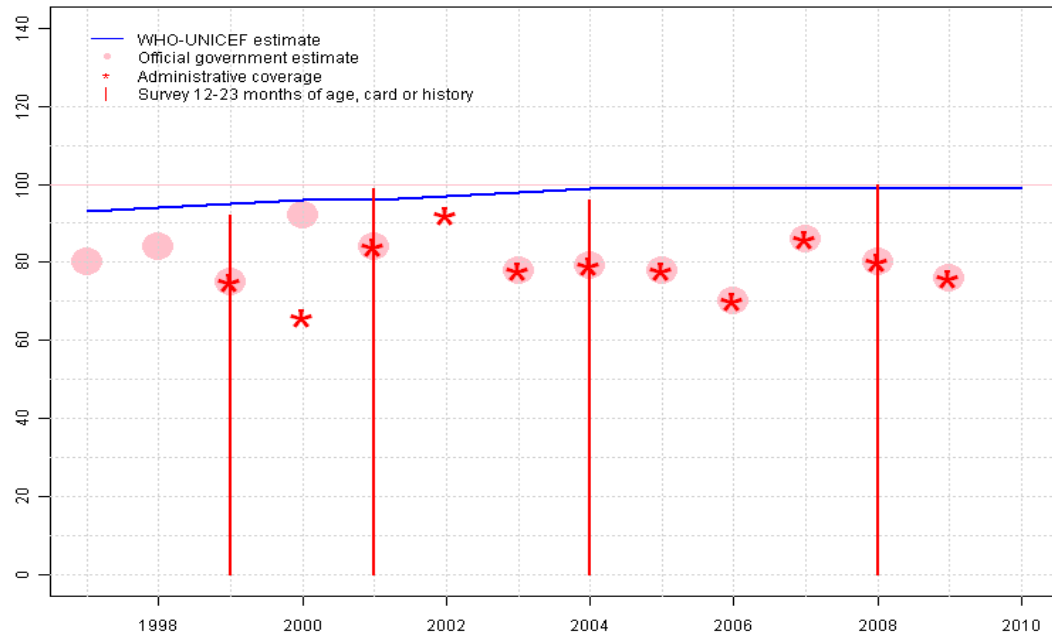


# Cape Verde - BCG

CPV - BCG



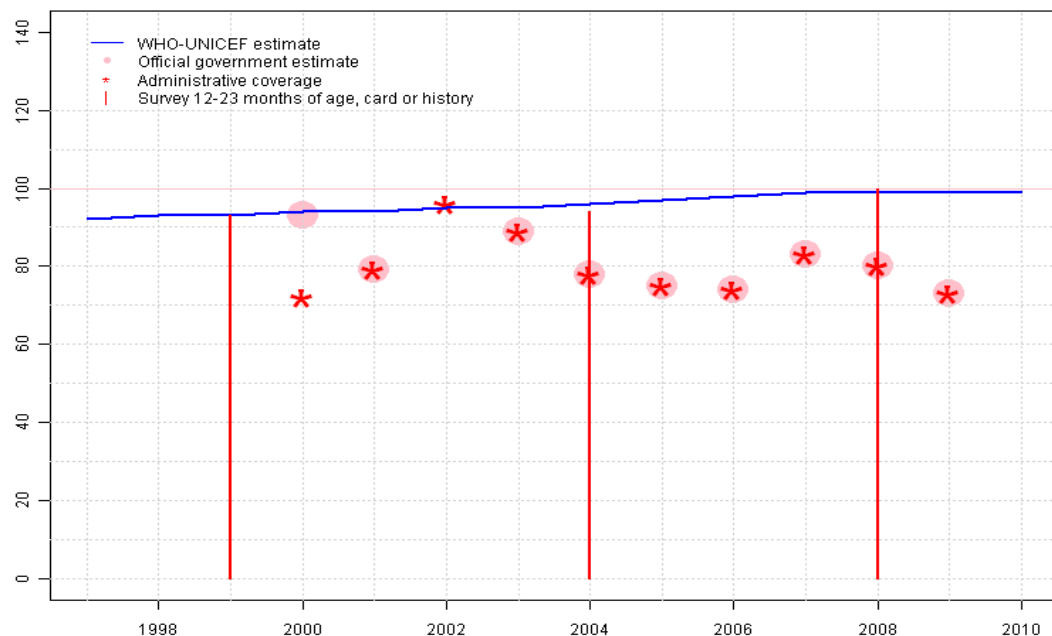
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	93	94	95	96	96	97	98	99	99	99	99	99	99	99
Official	80	84	75	92	84	NA	78	79	78	70	86	80	76	NA
Administrative	NA	NA	75	66	84	92	78	79	78	70	86	80	76	NA
Survey	NA	NA	92	NA	99	NA	NA	96	NA	NA	NA	100	NA	NA

## Description:

- 1997: Legacy estimate.
- 1998: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 1999: Estimate based on interpolation between 1997 and 2004. Survey results not accepted. Sample size 208 less than 300. Unexplained fluctuations in numerator and denominator levels.
- 2000: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 2001: Estimate based on interpolation between 1997 and 2004. Survey results not accepted. Sample size 0 less than 300. Unexplained fluctuations in numerator and denominator levels.
- 2002: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 2003: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 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 results are similar with differences between 2004 and 2005.
- 2005: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.
- 2006: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.
- 2007: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.
- 2008: Estimate based on survey results. 100 percent survey results does not support reported data of 80 percent.
- 2009: Estimate based on extrapolation from 2008 value of 99 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels.
- 2010: Estimate based on extrapolation from 2008 value of 99 percent. WHO and UNICEF recommend assessment and improvement of the routine monitoring system

# Cape Verde - DTP1

CPV - DTP1



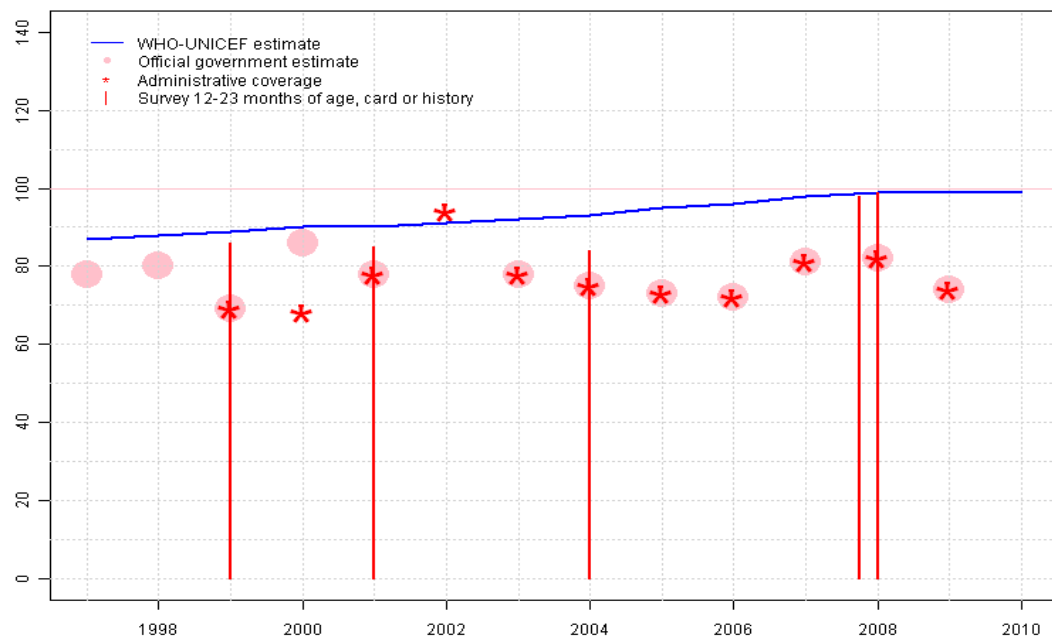
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	92	93	93	94	94	95	95	96	97	98	99	99	99	99
Official	NA	NA	NA	93	79	NA	89	78	75	74	83	80	73	NA
Administrative	NA	NA	NA	72	79	96	89	78	75	74	83	80	73	NA
Survey	NA	NA	93	NA	NA	NA	NA	94	NA	NA	NA	100	NA	NA

## Description:

- 1997: Legacy estimate.
- 1998: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 1999: Estimate based on interpolation between 1997 and 2004. Survey results not accepted. Sample size 208 less than 300. Unexplained fluctuations in numerator and denominator levels.
- 2000: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 2001: Estimate based on interpolation between 1997 and 2004. Reported data not accepted due to a decline from 93 percent to 79 percent with a subsequent increase to 96 percent. Unexplained fluctuations in numerator and denominator levels.
- 2002: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 2003: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 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 results are similar with differences between 2004 and 2005.
- 2005: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting. Current estimate of 97 percent changed from previous revision value of 98 percent.
- 2006: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.
- 2007: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.
- 2008: Estimate based on survey results. 100 percent survey results does not support reported data of 80 percent.
- 2009: Estimate based on extrapolation from 2008 value of 99 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 99 percent changed from previous revision value of 98 percent.
- 2010: Estimate based on extrapolation from 2008 value of 99 percent. WHO and UNICEF recommend assessment and improvement of the routine monitoring system

# Cape Verde - DTP3

CPV - DTP3



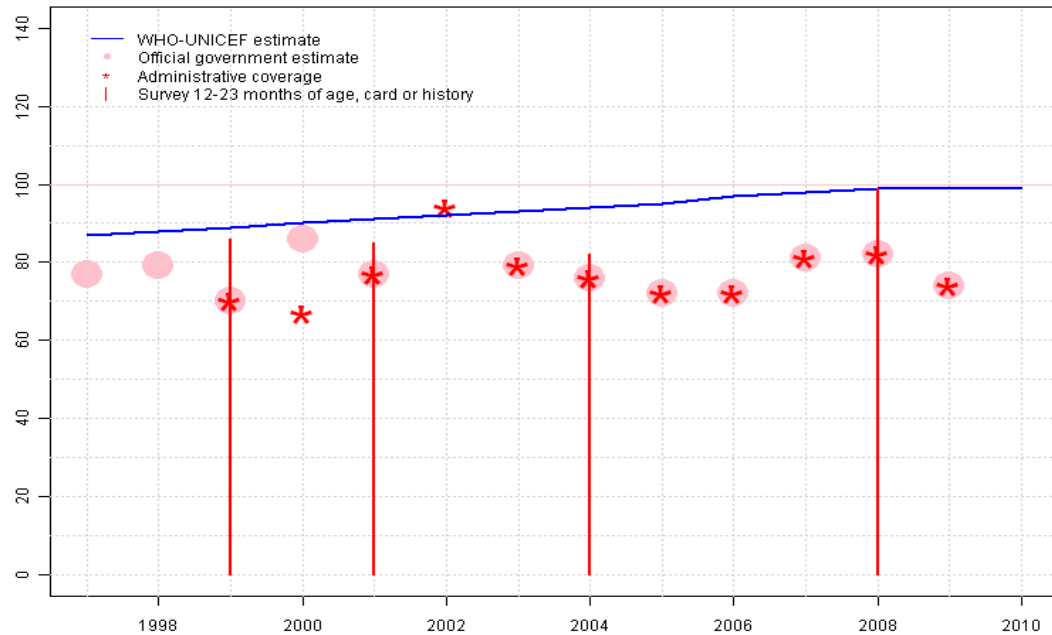
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	87	88	89	90	90	91	92	93	95	96	98	99	99	99
Official	78	80	69	86	78	NA	78	75	73	72	81	82	74	NA
Administrative	NA	NA	69	68	78	94	78	75	73	72	81	82	74	NA
Survey	NA	NA	86	NA	85	NA	NA	84	NA	NA	NA	*	NA	NA

## Description:

- 1997: Legacy estimate.
- 1998: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 1999: Estimate based on interpolation between 1997 and 2004. Reported data not accepted due to a decline from 80 percent to 69 percent with a subsequent increase to 86 percent. Survey results not accepted. Sample size 208 less than 300. Unexplained fluctuations in numerator and denominator levels.
- 2000: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 2001: Estimate based on interpolation between 1997 and 2004. Survey results not accepted. Sample size 0 less than 300. Unexplained fluctuations in numerator and denominator levels.
- 2002: Estimate based on interpolation between 1997 and 2004. Reported data not accepted due to an increase from 78 percent to 94 percent with a subsequent decrease to 78 percent. Unexplained fluctuations in numerator and denominator levels.
- 2003: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 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 results are similar with differences between 2004 and 2005.
- 2005: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.
- 2006: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.
- 2007: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.
- 2008: Estimate based on survey results. \*Summary survey results of 99 percent based on 2 surveys (see survey summary page) does not support reported data of 82 percent. Survey results of 99 percent modified for recall bias to 99 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.
- 2009: Estimate based on extrapolation from 2008 value of 99 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels.
- 2010: Estimate based on extrapolation from 2008 value of 99 percent. WHO and UNICEF recommend assessment and improvement of the routine monitoring system

# Cape Verde - Pol3

CPV - Pol3



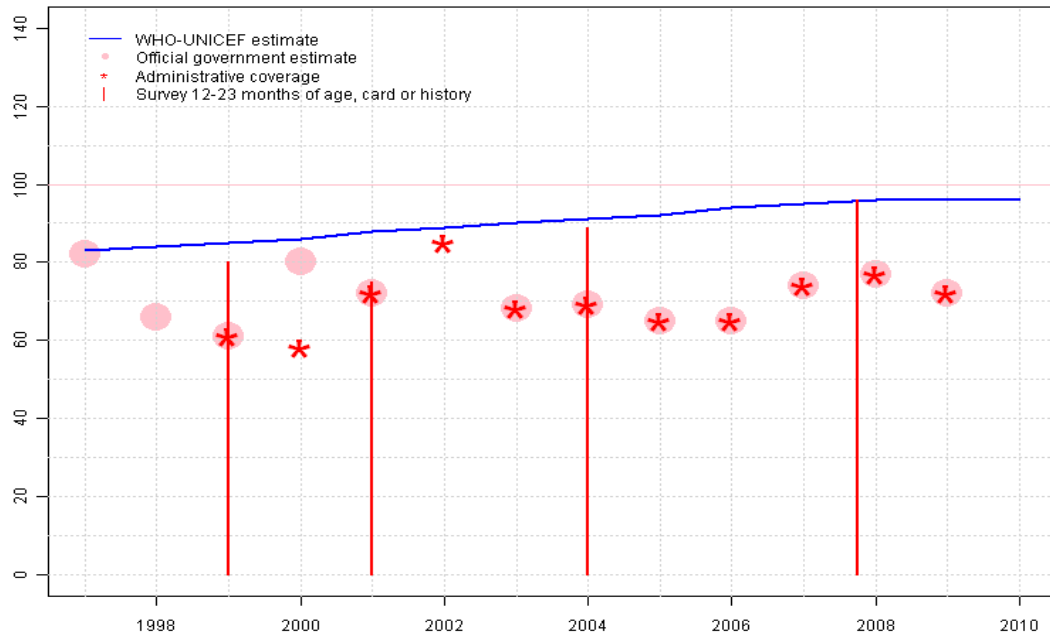
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	87	88	89	90	91	92	93	94	95	97	98	99	99	99
Official	77	79	70	86	77	NA	79	76	72	72	81	82	74	NA
Administrative	NA	NA	70	67	77	94	79	76	72	72	81	82	74	NA
Survey	NA	NA	86	NA	85	NA	NA	82	NA	NA	NA	99	NA	NA

## Description:

- 1997: Legacy estimate.
- 1998: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 1999: Estimate based on interpolation between 1997 and 2004. Survey results not accepted. Sample size 208 less than 300. Unexplained fluctuations in numerator and denominator levels.
- 2000: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 2001: Estimate based on interpolation between 1997 and 2004. Survey results not accepted. Sample size 0 less than 300. Unexplained fluctuations in numerator and denominator levels.
- 2002: Estimate based on interpolation between 1997 and 2004. Reported data not accepted due to an increase from 77 percent to 94 percent with a subsequent decrease to 79 percent. Unexplained fluctuations in numerator and denominator levels.
- 2003: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 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 results are similar with differences between 2004 surveys results only for multi-dose antigens (DTP, Pol, HepB).
- 2005: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.
- 2006: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.
- 2007: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.
- 2008: Estimate based on survey results. 99 percent survey results does not support reported data of 82 percent. Survey results of 99 percent modified for recall bias to 99 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.
- 2009: Estimate based on extrapolation from 2008 value of 99 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels.
- 2010: Estimate based on extrapolation from 2008 value of 99 percent. WHO and UNICEF recommend assessment and improvement of the routine monitoring system

# Cape Verde - MCV

CPV - MCV



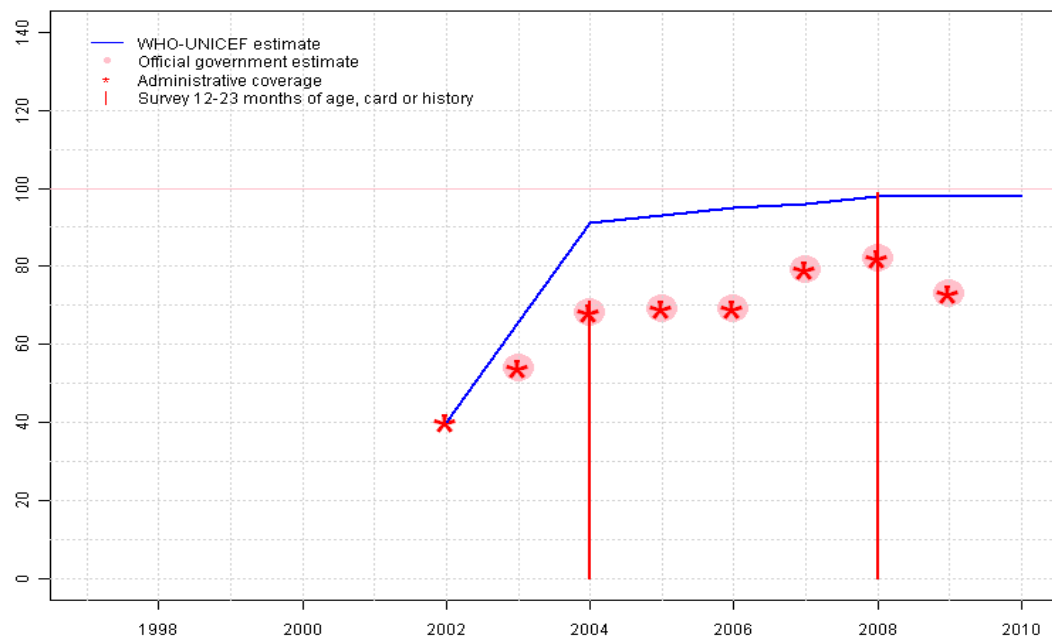
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	83	84	85	86	88	89	90	91	92	94	95	96	96	96
Official	82	66	61	80	72	NA	68	69	65	65	74	77	72	NA
Administrative	NA	NA	61	58	72	85	68	69	65	65	74	77	72	NA
Survey	NA	NA	80	NA	75	NA	NA	89	NA	NA	NA	*	NA	NA

## Description:

- 1997: Legacy estimate.
- 1998: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 1999: Estimate based on interpolation between 1997 and 2004. Survey results not accepted. Sample size 208 less than 300. Unexplained fluctuations in numerator and denominator levels.
- 2000: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 2001: Estimate based on interpolation between 1997 and 2004. Survey results not accepted. Sample size 0 less than 300. Unexplained fluctuations in numerator and denominator levels.
- 2002: Estimate based on interpolation between 1997 and 2004. Reported data not accepted due to an increase from 72 percent to 85 percent with a subsequent decrease to 68 percent. Unexplained fluctuations in numerator and denominator levels.
- 2003: Estimate based on interpolation between 1997 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 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 results are similar with differences between 2004 surveys results only for multi-dose antigens (DTP, Pol, HepB).
- 2005: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.
- 2006: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.
- 2007: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.
- 2008: Estimate based on survey results. \*Summary survey results of 96 percent based on 2 surveys (see survey summary page) does not support reported data of 77 percent.
- 2009: Estimate based on extrapolation from 2008 value of 96 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels.
- 2010: Estimate based on extrapolation from 2008 value of 96 percent. WHO and UNICEF recommend assessment and improvement of the routine monitoring system

# Cape Verde - HepB3

CPV - HepB3



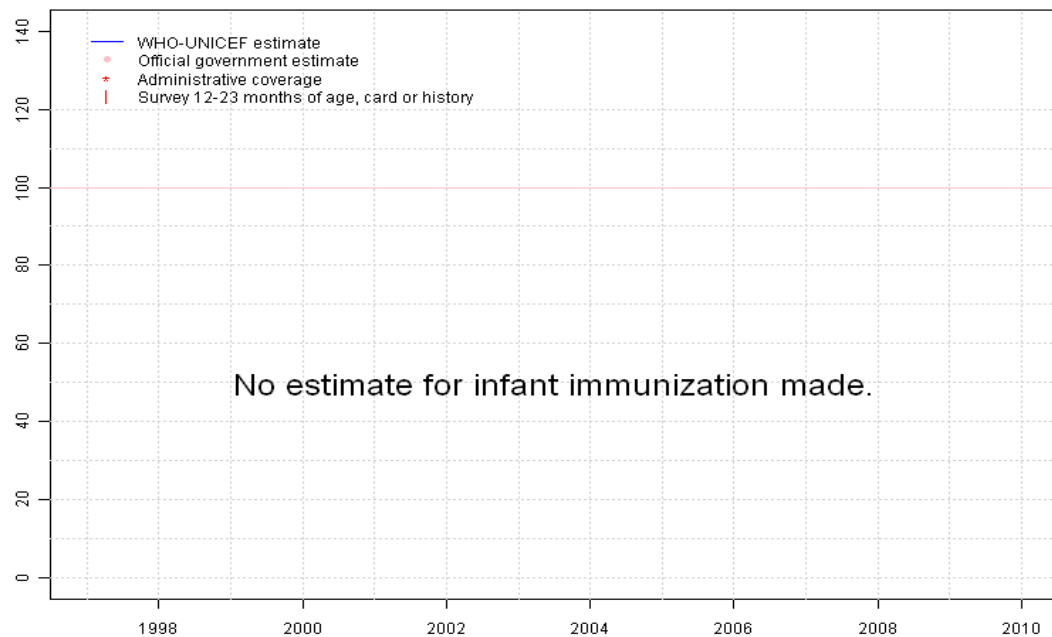
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	NA	NA	NA	NA	NA	40	66	91	93	95	96	98	98	98
Official	NA	NA	NA	NA	NA	NA	54	68	69	69	79	82	73	NA
Administrative	NA	NA	NA	NA	NA	40	54	68	69	69	79	82	73	NA
Survey	NA	NA	NA	NA	NA	NA	NA	71	NA	NA	NA	99	NA	NA

## Description:

- 2002: Estimate follows nationally reported data. HepB introduced in 2002 Vaccine presentation is HepB .Unexplained fluctuations in numerator and denominator levels.
- 2003: Estimate based on interpolation between 2002 and 2004. Unexplained fluctuations in numerator and denominator levels.
- 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 results are similar with differences between 2004
- 2005: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.Fluctuation and nationally reported data suggests poor recording and reporting.Fluctuation and nationally reported data suggests poor recording and reporting.
- 2006: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.Fluctuation and nationally reported data suggests poor recording and reporting.Fluctuation and nationally reported data suggests poor recording and reporting.
- 2007: Estimate based on interpolation between 2004 and 2008. Fluctuation and nationally reported data suggests poor recording and reporting.Fluctuation and nationally reported data suggests poor recording and reporting.Fluctuation and nationally reported data suggests poor recording and reporting.
- 2008: Estimate based on survey results. 98 percent survey results does not support reported data of 82 percent. Survey 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. Current estimate of 98 percent changed from previous revision value of 99 percent.
- 2009: Estimate based on extrapolation from 2008 value of 98 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels.Current estimate of 98 percent changed from previous revision value of 99 percent.
- 2010: Estimate based on extrapolation from 2008 value of 98 percent. WHO and UNICEF recommend assessment and improvement of the routine monitoring system

# Cape Verde - Hib3

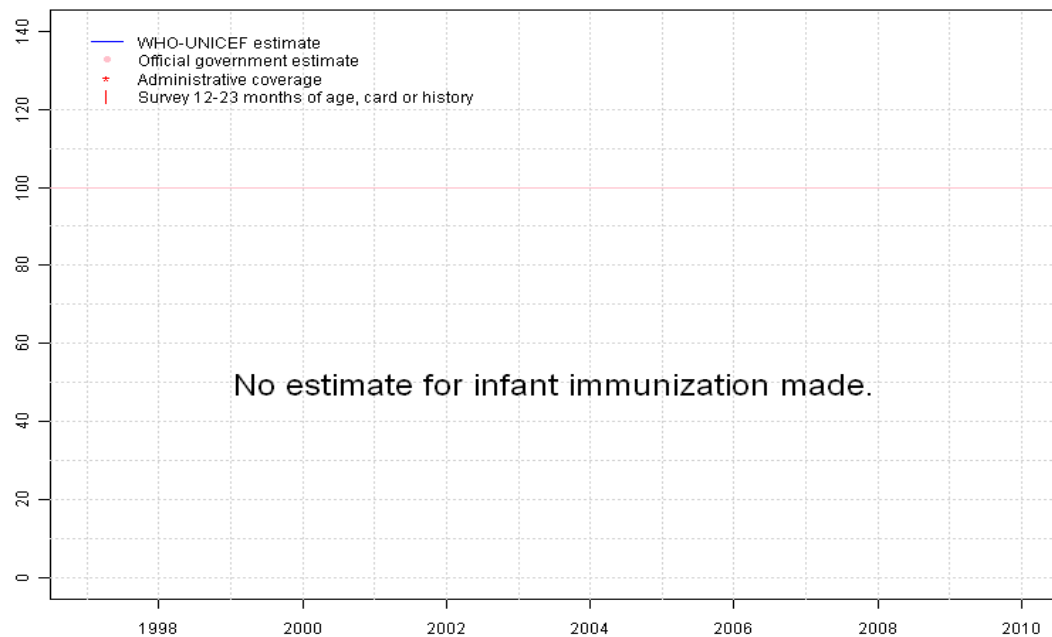
CPV - Hib3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	NA	NA	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	NA	NA
Administrative	NA	NA	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	NA	NA

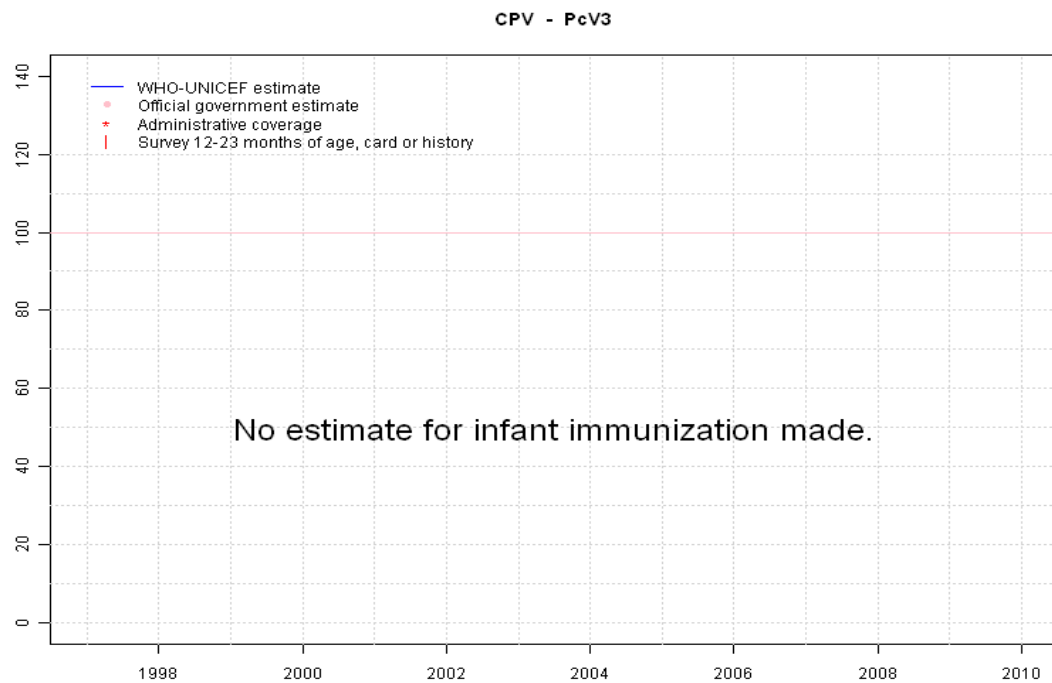
# Cape Verde - RotaC

CPV - RotaC



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	NA	NA	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	NA	NA
Administrative	NA	NA	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	NA	NA

# Cape Verde - PcV3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	NA	NA	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	NA	NA
Administrative	NA	NA	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	NA	NA

# Cape Verde - survey details

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
MCV	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
MCV	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 or History	99	12-23 m	1684	98
DTP3	Card	97	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 or History	99	12-23 m	1684	98
HepB3	Card	97	12-23 m	1684	98
MCV	Card	94	12-23 m	1684	98
MCV	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 or History	99	12-23 m	1684	98

Pol3 Card 97 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
MCV	Card	91	12-23 m	1160	97
Pol1	Card	96	12-23 m	1160	97
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
MCV	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

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	99	12-23 m	0	100
DTP3	Card or History	85	12-23 m	0	100
MCV	Card or History	75	12-23 m	0	100
Pol3	Card or History	85	12-23 m	0	100

# Cape Verde - survey details

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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
MCV	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

Further information and estimates for 1980-1996 are available at:

[http://www.childinfo.org/immunization\\_countryreports.html](http://www.childinfo.org/immunization_countryreports.html)

[http://www.who.int/immunization\\_monitoring/routine/immunization\\_coverage/en/index4.html](http://www.who.int/immunization_monitoring/routine/immunization_coverage/en/index4.html)

## Cape 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 receive 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.

Year	PAB coverage estimate (%)
1997	63
1998	62
1999	64
2000	60
2001	46
2002	62
2003	76
2004	78
2005	70
2006	74
2007	77
2008	78
2009	78
2010	92

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<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.