

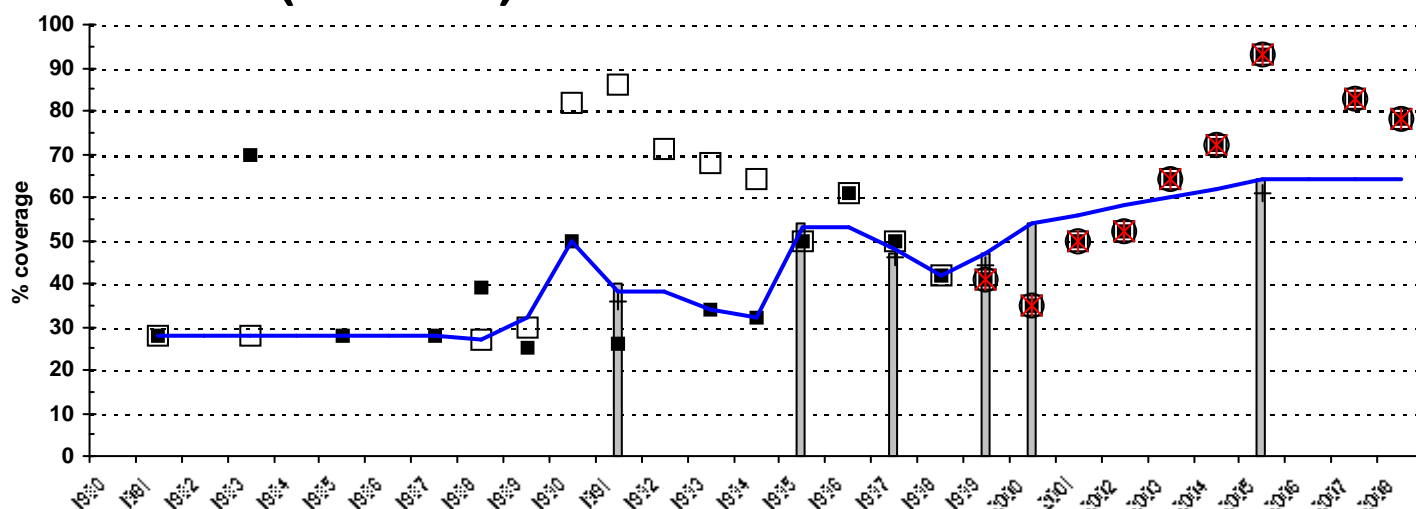
**WHO/UNICEF
Review of National Immunization Coverage
1980-2008**

Niger

July, 2009

Niger

BCG (1980-2008)



Description of trend

Estimates from 1991 onward are based on survey results. In 2007 Niger vaccinated approximately 23 000 additional children as compared with 2006. The apparent decline in reported data between 2006 and 2007 is the result of an increased estimate of the size of the target population

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	28	28	28				
1982	28		70				
1983	28	28					
1984	28		28				
1985	28		28				
1986	28						
1987	28		28				
1988	27	27	39				
1989	32	30	25				
1990	50	82	50				
1991	38	86	26			40	36
1992	38	71					
1993	34	68	34				
1994	32	64	32				
1995	53	50	50			54	
1996	53	61	61				
1997	48	50	50			47	46
1998	42	42	42				
1999	47	41	41	41	41	47	44
2000	54	35	35	35	35	54	
2001	56	50	50	50	50		
2002	58	52	52	52	52		
2003	60	64	64	64	64		
2004	62	72	72	72	72		
2005	64	93	93	93	93	64	61
2006	64	108	108	108	108		
2007	64	83	83	83	83		
2008	64	78	78	78	78		

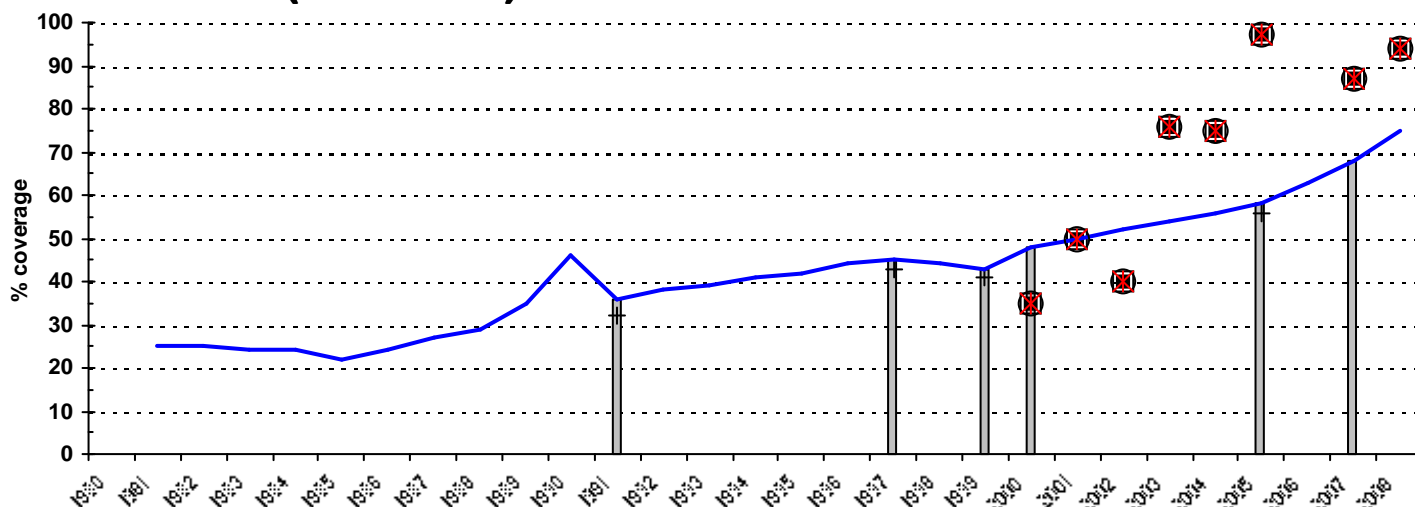
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Niger

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 1991 onward are based on survey results. For years prior to 1991 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. In 2007 Niger vaccinated approximately 23 000 additional children as compared with 2006. The apparent decline in reported data between 2006 and 2007 is result of an increased estimate of the size of the target population.

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	25						
1982	25						
1983	24						
1984	24						
1985	22						
1986	24						
1987	27						
1988	29						
1989	35						
1990	46						
1991	36					36	32
1992	38						
1993	39						
1994	41						
1995	42						
1996	44						
1997	45					45	43
1998	44						
1999	43					43	41
2000	48	35	35	35	35	48	
2001	50	50	50	50	50		
2002	52	40	40	40	40		
2003	54	76	76	76	76		
2004	56	75	75	75	75		
2005	58	97	97	97	97		
2006	63	114	114	114	114	58	56
2007	68	87	87	87	87	68	
2008	75	94	94	94	94		

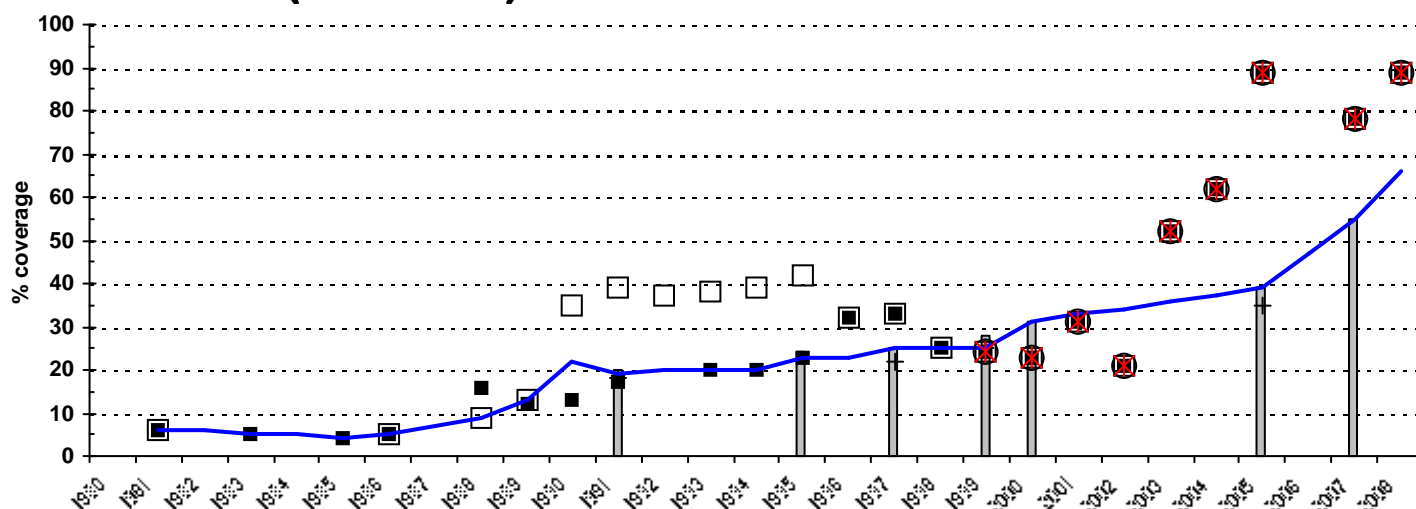
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Niger

DTP3 (1980-2008)



Description of trend

Estimates from 1991 onward based on survey results. In 2007 Niger vaccinated approximately 23 000 additional children as compared with 2006. The apparent decline in reported data between 2006 and 2007 is the result of an increased estimate of the size of the target population.

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	6	6	6				
1982	6						
1983	5		5				
1984	5						
1985	4		4				
1986	5	5	5				
1987	7						
1988	9	9	16				
1989	13	13	12				
1990	22	35	13				
1991	19	39	17			20	18
1992	20	37					
1993	20	38	20				
1994	20	39	20				
1995	23	42	23			24	
1996	23	32	32				
1997	25	33	33			25	22
1998	25	25	25				
1999	25	24	24	24	24	28	25
2000	31	23	23	23	23	31	
2001	33	31	31	31	31		
2002	34	21	21	21	21		
2003	36	52	52	52	52		
2004	37	62	62	62	62		
2005	39	89	89	89	89	39	35
2006	47	102	102	102	102		
2007	55	78	78	78	78	55	
2008	66	89	89	89	89		

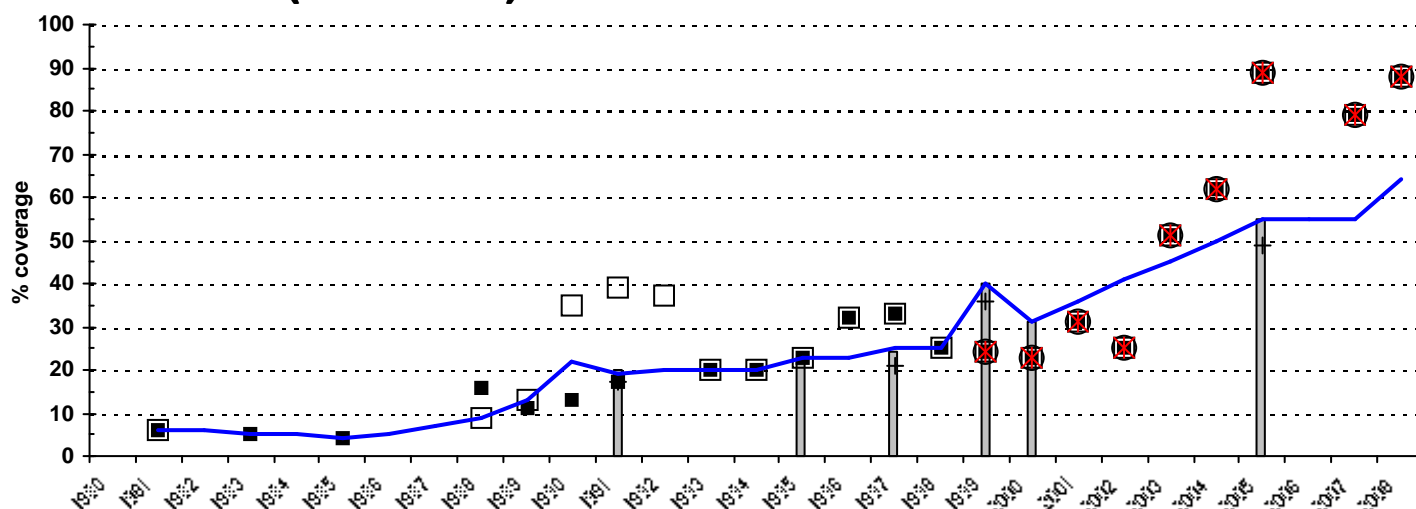
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Niger

Pol3 (1980-2008)



Description of trend

Estimates from 1991 onward based on survey results. In 2007 Niger vaccinated approximately 23 000 additional children as compared with 20 apparent decline in reported data between 2006 and 2007 is the result of an increased estimate of the size of the target population. Survey results for 2007 are not available. Estimates for 2006 are based on interpolation between 2007 DTP3 survey results. Estimates for 2007-2008 are based on DTP3 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							
1981	6	6	6				
1982	6						
1983	5		5				
1984	5						
1985	4		4				
1986	5						
1987	7						
1988	9	9	16				
1989	13	13	11				
1990	22	35	13				
1991	19	39	17			20	17
1992	20	37					
1993	20	20	20				
1994	20	20	20				
1995	23	23	23			22	
1996	23	32	32				
1997	25	33	33			24	21
1998	25	25	25				
1999	40	24	24	24	24	40	36
2000	31	23	23	23	23	31	
2001	36	31	31	31	31		
2002	41	25	25	25	25		
2003	45	51	51	51	51		
2004	50	62	62	62	62		
2005	55	89	89	89	89	55	49
2006	55	102	102	102	102		
2007	55	79	79	79	79		
2008	64	88	88	88	88		

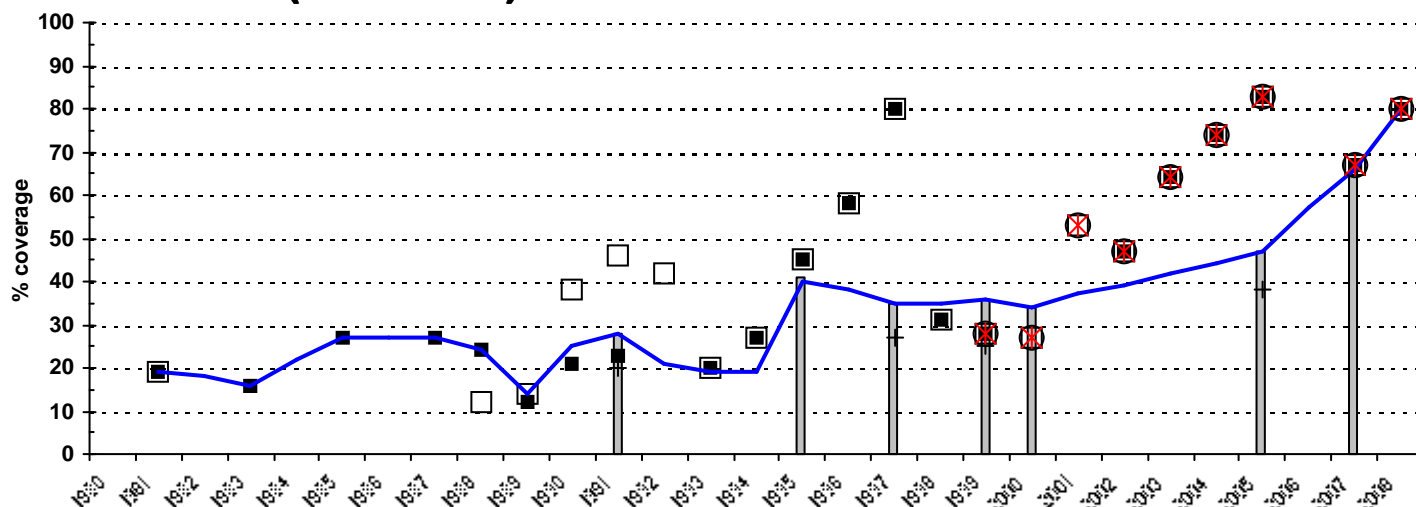
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Niger

MCV (1980-2008)



Description of trend

Estimates from 1991 onward based on survey results. In 2007 Niger vaccinated approximately 23 000 additional children as compared with 2006. The apparent decline in reported data between 2006 and 2007 is the result of an increased estimate of the size of the target population.

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	19	19	19				
1982	18						
1983	16		16				
1984	22						
1985	27		27				
1986	27						
1987	27		27				
1988	24	12	24				
1989	14	14	12				
1990	25	38	21				
1991	28	46	23			28	20
1992	21	42					
1993	19	20	20				
1994	19	27	27				
1995	40	45	45			41	
1996	38	58	58				
1997	35	80	80			35	27
1998	35	31	31				
1999	36	28	28	28	28	36	25
2000	34	27		27	27	34	
2001	37	53		53	53		
2002	39	47	47	47	47		
2003	42	64	64	64	64		
2004	44	74	74	74	74		
2005	47	83	83	83	83	47	38
2006	57	104	104	104	104		
2007	66	67	67	67	67	66	
2008	80	80	80	80	80		

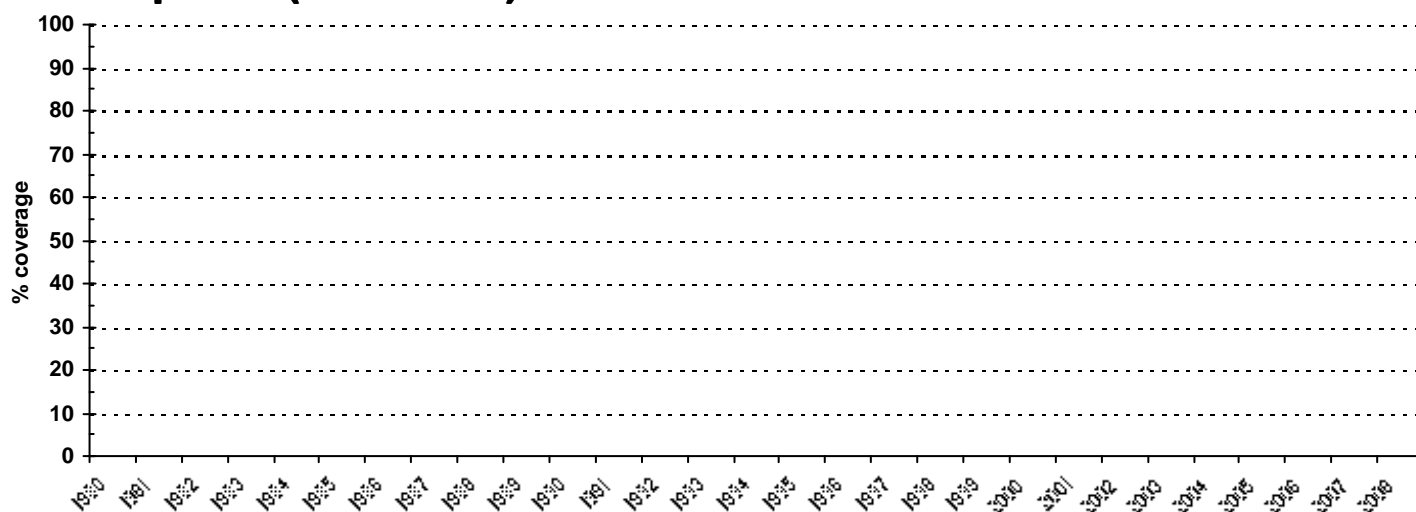
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Niger

HepB3 (1980-2008)



Description of trend

DTP-HepB-Hib combination vaccine introduced in September 2008

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							
2008							

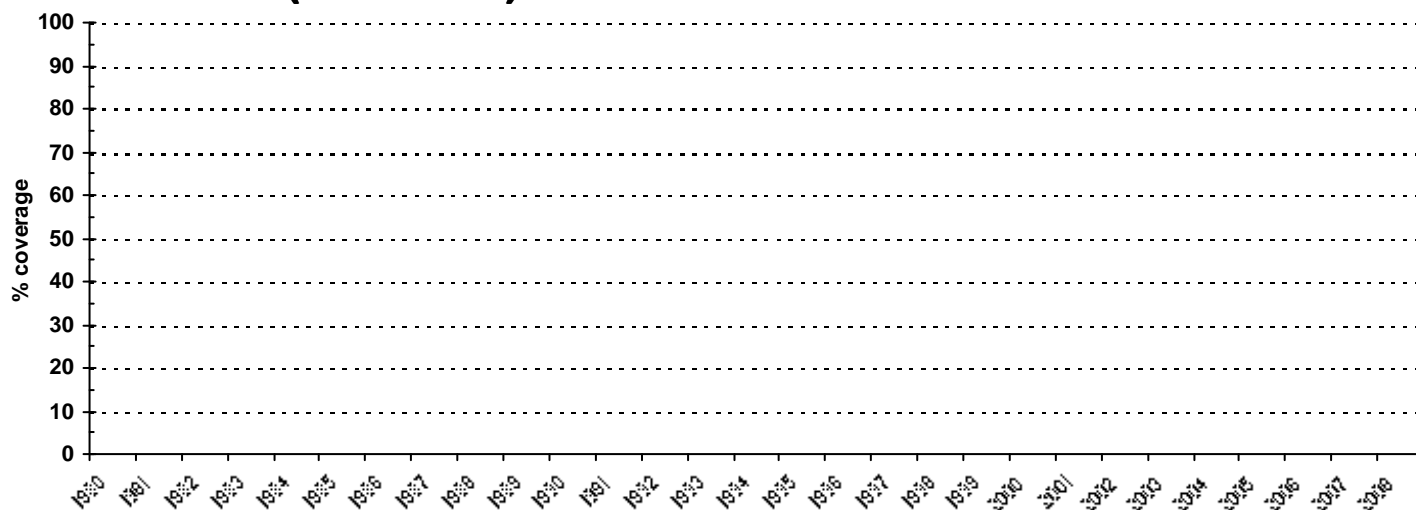
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Niger

Hib3 (1980-2008)



Description of trend

DTP-HepB-Hib combination vaccine introduced in September 2008

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							
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1995							
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							

*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.

Niger

Details Survey Data

Year Source

Antigen	Confirmation method	% coverage	Compliance with schedule	Age group	Sample size	% cards seen	Survey year	Comments
2007 Enquête nationale, Nutrition et Survie de l'Enfant, Niger, juin/juillet 2008								
DTP1	Card or History	68.5		12-23 m	885		2008	
DTP3	Card or History	54.7		12-23 m	885		2008	
MCV	Card or History	65.6		12-23 m	885		2008	
2005 L'Enquête Démographique et de Santé et à Indicateurs Multiples de Niger, 2006								
BCG	Card or History	63.6		12-23 m	1782	42.8	2006	
BCG	C or H <12 month	60.6		12-23 m	1782	42.8	2006	
DTP1	Card or History	58.4		12-23 m	1782	42.8	2006	
DTP1	C or H <12 month	56.2		12-23 m	1782	42.8	2006	
DTP3	Card or History	39.3		12-23 m	1782	42.8	2006	
DTP3	C or H <12 month	34.7		12-23 m	1782	42.8	2006	
Pol3	Card or History	54.6		12-23 m	1782	42.8	2006	
Pol3	C or H <12 month	48.7		12-23 m	1782	42.8	2006	
MCV	Card or History	47		12-23 m	1782	42.8	2006	
MCV	C or H <12 month	38.3		12-23 m	1782	42.8	2006	
2000 Niger, Revue du PEV 2001								
BCG	Card	54		12-23 m		56	2001	
DTP1	Card	48		12-23 m		56	2001	
DTP3	Card	31		12-23 m		56	2001	
Pol3	Card	31		12-23 m		56	2001	
MCV	Card	34		12-23 m		56	2001	
PAB	Card	22		Women 15-49		56	2001	
1999 République du Niger, Enquête à Indicateurs Multiples de la Fin de la Decennie (MICS2), 2000								
BCG	Card or History	46.8		12-23 m	915	35.6	2000	
BCG	C or H <12 month	44.4		12-23 m	915	35.6	2000	
DTP1	Card or History	43.2		12-23 m	915	35.6	2000	
DTP1	C or H <12 month	41		12-23 m	915	35.6	2000	
DTP3	Card or History	28.1		12-23 m	915	35.6	2000	
DTP3	C or H <12 month	24.8		12-23 m	915	35.6	2000	
Pol3	Card or History	40.5		12-23 m	915	35.6	2000	
Pol3	C or H <12 month	35.7		12-23 m	915	35.6	2000	
MCV	Card or History	35.5		12-23 m	915	35.6	2000	
MCV	C or H <12 month	25		12-23 m	915	35.6	2000	
PAB	Card or History	40.3		Women 15-49			2000	
1997 Enquête Démographique et de Santé Niger 1998, 1999								
BCG	Card or History	47.3		12-23 m	1431	34.8	1998	
BCG	C or H <12 month	45.7		12-23 m	1431	34.8	1998	
DTP1	Card or History	45.2		12-23 m	1431	34.8	1998	
DTP1	C or H <12 month	43		12-23 m	1431	34.8	1998	
DTP3	Card or History	25		12-23 m	1431	34.8	1998	
DTP3	C or H <12 month	22.2		12-23 m	1431	34.8	1998	
Pol3	Card or History	24		12-23 m	1431	34.8	1998	
Pol3	C or H <12 month	21.3		12-23 m	1431	34.8	1998	
MCV	Card or History	34.9		12-23 m	1431	34.8	1998	
MCV	C or H <12 month	26.7		12-23 m	1431	34.8	1998	

Niger

Details Survey Data

Year Source

Antigen	Confirmation method	% coverage	Compliance with schedule	Age group	Sample size	% cards seen	Survey year	Comments
1995 Enquête a Indicateurs Multiples, 1996								
BCG	Card or History	53.5		12-23 m	1168	38.9	1996	
DTP1	Card or History			12-23 m	1168	38.9	1996	
DTP3	Card or History	23.9		12-23 m	1168	38.9	1996	
Pol3	Card or History	22.3		12-23 m	1168	38.9	1996	
MCV	Card or History	40.6		12-23 m	1168	38.9	1996	

1991 Enquête Démographique et de Santé Niger 1992, 1993

BCG	Card or History	39.9		12-23 m	1087	35.3	1992	
BCG	C or H <12 month	35.3		12-23 m	1087	35.3	1992	
BCG	C or H <12 month	36		24-35 m	1119	34.1	1992	
BCG	C or H <12 month	28.9		36-47 m	1081	31.2	1992	
BCG	C or H <12 month	23.5		48-59 m	993	28.6	1992	
DTP1	Card or History	36.3		12-23 m	1087	35.3	1992	
DTP1	C or H <12 month	32.1		12-23 m	1087	35.3	1992	
DTP1	C or H <12 month	31.3		24-35 m	1119	34.1	1992	
DTP1	C or H <12 month	22		36-47 m	1081	31.2	1992	
DTP1	C or H <12 month	17.9		48-59 m	993	28.6	1992	
DTP3	Card or History	20.3		12-23 m	1087	35.3	1992	
DTP3	C or H <12 month	17.3		12-23 m	1087	35.3	1992	
DTP3	C or H <12 month	17.5		24-35 m	1119	34.1	1992	
DTP3	C or H <12 month	12.1		36-47 m	1081	31.2	1992	
DTP3	C or H <12 month	10.3		48-59 m	993	28.6	1992	
Pol3	Card or History	20.1		12-23 m	1087	35.3	1992	
Pol3	C or H <12 month	17.1		12-23 m	1087	35.3	1992	
Pol3	C or H <12 month	15.4		24-35 m	1119	34.1	1992	
Pol3	C or H <12 month	11.3		36-47 m	1081	31.2	1992	
Pol3	C or H <12 month	9.8		48-59 m	993	28.6	1992	
MCV	Card or History	27.8		12-23 m	1087	35.3	1992	
MCV	C or H <12 month	20.4		12-23 m	1087	35.3	1992	
MCV	C or H <12 month	19		24-35 m	1119	34.1	1992	
MCV	C or H <12 month	14.1		36-47 m	1081	31.2	1992	
MCV	C or H <12 month	13.1		48-59 m	993	28.6	1992	

Niger

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.

Niger

Year	PAB coverage estimate (%)
1980	
1981	3
1982	4
1983	5
1984	5
1985	5
1986	5
1987	7
1988	9
1989	14
1990	17
1991	40
1992	49
1993	56
1994	57
1995	57
1996	58
1997	57
1998	63
1999	62
2000	63
2001	64
2002	65
2003	65
2004	66
2005	69
2006	73
2007	79
2008	84