

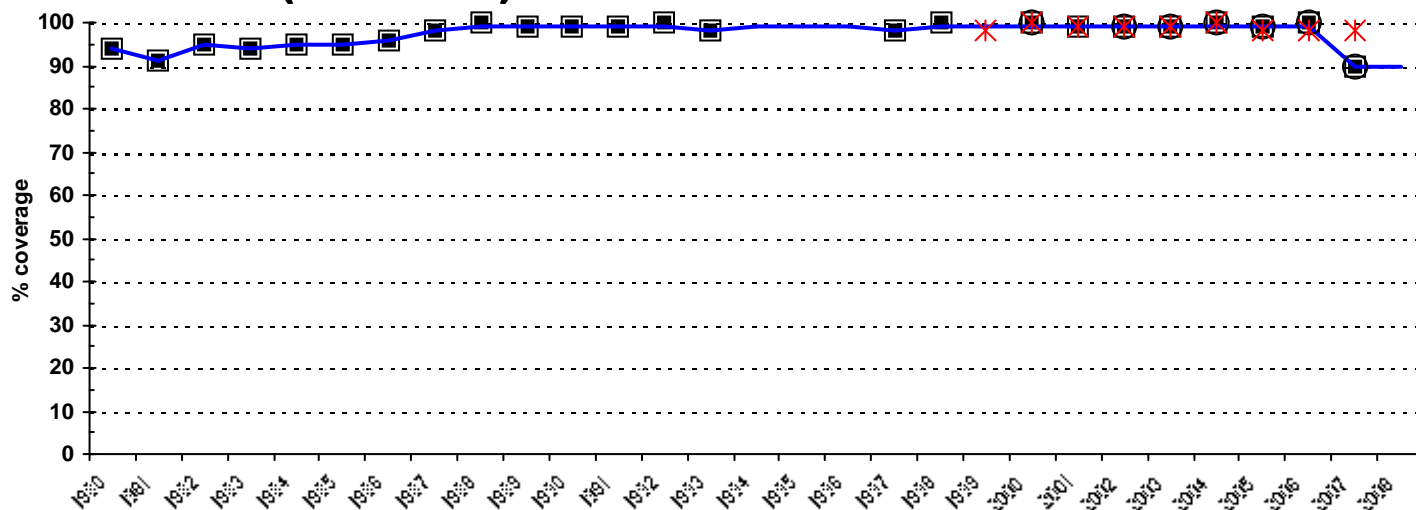
**WHO/UNICEF
Review of National Immunization Coverage
1980-2008**

Malaysia

July, 2009

Malaysia

BCG (1980-2008)



Description of trend

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	94	94	94				
1981	91	91	91				
1982	95	95	95				
1983	94	94	94				
1984	95	95	95				
1985	95	95	95				
1986	96	96	96				
1987	98	98	98				
1988	99	100	100				
1989	99	99	99				
1990	99	99	99				
1991	99	99	99				
1992	99	100	100				
1993	98	98	98				
1994	99	102	102				
1995	99	104	104				
1996	99	106	106				
1997	98	98	98				
1998	99	100	100				
1999	99	102	102	102	98		
2000	99	100	100	100	100		
2001	99	99	99		99		
2002	99	99	99	99	99		
2003	99	99	99	99	99		
2004	99	100	100	100	100		
2005	99	99	99	99	98		
2006	99	100	100	100	98		
2007	90	90	90	90	98		
2008	90						

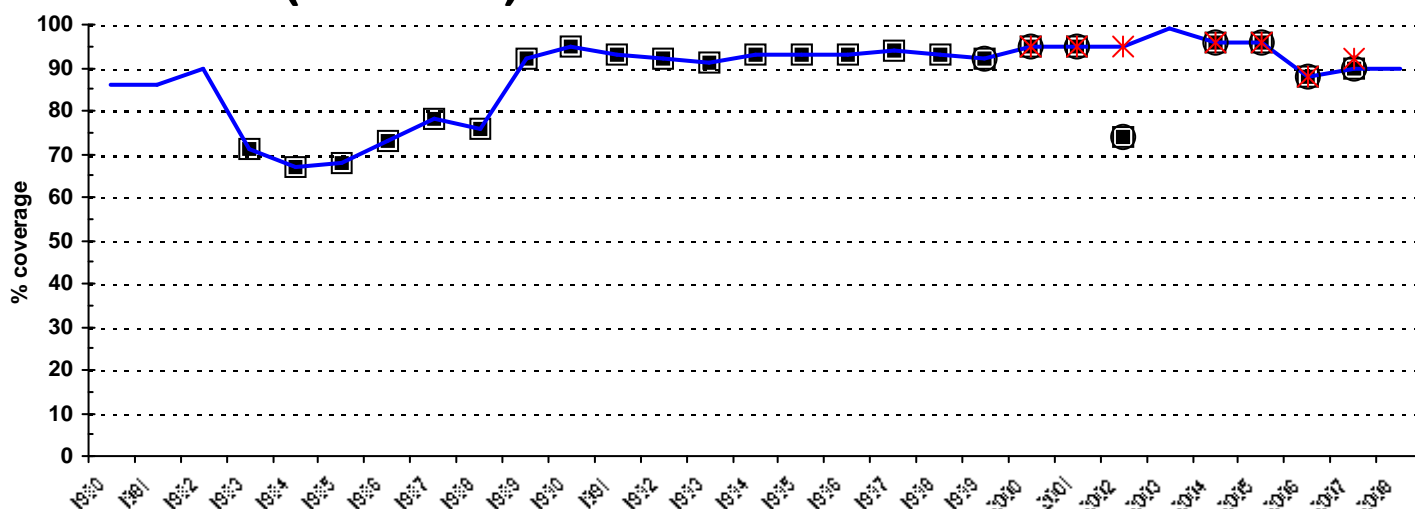
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

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

***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.

Malaysia

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 198: onward. Estimates of 1983 onward are based on nationally reported data. For 1980-1982 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. Estimates from 2004 onw are based on national reports. The reported decline in 2002 reflects a shortage of DTP-Hib combination vaccine and does not include DTP doses administered.

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	86						
1981	86						
1982	90						
1983	71	71	71				
1984	67	67	67				
1985	68	68	68				
1986	73	73	73				
1987	78	78	78				
1988	76	76	76				
1989	92	92	92				
1990	95	95	95				
1991	93	93	93				
1992	92	92	92				
1993	91	91	91				
1994	93	93	93				
1995	93	93	93				
1996	93	93	93				
1997	94	94	94				
1998	93	93	93				
1999	92	92	92	92			
2000	95	95	95	95	95		
2001	95	95	95	95	95		
2002	95	74	74	74	95		
2003	99	103	103	103	103		
2004	96	96	96	96	96		
2005	96	96	96	96	96		
2006	88	88	88	88	88		
2007	90	90	90	90	92		
2008	90						

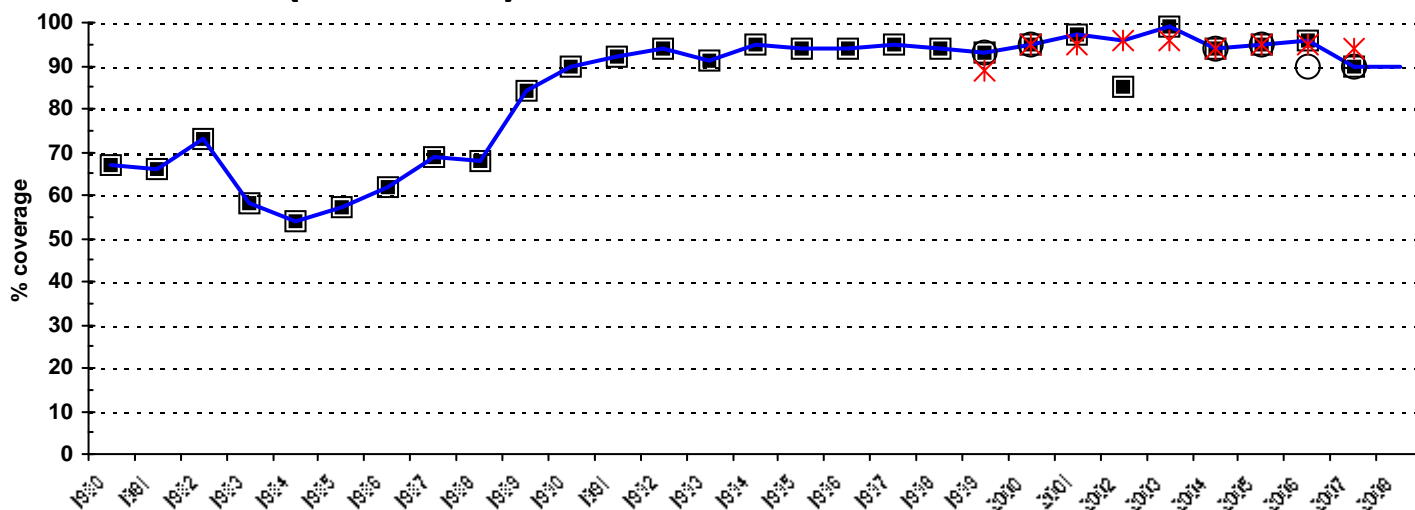
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

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

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Malaysia

DTP3 (1980-2008)



Description of trend

Estimated immunization coverage levels are based on reported data. No survey data are available. The reported decline in 2002 reflects a shortage of DTP-Hib combination vaccine and does not include DTP doses administered.

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	67	67	67				
1981	66	66	66				
1982	73	73	73				
1983	58	58	58				
1984	54	54	54				
1985	57	57	57				
1986	62	62	62				
1987	69	69	69				
1988	68	68	68				
1989	84	84	84				
1990	90	90	90				
1991	92	92	92				
1992	94	94	94				
1993	91	91	91				
1994	95	95	95				
1995	94	94	94				
1996	94	94	94				
1997	95	95	95				
1998	94	94	94				
1999	93	93	93	93	89		
2000	95	95	95	95	95		
2001	97	97	97		95		
2002	96	85	85		96		
2003	99	99	99		96		
2004	94	94	94	94	94		
2005	95	95	95	95	95		
2006	96	96	96	90	95		
2007	90	90	90	90	94		
2008	90						

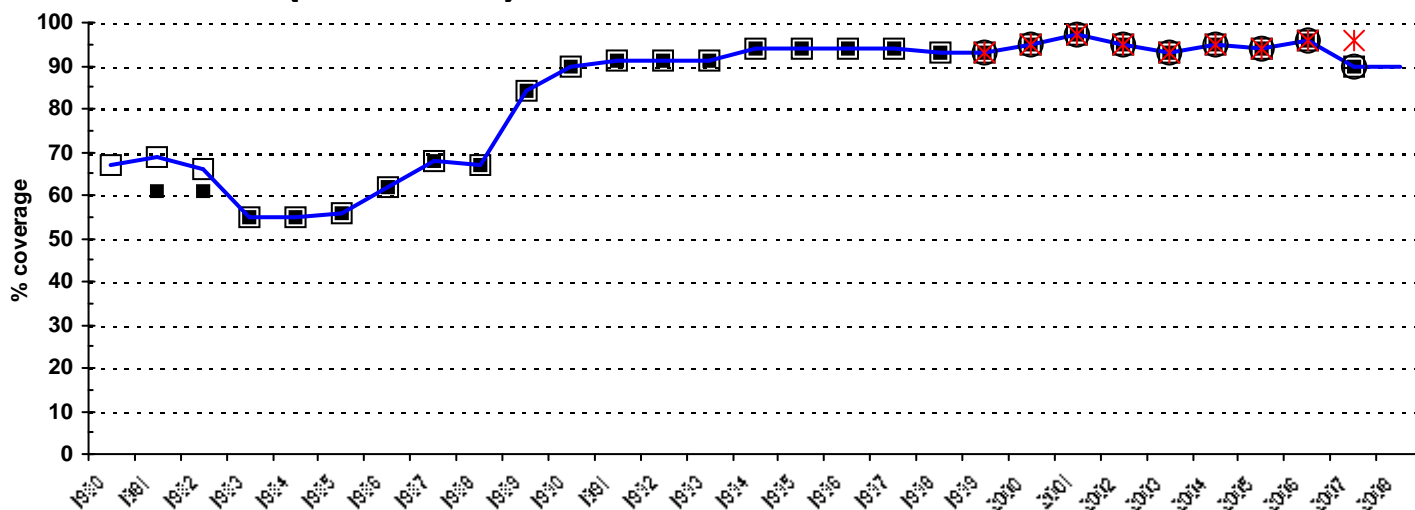
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

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

***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.

Malaysia

Pol3 (1980-2008)



Description of trend

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	67	67					
1981	69	69	61				
1982	66	66	61				
1983	55	55	55				
1984	55	55	55				
1985	56	56	56				
1986	62	62	62				
1987	68	68	68				
1988	67	67	67				
1989	84	84	84				
1990	90	90	90				
1991	91	91	91				
1992	91	91	91				
1993	91	91	91				
1994	94	94	94				
1995	94	94	94				
1996	94	94	94				
1997	94	94	94				
1998	93	93	93				
1999	93	93	93	93	93		
2000	95	95	95	95	95		
2001	97	97	97	97	97		
2002	95	95	95	95	95		
2003	93	93	93	93	93		
2004	95	95	95	95	95		
2005	94	94	94	94	94		
2006	96	96	96	96	96		
2007	90	90	90	90	96		
2008	90						

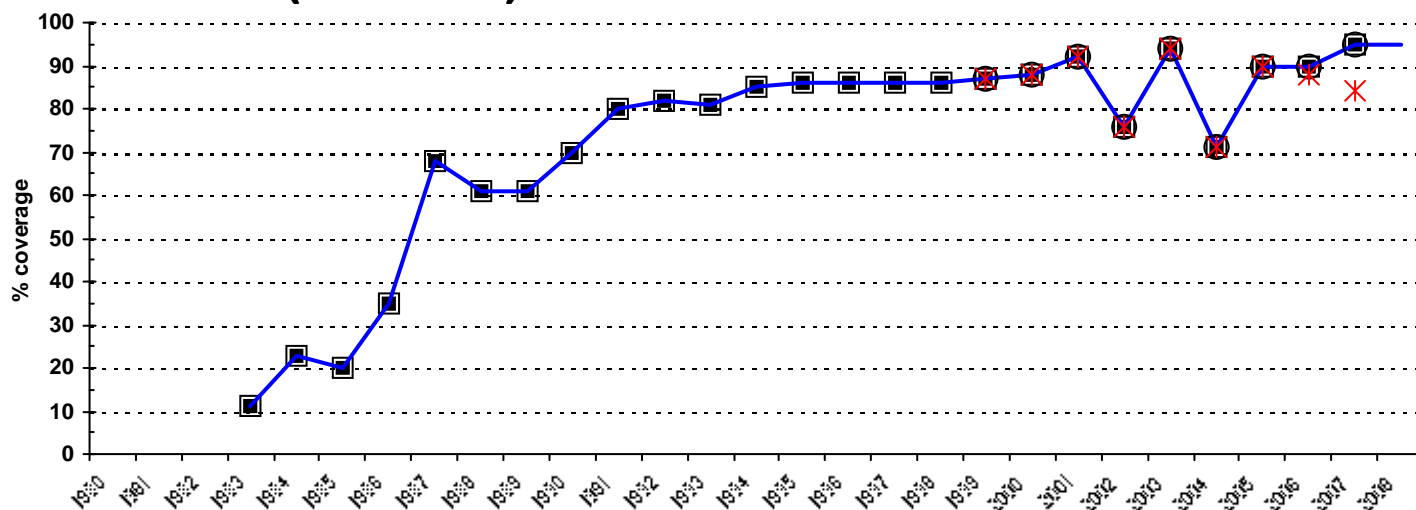
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

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

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Malaysia

MCV (1980-2008)



Description of trend

Estimated immunization coverage levels are based on reported data. No survey data are available. In 2002 Malaysia introduced the measles mumps-rubella (MMR) combination presentation for measles immunization.

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	11	11	11				
1984	23	23	23				
1985	20	20	20				
1986	35	35	35				
1987	68	68	68				
1988	61	61	61				
1989	61	61	61				
1990	70	70	70				
1991	80	80	80				
1992	82	82	82				
1993	81	81	81				
1994	85	85	85				
1995	86	86	86				
1996	86	86	86				
1997	86	86	86				
1998	86	86	86				
1999	87	87	87	87	87		
2000	88	88	88	88	88		
2001	92	92	92	92	92		
2002	76	76	76	76	76		
2003	94	94	94	94	94		
2004	71	71	71	71	71		
2005	90	90	90	90	90		
2006	90	90	90	90	88		
2007	95	95	95	95	84		
2008	95						

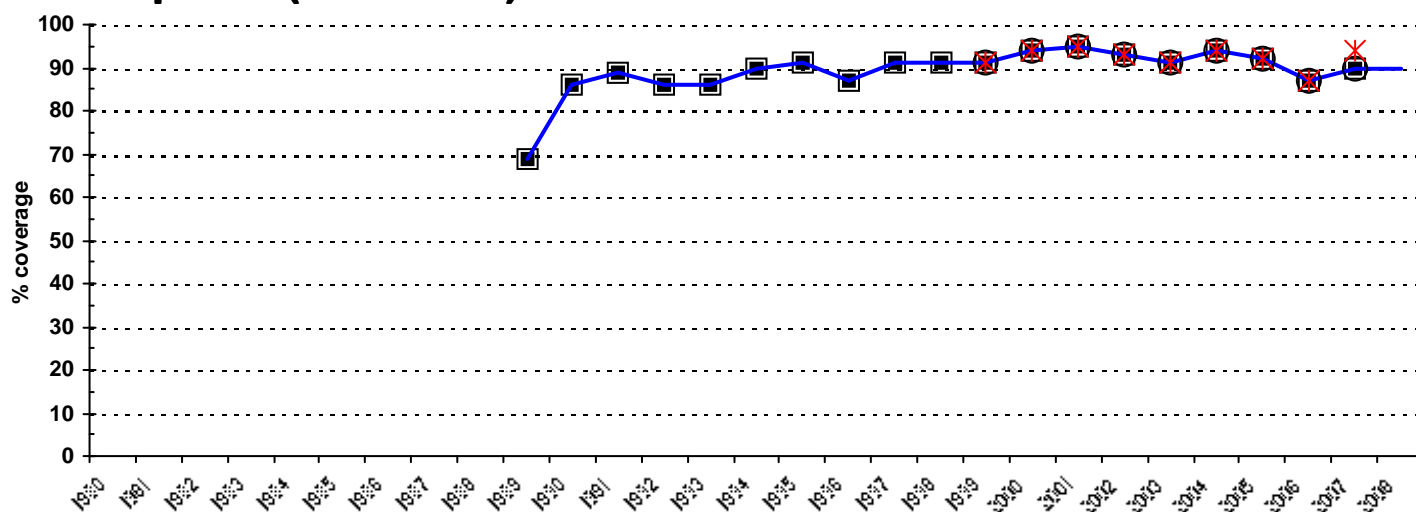
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Malaysia

HepB3 (1980-2008)



Description of trend

The Hepatitis vaccine was introduced in 1990. 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	69	69	69				
1990	86	86	86				
1991	89	89	89				
1992	86	86	86				
1993	86	86	86				
1994	90	90	90				
1995	91	91	91				
1996	87	87	87				
1997	91	91	91				
1998	91	91	91				
1999	91	91	91	91	91		
2000	94	94	94	94	94		
2001	95	95	95	95	95		
2002	93	93	93	93	93		
2003	91	91	91	91	91		
2004	94	94	94	94	94		
2005	92	92	92	92	92		
2006	87	87	87	87	87		
2007	90	90	90	90	94		
2008	90						

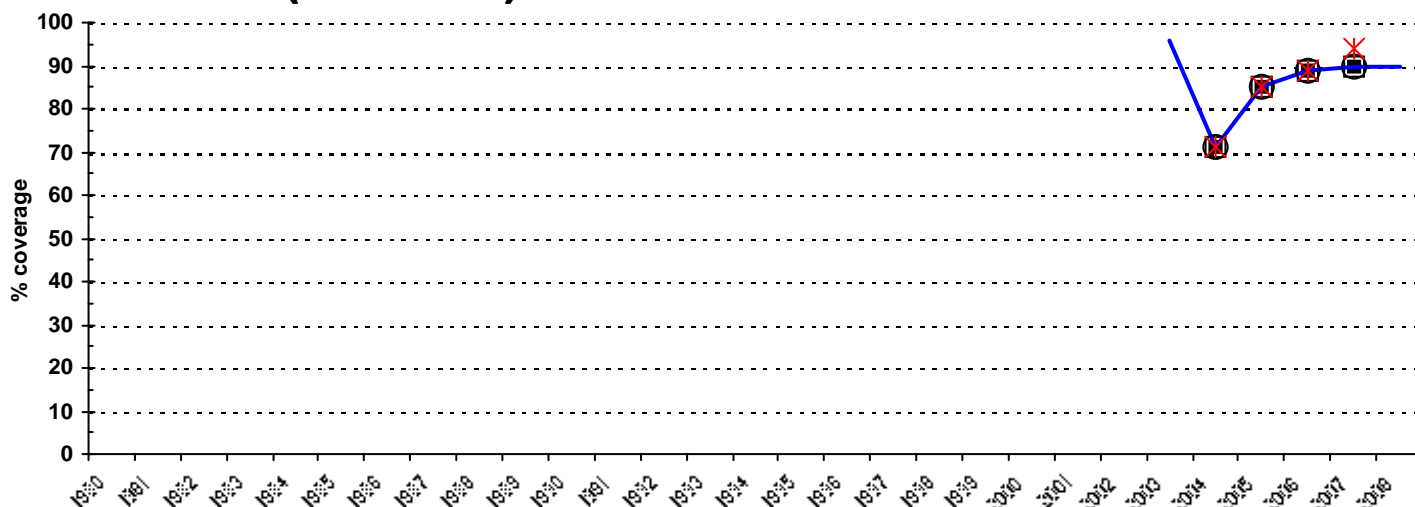
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

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

***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.

Malaysia

Hib3 (1980-2008)



Description of trend

DTP-Hib combination vaccine introduced in 2002. Estimates from 2003 and 2004 are based on data reported for DTP3. Estimates from 2005 onward are based on national reports. No survey data are available. Lower coverage in 2004-2005 due to vaccine shortage.

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	96						
2004	71	71	71	71	71		
2005	85	85	85	85	85		
2006	89	89	89	89	89		
2007	90	90	90	90	94		
2008	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.

***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.

Malaysia

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.

Malaysia

Year	PAB coverage estimate (%)
1980	20
1981	22
1982	21
1983	23
1984	19
1985	52
1986	56
1987	60
1988	66
1989	81
1990	82
1991	83
1992	85
1993	84
1994	83
1995	84
1996	85
1997	85
1998	81
1999	85
2000	88
2001	87
2002	86
2003	86
2004	88
2005	88
2006	88
2007	87
2008	87