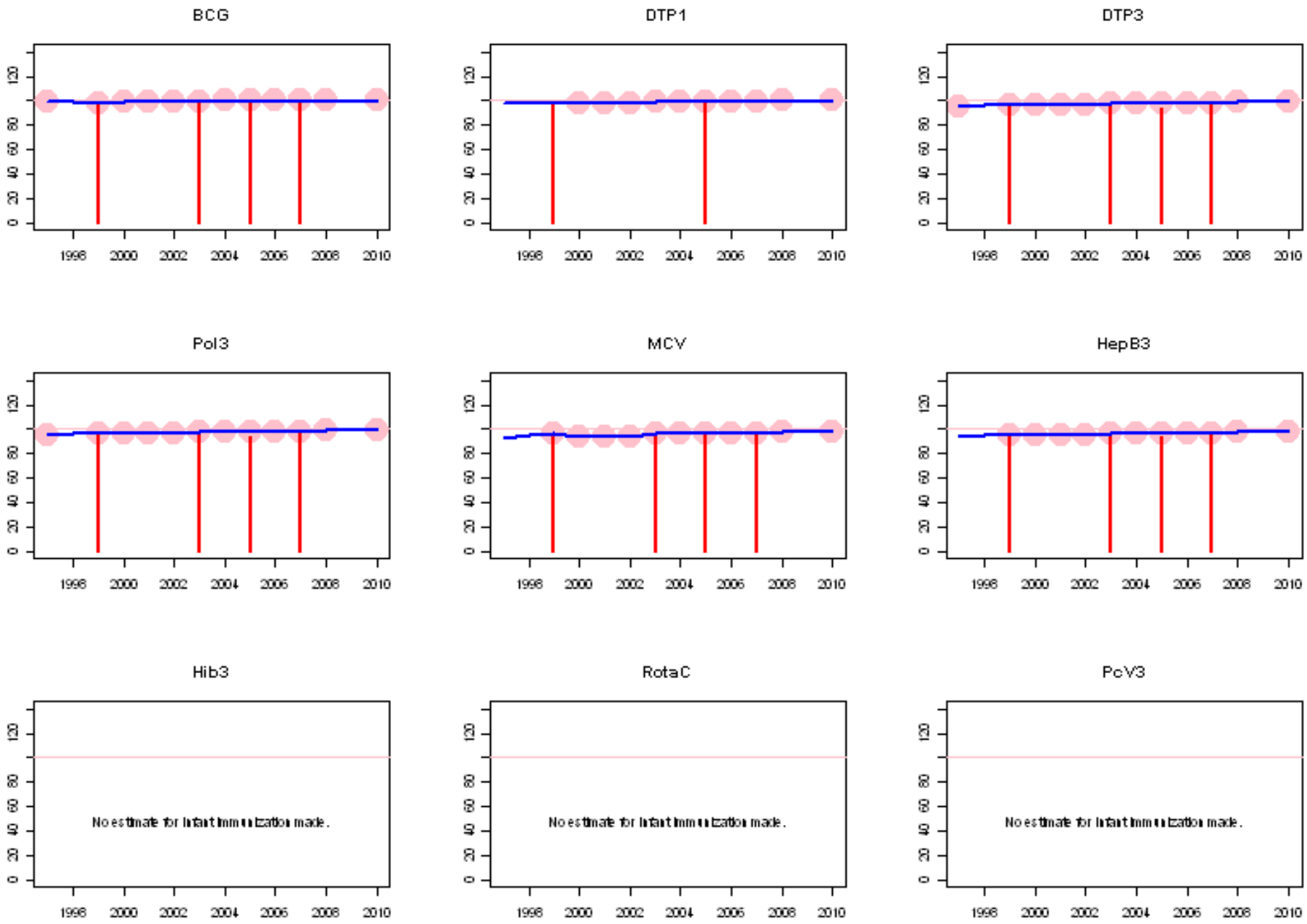
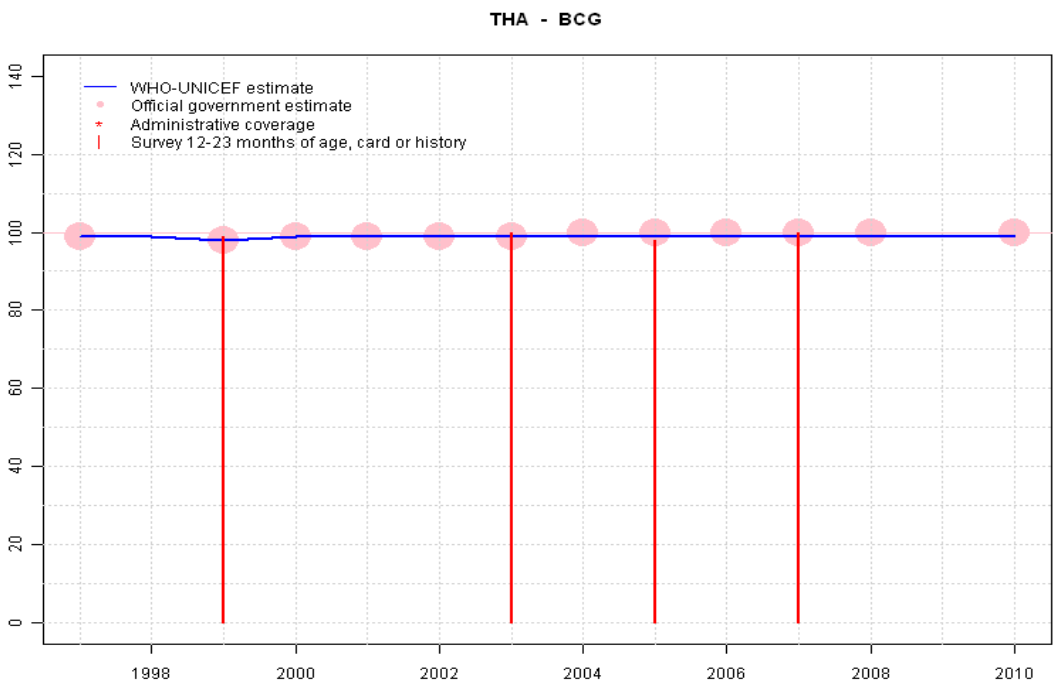

BCG
DTP1
DTP3
Pol3
MCV
HepB3
Hib3
RotaC
PcV3
No estimate for Infant Immunization made.
No estimate for Infant Immunization made.
No estimate for Infant Immunization made.
0
20
40
60
80
120
1998
2000
2002
2004
2006
2008
2010

Thailand - BCG

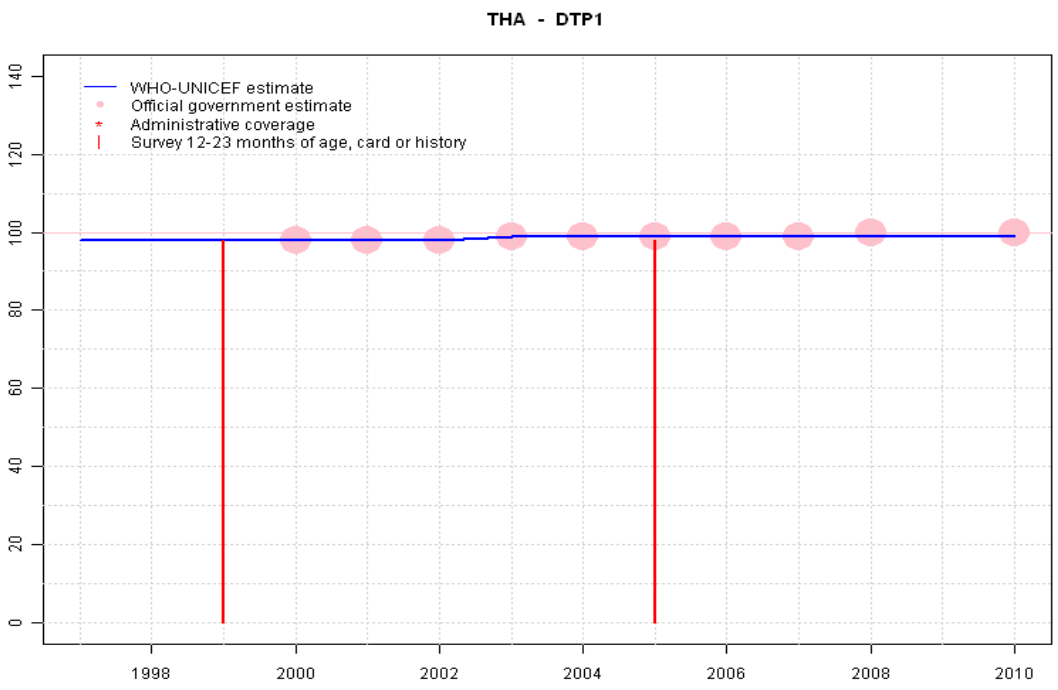


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	99	99	98	99	99	99	99	99	99	99	99	99	99	99
Official	99	NA	98	99	99	99	99	100	100	100	100	100	NA	100
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	99	NA	NA	NA	100	NA	98	NA	100	NA	NA	NA

Description:

1997: Legacy estimate.
1998: Estimate based on interpolation between 1997 and 1999.
1999: Estimate based on reported data. 99 percent survey results supports reported data of 98 percent.
2000: Estimate based on reported data.
2001: Estimate based on reported data.
2002: Estimate based on reported data.
2003: Estimate based on reported data. 100 percent survey results supports reported data of 99 percent.
2004: Estimate based on reported data.
2005: Estimate based on reported data. 98 percent survey results supports reported data of 100 percent.
2006: Estimate based on reported data.
2007: Estimate based on reported data. 100 percent survey results supports reported data of 100 percent.
2008: Estimate based on reported data.
2009: Estimate based on interpolation between 2008 and 2010.
2010: Estimate based on reported data.

Thailand - DTP1

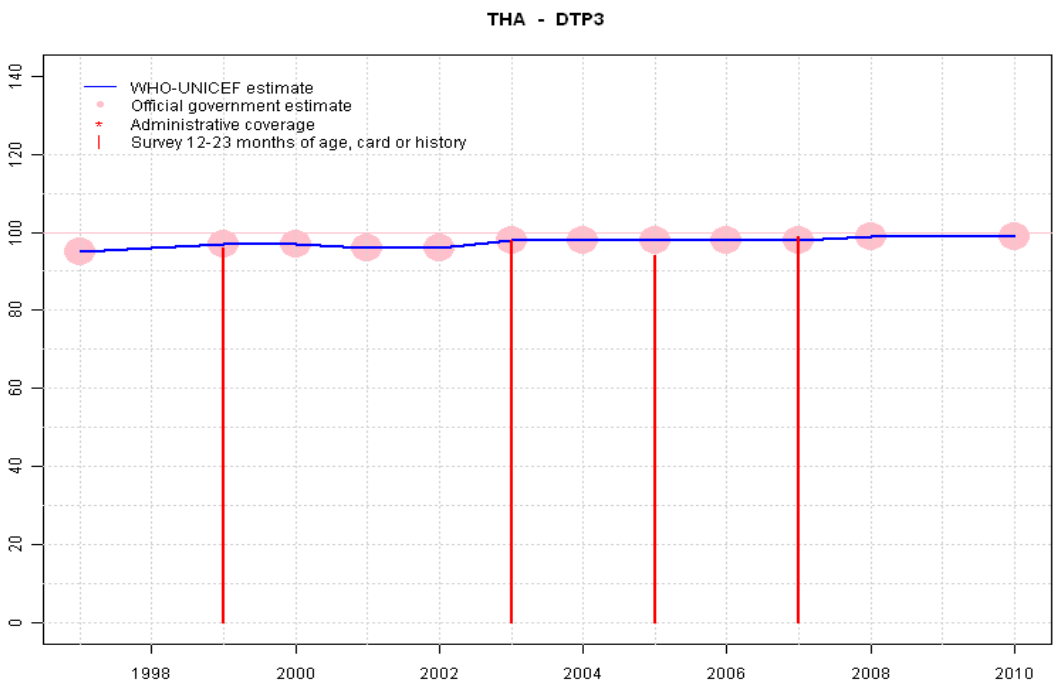


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	98	98	98	98	98	98	99	99	99	99	99	99	99	99
Official	NA	NA	NA	98	98	98	99	99	99	99	99	100	NA	100
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	98	NA	NA	NA	NA	NA	98	NA	NA	NA	NA	NA

Description:

1997: Legacy estimate.
1998: Estimate based on interpolation between 1997 and 1999.
1999: No accepted reported data.Reported data of 98 percent estimated by extrapolating from 2000supports trend in reported data. 98 percent survey results
2000: Estimate based on reported data.
2001: Estimate based on reported data.
2002: Estimate based on reported data.
2003: Estimate based on reported data.
2004: Estimate based on reported data.
2005: Estimate based on reported data. 98 percent survey results supports reported data of 99 percent.
2006: Estimate based on reported data.
2007: Estimate based on reported data.
2008: Estimate based on reported data.
2009: Estimate based on interpolation between 2008 and 2010.
2010: Estimate based on reported data.

Thailand - DTP3

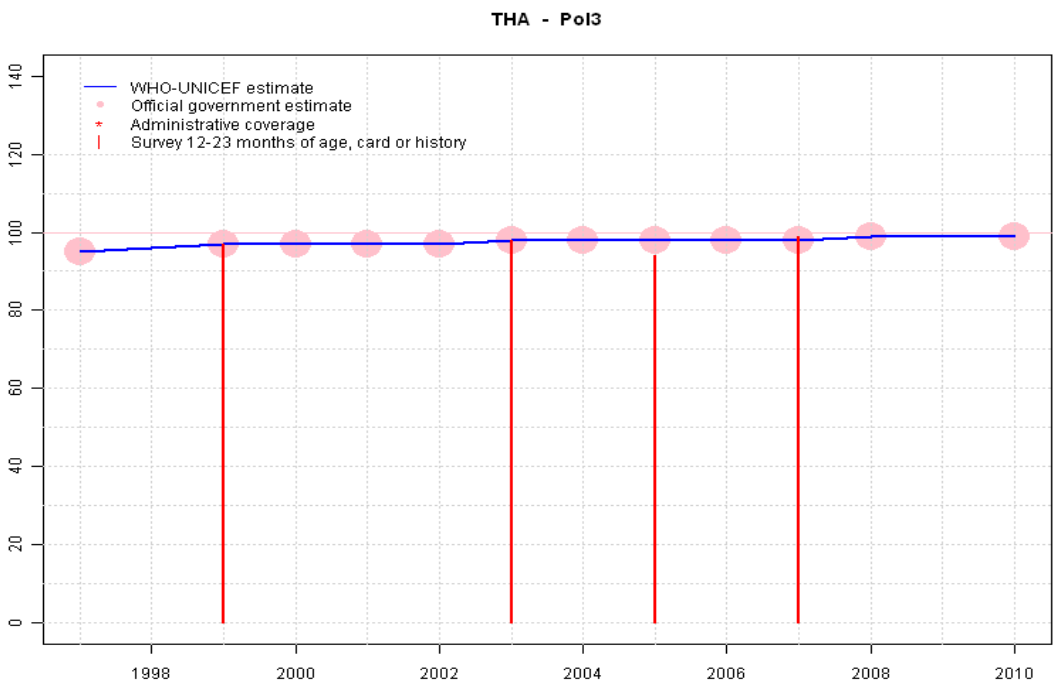


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	95	96	97	97	96	96	98	98	98	98	98	99	99	99
Official	95	NA	97	97	96	96	98	98	98	98	98	99	NA	99
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	96	NA	NA	NA	98	NA	94	NA	99	NA	NA	NA

Description:

1997: Legacy estimate.
1998: Estimate based on interpolation between 1997 and 1999.
1999: Estimate based on reported data. 96 percent survey results supports reported data of 97 percent.
2000: Estimate based on reported data.
2001: Estimate based on reported data.
2002: Estimate based on reported data.
2003: Estimate based on reported data. 98 percent survey results supports reported data of 98 percent.
2004: Estimate based on reported data.
2005: Estimate based on reported data. 98 percent survey results supports reported data of 98 percent. Survey results of 94 percent modified for recall bias to 98 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 89 percent and 3d dose card only coverage of 89 percent.
2006: Estimate based on reported data.
2007: Estimate based on reported data. 99 percent survey results supports reported data of 98 percent.
2008: Estimate based on reported data.
2009: Estimate based on interpolation between 2008 and 2010.
2010: Estimate based on reported data.

Thailand - Pol3

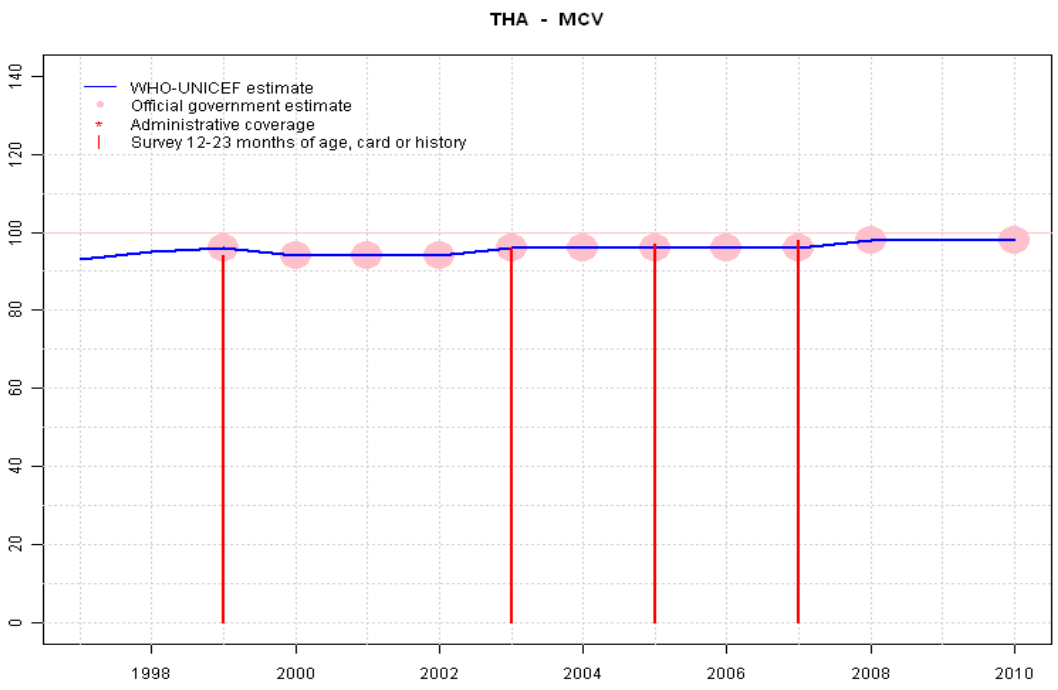


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	95	96	97	97	97	97	98	98	98	98	98	99	99	99
Official	95	NA	97	97	97	97	98	98	98	98	98	99	NA	99
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	97	NA	NA	NA	98	NA	94	NA	99	NA	NA	NA

Description:

1997: Legacy estimate.
1998: Estimate based on interpolation between 1997 and 1999.
1999: Estimate based on reported data. 97 percent survey results supports reported data of 97 percent.
2000: Estimate based on reported data.
2001: Estimate based on reported data.
2002: Estimate based on reported data.
2003: Estimate based on reported data. 98 percent survey results supports reported data of 98 percent.
2004: Estimate based on reported data.
2005: Estimate based on reported data. 98 percent survey results supports reported data of 98 percent. Survey results of 94 percent modified for recall bias to 98 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 88 percent and 3d dose card only coverage of 88 percent.
2006: Estimate based on reported data.
2007: Estimate based on reported data. 99 percent survey results supports reported data of 98 percent.
2008: Estimate based on reported data.
2009: Estimate based on interpolation between 2008 and 2010.
2010: Estimate based on reported data.

Thailand - MCV

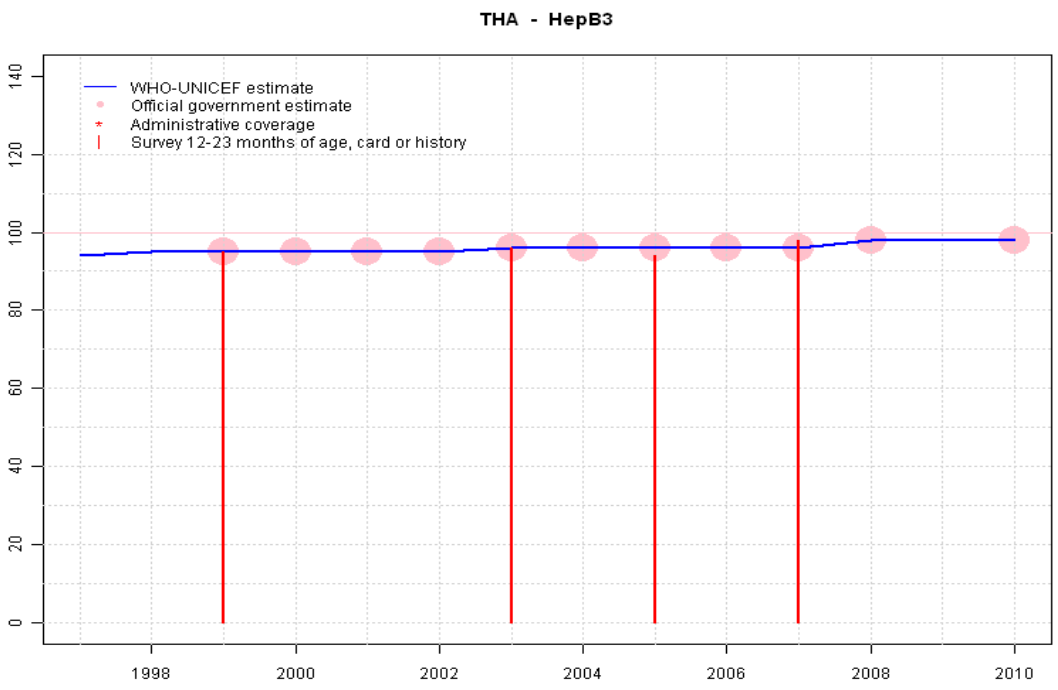


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	93	95	96	94	94	94	96	96	96	96	96	98	98	98
Official	NA	NA	96	94	94	94	96	96	96	96	96	98	NA	98
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	94	NA	NA	NA	96	NA	97	NA	98	NA	NA	NA

Description:

1997: Legacy estimate.
1998: Estimate based on interpolation between 1997 and 1999.
1999: Estimate based on reported data. 94 percent survey results supports reported data of 96 percent.
2000: Estimate based on reported data.
2001: Estimate based on reported data.
2002: Estimate based on reported data.
2003: Estimate based on reported data. 96 percent survey results supports reported data of 96 percent.
2004: Estimate based on reported data.
2005: Estimate based on reported data. 97 percent survey results supports reported data of 96 percent.
2006: Estimate based on reported data.
2007: Estimate based on reported data. 98 percent survey results supports reported data of 96 percent.
2008: Estimate based on reported data.
2009: Estimate based on interpolation between 2008 and 2010.
2010: Estimate based on reported data.

Thailand - HepB3

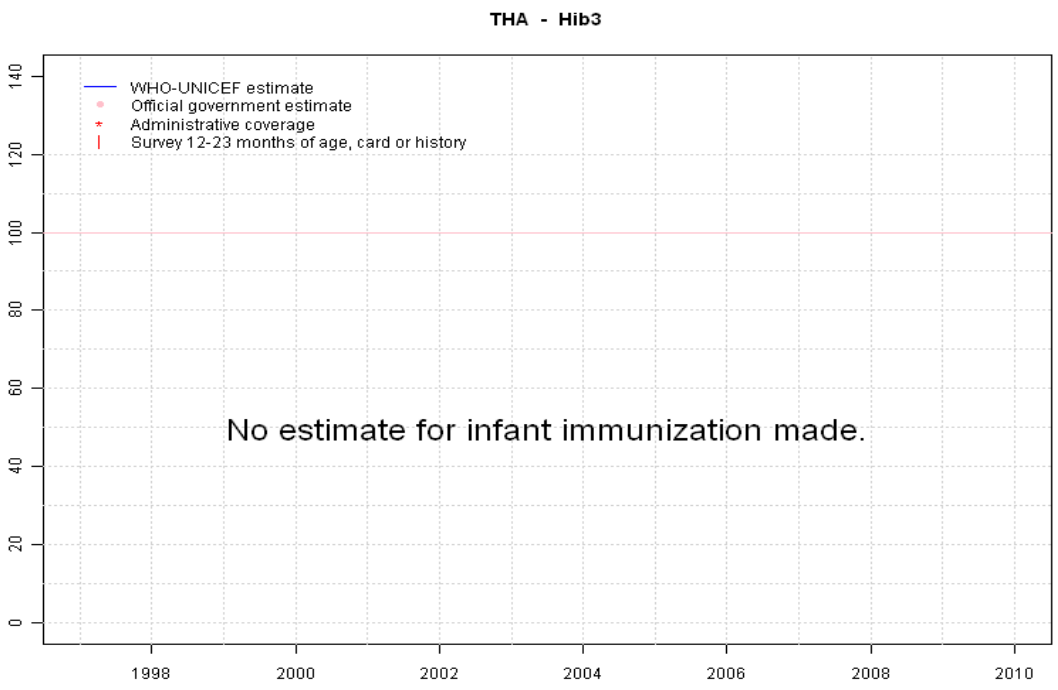


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	94	95	95	95	95	95	96	96	96	96	96	98	98	98
Official	NA	NA	95	95	95	95	96	96	96	96	96	98	NA	98
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	95	NA	NA	NA	96	NA	94	NA	98	NA	NA	NA

Description:

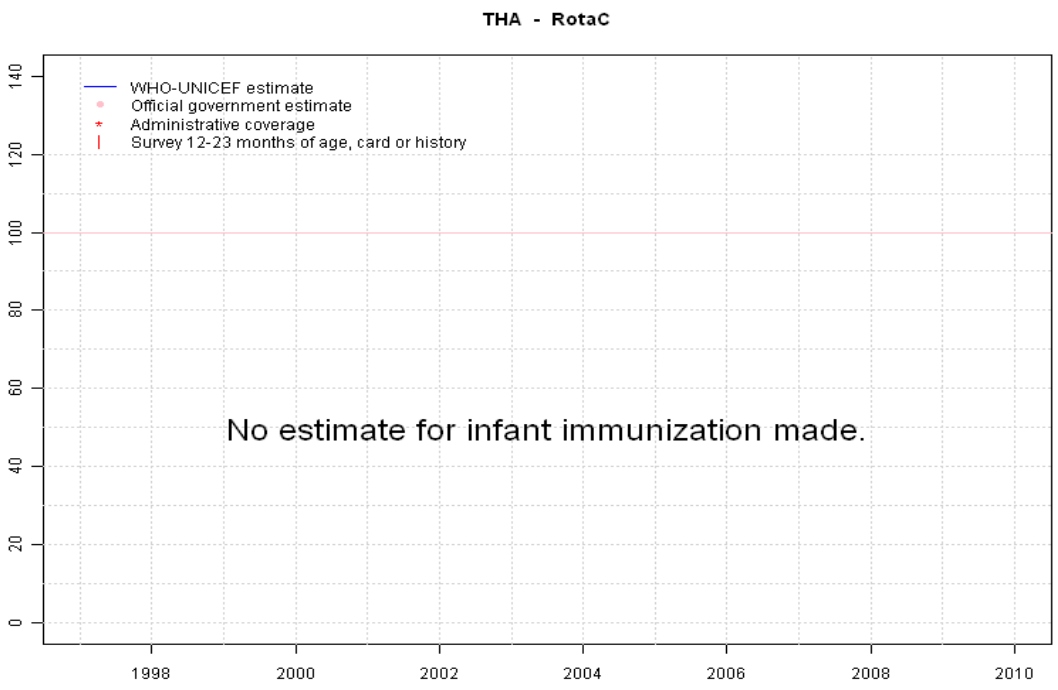
1997: Legacy estimate.
1998: Estimate based on interpolation between 1997 and 1999.
1999: Estimate based on reported data. 95 percent survey results supports reported data of 95 percent.
2000: Estimate based on reported data.
2001: Estimate based on reported data.
2002: Estimate based on reported data.
2003: Estimate based on reported data. 96 percent survey results supports reported data of 96 percent.
2004: Estimate based on reported data.
2005: Estimate based on reported data. 97 percent survey results supports reported data of 96 percent. Survey results of 94 percent modified for recall bias to 97 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 89 percent and 3d dose card only coverage of 88 percent.
2006: Estimate based on reported data.
2007: Estimate based on reported data. 98 percent survey results supports reported data of 96 percent.
2008: Estimate based on reported data.
2009: Estimate based on interpolation between 2008 and 2010.
2010: Estimate based on reported data.

Thailand - Hib3



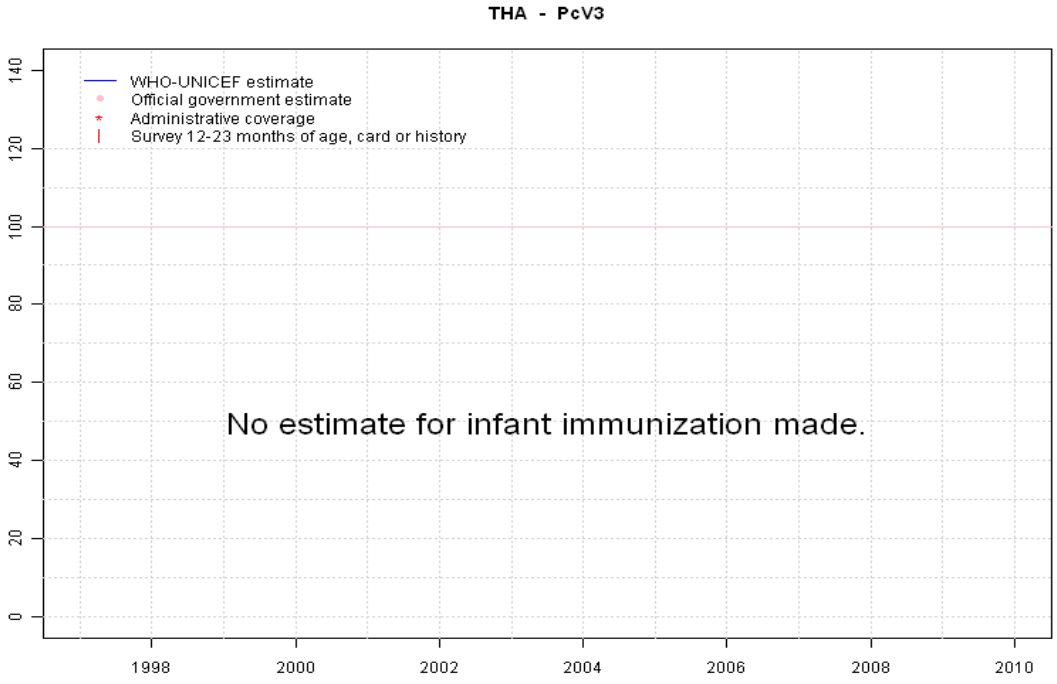
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Thailand - RotaC



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Thailand - PcV3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Thailand - survey details

2007 Immunization Coverage Survey: Thailand 2008

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	100	12-23 m	1800	97
DTP3	Card or History	99	12-23 m	1800	97
HepB3	Card or History	98	12-23 m	1800	97
MCV	Card or History	98	12-23 m	1800	97
Pol3	Card or History	99	12-23 m	1800	97

2005 Thailand Multiple Indicator Cluster Survey, December 2005 – February 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	98	12-23 m	1895	88
BCG	Card	88	12-23 m	1895	88
BCG	Card or History	98	12-23 m	1895	88
BCG	History	10	12-23 m	1895	88
DTP1	C or H <12 months	98	12-23 m	1895	88
DTP1	History	9	12-23 m	1895	88
DTP1	Card	89	12-23 m	1895	88
DTP1	Card or History	98	12-23 m	1895	88
DTP3	C or H <12 months	92	12-23 m	1895	88
DTP3	Card	89	12-23 m	1895	88
DTP3	Card or History	94	12-23 m	1895	88
DTP3	History	5	12-23 m	1895	88
HepB1	History	9	12-23 m	1895	88
HepB1	Card	89	12-23 m	1895	88
HepB1	Card or History	98	12-23 m	1895	88
HepB1	C or H <12 months	98	12-23 m	1895	88
HepB3	Card	88	12-23 m	1895	88
HepB3	Card or History	94	12-23 m	1895	88
HepB3	History	6	12-23 m	1895	88
HepB3	C or H <12 months	92	12-23 m	1895	88
MCV	C or H <12 months	92	12-23 m	1895	88
MCV	Card	86	12-23 m	1895	88
MCV	Card or History	97	12-23 m	1895	88
MCV	History	10	12-23 m	1895	88
Pol1	C or H <12 months	98	12-23 m	1895	88
Pol1	Card	88	12-23 m	1895	88
Pol1	Card or History	98	12-23 m	1895	88
Pol1	History	10	12-23 m	1895	88
Pol3	C or H <12 months	92	12-23 m	1895	88
Pol3	History	5	12-23 m	1895	88
Pol3	Card	88	12-23 m	1895	88
Pol3	Card or History	94	12-23 m	1895	88

2003 Immunization Coverage Survey: Thailand 2003

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	100	12-23 m	2520	98
DTP3	Card or History	98	12-23 m	2520	98
HepB3	Card or History	96	12-23 m	2520	98
MCV	Card or History	96	12-23 m	2520	98
Pol3	Card or History	98	12-23 m	2520	98

1999 Immunization Coverage Survey: Thailand 1999

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	99	12-23 m	3369	94
DTP1	Card or History	98	12-23 m	3369	94
DTP3	Card or History	96	12-23 m	3369	94
HepB3	Card or History	95	12-23 m	3369	94
MCV	Card or History	94	12-23 m	3369	94
Pol3	Card or History	97	12-23 m	3369	94

Further information and estmates for 1980-1996 are available at:
http://www.childinfo.org/immunization_countryreports.html
http://www.who.int/immunization_monitoring/routine/immunization_coverage/en/index4.html

Thailand

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.

Year	PAB coverage estimate (%)
1997	82
1998	83
1999	85
2000	85
2001	86
2002	86
2003	88
2004	88
2005	88
2006	88
2007	89
2008	91
2009	91
2010	91

[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.