

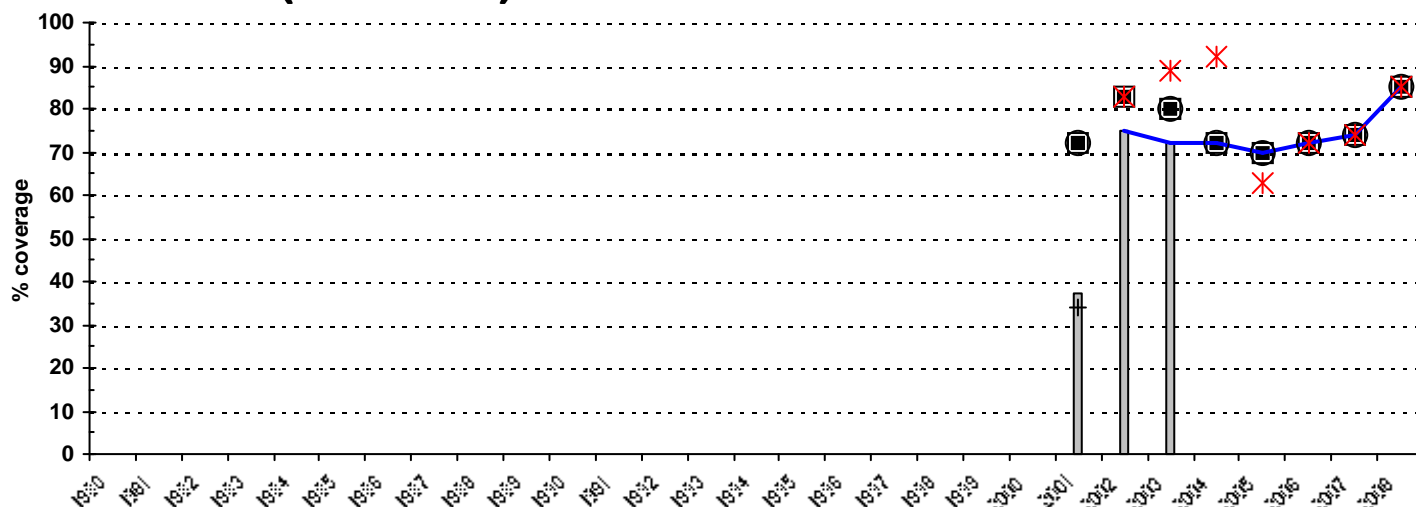
**WHO/UNICEF
Review of National Immunization Coverage
1980-2008**

Timor-Leste

July, 2009

Timor-Leste

BCG (1980-2008)



Description of trend

The 2002-2003 estimates are based on survey results. From 2004 onward, estimates are based on national reports. The national report for 2002 is based on revised census. The reported data for 2008 may be an overestimate as the number of reported births declined from 2006/2007 level.

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		72	72	72		37	34
2002	75	83	83	83	83	75	
2003	72	80	80	80	89	72	
2004	72	72	72	72	92		
2005	70	70	70	70	63		
2006	72	72	72	72	72		
2007	74	74	74	74	74		
2008	85	85	85	85	85		

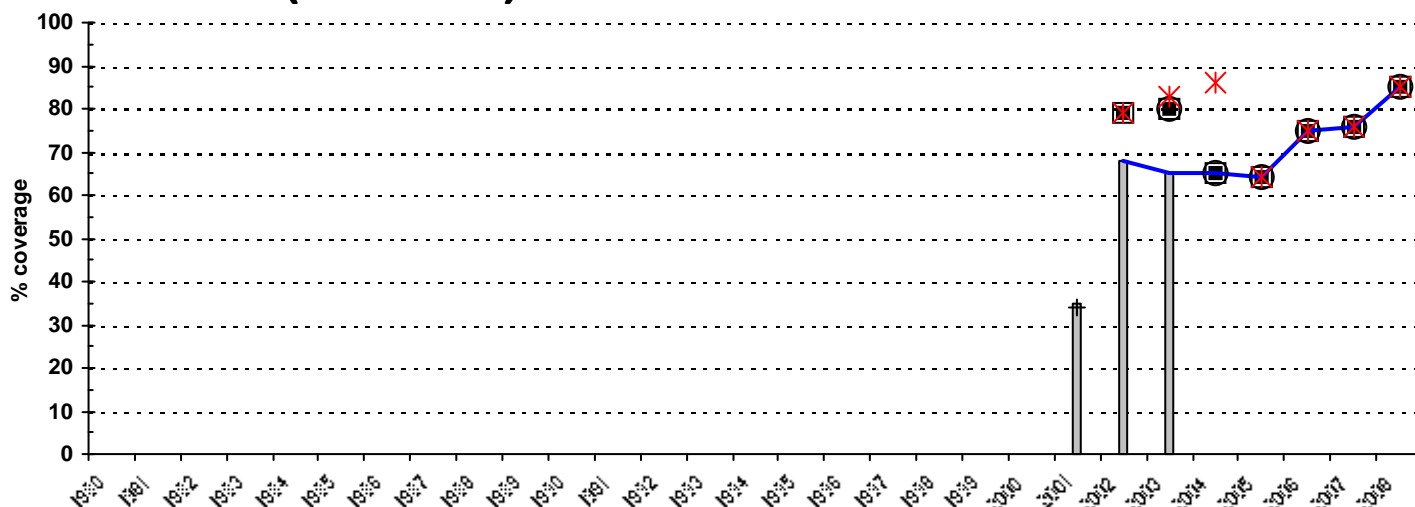
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Timor-Leste

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 2002-2003 estimates are based on survey results. From 2004 onward, estimates are based on national reports. The national report for 2005 is based on revised census. The reported data for 2008 may be an overestimate as the number of reported surviving infants declined from 2006/2007 levels.

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						35	34
2002	68	79	79		79	68	
2003	65	80	80	80	83	65	
2004	65	65	65	65	86		
2005	64	64	64	64	64		
2006	75	75	75	75	75		
2007	76	76	76	76	76		
2008	85	85	85	85	85		

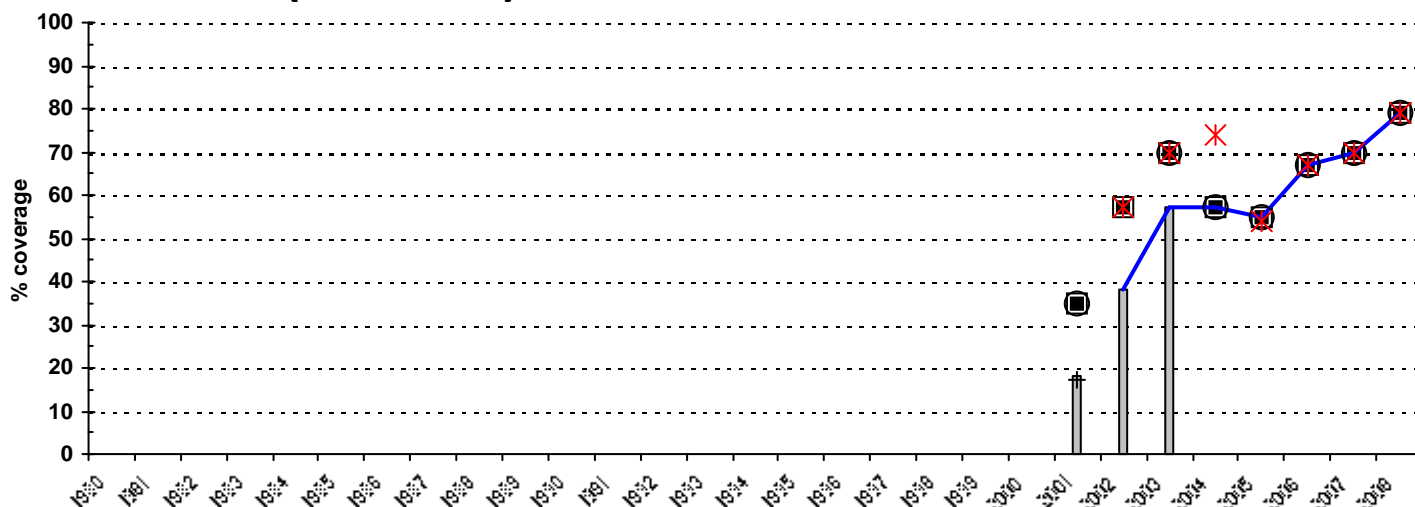
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

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

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Timor-Leste

DTP3 (1980-2008)



Description of trend

The 2002-2003 estimates are based on survey results. From 2004 onward, estimates are based on national reports. The national report for 2008 is based on a revised census. The reported data for 2008 may be an overestimate as the number of reported births declined from 2006/2007 levels.

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		35	35	35		18	17
2002	38	57	57		57	38	
2003	57	70	70	70	70	57	
2004	57	57	57	57	74		
2005	55	55	55	55	54		
2006	67	67	67	67	67		
2007	70	70	70	70	70		
2008	79	79	79	79	79		

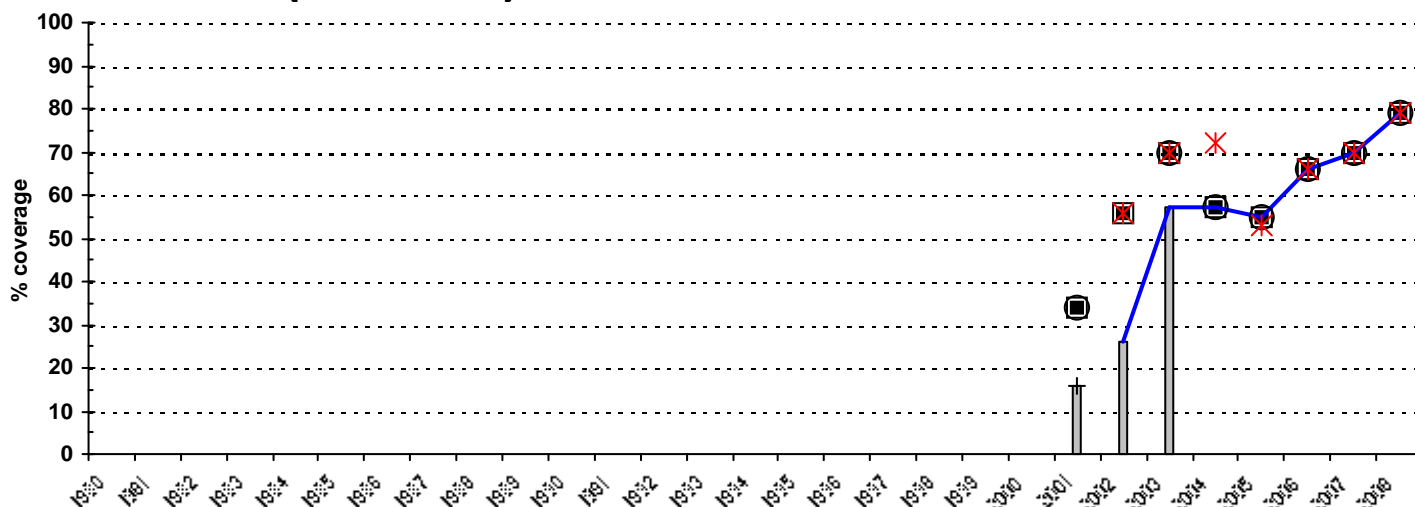
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

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

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Timor-Leste

Pol3 (1980-2008)



Description of trend

The 2002-2003 estimates are based on survey results. From 2004 onward, estimates are based on national reports. The national report for 2010 based on a revised census. The reported data for 2008 may be an overestimate as the number of reported births declined from 2006/2007 level.

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							
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1994							
1995							
1996							
1997							
1998							
1999							
2000							
2001		34	34	34		16	16
2002	26	56	56		56	26	
2003	57	70	70	70	70	57	
2004	57	57	57	57	72		
2005	55	55	55	55	53		
2006	66	66	66	66	66		
2007	70	70	70	70	70		
2008	79	79	79	79	79		

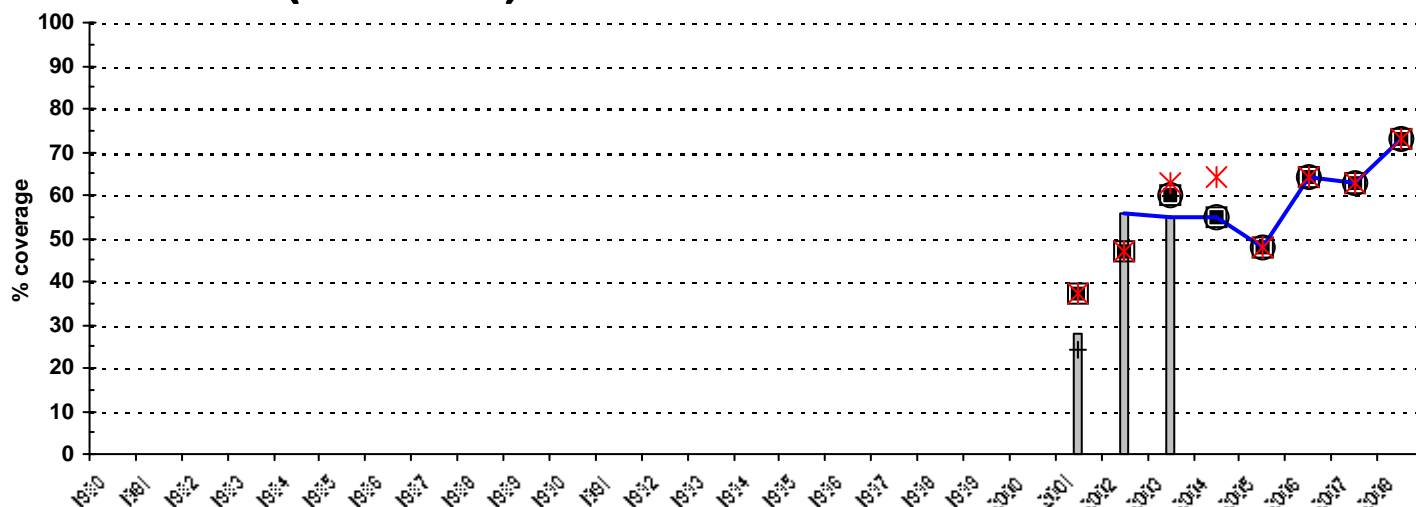
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Timor-Leste

MCV (1980-2008)



Description of trend

The 2002-2003 estimates are based on survey results. From 2004 onward, estimates are based on national reports. The national report for 2008 is based on revised census. The reported data for 2008 may be an overestimate as the number of reported births declined from 2006/2007 level.

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							
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1995							
1996							
1997							
1998							
1999							
2000							
2001		37	37		37	28	24
2002	56	47	47		47	56	
2003	55	60	60	60	63	55	
2004	55	55	55	55	64		
2005	48	48	48	48	48		
2006	64	64	64	64	64		
2007	63	63	63	63	63		
2008	73	73	73	73	73		

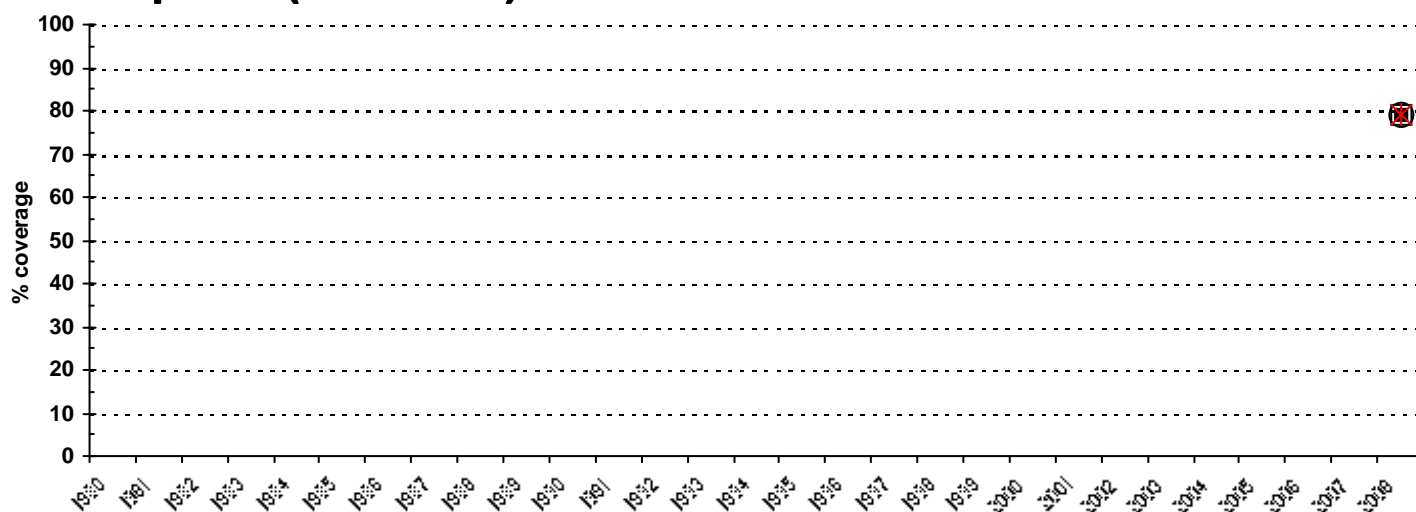
*Prior to 1998 national reports to WHO/UNICEF did not specify whether information was derived from administrative records, surveys or other sources.

**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.

Timor-Leste

HepB3 (1980-2008)



Description of trend

Hepatitis B was introduced in December of 2007.

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							
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1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008	79	79	79	79	79		

*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.

Timor-Leste

Details Survey Data

Year Source

Antigen	Confirmation method	% coverage	Compliance with schedule	Age group	Sample size	% cards seen	Survey year	Comments
2003 Immunization coverage among women and children 12-23 months in the Democratic Republic of Timor Lest Using the EPI cluster srurvey methodology								
BCG	Card or history	72		12-23 m	2662	26	2004	
BCG	Card	25		12-23 m	2662	26	2004	
DTP1	Card or history	65		12-23 m	2662	26	2004	
DTP1	Card	20		12-23 m	2662	26	2004	
DTP3	Card or history	57		12-23 m	2662	26	2004	
DTP3	Card	17		12-23 m	2662	26	2004	
Pol3	Card or history	57		12-23 m	2662	26	2004	
Pol3	Card	17		12-23 m	2662	26	2004	
MCV	Card or history	55		12-23 m	2662	26	2004	
MCV	Card	15		12-23 m	2662	26	2004	
2002 Timor-Leste 2003 Demographic and Health Survey								
BCG	Card or History	75.1		12-23 m	722	12.2	2003	
DTP1	Card or History	68.1		12-23 m	722	12.2	2003	
DTP3	Card or History	37.5		12-23 m	722	12.2	2003	
Pol3	Card or History	26.4		12-23 m	722	12.2	2003	
MCV	Card or History	56.4		12-23 m	722	12.2	2003	
2001 Multiple Indicator Cluster Survey Timor-Leste 2002								
BCG	Card or History	37.2		12-23 m	988	10.1	2002	
BCG	C or H <12 month	34.5		12-23 m	988	10.1	2002	
DTP1	Card or History	34.7		12-23 m	988	10.1	2002	
DTP1	C or H <12 month	34.5		12-23 m	988	10.1	2002	
DTP3	Card or History	18.3		12-23 m	988	10.1	2002	
DTP3	C or H <12 month	17.3		12-23 m	988	10.1	2002	
Pol3	Card or History	16.4		12-23 m	988	10.1	2002	
Pol3	C or H <12 month	15.7		12-23 m	988	10.1	2002	
MCV	Card or History	27.6		12-23 m	988	10.1	2002	
MCV	C or H <12 month	23.6		12-23 m	988	10.1	2002	

Timor-Leste

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.

Timor-Leste

Year	PAB coverage estimate (%)
1980	4
1981	6
1982	9
1983	12
1984	13
1985	16
1986	18
1987	19
1988	21
1989	27
1990	39
1991	40
1992	42
1993	43
1994	47
1995	47
1996	49
1997	52
1998	53
1999	54
2000	55
2001	55
2002	55
2003	58
2004	64
2005	59
2006	63
2007	59
2008	66