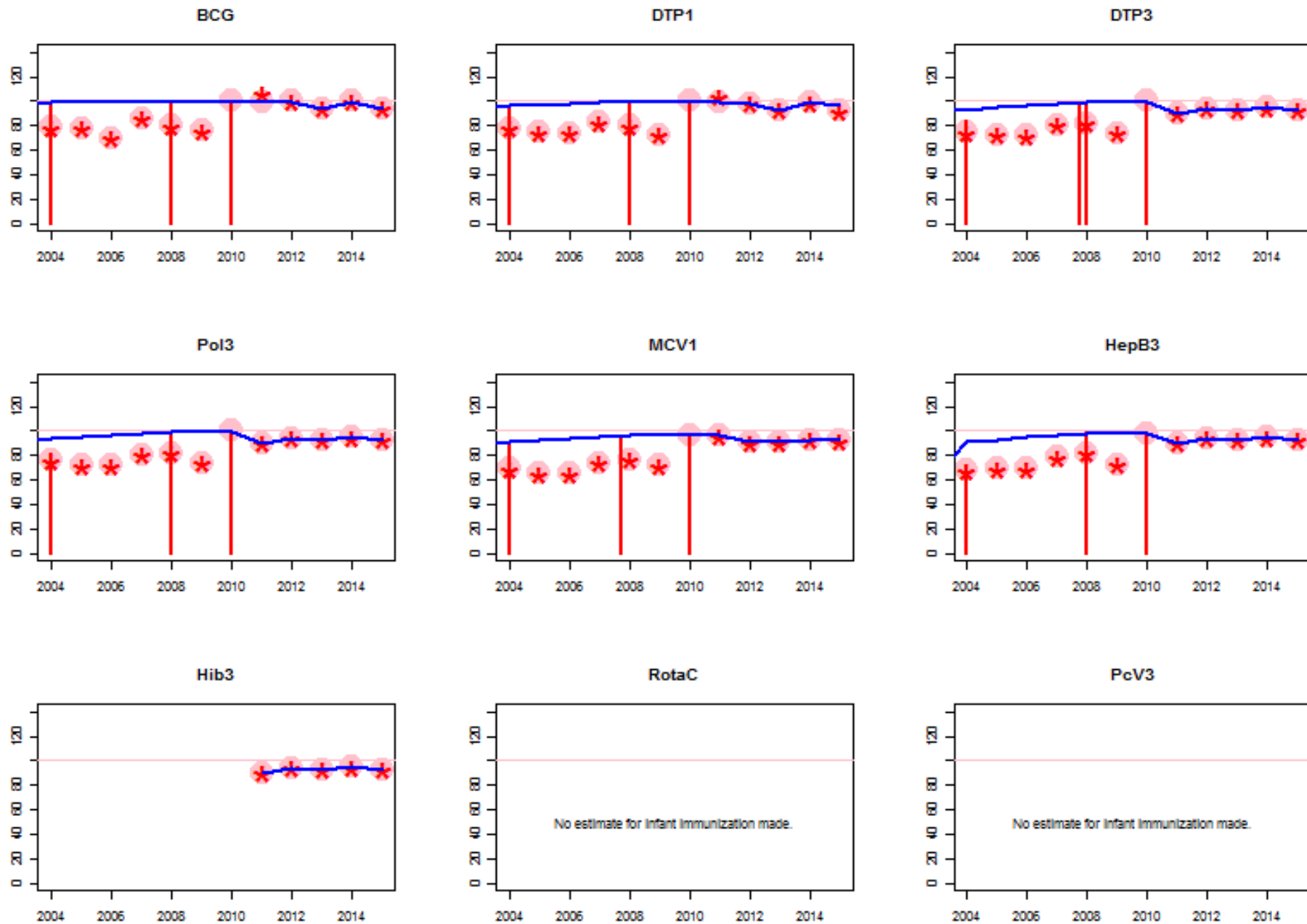
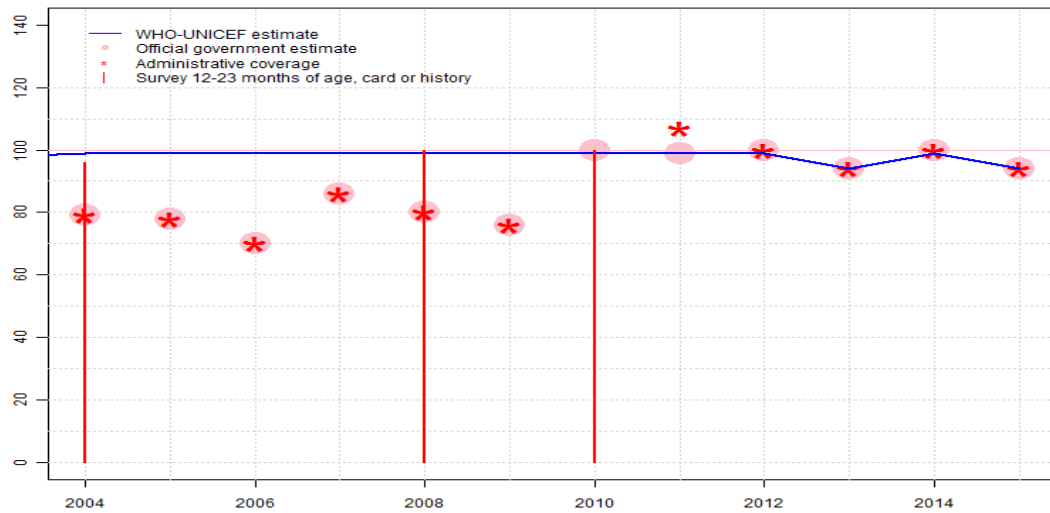


Cabo Verde: WHO and UNICEF estimates of immunization coverage: 2015 revision



# Cabo Verde - BCG

CPV - BCG



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	99	99	99	99	99	99	99	99	99	94	99	94
Estimate GoC	•	•	•	•	•	••	•••	•••	•••	••	•	••
Official	79	78	70	86	80	76	100	99	100	94	100	94
Administrative	79	78	70	86	80	76	NA	107	100	94	100	94
Survey	96	NA	NA	NA	100	NA	100	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.

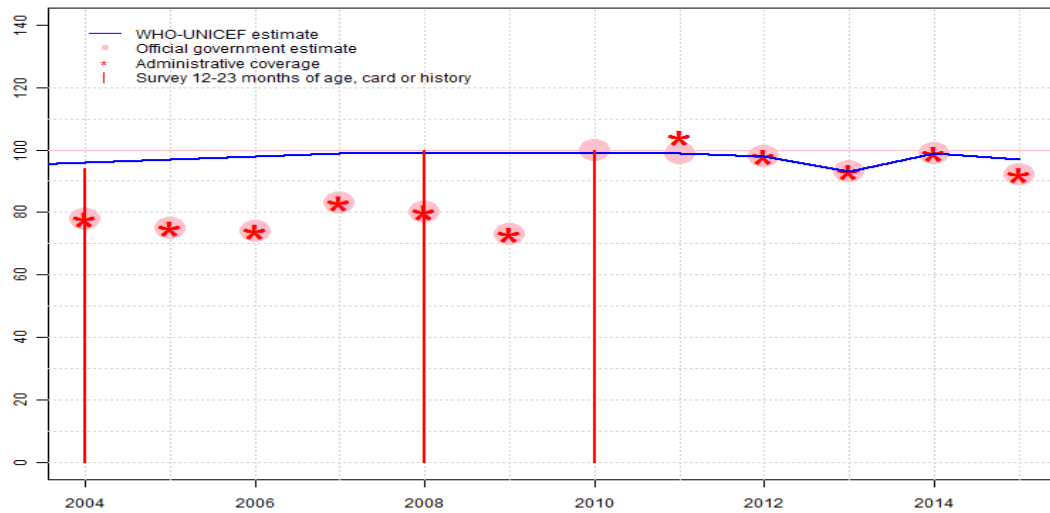
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2004: The results of the 2005 EPI coverage survey (card-only with retention rate of 97 percent, see survey details page) taken over those of the IDSR II 2005. Differences between survey results in 2004 may be the result of recall bias. BCG, DTP1, and MCV result Estimate challenged by: R-
- 2005: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: R-
- 2006: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: D-R-
- 2007: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: R-
- 2008: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 100 percent based on 1 survey(s). Estimate challenged by: R-
- 2009: Reported data calibrated to 2008 and 2010 levels. Reported data excluded. Unexplained fluctuations in numerator and denominator levels. GoC=S+ D+
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 100 percent based on 1 survey(s). GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF recommend continued assessment of the routine monitoring system. Survey results (based on documented evidence by home-based records) support reported coverage levels. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

# Cabo Verde - DTP1

CPV - DTP1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	96	97	98	99	99	99	99	99	98	93	99	97
Estimate GoC	•	•	•	•	•	•	•••	•••	•••	••	•	•
Official	78	75	74	83	80	73	100	99	98	93	99	92
Administrative	78	75	74	83	80	73	NA	104	98	93	99	92
Survey	94	NA	NA	NA	100	NA	100	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.

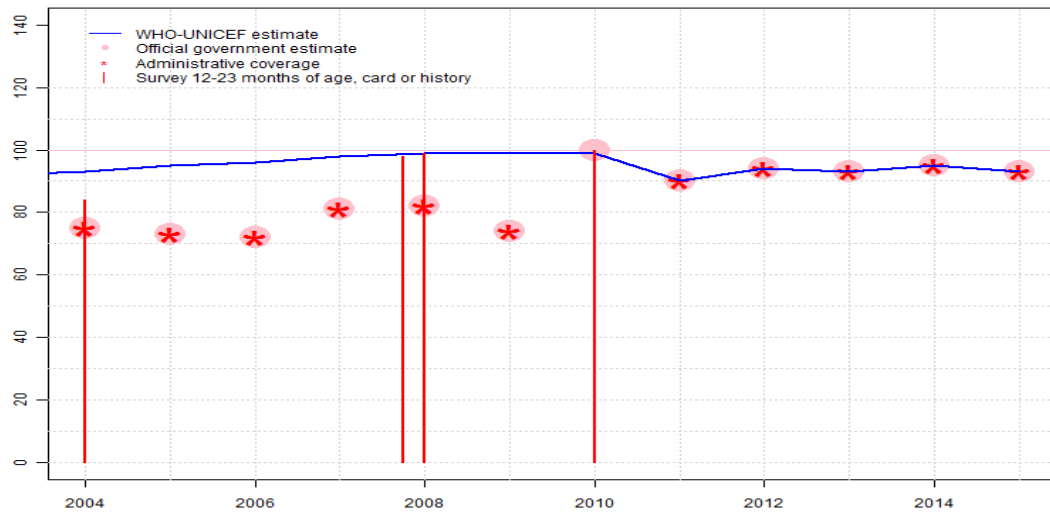
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2004: The results of the 2005 EPI coverage survey (card-only with retention rate of 97 percent, see survey details page) taken over those of the IDSR II 2005. Differences between survey results in 2004 may be the result of recall bias. BCG, DTP1, and MCV result Estimate challenged by: R-
- 2005: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: R-
- 2006: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: R-
- 2007: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: R-
- 2008: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 100 percent based on 1 survey(s). Estimate challenged by: R-
- 2009: Reported data calibrated to 2008 and 2010 levels. Reported data excluded. Unexplained fluctuations in numerator and denominator levels. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 100 percent based on 1 survey(s). GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF recommend continued assessment of the routine monitoring system. Survey results (based on documented evidence by home-based records) support reported coverage levels. Estimate challenged by: D-
- 2015: DTP1 coverage estimated based on DTP3 coverage of 93. Estimate challenged by: R-

# Cabo Verde - DTP3

CPV - DTP3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	93	95	96	98	99	99	99	90	94	93	95	93
Estimate GoC	●	●	●	●	●	●	●	●●●	●●●	●●	●	●●
Official	75	73	72	81	82	74	100	90	94	93	95	93
Administrative	75	73	72	81	82	74	NA	90	94	93	95	93
Survey	84	NA	NA	NA	*	NA	100	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.

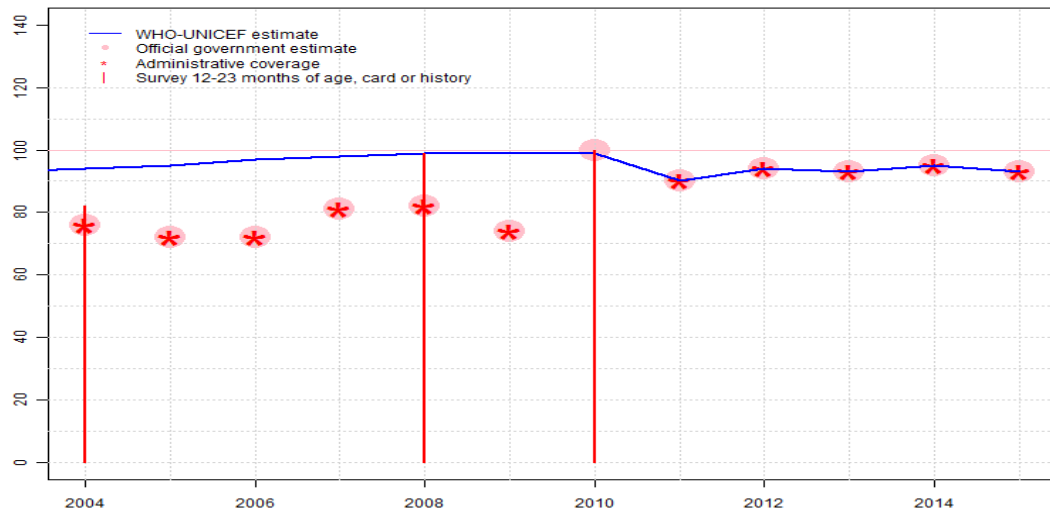
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2004: The results of the 2005 EPI coverage survey (card-only with retention rate of 97 percent, see survey details page) taken over those of the IDSR II 2005. Differences between survey results in 2004 may be the result of recall bias. BCG, DTP1, and MCV result Estimate challenged by: R-
- 2005: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: R-
- 2006: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: R-
- 2007: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: R-
- 2008: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 99 percent based on 2 survey(s). Estimate challenged by: R-
- 2009: Reported data calibrated to 2008 and 2010 levels. Reported data excluded. Unexplained fluctuations in numerator and denominator levels. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 100 percent based on 1 survey(s). Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF recommend continued assessment of the routine monitoring system. Survey results (based on documented evidence by home-based records) support reported coverage levels. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

# Cabo Verde - Pol3

CPV - Pol3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	94	95	97	98	99	99	99	90	94	93	95	93
Estimate GoC	•	•	•	•	•	•	•	•••	•••	••	•	••
Official	76	72	72	81	82	74	100	90	94	93	95	93
Administrative	76	72	72	81	82	74	NA	90	94	93	95	93
Survey	82	NA	NA	NA	99	NA	100	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.

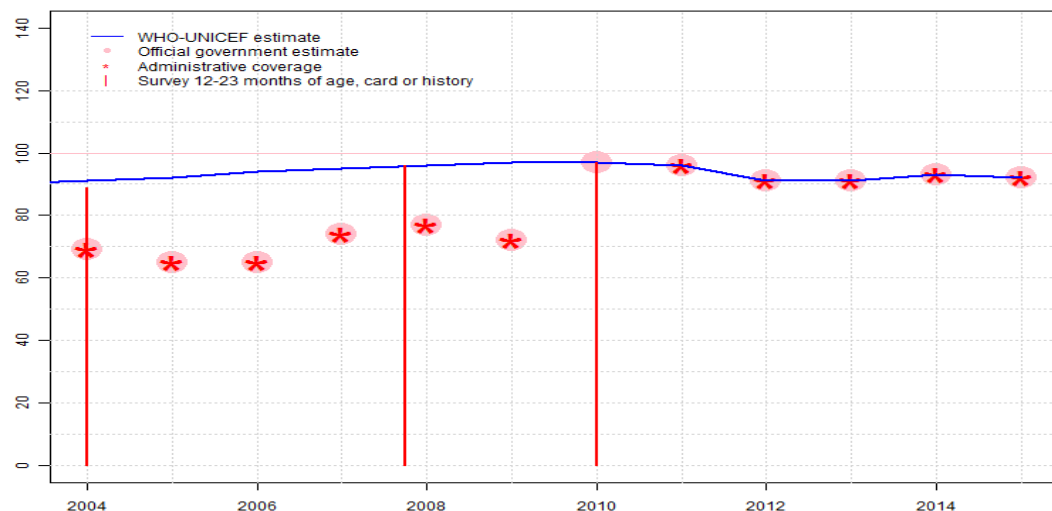
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2004: The results of the 2005 EPI coverage survey (card-only with retention rate of 97 percent, see survey details page) taken over those of the IDSR II 2005. Differences between survey results in 2004 may be the result of recall bias. BCG, DTP1, and MCV result Estimate challenged by: R-
- 2005: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: R-
- 2006: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: R-
- 2007: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: R-
- 2008: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 99 percent based on 1 survey(s). Estimate challenged by: R-
- 2009: Reported data calibrated to 2008 and 2010 levels. Reported data excluded. Unexplained fluctuations in numerator and denominator levels. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 100 percent based on 1 survey(s). Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF recommend continued assessment of the routine monitoring system. Survey results (based on documented evidence by home-based records) support reported coverage levels. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

# Cabo Verde - MCV1

CPV - MCV1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	91	92	94	95	96	97	97	96	91	91	93	92
Estimate GoC	•	•	•	•	•	•	•••	•••	•••	••	•	••
Official	69	65	65	74	77	72	97	96	91	91	93	92
Administrative	69	65	65	74	77	72	NA	96	91	91	93	92
Survey	89	NA	NA	NA	*	NA	97	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.

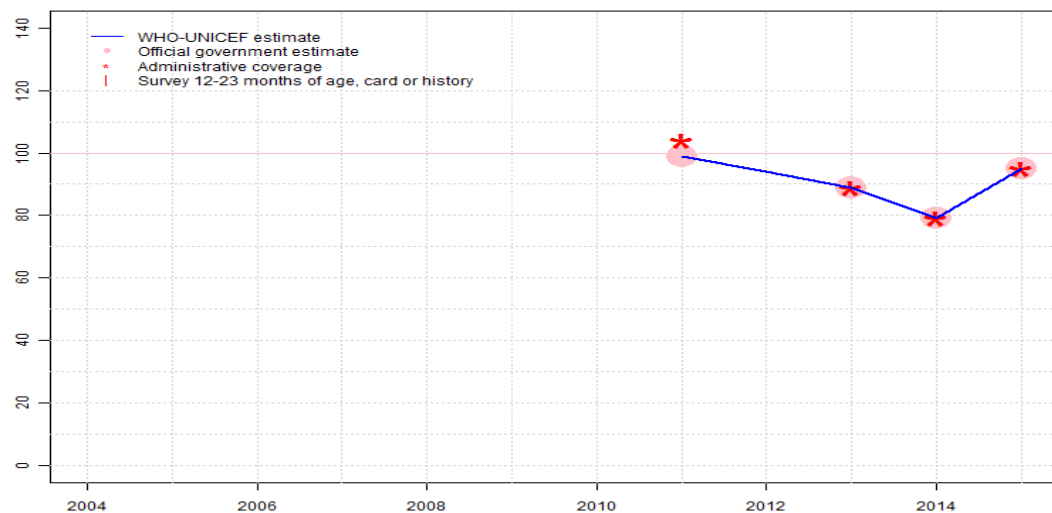
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2004: The results of the 2005 EPI coverage survey (card-only with retention rate of 97 percent, see survey details page) taken over those of the IDSR II 2005. Differences between survey results in 2004 may be the result of recall bias. BCG, DTP1, and MCV1 result Estimate challenged by: R-
- 2005: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: D-R-
- 2006: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: D-R-
- 2007: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: D-R-
- 2008: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 96 percent based on 2 survey(s). Estimate challenged by: R-
- 2009: Reported data calibrated to 2008 and 2010 levels. Reported data excluded. Unexplained fluctuations in numerator and denominator levels. Estimate challenged by: D-
- 2010: 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+
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF recommend continued assessment of the routine monitoring system. Survey results (based on documented evidence by home-based records) support reported coverage levels. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

# Cabo Verde - MCV2

CPV - MCV2



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	99	94	89	79	95
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	●●	●	●●	●●	●●
Official	NA	NA	NA	NA	NA	NA	NA	99	NA	89	79	95
Administrative	NA	NA	NA	NA	NA	NA	NA	104	NA	89	79	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: 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.

2011: Estimate based on coverage reported by national government. Second dose of measles containing vaccine introduced during 2010. Reporting started in 2011. GoC=R+ D+

2012: Estimate based on interpolation between reported values. GoC=No accepted empirical data

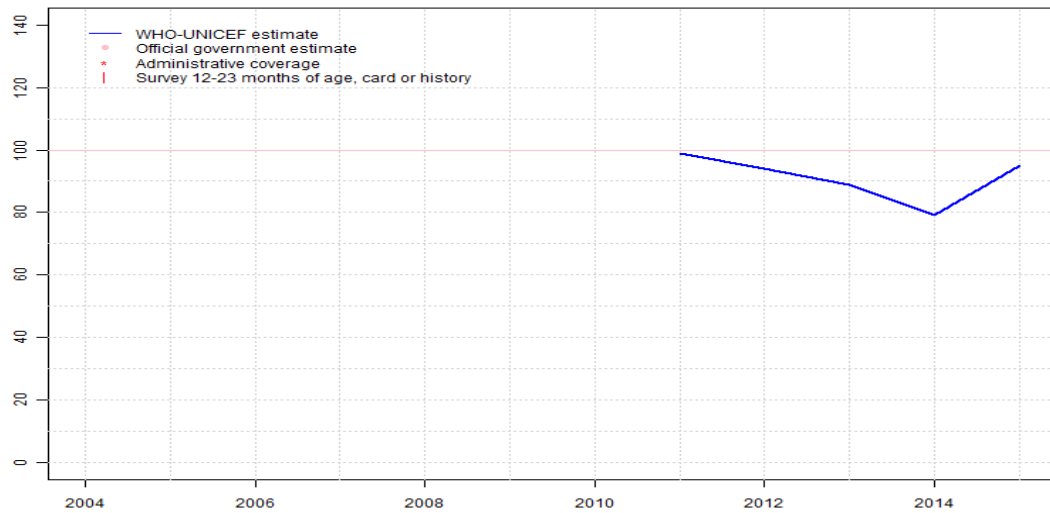
2013: Estimate based on coverage reported by national government. GoC=R+ D+

2014: Estimate based on coverage reported by national government. WHO and UNICEF recommend continued assessment of the routine monitoring system. Survey results (based on documented evidence by home-based records) support reported coverage levels. GoC=R+ D+

2015: Estimate based on coverage reported by national government. Programme reports intensification activities among children aged 15-24 months which may explain the exceptional year-to-year increase between 2014 and 2015. GoC=R+ D+

# Cabo Verde - RCV1

CPV - RCV1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	99	94	89	79	95
Estimate GoC	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.

## Description:

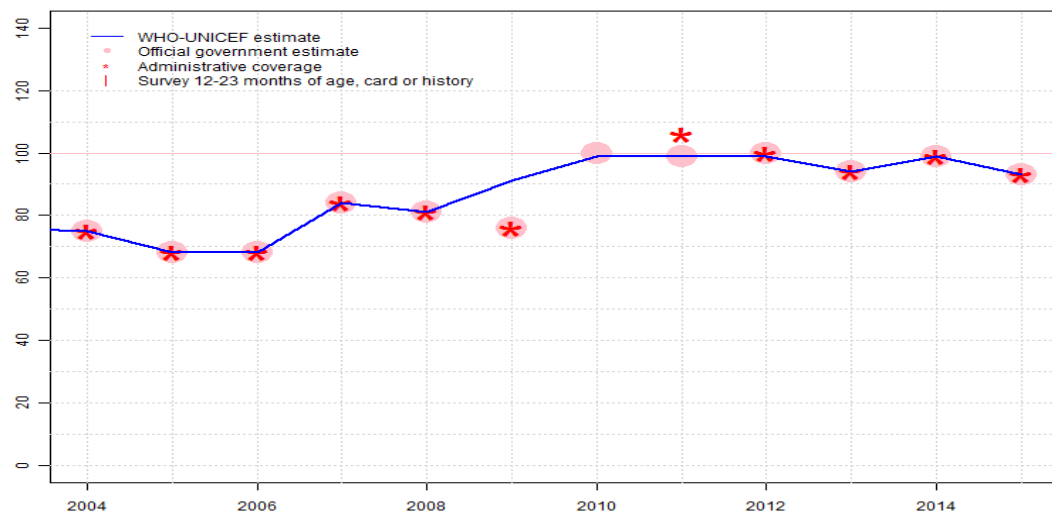
For this revision, coverage estimates for the first dose of rubella containing vaccine are based on WHO and UNICEF estimates of coverage of measles containing vaccine. Nationally reported coverage of rubella containing vaccine is not taken into consideration nor are they represented in the accompanying graph and data table.

- 2011: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate Rubella containing vaccine introduced during 2010. Reporting started in 2011. GoC=R+ D+
- 2012: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate GoC=No accepted empirical data
- 2013: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate GoC=R+ D+
- 2014: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate WHO and UNICEF recommend continued assessment of the routine monitoring system. Survey results (based on documented evidence by home-based records) support reported coverage levels. GoC=R+ D+
- 2015: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate GoC=R+ D+



# Cabo Verde - HepBB

CPV - HepBB



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	75	68	68	84	81	91	99	99	99	94	99	93
Estimate GoC	•	•	•	•	•	••	••	••	••	••	•	••
Official	75	68	68	84	81	76	100	99	100	94	99	93
Administrative	75	68	68	84	81	76	NA	106	100	94	99	93
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.

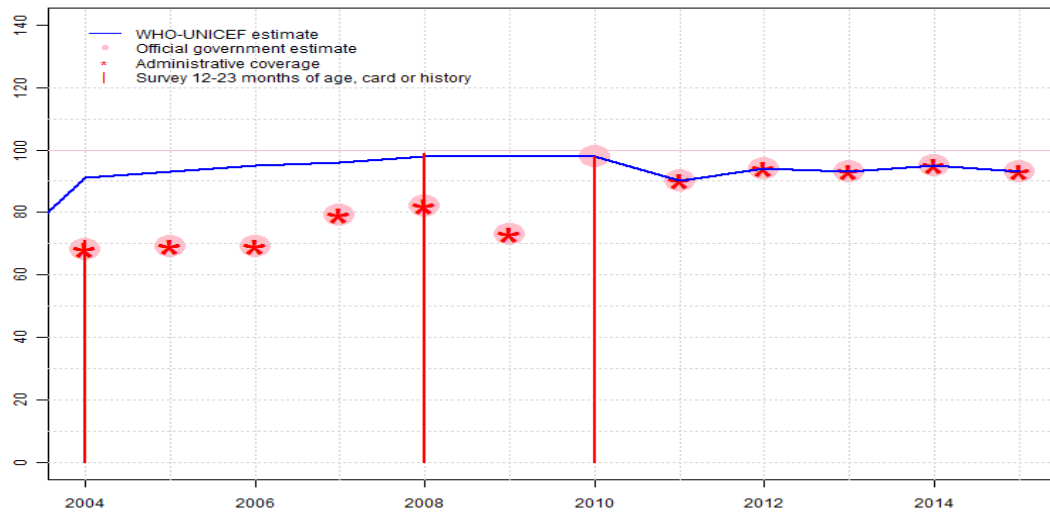
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2004: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2005: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2006: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2007: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on interpolation between reported values. Reported data excluded. Unexplained fluctuations in numerator and denominator levels. GoC=D+
- 2010: Estimate based on coverage reported by national government. GoC=R+D+
- 2011: Estimate based on coverage reported by national government. GoC=R+D+
- 2012: Estimate based on coverage reported by national government. GoC=R+D+
- 2013: Estimate based on coverage reported by national government. GoC=R+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF recommend continued assessment of the routine monitoring system. Survey results (based on documented evidence by home-based records) support reported coverage levels. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. GoC=R+D+

# Cabo Verde - HepB3

CPV - HepB3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	91	93	95	96	98	98	98	90	94	93	95	93
Estimate GoC	•	•	•	•	•	•	•	•••	•••	••	•	••
Official	68	69	69	79	82	73	98	90	94	93	95	93
Administrative	68	69	69	79	82	73	NA	90	94	93	95	93
Survey	71	NA	NA	NA	99	NA	98	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.

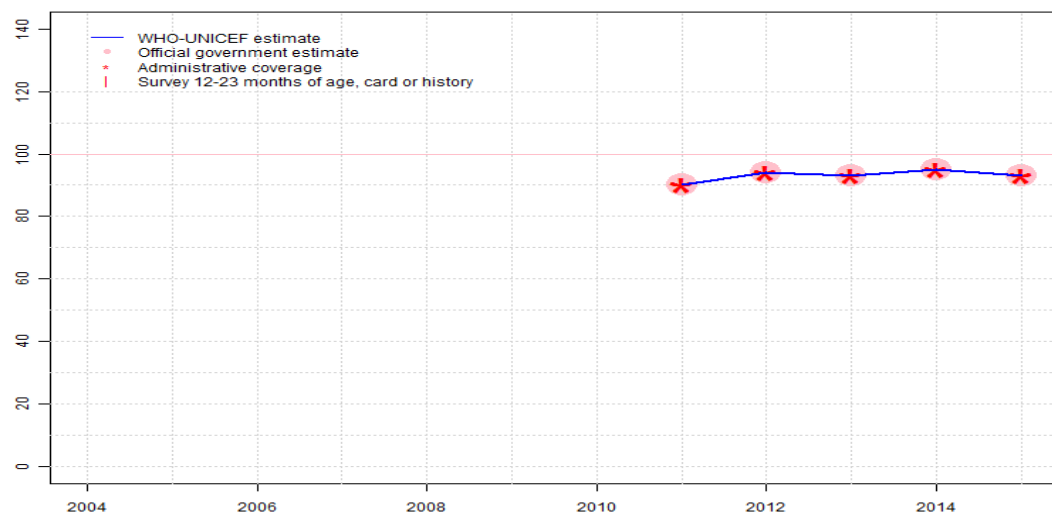
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2004: The results of the 2005 EPI coverage survey (card-only with retention rate of 97 percent, see survey details page) taken over those of the IDSR II 2005. Differences between survey results in 2004 may be the result of recall bias. BCG, DTP1, and MCV result Estimate challenged by: D-R-
- 2005: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: R-
- 2006: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: R-
- 2007: Estimate based on interpolation between 2004 and 2008 levels. Fluctuation and nationally reported data suggests poor recording and reporting. Estimate challenged by: R-
- 2008: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 98 percent based on 1 survey(s). National Immunisation Coverage Survey. Cape Verde, 2009 card or history results of 99 percent modified for recall bias to 98 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 98 percent and 3d dose card only coverage of 97 percent. Estimate challenged by: R-
- 2009: Reported data calibrated to 2008 and 2010 levels. Reported data excluded. Unexplained fluctuations in numerator and denominator levels. Estimate challenged by: D-
- 2010: 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-
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF recommend continued assessment of the routine monitoring system. Survey results (based on documented evidence by home-based records) support reported coverage levels. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. GoC=R+ S+ D+

# Cabo Verde - Hib3

CPV - Hib3



## Description:

- 2011: Estimate based on coverage reported by national government. Hib vaccine was introduced in 2010. Reporting started in 2011. The presentation is DTP- HepB-Hib. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. WHO and UNICEF recommend continued assessment of the routine monitoring system. Survey results (based on documented evidence by home-based records) support reported coverage levels. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

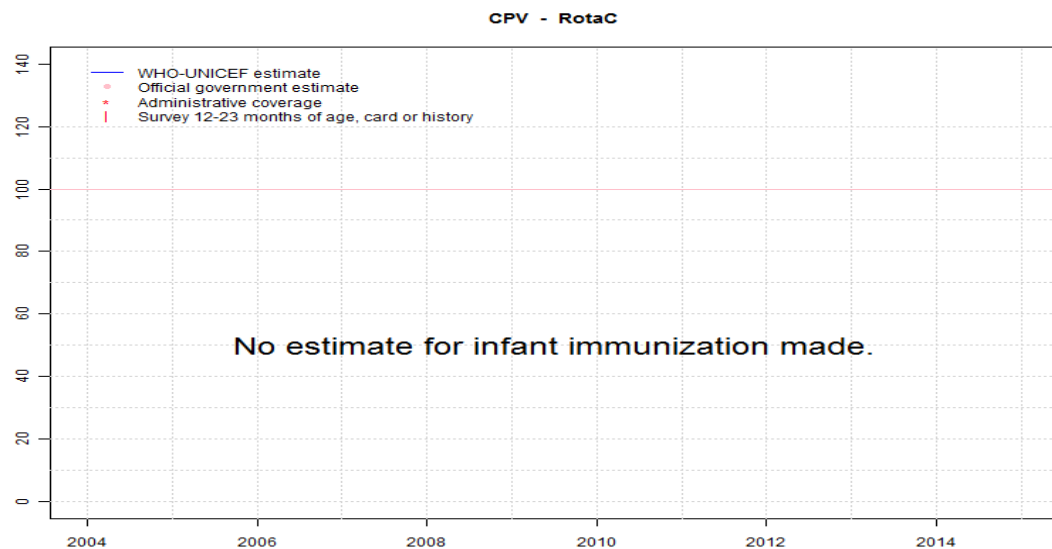
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	90	94	93	95	93
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	●●	●●	●●	●	●●
Official	NA	NA	NA	NA	NA	NA	NA	90	94	93	95	93
Administrative	NA	NA	NA	NA	NA	NA	NA	90	94	93	95	93
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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.

# Cabo Verde - RotaC

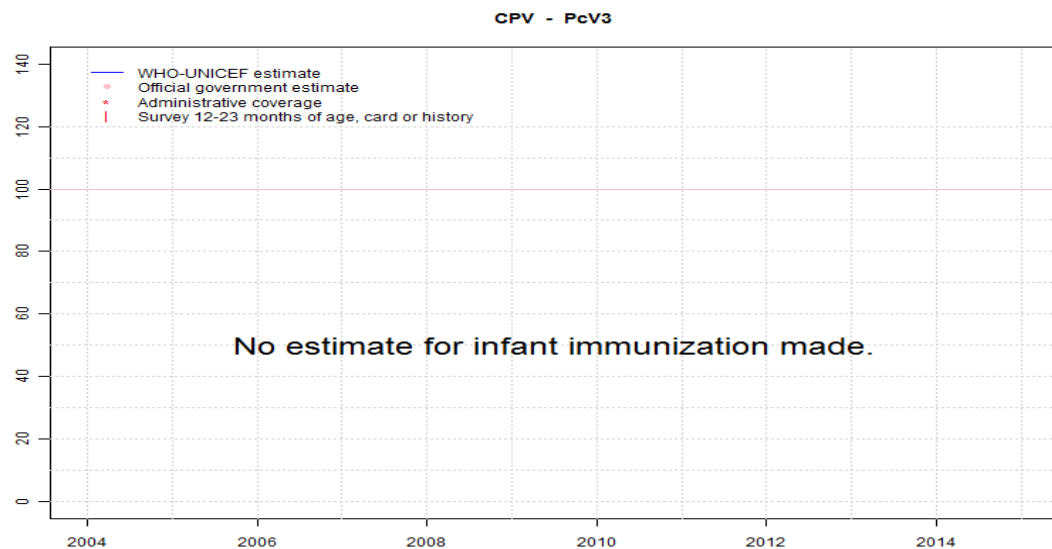


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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.



	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.

# Cabo Verde - survey details

## 2014 Rapport Final de la Revue du PEV Cabo Verde

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	93	12-23 m	1696	99
DTP1	Card	93	12-23 m	1696	99
DTP3	Card	92	12-23 m	1696	99
HepB1	Card	93	12-23 m	1696	99
HepB3	Card	92	12-23 m	1696	99
HepBB	Card	68	12-23 m	1696	99
Hib1	Card	93	12-23 m	1696	99
Hib3	Card	92	12-23 m	1696	99
MCV1	Card	90	12-23 m	1696	99

## 2010 Enquête de couverture vaccinale, Cap-Vert 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	100	12-23 m	1598	98
DTP1	Card or History	100	12-23 m	1598	98
DTP3	Card or History	100	12-23 m	1598	98
HepB1	Card or History	100	12-23 m	1598	98
HepB3	Card or History	98	12-23 m	1598	98
MCV1	Card or History	97	12-23 m	1598	98
Pol1	Card or History	100	12-23 m	1598	98
Pol3	Card or History	100	12-23 m	1598	98

## 2009 Enquête de couverture vaccinale de la 3ème dose de trois vaccins (contre la diphtérie, la coqueluche et le tétanos - DTC3) et la rougeole - Cap-Vert 2010

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
DTP3	Card	98	12-23 m	4458	100
MCV1	Card	94	12-23 m	4458	100

## 2008 Enquête de couverture vaccinale de la 3ème dose de trois vaccins (contre la diphtérie, la coqueluche et le tétanos - DTC3) et la rougeole - Le Cap-Vert 2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
DTP3	Card or History	98	12-23 m	1696	98
MCV1	Card or History	96	12-23 m	1696	98

## 2008 Inquérito nacional de cobertura vacinal. Cabo Verde, 2009.

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	98	12-23 m	1684	98
BCG	Card or History	100	12-23 m	1684	98
BCG	Scar	79	12-23 m	1684	98
DTP1	Card	98	12-23 m	1684	98
DTP1	Card or History	100	12-23 m	1684	98
DTP3	Card	97	12-23 m	1684	98
DTP3	Card or History	99	12-23 m	1684	98
HepB1	Card	98	12-23 m	1684	98
HepB1	Card or History	99	12-23 m	1684	98
HepB3	Card	97	12-23 m	1684	98
HepB3	Card or History	99	12-23 m	1684	98
MCV1	Card	94	12-23 m	1684	98
MCV1	Card or History	96	12-23 m	1684	98
Pol1	Card	98	12-23 m	1684	98
Pol1	Card or History	100	12-23 m	1684	98
Pol3	Card	97	12-23 m	1684	98
Pol3	Card or History	99	12-23 m	1684	98

## 2004 República de Cabo Verde, Inquérito de avaliação da cobertura vacinal 2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	99	12-23 m	1160	97
DTP1	Card	96	12-23 m	1160	97
DTP3	Card	93	12-23 m	1160	97
HepB1	Card	94	12-23 m	1160	97
HepB3	Card	91	12-23 m	1160	97
MCV1	Card	91	12-23 m	1160	97
Pol1	Card	96	12-23 m	1160	97

# Cabo Verde - survey details

Pol3 Card 94 12-23 m 1160 97

2004 Segundo Inquérito Demográfico e de Saúde Reprodutiva,  
Cabo Verde, IDSR-II, 2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	96	12-23 m	436	81
DTP1	Card or History	94	12-23 m	436	81
DTP3	Card or History	84	12-23 m	436	81
HepB1	Card or History	75	12-23 m	436	81
HepB3	Card or History	71	12-23 m	436	81
MCV1	Card or History	89	12-23 m	436	81
Pol1	Card or History	94	12-23 m	436	81
Pol3	Card or History	82	12-23 m	436	81

2001 Capo Verde, Inquérito Nacional de Cobertura Vacinal, 2002

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

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	99	12-23 m	-	100
DTP3	Card or History	85	12-23 m	-	100
MCV1	Card or History	75	12-23 m	-	100
Pol3	Card or History	85	12-23 m	-	100

1999 Capo Verde, Inquérito Nacional de Cobertura Vacinal, 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	92	12-23 m	208	94
DTP1	Card or History	93	12-23 m	208	94
DTP3	Card or History	86	12-23 m	208	94
MCV1	Card or History	80	12-23 m	208	94
Pol1	Card or History	93	12-23 m	208	94
Pol3	Card or History	86	12-23 m	208	94

## Cabo Verde

### 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	78
2005	70
2006	74
2007	77
2008	78
2009	78
2010	92
2011	92
2012	92
2013	92
2014	92
2015	92

<sup>1</sup> 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.