

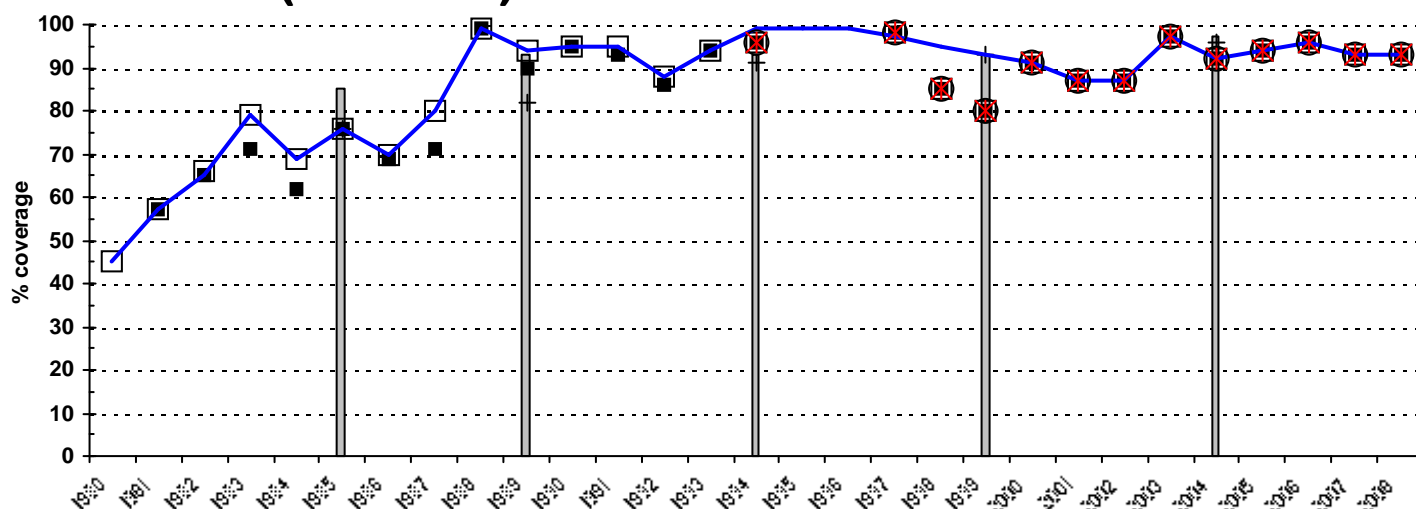
**WHO/UNICEF
Review of National Immunization Coverage
1980-2008**

Colombia

July, 2009

Colombia

BCG (1980-2008)



Description of trend

Trend follows officially reported data supported by survey data. The officially reported decline following 1997 is not supported by the 1999 DH survey point. The lower reported coverage rates are most likely the results of underreporting.

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	45	45					
1981	57	57	57				
1982	65	66	65				
1983	79	79	71				
1984	69	69	62				
1985	76	76	76			85	76
1986	70	70	69				
1987	80	80	71				
1988	99	99	99				
1989	94	94	90			93	82
1990	95	95	95				
1991	95	95	93				
1992	88	88	86				
1993	94	94	94				
1994	99	96	96	96	96	93	91
1995	99	104	104	104	104		
1996	99	104	104	104	104		
1997	97	98	98	98	98		
1998	95	85	85	85	85		
1999	93	80	80	80	80	93	93
2000	91	91	91	91	91		
2001	87	87	87	87	87		
2002	87	87	87	87	87		
2003	97	97	97	97	97		
2004	92	92	92	92	92	97	96
2005	94	94	94	94	94		
2006	96	96	96	96	96		
2007	93	93	93	93	93		
2008	93	93	93	93	93		

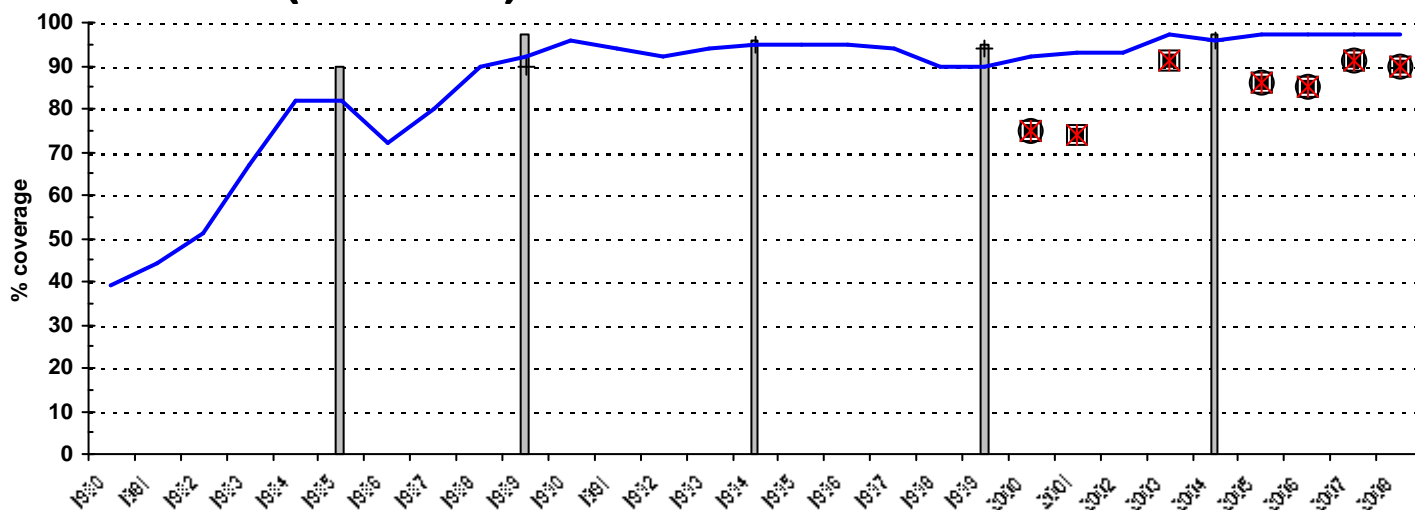
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Colombia

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 estimates are derived from the WHO/UNICEF estimates of DTP3 and the relationship between the levels of DTP3 coverage and 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.

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	39						
1981	44						
1982	51						
1983	67						
1984	82						
1985	82					90	
1986	72						
1987	80						
1988	90						
1989	92					97	90
1990	96						
1991	94						
1992	92						
1993	94						
1994	95					96	95
1995	95						
1996	95						
1997	94						
1998	90						
1999	90					95	94
2000	92	75	75	75	75		
2001	93	74	74		74		
2002	93						
2003	97	91	91		91		
2004	96					97	96
2005	97	86	86	86	86		
2006	97	85	85	85	85		
2007	97	91	91	91	91		
2008	97	90	90	90	90		

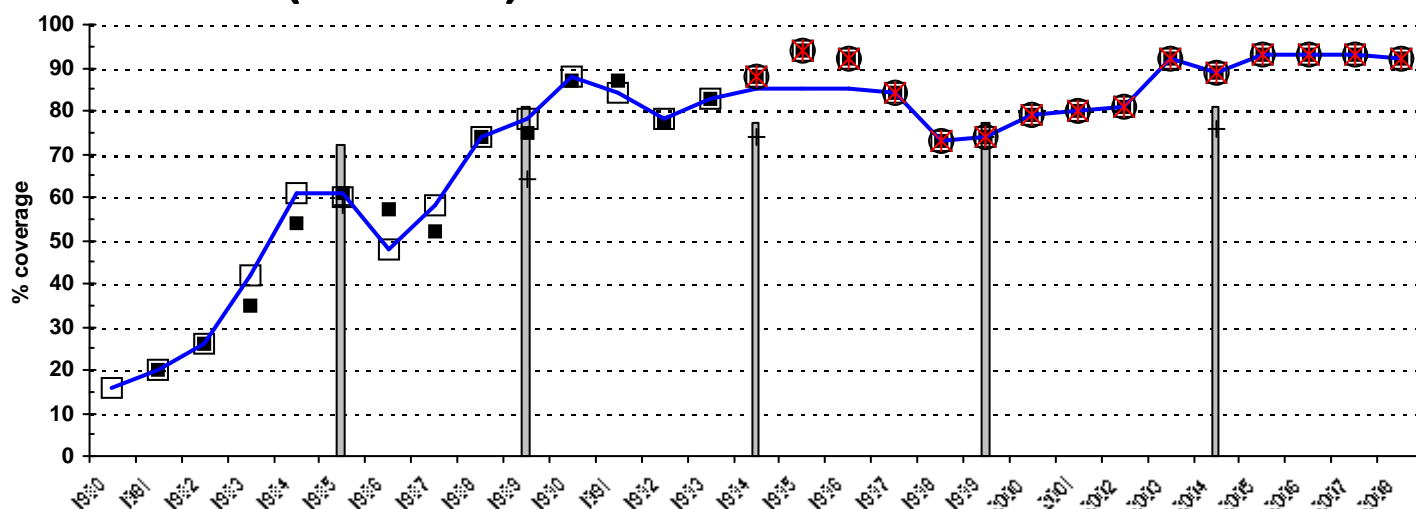
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

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

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Colombia

DTP3 (1980-2008)



Description of trend

Trend follows officially reported data supported by survey data. For 1994 through 1996 the level of coverage is established at the level of the DHS following adjustment for recall bias (85%). Estimates from 1997 are based on officially reported data confirmed by the 1999 and 2004 survey results.

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	16	16					
1981	20	20	20				
1982	26	26	26				
1983	42	42	35				
1984	61	61	54				
1985	61	60	61			72	58
1986	48	48	57				
1987	58	58	52				
1988	74	74	74				
1989	78	78	75			81	64
1990	88	88	87				
1991	84	84	87				
1992	78	78	77				
1993	83	83	83				
1994	85	88	88	88	88	77	74
1995	85	94	94	94	94		
1996	85	92	92	92	92		
1997	84	84	84	84	84		
1998	73	73	73	73	73		
1999	74	74	74	74	74	77	74
2000	79	79	79	79	79		
2001	80	80	80	80	80		
2002	81	81	81	81	81		
2003	92	92	92	92	92		
2004	89	89	89	89	89	81	76
2005	93	93	93	93	93		
2006	93	93	93	93	93		
2007	93	93	93	93	93		
2008	92	92	92	92	92		

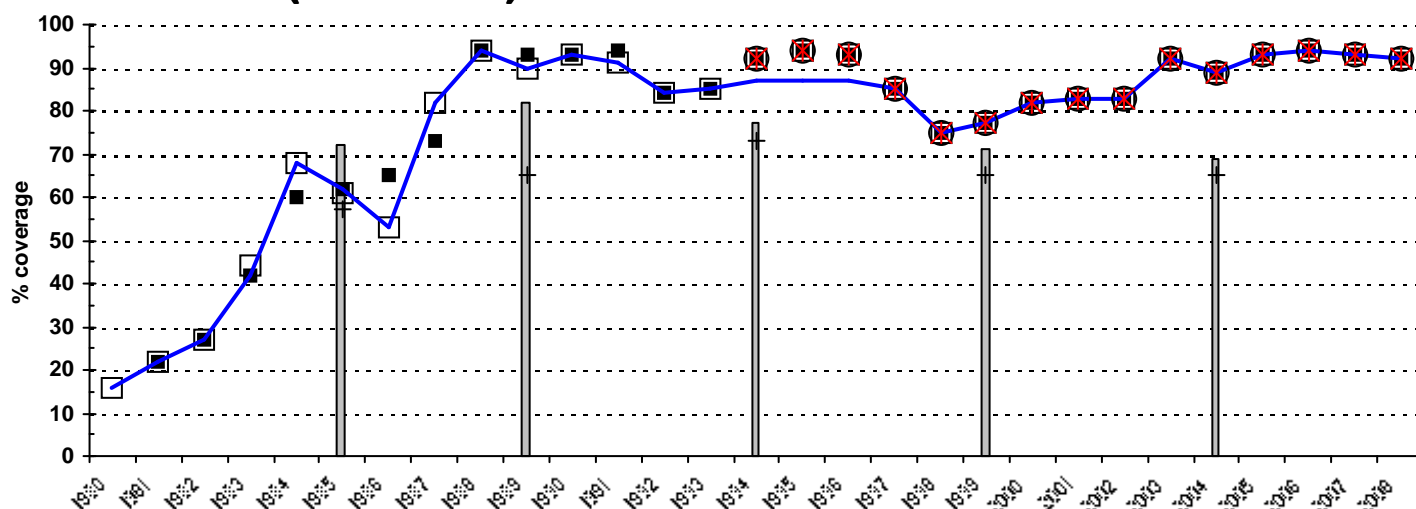
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Colombia

Pol3 (1980-2008)



Description of trend

Trend follows officially reported data, supported by survey data (DHS 1990/91). For 1994 through 1996 the level of coverage is established at level of the 1995 DHS following adjustment for recall bias (87%). Estimates following 1997 are based on officially reported data confirmed by 2000 DHS. The 2005 DHS may have interpreted the birth dose and the first dose of the polio vaccine.

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	16	16					
1981	22	22	22				
1982	27	27	27				
1983	42	44	42				
1984	68	68	60				
1985	62	61	62			72	57
1986	53	53	65				
1987	82	82	73				
1988	94	94	94				
1989	90	90	93			82	65
1990	93	93	93				
1991	91	91	94				
1992	84	84	84				
1993	85	85	85				
1994	87	92	92	92	92	77	73
1995	87	94	94	94	94		
1996	87	93	93	93	93		
1997	85	85	85	85	85		
1998	75	75	75	75	75		
1999	77	77	77	77	77	71	65
2000	82	82	82	82	82		
2001	83	83	83	83	83		
2002	83	83	83	83	83		
2003	92	92	92	92	92		
2004	89	89	89	89	89	69	65
2005	93	93	93	93	93		
2006	94	94	94	94	94		
2007	93	93	93	93	93		
2008	92	92	92	92	92		

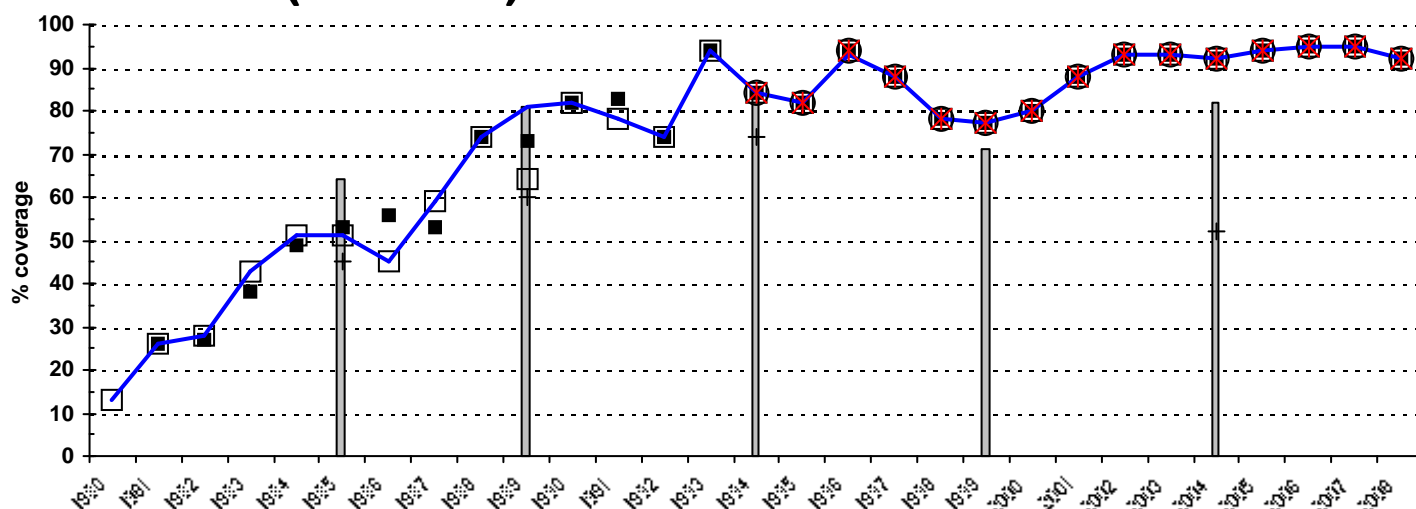
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Colombia

MCV (1980-2008)



Description of trend

Trend follows officially reported data, supported by survey data.

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	13	13	26				
1981	26	28	27				
1982	28	43	38				
1983	43	51	49				
1984	51	51	53			64	45
1985	51	45	56				
1986	45	59	53				
1987	59	74	74				
1988	74	81	73			81	60
1989	81	82	82				
1990	82	78	83				
1991	78	74	74				
1992	74	94	94				
1993	94	84	84	84	84	84	74
1994	84	82	82	82	82		
1995	82	94	94	94	94		
1996	93	88	88	88	88		
1997	88	78	78	78	78		
1998	78	77	77	77	77	71	
1999	77	80	80	80	80		
2000	80	88	88	88	88		
2001	88	93	93	93	93		
2002	93	93	93	93	93		
2003	93	92	92	92	92	82	52
2004	92	94	94	94	94		
2005	94	95	95	95	95		
2006	95	95	95	95	95		
2007	95	92	92	92	92		
2008	92						

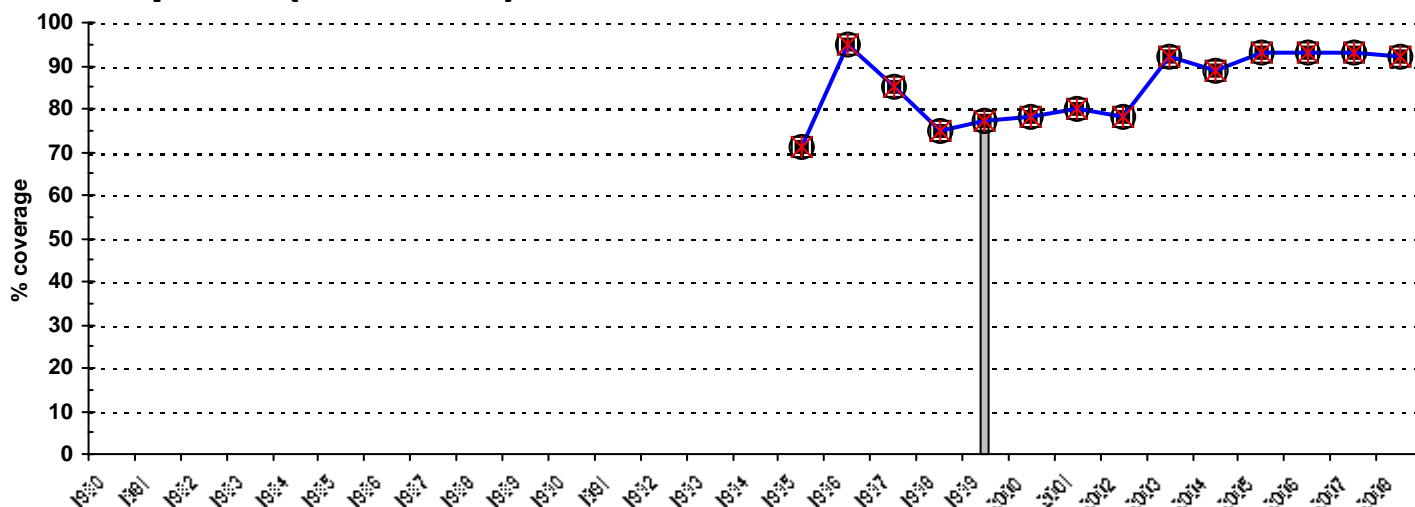
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Colombia

HepB3 (1980-2008)



Description of trend

Vaccine introduced in 1994. Estimate follows official reports confirmed by DHS 2000.

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	71	71	71	71	71		
1996	95	95	95	95	95		
1997	85	85	85	85	85		
1998	75	75	75	75	75		
1999	77	77	77	77	77	77	
2000	78	78	78	78	78		
2001	80	80	80	80	80		
2002	78	78	78	78	78		
2003	92	92	92	92	92		
2004	89	89	89	89	89		
2005	93	93	93	93	93		
2006	93	93	93	93	93		
2007	93	93	93	93	93		
2008	92	92	92	92	92		

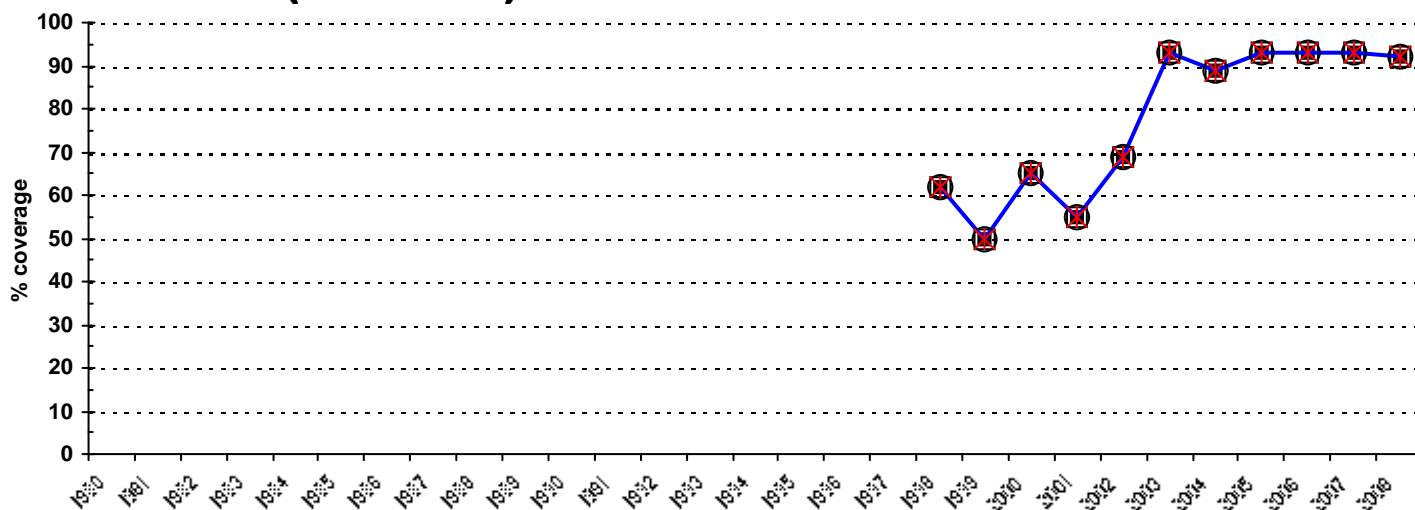
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Colombia

Hib3 (1980-2008)



Description of trend

Monovalent Hib vaccine introduced in 1998. Estimated immunization coverage levels are based on reported data. No survey data are available

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	62	62	62	62	62		
1999	50	50	50	50	50		
2000	65	65	65	65	65		
2001	55	55	55	55	55		
2002	69	69	69	69	69		
2003	93	93	93	93	93		
2004	89	89	89	89	89		
2005	93	93	93	93	93		
2006	93	93	93	93	93		
2007	93	93	93	93	93		
2008	92	92	92	92	92		

*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.

Colombia

Details Survey Data

Year Source

Antigen	Confirmation method	% coverage	Compliance with schedule	Age group	Sample size	% cards seen	Survey year	Comments
2004 Salud sexual y reproductiva en Colombia, Encuesta nacional de demografía y salud 2005								
BCG	Card or History	96.9		12-23 m	2705	78	2004/2005	
BCG	C or H <12 month	96.4		12-23 m	2705	78	2004/2005	
DTP1	Card or History	96.9		12-23 m	2705	78	2004/2005	
DTP1	C or H <12 month	96.1		12-23 m	2705	78	2004/2005	
DTP3	Card or History	81.1		12-23 m	2705	78	2004/2005	
DTP3	C or H <12 month	75.7		12-23 m	2705	78	2004/2005	
Pol3	Card or History	69.4		12-23 m	2705	78	2004/2005	
Pol3	C or H <12 month	65		12-23 m	2705	78	2004/2005	
MCV	Card or History	82		12-23 m	2705	78	2004/2005	
MCV	C or H <12 month	52.4		12-23 m	2705	78	2004/2005	

1999 Salud Sexual y Reproductiva en Colombia, Resultados Encuesta Nacional de Demografía y Salud 2000

BCG	Card or History	93.4		12-23 m	890	74.7	2000	
BCG	C or H <12 month	91.9		12-23 m	890	74.7	2000	
BCG	C or H <12 month	91.7		24-35 m	894	63.3	2000	
BCG	C or H <12 month	92.7		36-47 m	848	61.5	2000	
BCG	C or H <12 month	93.1		48-59 m	888	57.4	2000	
DTP1	Card or History	95.3		12-23 m	890	74.7	2000	
DTP1	C or H <12 month	92.7		12-23 m	890	74.7	2000	
DTP1	C or H <12 month	93.5		24-35 m	894	63.3	2000	
DTP1	C or H <12 month	93.4		36-47 m	848	61.5	2000	
DTP1	C or H <12 month	92.7		48-59 m	888	57.4	2000	
DTP3	Card or History	76.8		12-23 m	890	74.7	2000	
DTP3	C or H <12 month	67.4		12-23 m	890	74.7	2000	
DTP3	C or H <12 month	70.6		24-35 m	894	63.3	2000	
DTP3	C or H <12 month	74.3		36-47 m	848	61.5	2000	
DTP3	C or H <12 month	73.9		48-59 m	888	57.4	2000	
Pol3	Card or History	71.3		12-23 m	890	74.7	2000	
Pol3	C or H <12 month	63		12-23 m	890	74.7	2000	
Pol3	C or H <12 month	60.5		24-35 m	894	63.3	2000	
Pol3	C or H <12 month	62.7		36-47 m	848	61.5	2000	
Pol3	C or H <12 month	64.9		48-59 m	888	57.4	2000	
MCV	Card or History	70.8		12-23 m	890	74.7	2000	
MCV	C or H <12 month			12-23 m	890	74.7	2000	
MCV	C or H <12 month			24-35 m	894	63.3	2000	
MCV	C or H <12 month			36-47 m	848	61.5	2000	
MCV	C or H <12 month			48-59 m	888	57.4	2000	
HepB	Card or History	76.8		12-23 m	890	74.7	2000	

1994 Encuesta Nacional de Demografía y Salud 1995

BCG	Card or History	93.4		12-23 m	1018	61.8	1995	
BCG	C or H <12 month	91.2		12-23 m	1018	61.8	1995	
BCG	C or H <12 month	88.8		24-35 m	1015	46.8	1995	
BCG	C or H <12 month	90.5		36-47 m	960	43.2	1995	
BCG	C or H <12 month	88.1		48-59 m	938	37.7	1995	
DTP1	Card or History	96		12-23 m	1018	61.8	1995	
DTP1	C or H <12 month	94.6		12-23 m	1018	61.8	1995	
DTP1	C or H <12 month	90.6		24-35 m	1015	46.8	1995	
DTP1	C or H <12 month	92		36-47 m	960	43.2	1995	
DTP1	C or H <12 month	89.1		48-59 m	938	37.7	1995	
DTP3	Card or History	77.4		12-23 m	1018	61.8	1995	

Colombia

Details Survey Data

Year Source

Antigen	Confirmation method	% coverage	Compliance with schedule	Age group	Sample size	% cards seen	Survey year	Comments
DTP3	C or H <12 month	74.1		12-23 m	1018	61.8	1995	
DTP3	C or H <12 month	71.5		24-35 m	1015	46.8	1995	
DTP3	C or H <12 month	70		36-47 m	960	43.2	1995	
DTP3	C or H <12 month	68.4		48-59 m	938	37.7	1995	
Pol3	Card or History	76.7		12-23 m	1018	61.8	1995	
Pol3	C or H <12 month	73.1		12-23 m	1018	61.8	1995	
Pol3	C or H <12 month	70.9		24-35 m	1015	46.8	1995	
Pol3	C or H <12 month	68.5		36-47 m	960	43.2	1995	
Pol3	C or H <12 month	66.3		48-59 m	938	37.7	1995	
MCV	Card or History	84.1		12-23 m	1018	61.8	1995	
MCV	C or H <12 month	73.6		12-23 m	1018	61.8	1995	
MCV	C or H <12 month	73.3		24-35 m	1015	46.8	1995	
MCV	C or H <12 month	62.6		36-47 m	960	43.2	1995	
MCV	C or H <12 month	62.4		48-59 m	938	37.7	1995	

1989 Encuesta de Prevalencia, Demografía y Salud 1990, 1991

BCG	Card or History	93.3		12-23 m	761	58.3	1990	Recalculated
BCG	C or H <12 month	81.9		12-23 m	761	58.3	1990	
BCG	C or H <12 month	77.7		24-35 m	747	41.6	1990	
BCG	C or H <12 month	71		36-47 m	733	45.6	1990	
BCG	C or H <12 month	66.6		48-59 m	697	37.3	1990	
DTP1	Card or History	96.9		12-23 m	761	58.3	1990	
DTP1	C or H <12 month	89.8		12-23 m	761	58.3	1990	
DTP1	C or H <12 month	85.7		24-35 m	747	41.6	1990	
DTP1	C or H <12 month	80.2		36-47 m	733	45.6	1990	
DTP1	C or H <12 month	74.5		48-59 m	697	37.3	1990	
DTP3	Card or History	81		12-23 m	761	58.3	1990	
DTP3	C or H <12 month	63.9		12-23 m	761	58.3	1990	
DTP3	C or H <12 month	60.2		24-35 m	747	41.6	1990	
DTP3	C or H <12 month	50.7		36-47 m	733	45.6	1990	
DTP3	C or H <12 month	47.4		48-59 m	697	37.3	1990	
Pol3	Card or History	82.2		12-23 m	761	58.3	1990	
Pol3	C or H <12 month	64.8		12-23 m	761	58.3	1990	
Pol3	C or H <12 month	58.7		24-35 m	747	41.6	1990	
Pol3	C or H <12 month	54.4		36-47 m	733	45.6	1990	
Pol3	C or H <12 month	48.2		48-59 m	697	37.3	1990	
MCV	Card or History	81.2		12-23 m	761	58.3	1990	
MCV	C or H <12 month	60.3		12-23 m	761	58.3	1990	
MCV	C or H <12 month	53.6		24-35 m	747	41.6	1990	
MCV	C or H <12 month	41.1		36-47 m	733	45.6	1990	
MCV	C or H <12 month	45.2		48-59 m	697	37.3	1990	

1985 Demographic and Health Surveys Comparative Studies No. 1, Immunization, Boerma et al., Institute for Resource Development/Macro Systems, 1990

BCG	Card or History	85		12-23 m	556	55	1986	Percentage card according to Comparative Studies No. 22
BCG	C or H <12 month	76	Valid	12-23 m	556	55	1986	Valid data
DTP1	Card or History	90		12-23 m	556	55	1986	
DTP1	C or H <12 month		Valid	12-23 m	556	55	1986	Valid data
DTP3	Card or History	72		12-23 m	556	55	1986	
DTP3	C or H <12 month	58	Valid	12-23 m	556	55	1986	Valid data
Pol3	Card or History	72		12-23 m	556	55	1986	
Pol3	C or H <12 month	57	Valid	12-23 m	556	55	1986	Valid data
MCV	Card or History	64		12-23 m	556	55	1986	
MCV	C or H <12 month	45	Valid	12-23 m	556	55	1986	Valid data

Colombia

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.

Colombia

Year	PAB coverage estimate (%)
1980	3
1981	6
1982	7
1983	7
1984	7
1985	8
1986	8
1987	8
1988	24
1989	41
1990	45
1991	57
1992	59
1993	61
1994	62
1995	64
1996	65
1997	66
1998	67
1999	69
2000	70
2001	71
2002	72
2003	73
2004	76
2005	77
2006	77
2007	78
2008	78