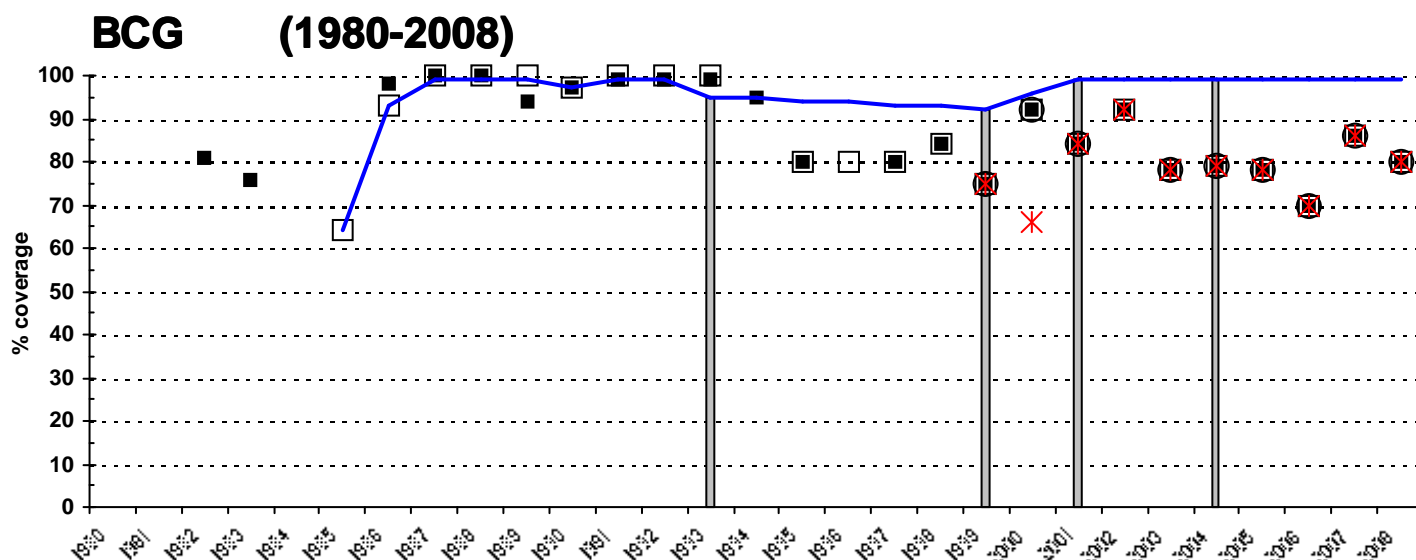


**WHO/UNICEF
Review of National Immunization Coverage
1980-2008**

Cape Verde

July, 2009

Cape Verde



Description of trend

Estimates since 1993 are based on survey results. WHO & UNICEF recommend improving the routine monitoring system.

Data presented in chart

Year	WHO/ UNICEF estimate (%)	Reported to:*		Government official estimate (%)	Reported doses administered (%)**	Survey data (%)***	
		WHO (%)	UNICEF (%)			Survey 12-23 months	Survey <12 months
1980							
1981							
1982			81				
1983			76				
1984							
1985	64	64					
1986	93	93	98				
1987	99	100	100				
1988	99	100	100				
1989	99	100	94				
1990	97	97	97				
1991	99	100	99				
1992	99	100	99				
1993	95	100	99			95	
1994	95		95				
1995	94	80	80				
1996	94	80					
1997	93	80	80				
1998	93	84	84				
1999	92	75	75	75	75	92	
2000	96	92	92	92	66		
2001	99	84	84	84	84	99	
2002	99	92	92		92		
2003	99	78	78	78	78		
2004	99	79	79	79	79	99	
2005	99	78	78	78	78		
2006	99	70	70	70	70		
2007	99	86	86	86	86		
2008	99	80	80	80	80		

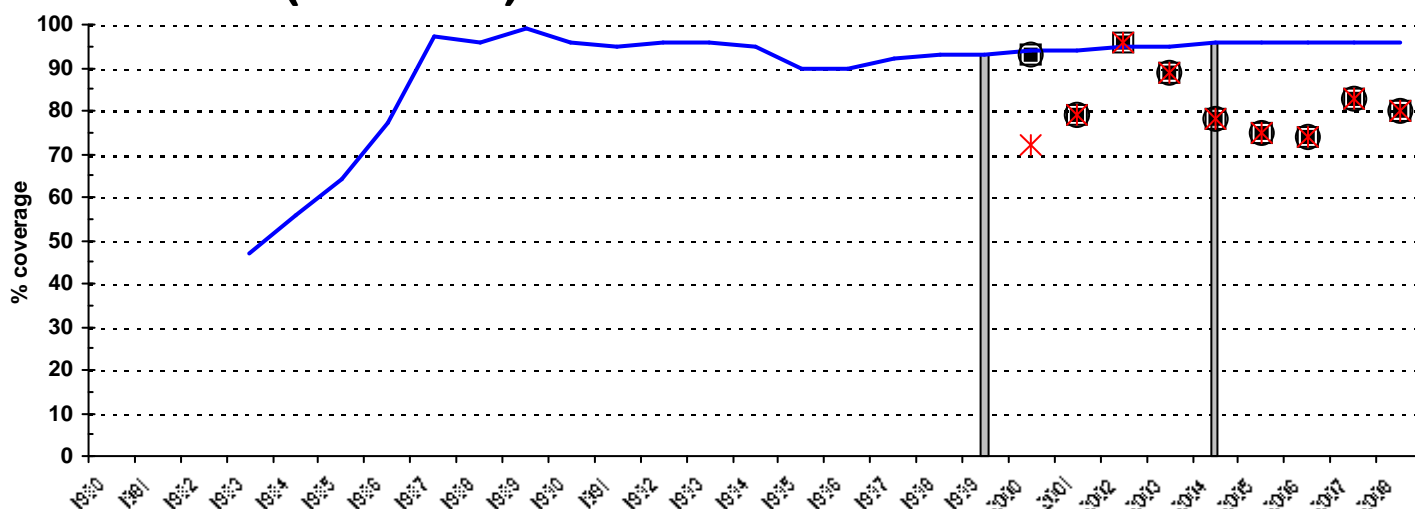
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**Coverage based on registration of doses administered by health care providers.

***In case more than one survey was implemented in a certain year the highest value is presented. Details of all data are presented in the second section of this report.

Cape Verde

DTP1 (1980-2008)



Description of trend

WHO and UNICEF began requesting data on DTP1 coverage in 2001 and have received national reports reflecting DTP1 coverage from 2001 onward. The DTP1 estimates from 2000 onward are based on these reports. For years prior to 2000 the estimates are derived from the WHO/UNICEF estimates of DTP3 and the relationship between the levels of DTP3 coverage and the drop-out between DTP1 and DTP3. This relationship results from an analysis of 282 surveys conducted in 101 countries which were published between 1980 and 2004. Estimates since 1999 are based on survey results. WHO & UNICEF recommend improving the routine monitoring system.

Data presented in chart

Year	WHO/ UNICEF estimate (%)	Reported to:*		Government official estimate (%)	Reported doses administered (%)**	Survey data (%)***	
		WHO (%)	UNICEF (%)			Survey 12-23 months	Survey <12 months
1980							
1981							
1982							
1983	47						
1984	56						
1985	64						
1986	77						
1987	97						
1988	96						
1989	99						
1990	96						
1991	95						
1992	96						
1993	96						
1994	95						
1995	90						
1996	90						
1997	92						
1998	93						
1999	93					93	
2000	94	93	93	93	72		
2001	94	79	79	79	79		
2002	95	96	96		96		
2003	95	89	89	89	89		
2004	96	78	78	78	78	96	
2005	96	75	75	75	75		
2006	96	74	74	74	74		
2007	96	83	83	83	83		
2008	96	80	80	80	80		

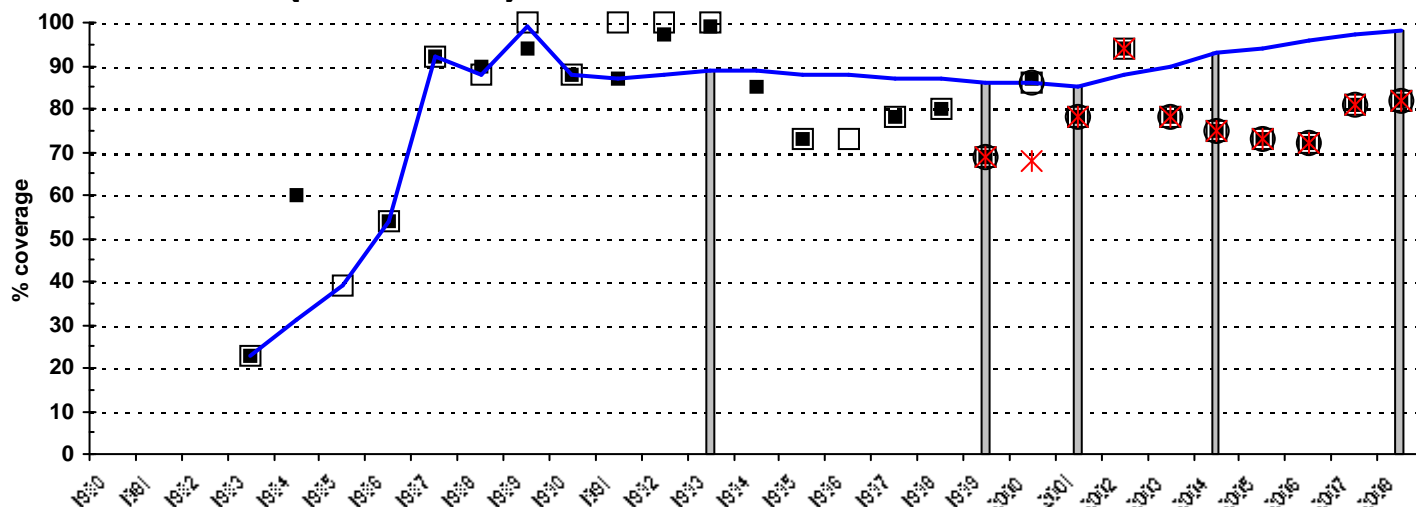
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**Coverage based on registration of doses administered by health care providers.

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Cape Verde

DTP3 (1980-2008)



Description of trend

Estimates since 1993 are based on survey results. 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). WHO & UNICEF recommend improving the routine monitoring system.

Data presented in chart

Year	WHO/ UNICEF estimate (%)	Reported to:*		Government official estimate (%)	Reported doses administered (%)**	Survey data (%)***	
		WHO (%)	UNICEF (%)			Survey 12-23 months	Survey <12 months
1980							
1981							
1982							
1983	23	23	23				
1984	31		60				
1985	39	39					
1986	54	54	54				
1987	92	92	92				
1988	88	88	90				
1989	99	100	94				
1990	88	88	88				
1991	87	100	87				
1992	88	100	97				
1993	89	100	99			89	
1994	89		85				
1995	88	73	73				
1996	88	73					
1997	87		78				
1998	87	80	80				
1999	86	69	69	69	69	86	
2000	86	86	87	86	68		
2001	85	78	78	78	78	85	
2002	88	94	94		94		
2003	90	78	78	78	78		
2004	93	75	75	75	75	93	
2005	94	73	73	73	73		
2006	96	72	72	72	72		
2007	97	81	81	81	81		
2008	98	82	82	82	82	98	

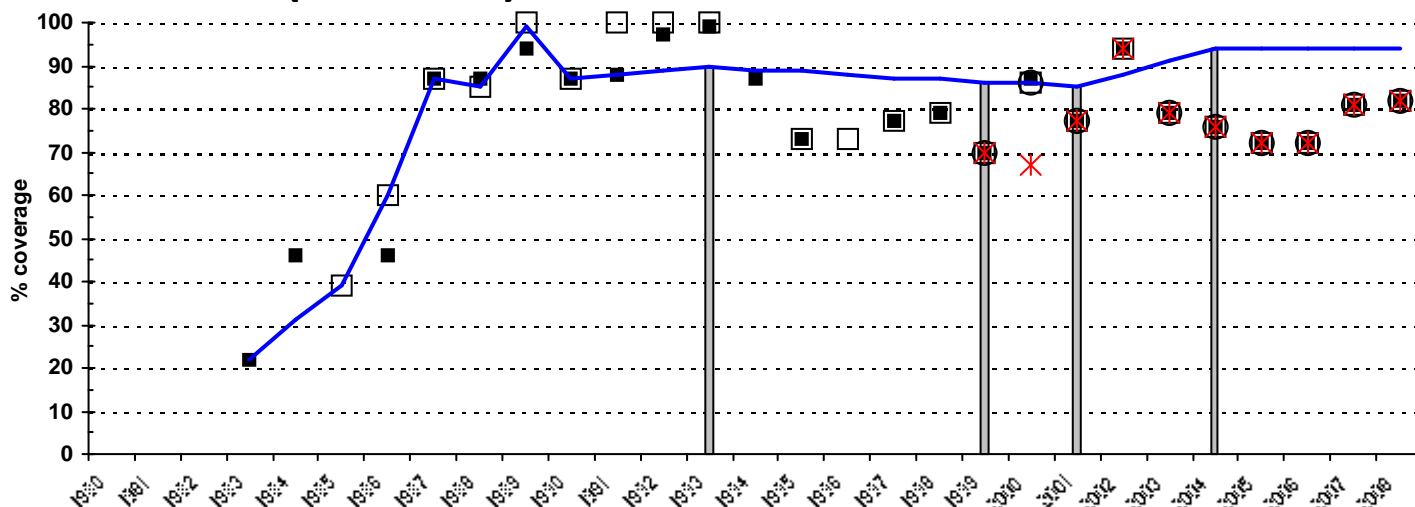
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**Coverage based on registration of doses administered by health care providers.

***In case more than one survey was implemented in a certain year the highest value is presented. Details of all data are presented in the second section of this report.

Cape Verde

Pol3 (1980-2008)



Description of trend

Estimates since 1993 are based on survey results. Differences between survey results in 2004 may be the result of recall bias. BCG, DTP1, a MCV results are similar with differences between 2004 surveys results only for multi-dose antigens (DTP, Pol, HepB). WHO & UNICEF recon improving the routine monitoring system.

Data presented in chart

Year	WHO/ UNICEF estimate (%)	Reported to:*		Government official estimate (%)	Reported doses administered (%)**	Survey data (%)***	
		WHO (%)	UNICEF (%)			Survey 12-23 months	Survey <12 months
1980							
1981							
1982							
1983	22		22				
1984	31		46				
1985	39	39					
1986	60	60	46				
1987	87	87	87				
1988	85	85	87				
1989	99	100	94				
1990	87	87	87				
1991	88	100	88				
1992	89	100	97				
1993	90	100	99			90	
1994	89		87				
1995	89	73	73				
1996	88	73					
1997	87	77					
1998	87	79	79				
1999	86	70	70	70	70	86	
2000	86	86	87	86	67		
2001	85	77	77	77	77	85	
2002	88	94	94		94		
2003	91	79	79	79	79		
2004	94	76	76	76	76	94	
2005	94	72	72	72	72		
2006	94	72	72	72	72		
2007	94	81	81	81	81		
2008	94	82	82	82	82		

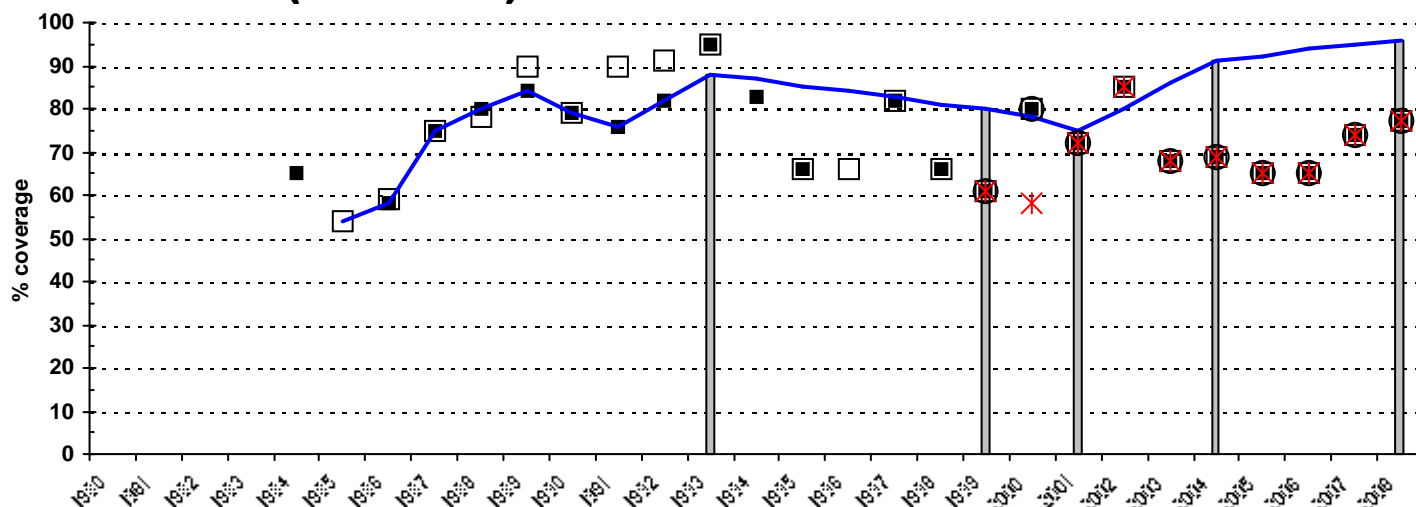
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**Coverage based on registration of doses administered by health care providers.

***In case more than one survey was implemented in a certain year the highest value is presented. Details of all data are presented in the second section of this report.

Cape Verde

MCV (1980-2008)



Description of trend

Estimates since 1993 are based on survey results. WHO & UNICEF recommend improving the routine monitoring system.

Data presented in chart

Year	WHO/ UNICEF estimate (%) —	Reported to:*		Government official estimate (%) ○	Reported doses administered (%)** ✕	Survey data (%)***	
		WHO (%) □	UNICEF (%) ■			Survey 12-23 months 	Survey <12 months +
1980							
1981							
1982							
1983							
1984			65				
1985	54	54	58				
1986	58	59	58				
1987	75	75	75				
1988	80	78	80				
1989	84	90	84				
1990	79	79	79				
1991	76	90	76				
1992	82	91	82				
1993	88	95	95			88	
1994	87		83				
1995	85	66	66				
1996	84	66	66				
1997	83	82	82				
1998	81	66	66				
1999	80	61	61	61	61	80	
2000	78	80	80	80	58		
2001	75	72	72	72	72	75	
2002	80	85	85		85		
2003	86	68	68	68	68		
2004	91	69	69	69	69	91	
2005	92	65	65	65	65		
2006	94	65	65	65	65		
2007	95	74	74	74	74		
2008	96	77	77	77	77	96	

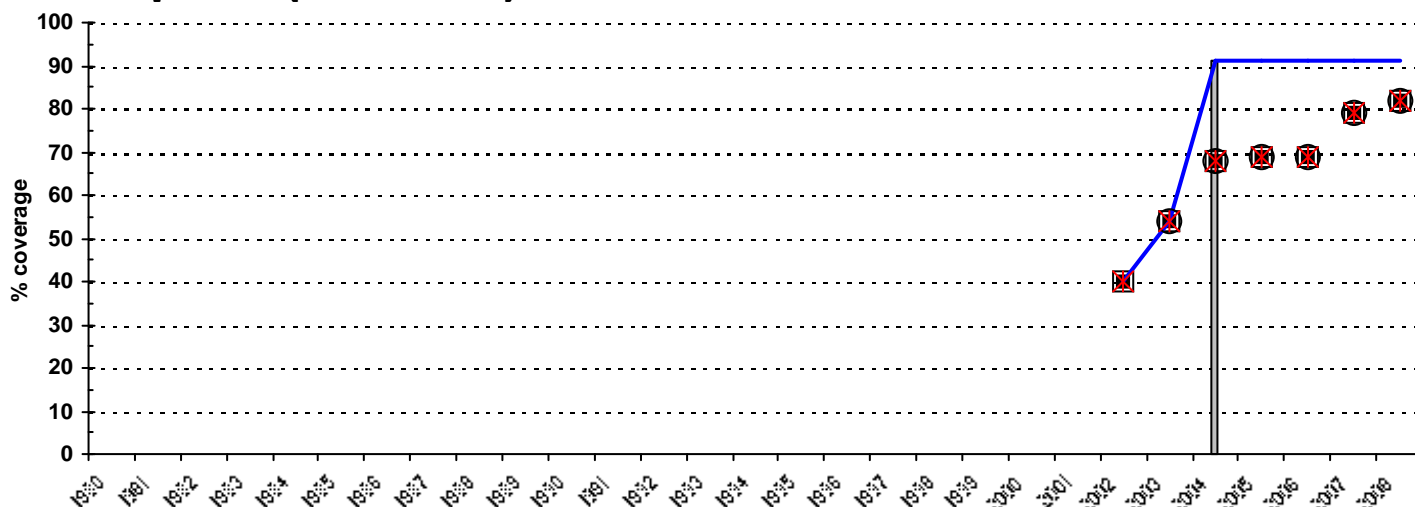
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**Coverage based on registration of doses administered by health care providers.

***In case more than one survey was implemented in a certain year the highest value is presented. Details of all data are presented in the second section of this report.

Cape Verde

HepB3 (1980-2008)



Description of trend

Monovalent hepatitis B vaccine introduced in 2002. Estimates since 2004 are based on reported data. 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-antigens (DTP, Pol, HepB). WHO & UNICEF recommend improving the routine monitoring system.

Data presented in chart

Year	WHO/ UNICEF estimate (%) —	Reported to:*		Government official estimate (%) ○	Reported doses administered (%)** ✖	Survey data (%)***	
		WHO (%) □	UNICEF (%) ■			Survey 12-23 months 	Survey <12 months +
1980							
1981							
1982							
1983							
1984							
1985							
1986							
1987							
1988							
1989							
1990							
1991							
1992							
1993							
1994							
1995							
1996							
1997							
1998							
1999							
2000							
2001							
2002	40	40	40		40		
2003	54	54	54	54	54		
2004	68	68	68	68	68	91	
2005	91	69	69	69	69		
2006	91	69	69	69	69		
2007	91	79	79	79	79		
2008	91	82	82	82	82		

*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**Coverage based on registration of doses administered by health care providers.

***In case more than one survey was implemented in a certain year the highest value is presented. Details of all data are presented in the second section of this report.

Cape Verde

Details Survey Data

Year Source

Antigen	Confirmation method	% coverage	Compliance with schedule	Age group	Sample size	% cards seen	Survey year	Comments
2008 Enquête de couverture vaccinale de la 3ème dose de trois (contre la diphtérie, la coqueluche et le tétanos - DTC3) et la rougeole - Le Cap-Vert 2009								
DTP3	Card	98		12-23 m	1696	98.17	2009	
MCV	Card	96.22		12-23 m	1696	98.17	2009	
2004 República de Cabo Verde, Inquérito de avaliação da cobertura vacinal 2005								
BCG	Card	98.6	Crude	12-23 m	1160	97.1	2005	Survey report shows only data disaggregated by island; national totals computed based on the report.
DTP1	Card	96.3	Crude	12-23 m	1160	97.1	2005	Survey report shows only data disaggregated by island; national totals computed based on the report.
DTP3	Card	93.4	Crude	12-23 m	1160	97.1	2005	Survey report shows only data disaggregated by island; national totals computed based on the report.
Pol3	Card	93.7	Crude	12-23 m	1160	97.1	2005	Survey report shows only data disaggregated by island; national totals computed based on the report.
MCV	Card	90.7	Crude	12-23 m	1160	97.1	2005	Survey report shows only data disaggregated by island; national totals computed based on the report.
HepB	Card	91	Crude	12-23 m	1160	97.1	2005	Survey report shows only data disaggregated by island; national totals computed based on the report.
2004 Segundo Inquérito Demográfico e de Saúde Reprodutiva, Cabo Verde, IDSR-II, 2005								
BCG	Card or History	96.5		12-23 m	436	81.3	2005	
DTP1	Card or History	94		12-23 m	436	81.3	2005	
DTP3	Card or History	84.4		12-23 m	436	81.3	2005	
Pol3	Card or History	81.6		12-23 m	436	81.3	2005	
MCV	Card or History	88.7		12-23 m	436	81.3	2005	
HepB	Card or History	70.7		12-23 m	436	81.3	2005	
2001 Capó Verde, Inquérito Nacional de Cobertura Vacinal, 2002								
BCG	Card or History	99.1		12-23 m		99.5	2002	
DTP1	Card or History			12-23 m		99.5	2002	
DTP3	Card or History	85.3		12-23 m		99.5	2002	
Pol3	Card or History	85.3		12-23 m		99.5	2002	
MCV	Card or History	75.4		12-23 m		99.5	2002	
1999 Capó Verde, Inquérito Nacional de Cobertura Vacinal, 2000								
BCG	Card or History	92.3		12-23 m	208	94.2	2000	
DTP1	Card or History	92.8		12-23 m	208	94.2	2000	
DTP3	Card or History	86.5		12-23 m	208	94.2	2000	
Pol3	Card or History	86.5		12-23 m	208	94.2	2000	
MCV	Card or History	79.8		12-23 m	208	94.2	2000	
1993 The Health of Children less than five years of age in Cape Verde, Volume I, Epidemiologic study, 1997								
BCG	Card or History	94.6		12-23 m	313		1994	
DTP1	Card or History			12-23 m	313		1994	
DTP3	Card or History	88.7		12-23 m	313		1994	
Pol3	Card or History	90.5		12-23 m	313		1994	
MCV	Card or History	88		12-23 m	313		1994	

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.

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.

Cape Verde

Year	PAB coverage estimate (%)
1980	
1981	
1982	
1983	
1984	
1985	
1986	
1987	
1988	77
1989	82
1990	75
1991	91
1992	92
1993	91
1994	65
1995	30
1996	24
1997	63
1998	62
1999	64
2000	60
2001	46
2002	62
2003	76
2004	78
2005	70
2006	74
2007	77
2008	78