

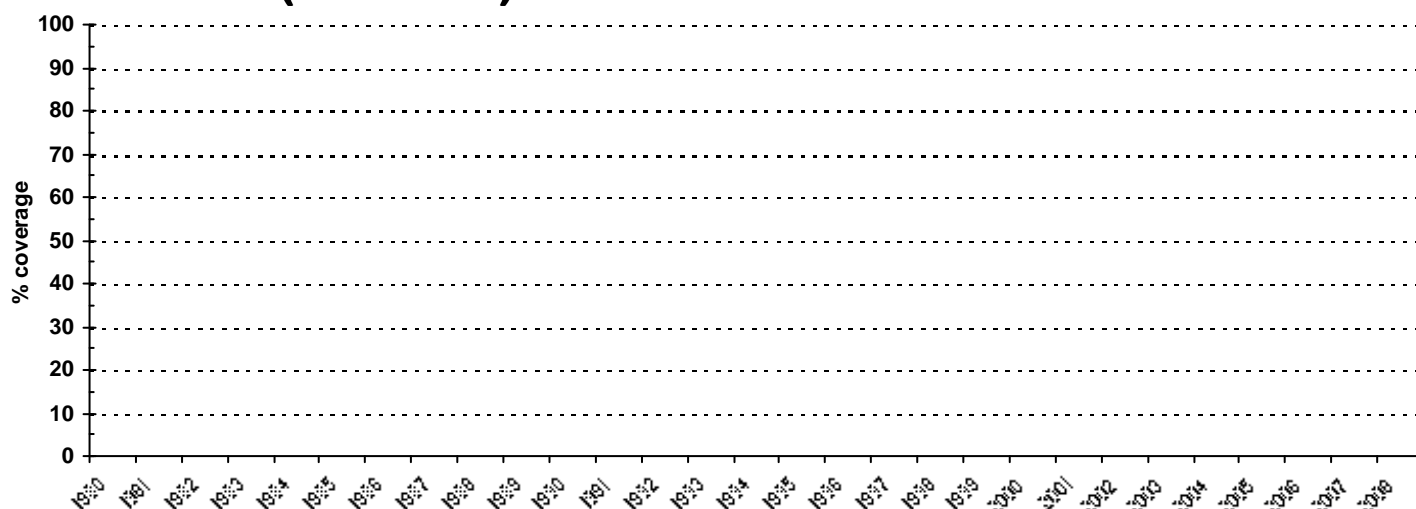
**WHO/UNICEF
Review of National Immunization Coverage
1980-2008**

Lebanon

July, 2009

Lebanon

BCG (1980-2008)



Description of trend

BCG not in schedule for children under one. WHO & UNICEF recommend conducting a high quality survey to confirm current levels of coverage. Reported administrative data for 2008 are based only on vaccinations provided in the public sector. The government estimate for 2008 includes reports from both public and private sector service providers and district-level community based initiatives.

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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1996							
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1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							

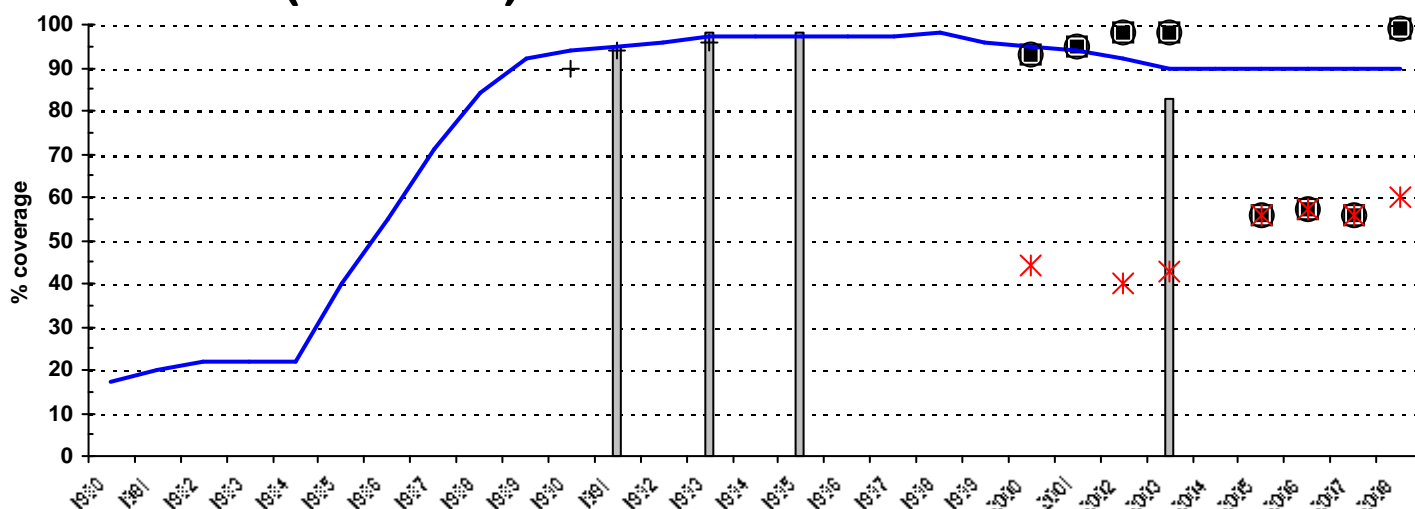
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Lebanon

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 2000-2004 are based on these reports. Estimates for 2005 onward are adjusted to include immunizations given in the private sector. 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 dropout between DTP1 and DTP3. This relationship results from an analysis of 282 surveys conducted in 101 countries which were published between 1980 and 2004. WHO & UNICEF recommend conducting a high quality survey to confirm current levels of coverage. Reported administrative data for 2008 are based only on vaccinations provided in the public sector. The government estimate for 2008 includes reports from both public and private sector service providers and district-level community based initiatives.

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	17						
1981	20						
1982	22						
1983	22						
1984	22						
1985	40						
1986	55						
1987	71						
1988	84						
1989	92						
1990	94						90
1991	95					95	94
1992	96						
1993	97					98	96
1994	97						
1995	97					98	
1996	97						
1997	97						
1998	98						
1999	96						
2000	95	93	93	93	44		
2001	94	95	95	95			
2002	92	98	98	98	40		
2003	90	98	98	98	43	83	
2004	90						
2005	90	56	56	56	56		
2006	90	57	57	57	57		
2007	90	56	56	56	56		
2008	90	99	99	99	60		

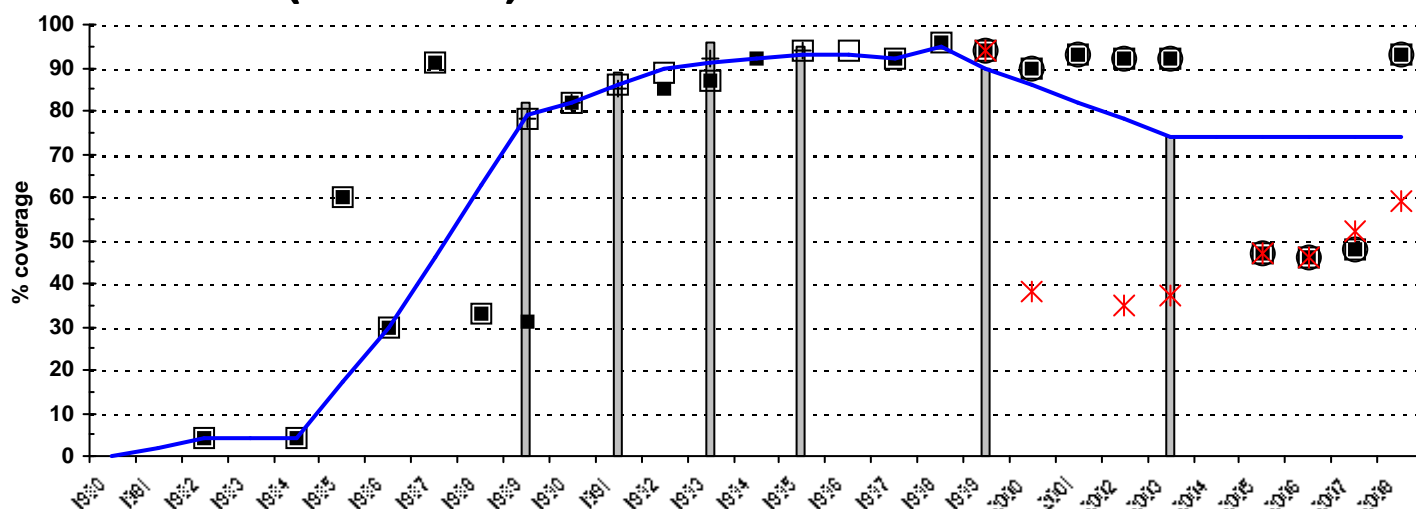
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

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Lebanon

DTP3 (1980-2008)



Description of trend

Before 1989 officially reported numbers are not considered reliable due to the war in the country. Officially reported data show an increase in late 1980s/early 1990s, a trend confirmed by survey data. From 1991 to 1998 the national report is estimated based on administrative cover reported by the public sector and vaccinations given in the private sector which account for approximately 50% of all vaccinations. Estimates 1999 onward are based on survey data. WHO & UNICEF recommend conducting a high quality survey to confirm current levels of coverage. Reported administrative data for 2008 are based only on vaccinations provided in the public sector. The government estimate for 2008 includes reports from both public and private sector service providers and district-level community based initiatives.

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	0						
1981	2						
1982	4	4	4				
1983	4						
1984	4	4	4				
1985	17	60	60				
1986	30	30	30				
1987	46	91	91				
1988	63	33	33				
1989	79	78	31			82	78
1990	82	82	82				82
1991	86	86				89	85
1992	90	89	85				
1993	91	87	87				
1994	92		92			96	92
1995	93	94				95	94
1996	93	94					
1997	92	92	92				
1998	95	96	96				
1999	90	94	94	94	94	90	
2000	86	90	90	90	38		
2001	82	93	93	93			
2002	78	92	92	92	35		
2003	74	92	92	92	37	74	
2004	74						
2005	74	47	47	47	47		
2006	74	46	46	46	46		
2007	74	48	48	48	52		
2008	74	93	93	93	59		

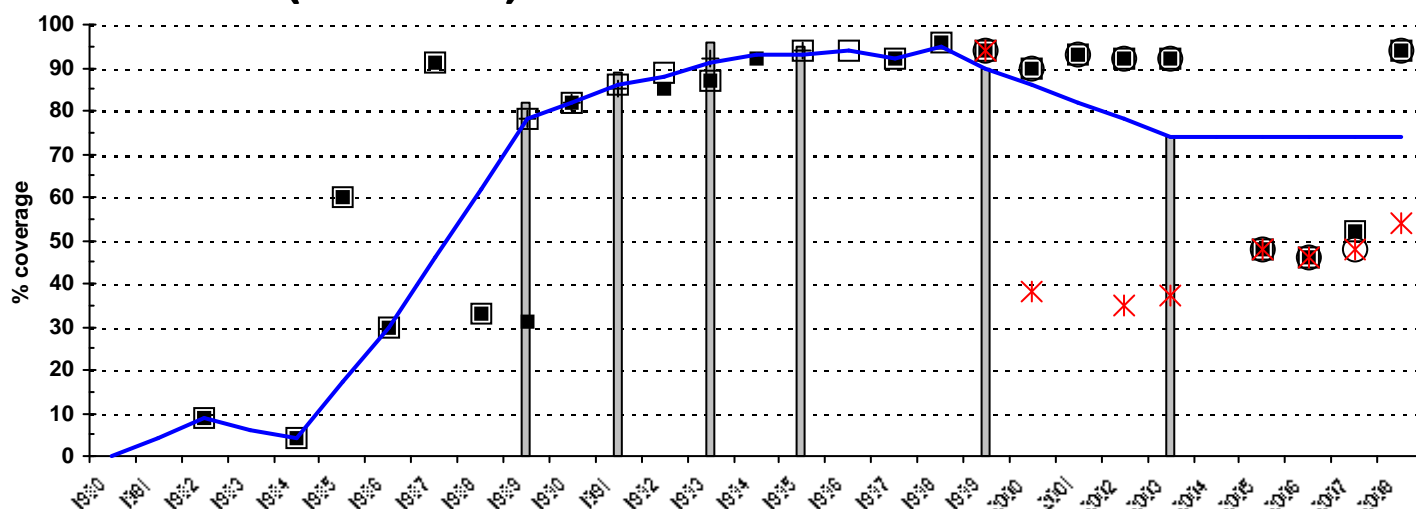
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

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

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Lebanon

Pol3 (1980-2008)



Description of trend

Before 1989 officially reported numbers are not considered reliable due to the war in the country. Officially reported data show an increase in the 1980s/early 1990s. From 1991 to 1998 the national report is estimated based on administrative coverage reported by the public sector and vaccinations given in the private sector which accounts for approximately 50% of all vaccinations. Estimates for 1999 onward are based on survey data. WHO & UNICEF recommend conducting a high quality survey to confirm current levels of coverage. Reported administrative data for 2008 based only on vaccinations provided in the public sector. The government estimate for 2008 includes reports from both public and private service providers and district-level community based initiatives.

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	0						
1981	4						
1982	9	9	9				
1983	6						
1984	4	4	4				
1985	17	60	60				
1986	30	30	30				
1987	46	91	91				
1988	62	33	33				
1989	78	78	31			82	78
1990	82	82	82				82
1991	86	86				89	85
1992	88	89	85				
1993	91	87	87			96	92
1994	93		92				
1995	93	94				95	94
1996	94	94					
1997	92	92	92				
1998	95	96	96				
1999	90	94	94	94	94	90	
2000	86	90	90	90	38		
2001	82	93	93	93			
2002	78	92	92	92	35		
2003	74	92	92	92	37	74	
2004	74						
2005	74	48	48	48	48		
2006	74	46	46	46	46		
2007	74	52	52	48	48		
2008	74	94	94	94	54		

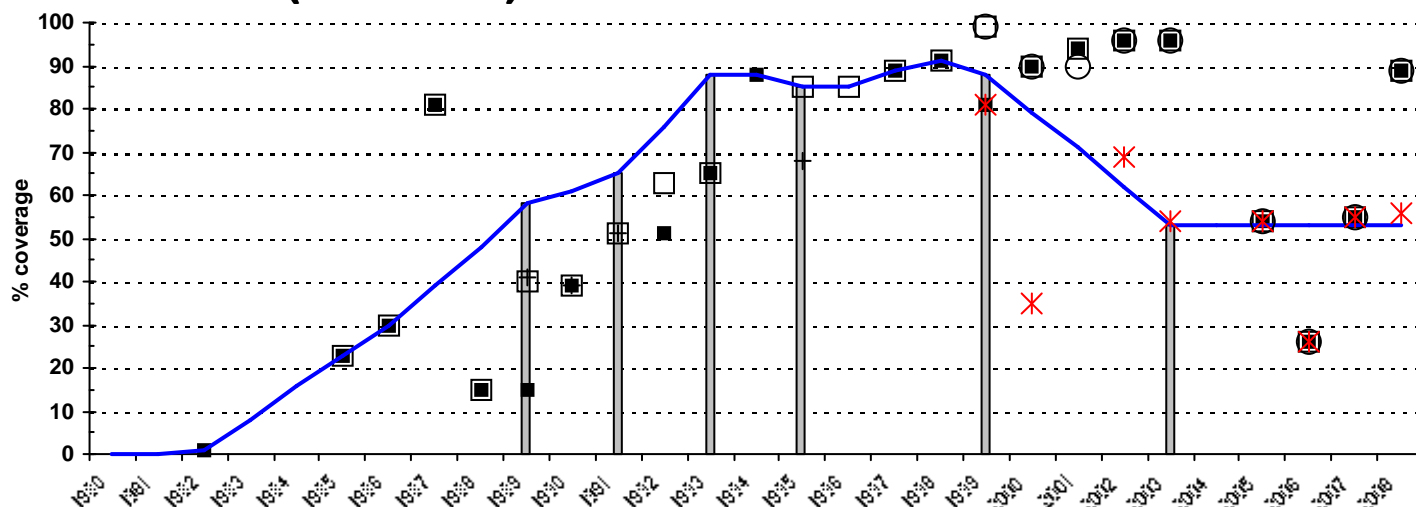
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**Coverage based on registration of doses administered by health care providers.

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Lebanon

MCV (1980-2008)



Description of trend

Before 1989 the officially reported numbers are not considered reliable due to the war in the country. Between 1989 and 1998 the trend follows survey data because they include the private sector which makes up approximately 40% of the vaccinations. The officially reported estimate for 1999 appears to be an overestimate in light of the results from the MICS 2000. Estimates for 1999 onward are based on survey data. WHO and UNICEF recommend conducting a high quality survey to confirm current levels of coverage. Reported administrative data for 2008 are based on vaccinations provided in the public sector. The government estimate for 2008 includes reports from both public and private sector service providers and district-level community based initiatives.

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	0						
1981	0						
1982	1		1				
1983	8						
1984	16						
1985	23	23	23				
1986	30	30	30				
1987	39	81	81				
1988	48	15	15				
1989	58	40	15			58	41
1990	61	39	39				39
1991	65	51				65	51
1992	76	63	51				
1993	88	65	65			88	
1994	88		88				
1995	85	85				85	68
1996	85	85					
1997	89	89	89				
1998	91	91	91				
1999	88	99	81	99	81	88	
2000	79	90	90	90	35		
2001	71	94	94	90			
2002	62	96	96	96	69		
2003	53	96	96	96	54	53	
2004	53						
2005	53	54	54	54	54		
2006	53	26	26	26	26		
2007	53	55	55	55	55		
2008	53	89	89	89	56		

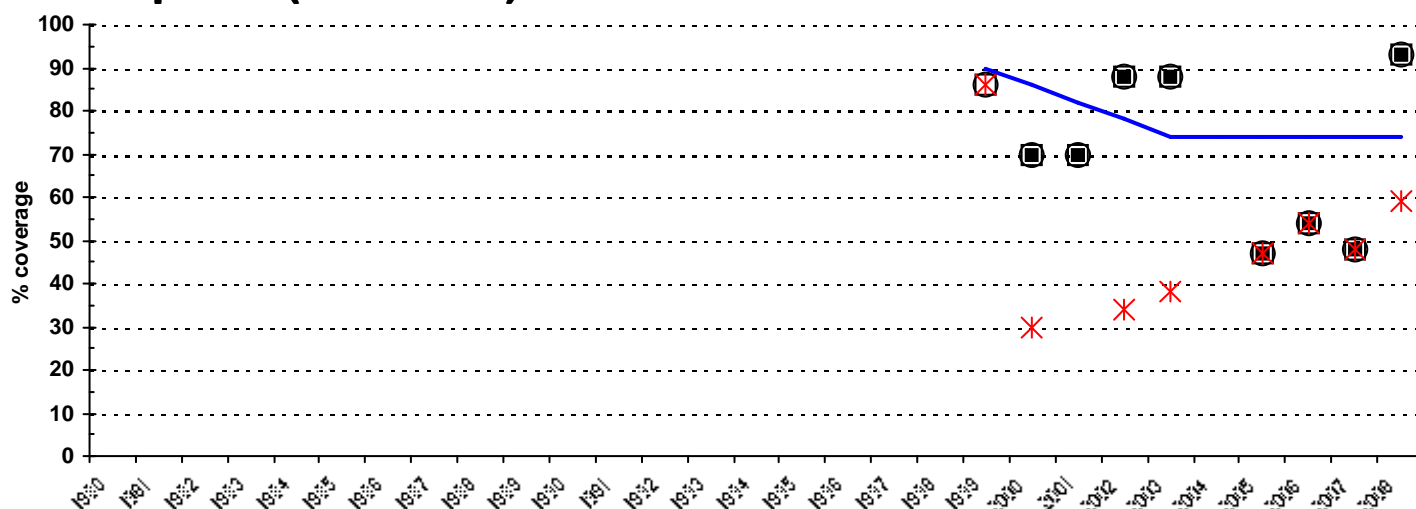
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

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

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Lebanon

HepB3 (1980-2008)



Description of trend

Hepatitis B vaccine introduction into the public sector in 1998. Estimates for 1999 onward are based on DTP3 survey data. WHO & UNICEF recommend conducting a high quality survey to confirm current levels of coverage. Reported administrative data for 2008 are based only on vaccinations provided in the public sector. The government estimate for 2008 includes reports from both public and private sector service providers and district-level community based initiatives.

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	90	86		86	86		
2000	86	70	70	70	30		
2001	82	70	70	70	30		
2002	78	88	88	88	34		
2003	74	88	88	88	38		
2004	74						
2005	74	47	47	47	47		
2006	74	54	54	54	54		
2007	74	48	48	48	48		
2008	74	93	93	93	59		

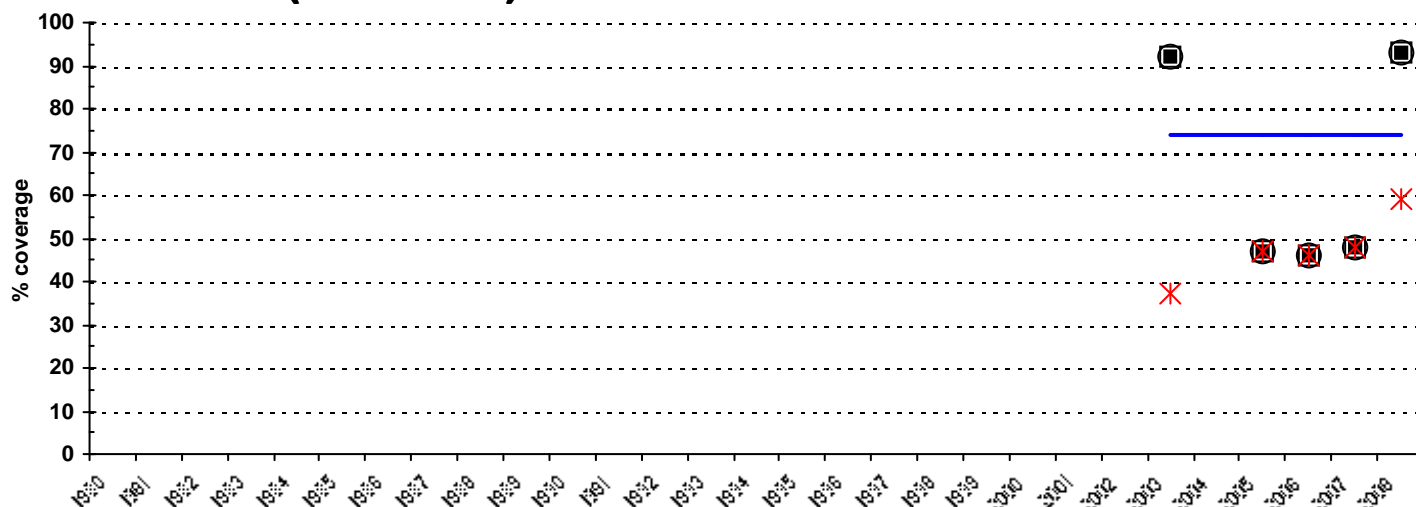
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Lebanon

Hib3 (1980-2008)



Description of trend

Estimates for 2003 onward are based on DTP3 survey data. WHO & UNICEF recommend conducting a high quality survey to confirm current levels of coverage. Reported administrative data for 2008 are based only on vaccinations provided in the public sector. The government estimate for 2008 includes reports from both public and private sector service providers and district-level community based initiatives.

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	74	92	92	92	37		
2004	74						
2005	74	47	47	47	47		
2006	74	46	46	46	46		
2007	74	48	48	48	48		
2008	74	93	93	93	59		

*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.

Lebanon

Details Survey Data

Year Source

Antigen	Confirmation method	% coverage	Compliance with schedule	Age group	Sample size	% cards seen	Survey year	Comments
2003 Lebanon Family Health Survey (PAPFAM) 2004								
DTP1	Card or History	83.3		12-23 m	3365	62	2004	
DTP3	Card or History	74.4		12-23 m	3365	62	2004	
Pol3	Card or History	74.4		12-23 m	3365	62	2004	
MCV	Card or History	53.4		12-23 m	3365	62	2004	
1999 Preliminary Report on the Multiple Cluster Survey on the Situation of Children in Lebanon, 2001								
BCG	Card or History			12-23 m		59.2	2000	
DTP1	Card or History			12-23 m		59.2	2000	
DTP3	Card or History	90.1		12-23 m		59.2	2000	
Pol3	Card or History	90.1		12-23 m		59.2	2000	
MCV	Card or History	88		12-23 m		59.2	2000	
1995 EPI/CDD National Survey, Lebanon, Preliminary Report 1996								
BCG	Card or History			12-23 m	446	76.2	1996	
BCG	C or H <12 month			12-23 m	446	76.2	1996	
DTP1	Card or History	97.8		12-23 m	446	76.2	1996	
DTP1	C or H <12 month			12-23 m	446	76.2	1996	
DTP3	Card or History	94.8		12-23 m	446	76.2	1996	
DTP3	C or H <12 month	94.2		12-23 m	446	76.2	1996	
Pol3	Card or History	94.8		12-23 m	446	76.2	1996	
Pol3	C or H <12 month	94.2		12-23 m	446	76.2	1996	
MCV	Card or History	85		12-23 m	446	76.2	1996	
MCV	C or H <12 month	67.9		12-23 m	446	76.2	1996	
1993 Report on the National Survey about Health Indicators of Children in Lebanon: Part one, Expanded Programme on Immunization, 1994								
BCG	Card or History			12-23 m	449	66.4	1994	
BCG	C or H <12 month			12-23 m	449	66.4	1994	
DTP1	Card or History	98		12-23 m	449	66.4	1994	
DTP1	C or H <12 month	95.8		12-23 m	449	66.4	1994	
DTP3	Card or History	95.6		12-23 m	449	66.4	1994	
DTP3	C or H <12 month	91.6		12-23 m	449	66.4	1994	
Pol3	Card or History	95.6		12-23 m	449	66.4	1994	
Pol3	C or H <12 month	91.6		12-23 m	449	66.4	1994	
MCV	Card or History	88.2		12-23 m	449	66.4	1994	
MCV	C or H <12 month			12-23 m	449	66.4	1994	
1991 Preliminary Report on the National Immunization Coverage Survey 1992								
BCG	Card or History			12-23 m			1992	
BCG	C or H <12 month			12-23 m			1992	
DTP1	Card or History	94.7		12-23 m			1992	
DTP1	C or H <12 month	93.7		12-23 m			1992	
DTP3	Card or History	89.2		12-23 m			1992	
DTP3	C or H <12 month	85		12-23 m			1992	
Pol3	Card or History	89.2		12-23 m			1992	
Pol3	C or H <12 month	85		12-23 m			1992	
MCV	Card or History	65.1		12-23 m			1992	
MCV	C or H <12 month	50.8		12-23 m			1992	

Lebanon

Details Survey Data

Year Source

Antigen	Confirmation method	% coverage	Compliance with schedule	Age group	Sample size	% cards seen	Survey year	Comments
1990 The National Immunization Coverage Survey, 1991								
BCG	C or H <12 month			12-23 m			1991	
DTP1	C or H <12 month	90		12-23 m			1991	
DTP3	C or H <12 month	81.6		12-23 m			1991	
Pol3	C or H <12 month	81.6		12-23 m			1991	
MCV	C or H <12 month	39.3		12-23 m			1991	
1989 EPI/CDD/IMR National Survey, Lebanon, Preliminary Report, 1990								
BCG	Card or History			12-23 m			1990	
DTP1	Card or History			12-23 m			1990	
DTP3	Card or History	82.3		12-23 m			1990	
DTP3	C or H <12 month	77.8		12-23 m			1990	
Pol3	Card or History	82.3		12-23 m			1990	
Pol3	C or H <12 month	77.8		12-23 m			1990	
MCV	Card or History	57.5		12-23 m			1990	number not clear
MCV	C or H <12 month	40.7		12-23 m			1990	