World Health Organization

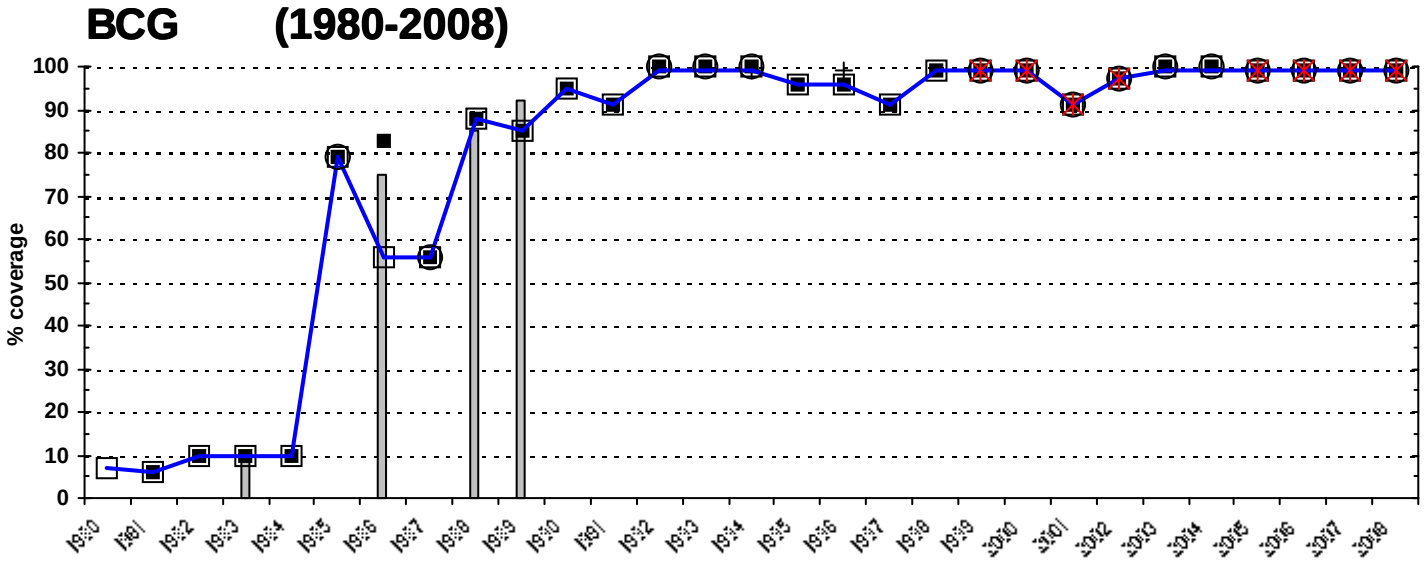
unicef

WHO/UNICEF
Review of National Immunization Coverage
1980-2008

Iran (Islamic Republic of)

July, 2009

Iran (Islamic Republic of)



Description of trend

Estimates are based on nationally reported data, supported by survey. The EPI Programme was introduced in 1984. Coverage from earlier ye is likely based on hospital records. However, due to war and population movements in the late 1980s, confidence is low in both officially repo and survey data. The survey in 1986 is not considered (total coverage is weighted average of urban/rural coverage). In March 2005 Iran cond 41 province-specific coverage surveys (n=22 200, % cards seen = 97.8%, age group 15-26 months, coverage for all infant vaccines > 99%) v supports reported 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	7	7					
1981	6	6	6				
1982	10	10	10				
1983	10	10	10			10	
1984	10	10	10				
1985	79	79	79	79			
1986	56	56	83			75	
1987	56	56	56	56			
1988	88	88	88			85	
1989	85	85	85			92	
1990	95	95	95				
1991	91	91	91				
1992	99	100	100	100			
1993	99	100	100	100			
1994	99	100	100	100			99
1995	96	96	96				
1996	96	96	96				99
1997	91	91	91				
1998	99	99	99				
1999	99	99	99	99	99		
2000	99	99	99	99	99		
2001	91	91	91	91	91		
2002	97	97	97	97	97		
2003	99	100	100	100	104		
2004	99	100	100	100	103		
2005	99	99	99	99	99		
2006	99	99	99	99	99		
2007	99	99	99	99	99		
2008	99	99	99	99	99		

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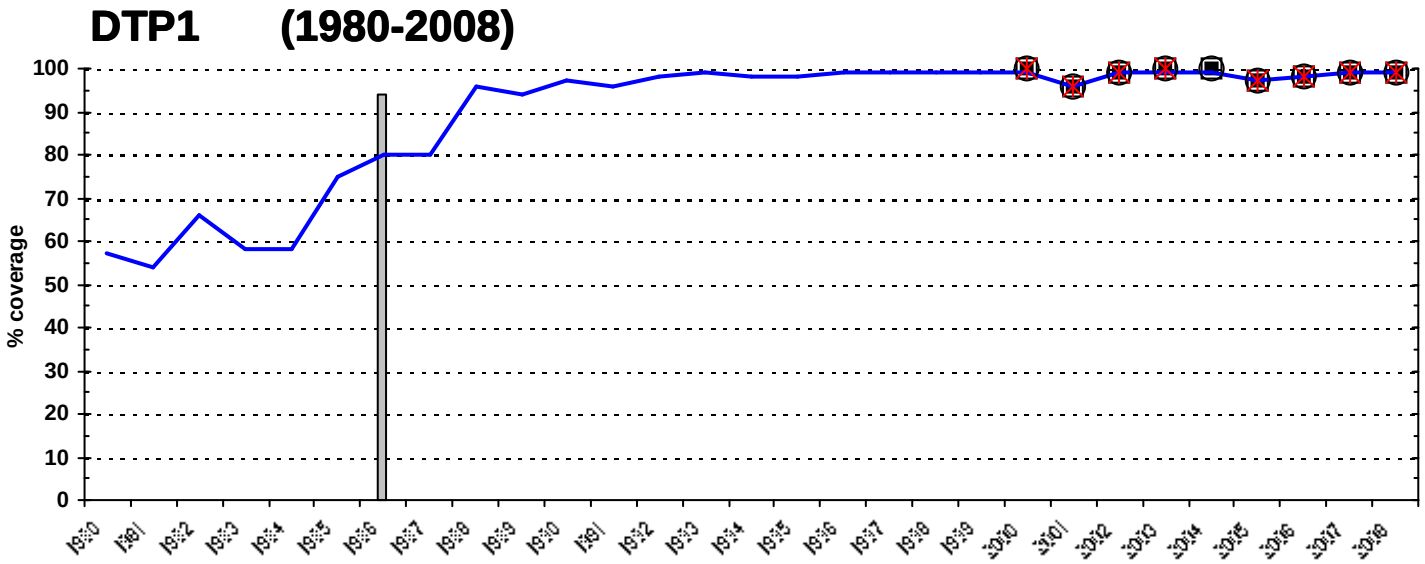
Iran (Islamic Republic of)



Description of trend

WHO and UNICEF began requesting data on DTP1 coverage in 2001 and have received national reports reflecting DTP1 coverage from 200 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. Thi relationship results from an analysis of 282 surveys conducted in 101 countries which were published between 1980 and 2004. The survey in 1986 is not considered (total coverage is weighted average of urban/rural 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	57						
1981	54						
1982	66						
1983	58						
1984	58						
1985	75						
1986	80					94	
1987	80						
1988	96						
1989	94						
1990	97						
1991	96						
1992	98						
1993	99						
1994	98						
1995	98						
1996	99						
1997	99						
1998	99						
1999	99						
2000	99	100	100	100	100		
2001	96	96	96	96	96		
2002	99	99	99	99	99		
2003	99	100	100	100	100		
2004	99	100	100	100	102		
2005	97	97	97	97	97		
2006	98	98	98	98	98		
2007	99	99	99	99	99		
2008	99	99	99	99	99		

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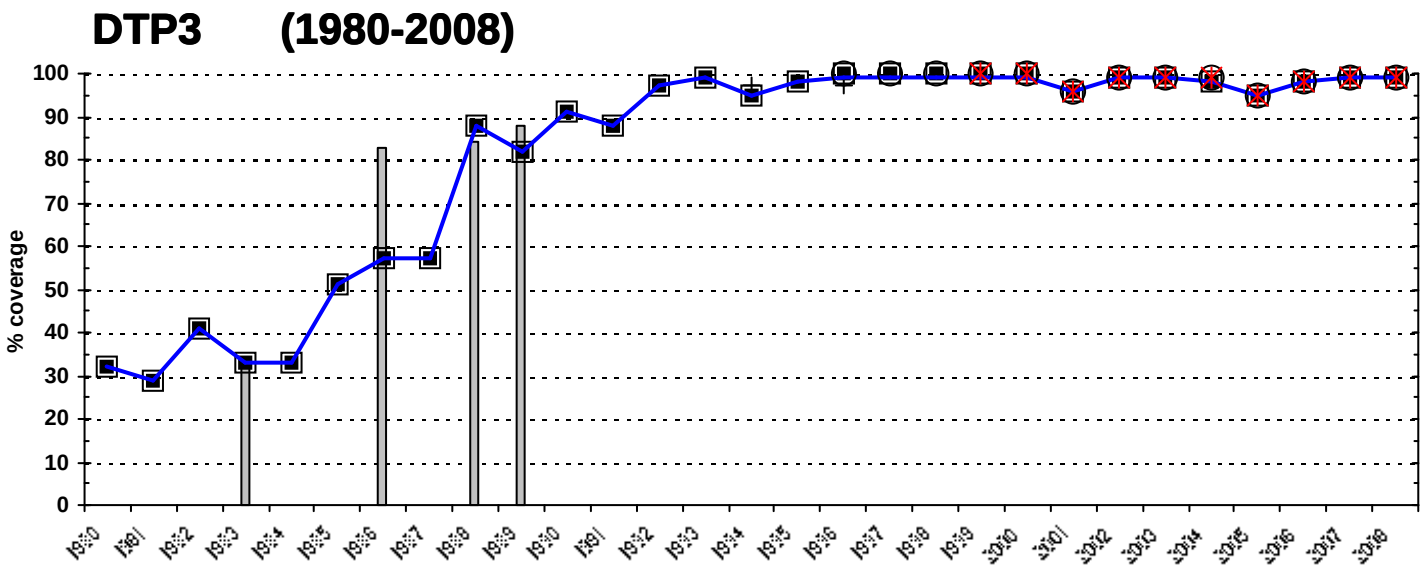

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Year	WHO/ UNICEF estimate (%)	Reported to:*		Government official estimate (%)	Reported doses administered (%)**	Survey data (%)***	
		WHO (%)	UNICEF (%)			Survey 12-23 months	Survey <12 months
	—	□	■	○	✳	▯	+
1980	32	32	32				
1981	29	29	29				
1982	41	41	41				
1983	33	33	33			33	
1984	33	33	33				
1985	51	51	51				
1986	57	57	57			83	
1987	57	57	57				
1988	88	88	88			84	
1989	82	82	82			88	
1990	91	91	91				
1991	88	88	88				
1992	97	97	97				
1993	99	99	99				
1994	95	95	95				97
1995	98	98	98				
1996	99	100	100	100			97
1997	99	100	100	100			
1998	99	100	100	100			
1999	99	100	100	100	100		
2000	99	100	100	100	100		
2001	96	96	96	96	96		
2002	99	99	99	99	99		
2003	99	99	99	99	99		
2004	98	98	98	99	99		
2005	95	95	95	95	95		
2006	98	98	98	98	98		
2007	99	99	99	99	99		
2008	99	99	99	99	99		

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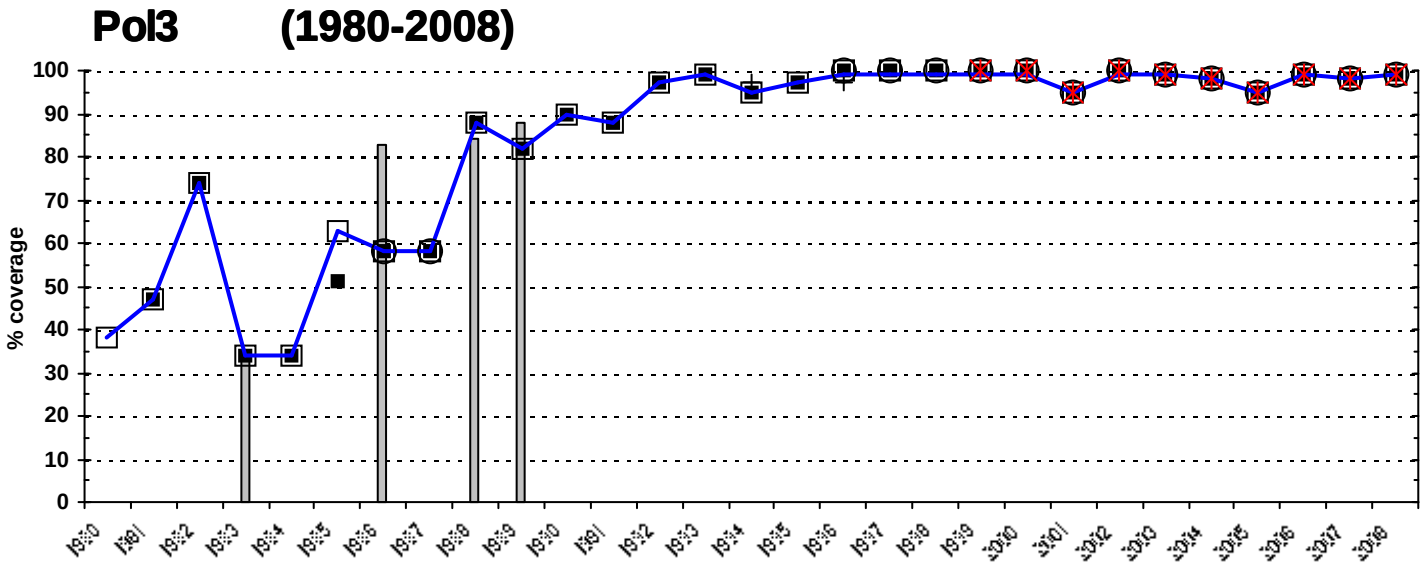

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Data presented in chart

Year	WHO/ UNICEF estimate (%)	Reported to:*		Government official estimate (%)	Reported doses administered (%)**	Survey data (%)***	
		WHO (%)	UNICEF (%)			Survey 12-23 months	Survey <12 months
	—	□	■	○	✳	▯	+
1980	38	38					
1981	47	47	47				
1982	74	74	74				
1983	34	34	34			34	
1984	34	34	34				
1985	63	63	51				
1986	58	58	58	58		83	
1987	58	58	58	58			
1988	88	88	88			84	
1989	82	82	82			88	
1990	90	90	90				
1991	88	88	88				
1992	97	97	97				
1993	99	99	99				
1994	95	95	95				97
1995	97	97	97				
1996	99	100	100	100			97
1997	99	100	100	100			
1998	99	100	100	100			
1999	99	100	100	100	100		
2000	99	100	100	100	100		
2001	95	95	95	95	95		
2002	99	100	100	100	100		
2003	99	99	99	99	99		
2004	98	98	98	98	98		
2005	95	95	95	95	95		
2006	99	99	99	99	99		
2007	98	98	98	98	98		
2008	99	99	99	99	99		

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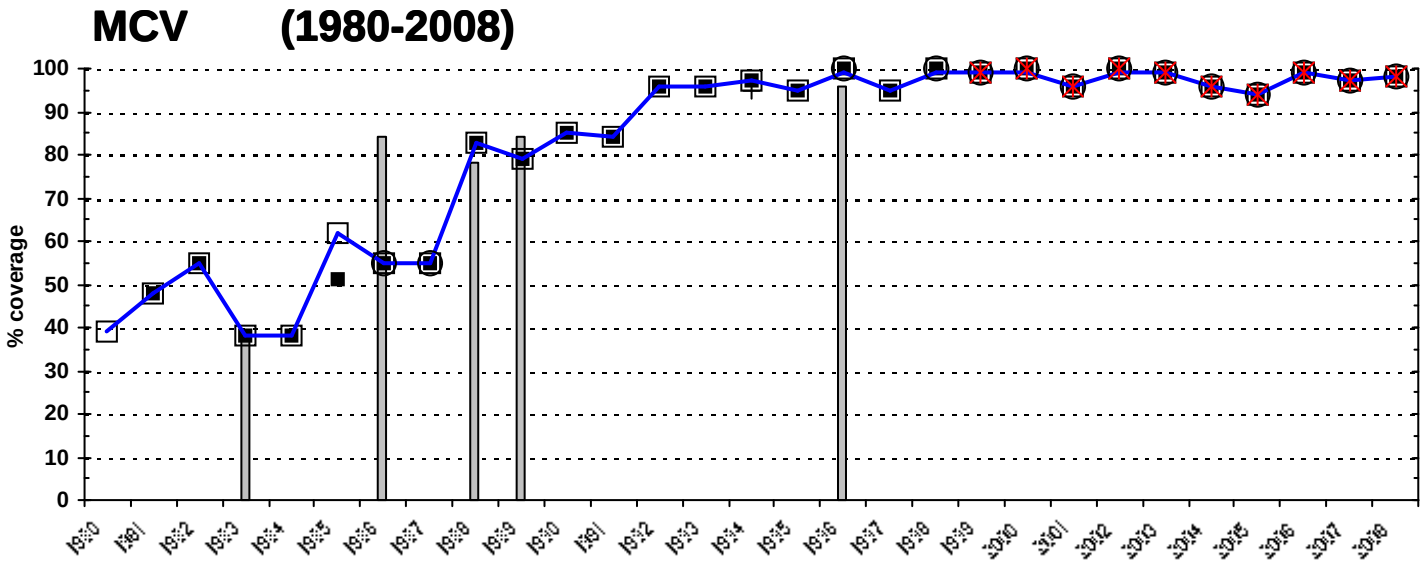

Description of trend

Selective vaccination - certain regions only - took place between 1980 and 1982. Estimates are based on nationally reported data, supported survey. The EPI Program was introduced in 1984. Coverage from earlier years is likely based on hospital records. However, due to war and population movements in the late 1980s, confidence is low in both officially reported and survey data. The survey in 1986 is not considered (t coverage is weighted average of urban/rural coverage). In March 2005 Iran conducted 41 province-specific coverage surveys (n=22 200, % c seen = 97.8%, age group 15-26 months, coverage for all infant vaccines > 99%) which supports reported 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	39	39					
1981	48	48	48				
1982	55	55	55				
1983	38	38	38			38	
1984	38	38	38				
1985	62	62	51				
1986	55	55	55	55		84	
1987	55	55	55	55			
1988	83	83	83			78	
1989	79	79	79			84	
1990	85	85	85				
1991	84	84	84				
1992	96	96	96				
1993	96	96	96				
1994	97	97	97				95
1995	95	95	95				
1996	99	100	100	100		96	
1997	95	95	95				
1998	99	100	100	100			
1999	99	99	99	99	99		
2000	99	100	100	100	100		
2001	96	96	96	96	96		
2002	99	100	100	100	100		
2003	99	99	99	99	99		
2004	96	96	96	96	96		
2005	94	94	94	94	94		
2006	99	99	99	99	99		
2007	97	97	97	97	97		
2008	98	98	98	98	98		

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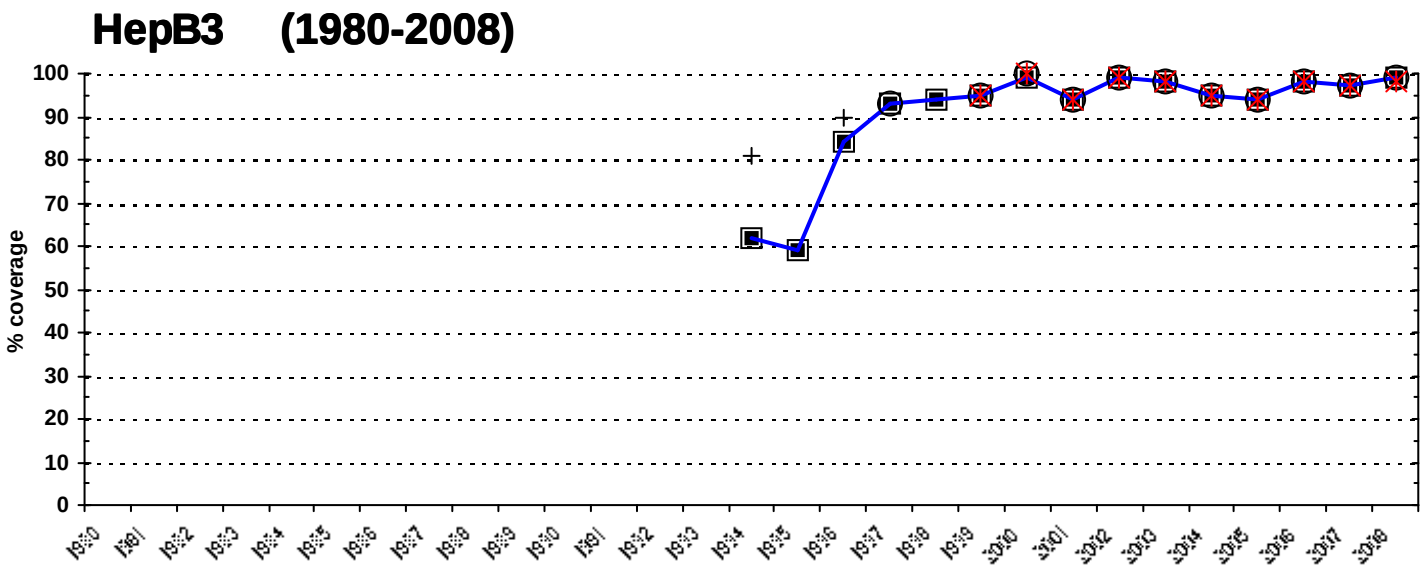
Iran (Islamic Republic of)



Description of trend

Hepatitis vaccine was introduced in 1993. Coverage estimates are based on reported data. The survey in 1986 is not considered (total cover is weighted average of urban/rural coverage). In March 2005 Iran conducted 41 province-specific coverage surveys (n=22 200, % cards seer 97.8%, age group 15-26 months, coverage for all infant vaccines > 99%) which supports reported 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							
1981							
1982							
1983							
1984							
1985							
1986							
1987							
1988							
1989							
1990							
1991							
1992							
1993							
1994	62	62	62				81
1995	59	59	59				
1996	84	84	84				90
1997	93	93	93	93			
1998	94	94	94				
1999	95	95	95	95	95		
2000	99	99	99	100	100		
2001	94	94	94	94	94		
2002	99	99	99	99	99		
2003	98	98	98	98	98		
2004	95	95	95	95	95		
2005	94	94	94	94	94		
2006	98	98	98	98	98		
2007	97	97	97	97	97		
2008	99	99	99	99	98		

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Iran (Islamic Republic of)

Details Survey Data

Year Source

Antigen	Confirmation method	% coverage	Compliance with schedule	Age group	Sample size	% cards seen	Survey year	Comments
1996 Joint Form: The Progress of Provinces Islamic Republic of Iran 1997, 1998 + Joint form								
HepB	C or H <12 month	89.9		12-23 m		98	1997	data from Joint Form
1996 The Progress of Provinces Islamic Republic of Iran 1997, 1998								
BCG	C or H <12 month	98.6		12-23 m		98	1997	
DTP1	C or H <12 month			12-23 m		98	1997	
DTP3	C or H <12 month	96.9		12-23 m		98	1997	
Pol3	C or H <12 month	96.9		12-23 m		98	1997	
MCV	Card or History	95.9		12-23 m		98	1997	
1994 Declaration of Achievements in the Islamic Republic of Iran 1995								
BCG	C or H <12 month	99		12-23 m			1995	
DTP1	C or H <12 month			12-23 m			1995	
DTP3	C or H <12 month	97.4		12-23 m			1995	
Pol3	C or H <12 month	97.4		12-23 m			1995	
MCV	C or H <12 month	94.8		12-23 m			1995	
HepB	C or H <12 month	80.6		12-23 m			1995	
1989 Report to the 9th intercountry meeting for EPI managers Teheran 23-27 May 1992								
BCG	Card or History	92		12-23 m			1990	
DTP1	Card or History			12-23 m			1990	
DTP3	Card or History	88		12-23 m			1990	
Pol3	Card or History	88		12-23 m			1990	
MCV	Card or History	84		12-23 m			1990	
1988 Report to the 9th intercountry meeting for EPI managers Teheran 23-27 May 1992								
BCG	Card or History	85		12-23 m			1989	
DTP1	Card or History			12-23 m			1989	
DTP3	Card or History	84		12-23 m			1989	
Pol3	Card or History	84		12-23 m			1989	
MCV	Card or History	78		12-23 m			1989	
1986 Short Note on EPI activities in The Islamic Republi of Iran in 1987								
BCG	Card or History	75.3		12-23 m	212		1987	
DTP1	Card or History	93.7		12-23 m	212		1987	
DTP3	Card or History	82.8		12-23 m	212		1987	
Pol3	Card or History	83.2		12-23 m	212		1987	
MCV	Card or History	84.1		12-23 m	212		1987	
1983 MOH, reported in response to draft estimates, June 2001.								
BCG	Card or History	10.4		12-23 m			1984	
DTP3	Card or History	33		12-23 m			1984	
Pol3	Card or History	34		12-23 m			1984	
MCV	Card or History	38.3		12-23 m			1984	

Iran (Islamic Republic of)

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.

Iran administers a dose of tetanus-containing vaccine to all children aged 6 and aged 15, which is not captured by the mathematical model to estimate PAB. The real PAB may therefore be higher than what is suggested in the above PAB estimates.

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[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.

Iran (Islamic Republic of)

Year	PAB coverage estimate (%)
1980	1
1981	2
1982	4
1983	5
1984	14
1985	26
1986	35
1987	40
1988	56
1989	61
1990	71
1991	80
1992	64
1993	84
1994	69
1995	66
1996	68
1997	81
1998	82
1999	82
2000	82
2001	82
2002	82
2003	82
2004	82
2005	83
2006	83
2007	83
2008	83