA | 85.8 | 90.3 | NA | NA | NA |

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

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

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

Description:

- 2004: Reported data calibrated to 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 and 2011 levels. Survey results ignored. Sample size 220 less than 300. GoC=S+ D+
- 2007: Reported data calibrated to 2005 and 2011 levels. GoC=S+ D+
- 2008: Reported data calibrated to 2005 and 2011 levels. GoC=D+
- 2009: Reported data calibrated to 2005 and 2011 levels. Estimate of 90 percent changed from previous revision value of 91 percent. GoC=S+ D+
- 2010: Reported data calibrated to 2005 and 2011 levels. Estimate of 92 percent changed from previous revision value of 93 percent. GoC=S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 86 percent based on 1 survey(s). Estimate of 91 percent changed from previous revision value of 92 percent. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). Estimate of 92 percent changed from previous revision value of 93 percent. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. Estimate of 91 percent changed from previous revision value of 92 percent. GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government. Estimate of 92 percent changed from previous revision value of 93 percent. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

Sao Tome and Principe - survey details

2012 Sao Tome and Principe Multiple Indicator Cluster Survey,
2014

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | C or H <12 months | 97.3 | 12-23 m | 403 | 92 |
| BCG | Card | 91.2 | 12-23 m | 403 | 92 |
| BCG | Card or History | 97.3 | 12-23 m | 403 | 92 |
| BCG | History | 6.1 | 12-23 m | 403 | 92 |
| DTP1 | C or H <12 months | 95.4 | 12-23 m | 403 | 92 |
| DTP1 | Card | 91.7 | 12-23 m | 403 | 92 |
| DTP1 | Card or History | 97.2 | 12-23 m | 403 | 92 |
| DTP1 | History | 5.5 | 12-23 m | 403 | 92 |
| DTP3 | C or H <12 months | 93 | 12-23 m | 403 | 92 |
| DTP3 | Card | 90.5 | 12-23 m | 403 | 92 |
| DTP3 | Card or History | 94.5 | 12-23 m | 403 | 92 |
| DTP3 | History | 4 | 12-23 m | 403 | 92 |
| HepB1 | C or H <12 months | 95.4 | 12-23 m | 403 | 92 |
| HepB1 | Card | 91.7 | 12-23 m | 403 | 92 |
| HepB1 | Card or History | 97.2 | 12-23 m | 403 | 92 |
| HepB1 | History | 5.5 | 12-23 m | 403 | 92 |
| HepB3 | C or H <12 months | 93 | 12-23 m | 403 | 92 |
| HepB3 | Card | 90.5 | 12-23 m | 403 | 92 |
| HepB3 | Card or History | 94.5 | 12-23 m | 403 | 92 |
| HepB3 | History | 4 | 12-23 m | 403 | 92 |
| Hib1 | C or H <12 months | 95.4 | 12-23 m | 403 | 92 |
| Hib1 | Card | 91.7 | 12-23 m | 403 | 92 |
| Hib1 | Card or History | 97.2 | 12-23 m | 403 | 92 |
| Hib1 | History | 5.5 | 12-23 m | 403 | 92 |
| Hib3 | C or H <12 months | 93 | 12-23 m | 403 | 92 |
| Hib3 | Card | 90.5 | 12-23 m | 403 | 92 |
| Hib3 | Card or History | 94.5 | 12-23 m | 403 | 92 |
| Hib3 | History | 4 | 12-23 m | 403 | 92 |
| MCV1 | C or H <12 months | 89 | 12-23 m | 403 | 92 |
| MCV1 | Card | 88.1 | 12-23 m | 403 | 92 |
| MCV1 | Card or History | 93 | 12-23 m | 403 | 92 |
| MCV1 | History | 4.9 | 12-23 m | 403 | 92 |
| PcV1 | C or H <12 months | 86.8 | 12-23 m | 403 | 92 |
| PcV1 | Card | 83 | 12-23 m | 403 | 92 |
| PcV1 | Card or History | 88 | 12-23 m | 403 | 92 |

| | | | | | |
|------|-------------------|------|---------|-----|----|
| PcV1 | History | 5 | 12-23 m | 403 | 92 |
| PcV3 | C or H <12 months | 82 | 12-23 m | 403 | 92 |
| PcV3 | Card | 81 | 12-23 m | 403 | 92 |
| PcV3 | Card or History | 84.8 | 12-23 m | 403 | 92 |
| PcV3 | History | 3.8 | 12-23 m | 403 | 92 |
| Pol1 | C or H <12 months | 95.3 | 12-23 m | 403 | 92 |
| Pol1 | Card | 90.7 | 12-23 m | 403 | 92 |
| Pol1 | Card or History | 95.8 | 12-23 m | 403 | 92 |
| Pol1 | History | 5.1 | 12-23 m | 403 | 92 |
| Pol3 | C or H <12 months | 88.8 | 12-23 m | 403 | 92 |
| Pol3 | Card | 89.9 | 12-23 m | 403 | 92 |
| Pol3 | Card or History | 90.4 | 12-23 m | 403 | 92 |
| Pol3 | History | 0.4 | 12-23 m | 403 | 92 |
| YFV | C or H <12 months | 89.3 | 12-23 m | 403 | 92 |
| YFV | Card | 85.1 | 12-23 m | 403 | 92 |
| YFV | Card or History | 90.3 | 12-23 m | 403 | 92 |
| YFV | History | 5.2 | 12-23 m | 403 | 92 |

2011 Sao Tome and Principe Multiple Indicator Cluster Survey,
2014

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | C or H <12 months | 93.7 | 24-35 m | 412 | 92 |
| BCG | Card | 85.7 | 24-35 m | 412 | 92 |
| BCG | Card or History | 93.8 | 24-35 m | 412 | 92 |
| BCG | History | 8.1 | 24-35 m | 412 | 92 |
| DTP1 | C or H <12 months | 93.6 | 24-35 m | 412 | 92 |
| DTP1 | Card | 87.3 | 24-35 m | 412 | 92 |
| DTP1 | Card or History | 94.1 | 24-35 m | 412 | 92 |
| DTP1 | History | 6.8 | 24-35 m | 412 | 92 |
| DTP3 | C or H <12 months | 85.8 | 24-35 m | 412 | 92 |
| DTP3 | Card | 83.7 | 24-35 m | 412 | 92 |
| DTP3 | Card or History | 88.5 | 24-35 m | 412 | 92 |
| DTP3 | History | 4.9 | 24-35 m | 412 | 92 |
| HepB1 | C or H <12 months | 93.6 | 24-35 m | 412 | 92 |
| HepB1 | Card | 87.3 | 24-35 m | 412 | 92 |
| HepB1 | Card or History | 94.1 | 24-35 m | 412 | 92 |
| HepB1 | History | 6.8 | 24-35 m | 412 | 92 |
| HepB3 | C or H <12 months | 85.8 | 24-35 m | 412 | 92 |

Sao Tome and Principe - survey details

| | | | | | |
|-------|-------------------|------|---------|-----|----|
| HepB3 | Card | 83.7 | 24-35 m | 412 | 92 |
| HepB3 | Card or History | 88.5 | 24-35 m | 412 | 92 |
| HepB3 | History | 4.9 | 24-35 m | 412 | 92 |
| Hib1 | C or H <12 months | 93.6 | 24-35 m | 412 | 92 |
| Hib1 | Card | 87.3 | 24-35 m | 412 | 92 |
| Hib1 | Card or History | 94.1 | 24-35 m | 412 | 92 |
| Hib1 | History | 6.8 | 24-35 m | 412 | 92 |
| Hib3 | C or H <12 months | 85.8 | 24-35 m | 412 | 92 |
| Hib3 | Card | 83.7 | 24-35 m | 412 | 92 |
| Hib3 | Card or History | 88.5 | 24-35 m | 412 | 92 |
| Hib3 | History | 4.9 | 24-35 m | 412 | 92 |
| MCV1 | C or H <12 months | 86.1 | 24-35 m | 412 | 92 |
| MCV1 | Card | 84.5 | 24-35 m | 412 | 92 |
| MCV1 | Card or History | 92 | 24-35 m | 412 | 92 |
| MCV1 | History | 7.5 | 24-35 m | 412 | 92 |
| PcV1 | C or H <12 months | 47.8 | 24-35 m | 412 | 92 |
| PcV1 | Card | 41.9 | 24-35 m | 412 | 92 |
| PcV1 | Card or History | 49.1 | 24-35 m | 412 | 92 |
| PcV1 | History | 7.2 | 24-35 m | 412 | 92 |
| PcV3 | C or H <12 months | 27.6 | 24-35 m | 412 | 92 |
| PcV3 | Card | 36.4 | 24-35 m | 412 | 92 |
| PcV3 | Card or History | 42 | 24-35 m | 412 | 92 |
| PcV3 | History | 5.6 | 24-35 m | 412 | 92 |
| Pol1 | C or H <12 months | 92 | 24-35 m | 412 | 92 |
| Pol1 | Card | 85 | 24-35 m | 412 | 92 |
| Pol1 | Card or History | 92.1 | 24-35 m | 412 | 92 |
| Pol1 | History | 7.1 | 24-35 m | 412 | 92 |
| Pol3 | C or H <12 months | 81 | 24-35 m | 412 | 92 |
| Pol3 | Card | 82.9 | 24-35 m | 412 | 92 |
| Pol3 | Card or History | 84 | 24-35 m | 412 | 92 |
| Pol3 | History | 1.1 | 24-35 m | 412 | 92 |
| YFV | C or H <12 months | 81.2 | 24-35 m | 412 | 92 |
| YFV | Card | 78 | 24-35 m | 412 | 92 |
| YFV | Card or History | 85.8 | 24-35 m | 412 | 92 |
| YFV | History | 7.7 | 24-35 m | 412 | 92 |

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 |

Sao Tome and Principe - survey details

| | | | | | |
|-----|-----------------|------|---------|-----|----|
| 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 |
| 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 |

1999 Sao Tome and Principe Enquête de grappes à indicateurs 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 | - | - |

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 (%) |
|------|---------------------------|
| 2004 | |
| 2005 | |
| 2006 | 98 |
| 2007 | 98 |
| 2008 | 98 |
| 2009 | 98 |
| 2010 | 99 |
| 2011 | 99 |
| 2012 | 99 |
| 2013 | 99 |
| 2014 | 99 |
| 2015 | 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.