

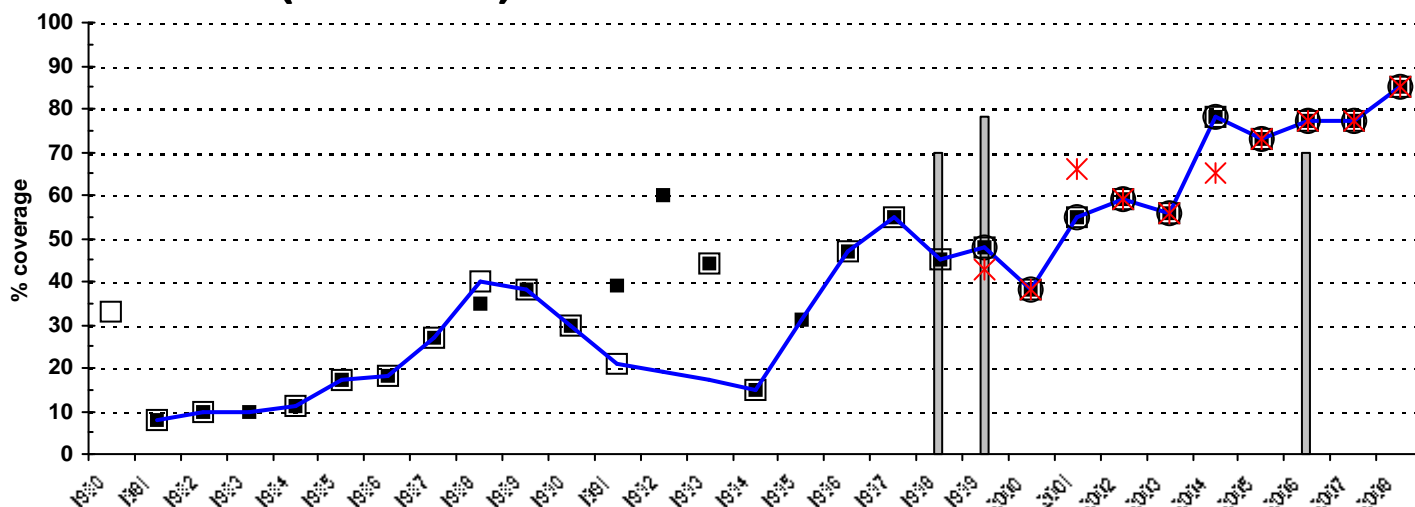
**WHO/UNICEF
Review of National Immunization Coverage
1980-2008**

Afghanistan

July, 2009

Afghanistan

BCG (1980-2008)



Description of trend

Estimated immunization coverage levels are based on reported data. For missing data between two years the imputed coverage is the linear interpolation between the two reported coverage rates. If coverage has ceased to be reported, it is assumed to remain constant. Due to the unstable situation in the country and the lack of updated population data the reported coverage data can be unreliable. Higher reported coverage rates in the early 1990s are not considered to be accurate as the programme was only operational in part of the country. Donor support began in 1994 led to an increase in coverage through 1997. Survey data points for 1998 and 1999 include immunizations given during national immunization days. Increases in coverage beginning in 2000 are the result of increased donor support. The 2006 survey excluded 5 province card retention was 17% and is not considered. WHO & UNICEF recommend a high quality national survey to confirm levels of coverage.

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		33					
1981	8	8	8				
1982	10	10	10				
1983	10		10				
1984	11	11	11				
1985	17	17	17				
1986	18	18	18				
1987	27	27	27				
1988	40	40	35				
1989	38	38	38				
1990	30	30	30				
1991	21	21	39				
1992	19		60				
1993	17	44	44				
1994	15	15	15				
1995	31		31				
1996	47	47	47				
1997	55	55	55				
1998	45	45	45			70	
1999	48	48	48	48	43	78	
2000	38	38	38	38	38		
2001	55	55	55	55	66		
2002	59	59	59	59	59		
2003	56	56	56	56	56		
2004	78	78	78	78	65		
2005	73	73	73	73	73		
2006	77	77	77	77	77	70	
2007	77	77	77	77	77		
2008	85	85	85	85	85		

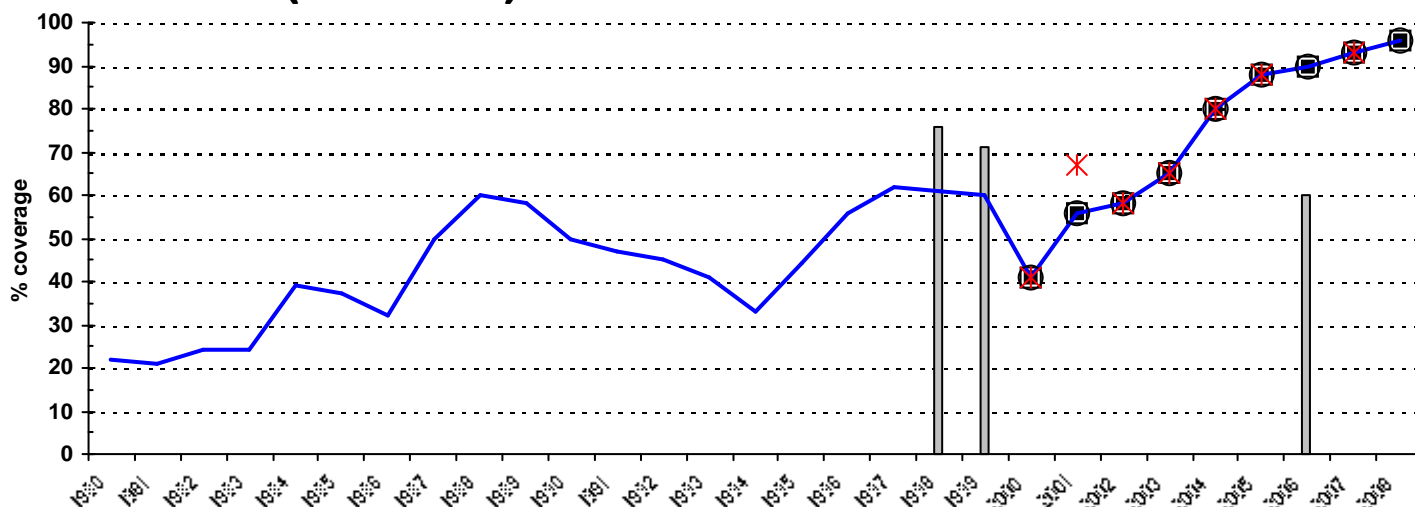
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Afghanistan

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. 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. Survey data points for 1998 and 1999 include immunizations given during national immunization days. The 2006 survey excluded 5 provinces, card retention was 17% and not considered. WHO & UNICEF recommend a high quality national survey to confirm levels of coverage.

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	22						
1981	21						
1982	24						
1983	24						
1984	39						
1985	37						
1986	32						
1987	50						
1988	60						
1989	58						
1990	50						
1991	47						
1992	45						
1993	41						
1994	33						
1995	44						
1996	56						
1997	62						
1998	61					76	
1999	60					71	
2000	41	41	41	41	41		
2001	56	56	56	56	67		
2002	58	58	58	58	58		
2003	65	65	65	65	65		
2004	80	80	80	80	80		
2005	88	88	88	88	88		
2006	90	90	90	90	106	60	
2007	93	93	93	93	93		
2008	96	96	96	96			

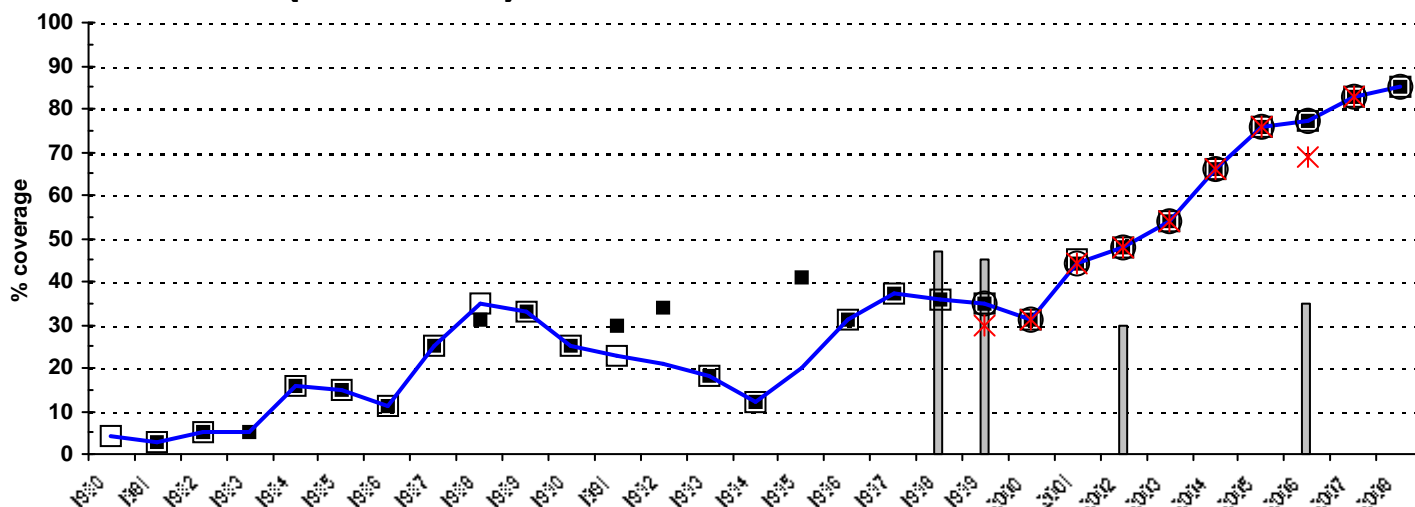
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Afghanistan

DTP3 (1980-2008)



Description of trend

Estimated immunization coverage levels are based on reported data. For missing data between two years the imputed coverage is the linear interpolation between the two reported coverage rates. If coverage has ceased to be reported, it is assumed to remain constant. Due to the unstable situation in the country and the lack of updated population data the reported coverage data can be unreliable. In 1994 multi-antigen campaigns started to reduce the drop-out between BCG and DPT3, however activities only referred to the Central Area. Donor support beginning in 1994 led to an increase in coverage through 1997. Survey data points for 1998 and 1999 include immunizations given during national immunization days. Increases in coverage beginning in 2000 are the result of increased donor support. The 2006 survey excluded 5 province card retention was 17% and is not considered. WHO & UNICEF recommend a high quality national survey to confirm levels of coverage.

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	4	4					
1981	3	3	3				
1982	5	5	5				
1983	5		5				
1984	16	16	16				
1985	15	15	15				
1986	11	11	11				
1987	25	25	25				
1988	35	35	31				
1989	33	33	33				
1990	25	25	25				
1991	23	23	30				
1992	21		34				
1993	18	18	18				
1994	12	12	12				
1995	20		41				
1996	31	31	31				
1997	37	37	37				
1998	36	36	36			47	
1999	35	35	35	35	30	45	
2000	31	31	31	31	31		
2001	44	45	44	44	44		
2002	48	48	48	48	48	30	
2003	54	54	54	54	54		
2004	66	66	66	66	66		
2005	76	76	76	76	76		
2006	77	77	77	77	69	35	
2007	83	83	83	83	83		
2008	85	85	85	85			

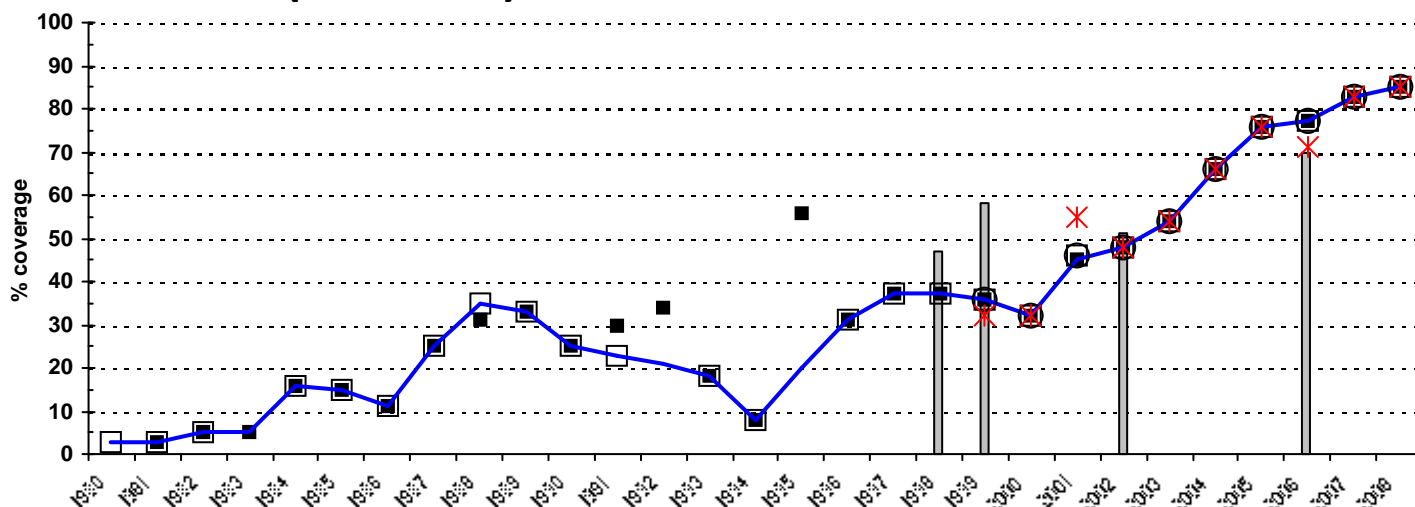
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

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***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.

Afghanistan

Pol3 (1980-2008)



Description of trend

Estimated immunization coverage levels are based on reported data. For missing data between two years the imputed coverage is the linear interpolation between the two reported coverage rates. If coverage has ceased to be reported, it is assumed to remain constant. Due to the situation in the country and the lack of updated population data the reported coverage data can be unreliable. In 1994 multi-antigen campaign started to reduce the drop-out from BCG, however activities only referred to the Central Area. Donor support beginning in 1994 led to an increase in coverage through 1997. Survey data points for 1998 and 1999 include immunizations given during national immunization days. Increases in coverage beginning in 2000 are the result of increased donor support. The 2006 survey excluded 5 provinces, card retention was 17% and is not considered. WHO & UNICEF recommend a high quality national survey to confirm levels of coverage.

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	3	3					
1981	3	3	3				
1982	5	5	5				
1983	5		5				
1984	16	16	16				
1985	15	15	15				
1986	11	11	11				
1987	25	25	25				
1988	35	35	31				
1989	33	33	33				
1990	25	25	25				
1991	23	23	30				
1992	21		34				
1993	18	18	18				
1994	8	8	8				
1995	20		56				
1996	31	31	31				
1997	37	37	37				
1998	37	37	37			47	
1999	36	36	36	36	32	58	
2000	32	32	32	32	32		
2001	45	46	45	46	55		
2002	48	48	48	48	48	51	
2003	54	54	54	54	54		
2004	66	66	66	66	66		
2005	76	76	76	76	76		
2006	77	77	77	77	71	70	
2007	83	83	83	83	83		
2008	85	85	85	85	85		

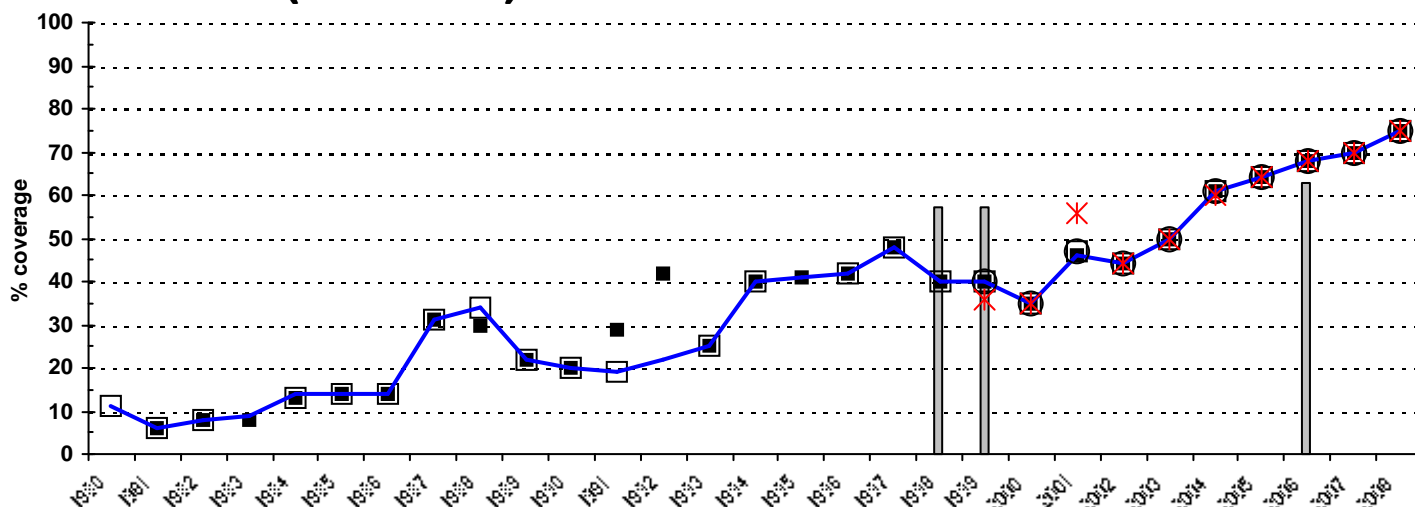
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

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

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Afghanistan

MCV (1980-2008)



Description of trend

Estimated immunization coverage levels are based on reported data. For missing data between two years the imputed coverage is the linear interpolation between the two reported coverage rates. If coverage has ceased to be reported, it is assumed to remain constant. Due to the unstable situation in the country and the lack of updated population data the reported coverage data can be unreliable. Donor support beginning in 1994 led to an increase in coverage through 1997. Survey data points for 1998 and 1999 include immunizations given during national immunization days. Increases in coverage beginning in 2000 are the result of increased donor support. The 2006 survey excluded 5 province card retention was 17% and is not considered. WHO & UNICEF recommend a high quality national survey to confirm levels of coverage.

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	11	11					
1981	6	6	6				
1982	8	8	8				
1983	9		8				
1984	14	13	13				
1985	14	14	14				
1986	14	14	14				
1987	31	31	31				
1988	34	34	30				
1989	22	22	22				
1990	20	20	20				
1991	19	19	29				
1992	22		42				
1993	25	25	25				
1994	40	40	40				
1995	41		41				
1996	42	42	42				
1997	48	48	48				
1998	40	40	40			57	
1999	40	40	40	40	36	57	
2000	35	35	35	35	35		
2001	46	47	46	47	56		
2002	44	44	44	44	44		
2003	50	50	50	50	50		
2004	61	61	61	61	60		
2005	64	64	64	64	64		
2006	68	68	68	68	68	63	
2007	70	70	70	70	70		
2008	75	75	75	75	75		

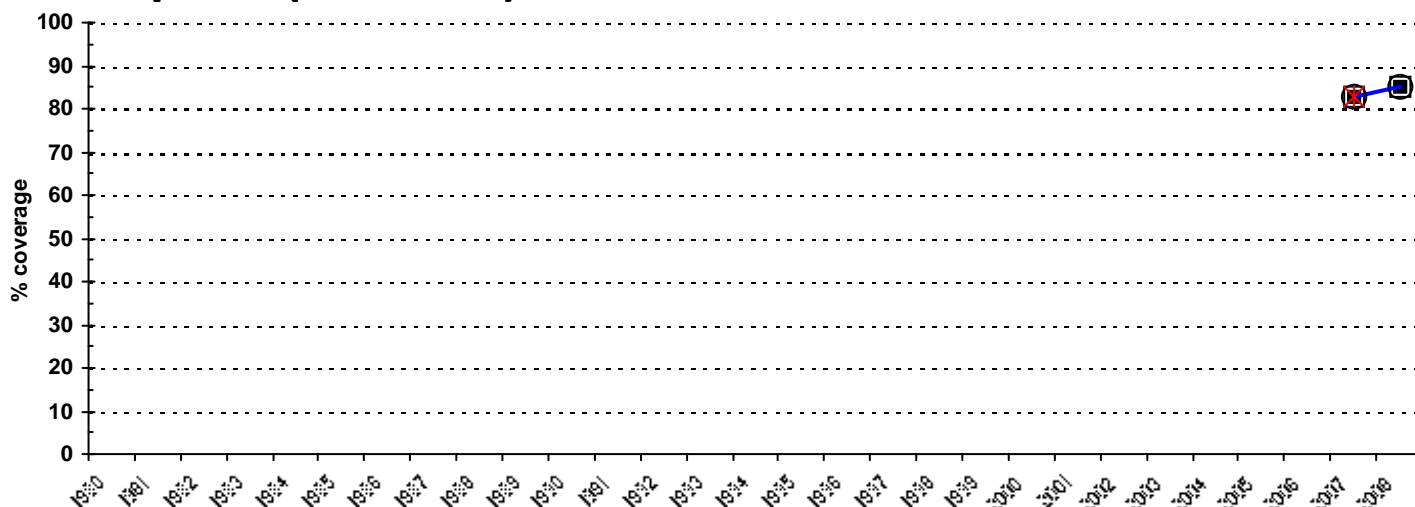
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Afghanistan

HepB3 (1980-2008)



Description of trend

Tetavalent vaccine (DTP-HepB) introduced in 2006. Estimates based on reported coverage. WHO & UNICEF recommend a high quality national survey to confirm levels of coverage.

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							
2003							
2004							
2005							
2006							
2007	83	83	83	83	83		
2008	85	85	85	85			

*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.

Afghanistan

Details Survey Data

Year Source

Antigen	Confirmation method	% coverage	Compliance with schedule	Age group	Sample size	% cards seen	Survey year	Comments
2006 Afghanistan Health Survey 2006								
BCG	Card or History	70.2		12-23 m	1665	17.4	2007	5 provinces excluded from survey
DTP1	Card or History	60.4		12-23 m	1665	17.4	2007	5 provinces excluded from survey
DTP3	Card or History	34.6		12-23 m	1665	17.4	2007	5 provinces excluded from survey
Pol3	Card or History	69.7		12-23 m	1665	17.4	2007	5 provinces excluded from survey
MCV	Card or History	62.6		12-23 m	1665	17.4	2007	5 provinces excluded from survey
2002 Moving Beyond 2 decades of war: Progress of Provinces								
DTP3	n.a.	30		12-23 m		60.7	2003	
Pol3	n.a.	51		12-23 m		60.7	2003	
1999 Afghanistan Multiple Indicator Cluster Survey, 2000, East of Afghanistan								
BCG	Card or History	78		12-23 m	223		2000	Children born between June 97 and June 98, data includes NID's conducted in May and June 99
DTP1	Card or History	71.3		12-23 m	223		2000	Children born between June 97 and June 98, data includes NID's conducted in May and June 99
DTP3	Card or History	45.3		12-23 m	223		2000	Children born between June 97 and June 98, data includes NID's conducted in May and June 99
Pol3	Card or History	57.8		12-23 m	223		2000	Children born between June 97 and June 98, data includes NID's conducted in May and June 99
MCV	Card or History	57		12-23 m	223		2000	Children born between June 97 and June 98, data includes NID's conducted in May and June 99
1998 EPI Coverage Situation in Women and Children of Afghanistan, Report of Post NID's, Routine Coverage and Acceleration Campaign Survey in Afghanistan (1999)								
BCG	Card or History	70.2		12-23 m	1681	48.3	1999	Children born between June 97 and June 98, data includes NID's conducted in May and June 99
DTP1	Card or History	75.8		12-23 m	1681	48.3	1999	Children born between June 97 and June 98, data includes NID's conducted in May and June 99
DTP3	Card or History	46.9		12-23 m	1681	48.3	1999	Children born between June 97 and June 98, data includes NID's conducted in May and June 99
Pol3	Card or History	46.9		12-23 m	1681	48.3	1999	Children born between June 97 and June 98, data includes NID's conducted in May and June 99
MCV	Card or History	57		12-23 m	1681	48.3	1999	Children born between June 97 and June 98, data includes NID's conducted in May and June 99

Afghanistan

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.

Afghanistan

Year	PAB coverage estimate (%)
1980	1
1981	3
1982	2
1983	4
1984	5
1985	13
1986	18
1987	13
1988	16
1989	26
1990	13
1991	13
1992	11
1993	13
1994	10
1995	13
1996	17
1997	19
1998	21
1999	28
2000	32
2001	47
2002	52
2003	62
2004	95
2005	96
2006	95
2007	84
2008	83