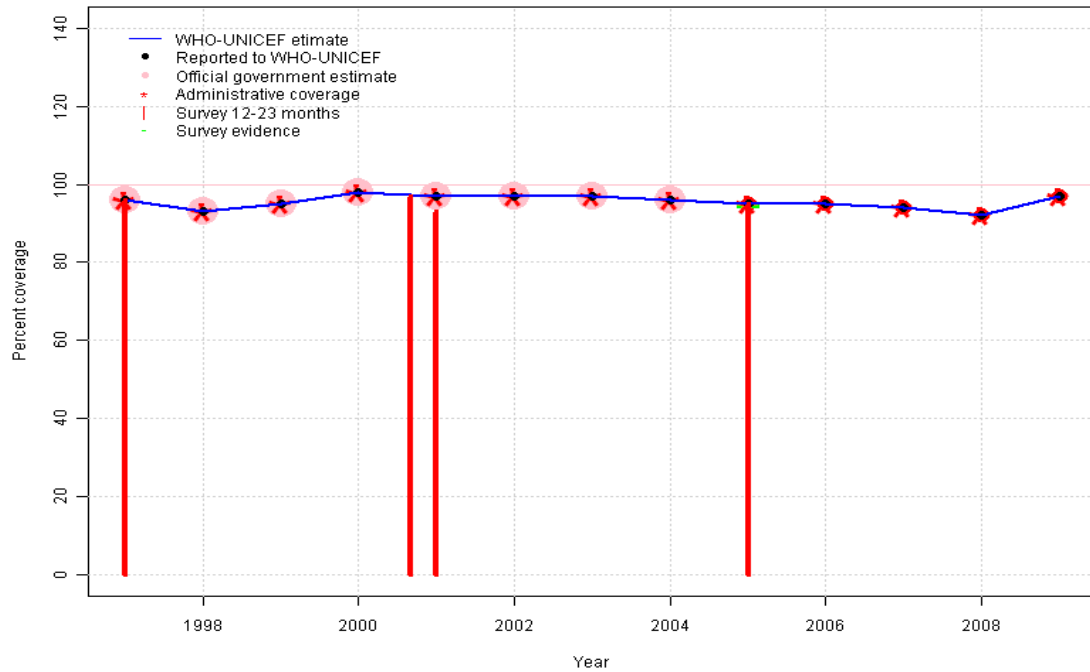


Viet Nam - BCG

VNM - BCG

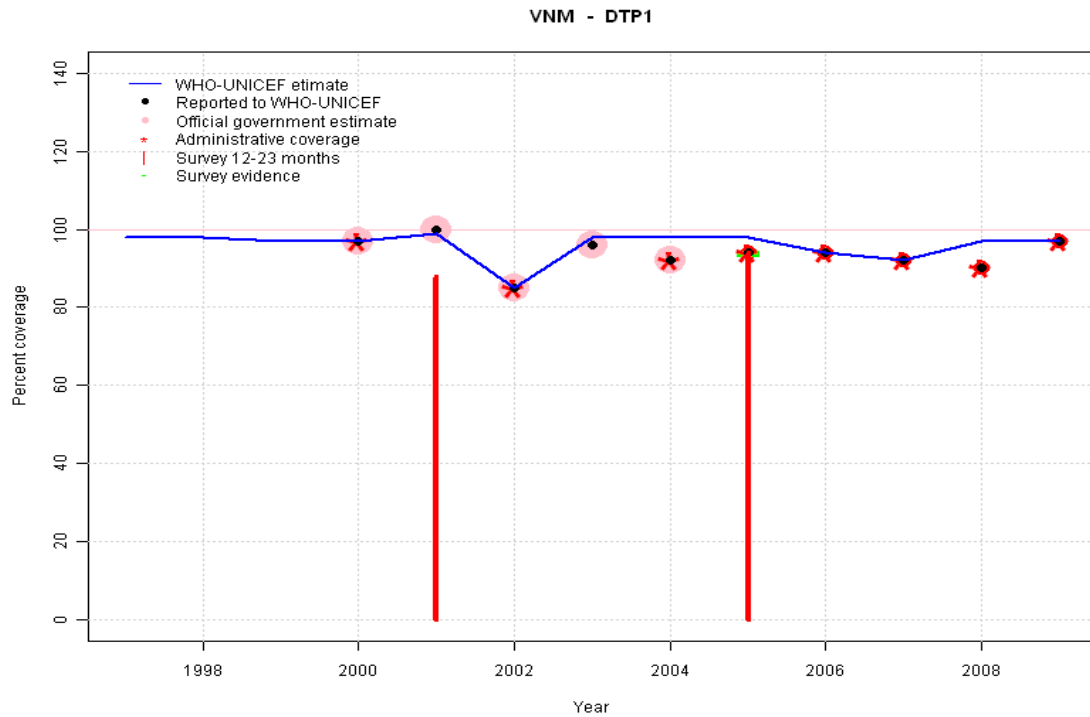


Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data.
- 2000: Estimate based on reported data.
- 2001: Estimate based on reported data. Survey results of 97 percent with sample size 0 ignored; sample size less than 300. Survey results of 93 percent ignored by working group.
- 2002: Estimate based on reported data.
- 2003: Estimate based on reported data.
- 2004: Estimate based on reported data.
- 2005: Estimate based on reported data (95 percent) confirmed by survey (95 percent).
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimate based on reported data.
- 2009: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	96	93	95	98	97	97	97	96	95	95	94	92	97
Reported	96	93	95	98	97	97	97	96	95	95	94	92	97
Official	96	93	95	98	97	97	97	96	NA	NA	NA	NA	NA
Administrative	96	93	95	98	97	97	97	96	95	95	94	92	97
Survey	96	NA	NA	NA	NA	NA	NA	NA	95	NA	NA	NA	NA

Viet Nam - DTP1



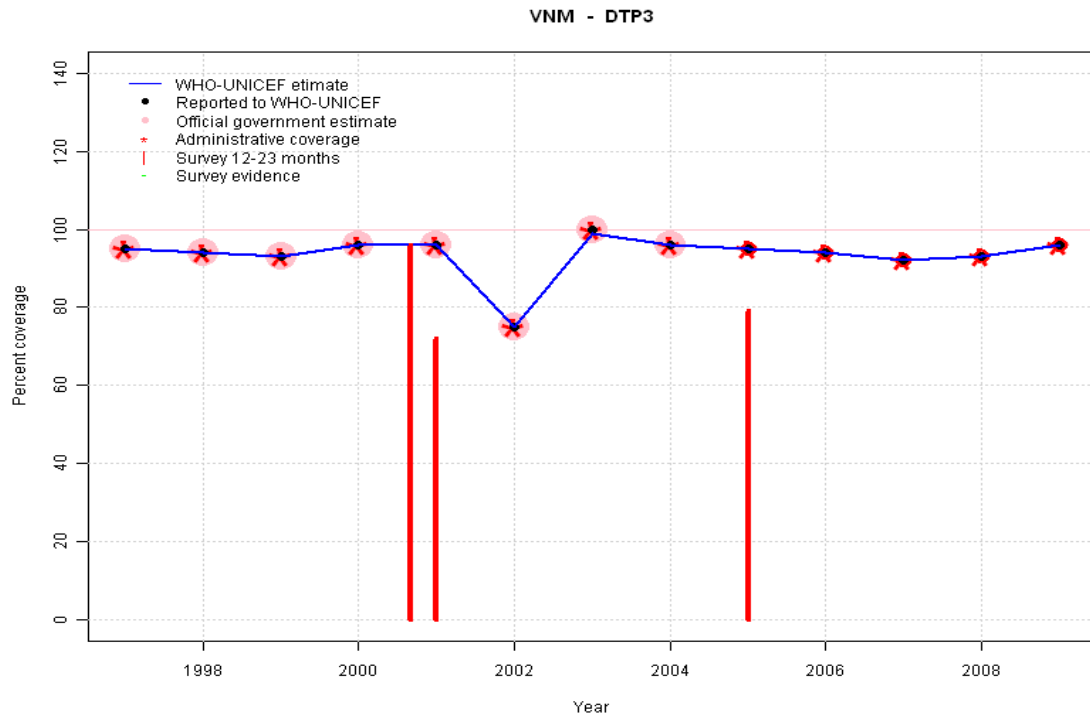
Description:

- 1997: Legacy estimate.
- 1998: Estimate interpolated between 1997 and 2000 estimates.
- 1999: Estimate interpolated between 1997 and 2000 estimates.
- 2000: Estimate is based on the reported data.
- 2001: Estimate based on reported data. Survey results of 88 percent ignored by working group.
- 2002: Estimate based on reported data. The decline in 2002 reflects vaccine shortage due to frozen vaccine.
- 2003: Estimated DTP3 greater than estimated DTP1; DTP1 estimate based on the relationship between DTP1 and DTP3 from 282 surveys.
- 2004: Estimated DTP3 greater than estimated DTP1; DTP1 estimate based on the relationship between DTP1 and DTP3 from 282 surveys.
- 2005: Estimated DTP3 greater than estimated DTP1; DTP1 estimate based on the relationship between DTP1 and DTP3 from 282 surveys.
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimated DTP3 greater than estimated DTP1; DTP1 estimate based on the relationship between DTP1 and DTP3 from 282 surveys.
- 2009: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	98	98	97	97	99	85	98	98	98	94	92	97	97
Reported	NA	NA	NA	97	100	85	96	92	94	94	92	90	97
Official	NA	NA	NA	97	100	85	96	92	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	97	NA	85	NA	92	94	94	92	90	97
Survey	NA	NA	NA	NA	NA	NA	NA	NA	94	NA	NA	NA	NA

Viet Nam - DTP3

Description:

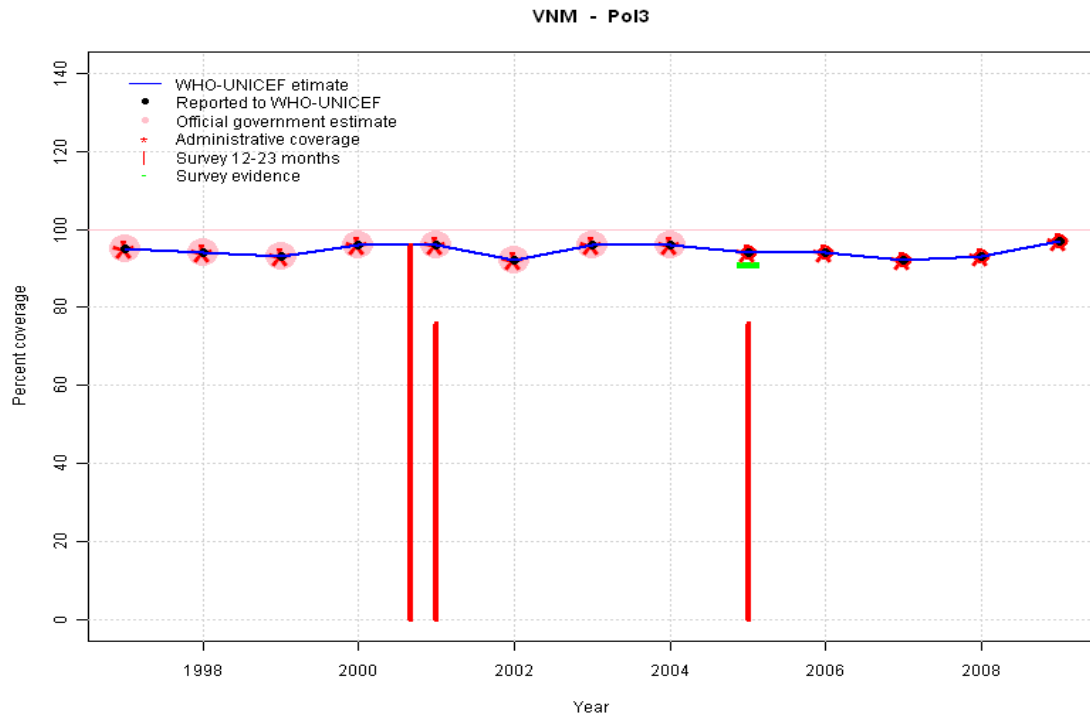


- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data.
- 2000: Estimate based on reported data.
- 2001: Estimate based on reported data. Survey results of 96 percent with sample size 0 ignored; sample size less than 300. Survey results of 72 percent ignored by working group.
- 2002: Estimate based on reported data. The decline in 2002 reflects vaccine shortage due to frozen vaccine.
- 2003: Estimate based on reported data.
- 2004: Estimate based on reported data.
- 2005: Estimate based on reported data. Survey results of 79 percent ignored by working group. The 2006 MICS survey has a card retention rate of 38.42
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimate based on reported data.
- 2009: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	95	94	93	96	96	75	99	96	95	94	92	93	96
Reported	95	94	93	96	96	75	100	96	95	94	92	93	96
Official	95	94	93	96	96	75	100	96	NA	NA	NA	NA	NA
Administrative	95	94	93	96	96	75	100	96	95	94	92	93	96
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Viet Nam - Pol3

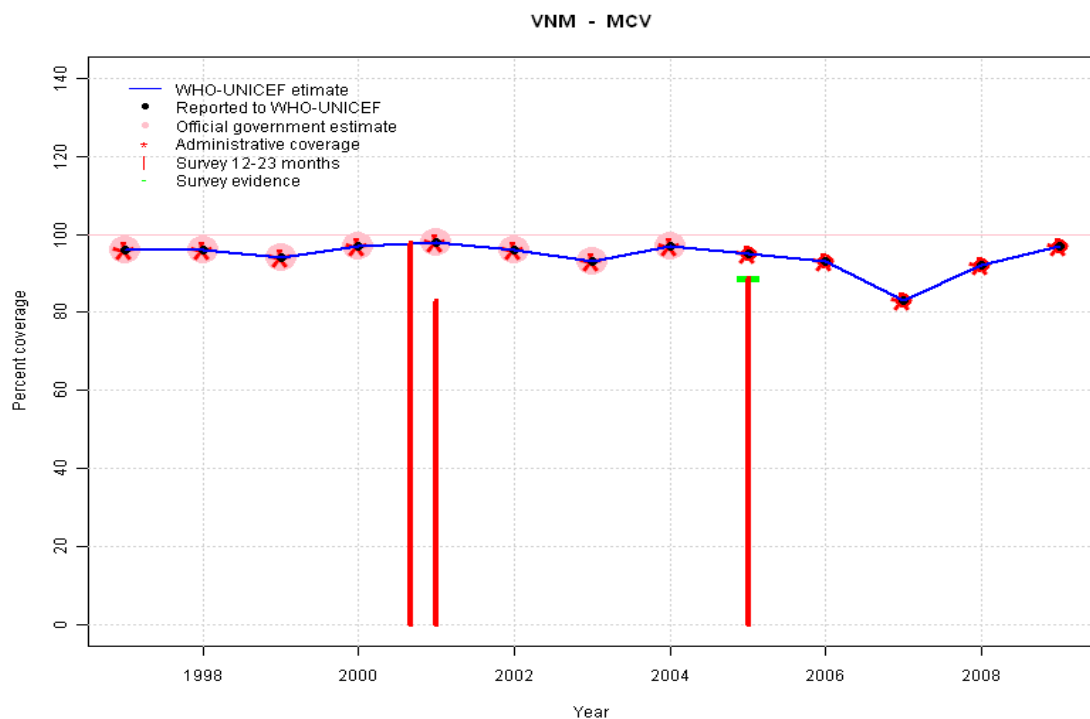
Description:



- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data.
- 2000: Estimate based on reported data.
- 2001: Estimate based on reported data. Survey results of 96 percent with sample size 0 ignored; sample size less than 300. Survey results of 76 percent ignored by working group.
- 2002: Estimate based on reported data.
- 2003: Estimate based on reported data.
- 2004: Estimate based on reported data.
- 2005: Estimate based on reported data (94 percent) confirmed by survey (91 percent). Survey results (76 percent) adjusted for recall bias to 91 percent based on first dose card or history coverage (96 percent) and documented drop-out between first (38 percent) and third (36 percent) doses.
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimate based on reported data.
- 2009: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	95	94	93	96	96	92	96	96	94	94	92	93	97
Reported	95	94	93	96	96	92	96	96	94	94	92	93	97
Official	95	94	93	96	96	92	96	96	NA	NA	NA	NA	NA
Administrative	95	94	93	96	96	92	96	96	94	94	92	93	97
Survey	NA	NA	NA	NA	NA	NA	NA	NA	91	NA	NA	NA	NA

Viet Nam - MCV

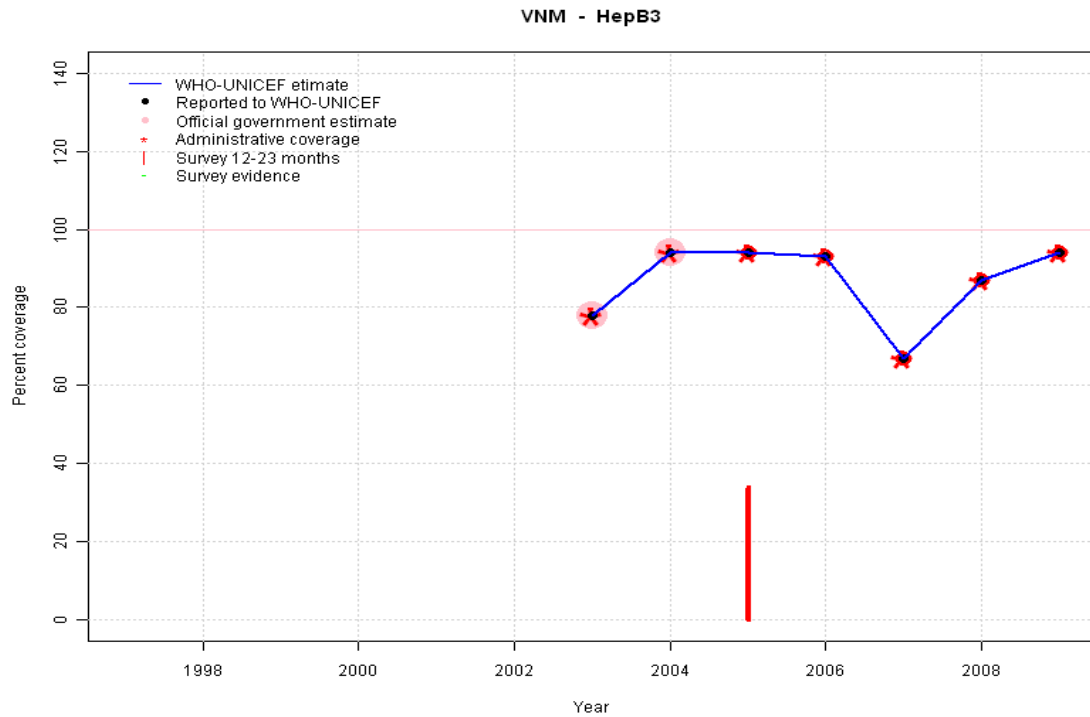


Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data.
- 2000: Estimate based on reported data.
- 2001: Estimate based on reported data. Survey results of 98 percent with sample size 0 ignored; sample size less than 300. Survey results of 83 percent ignored by working group.
- 2002: Estimate based on reported data.
- 2003: Estimate based on reported data.
- 2004: Estimate based on reported data.
- 2005: Estimate based on reported data (95 percent) confirmed by survey (89 percent).
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimate based on reported data.
- 2009: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	96	96	94	97	98	96	93	97	95	93	83	92	97
Reported	96	96	94	97	98	96	93	97	95	93	83	92	97
Official	96	96	94	97	98	96	93	97	NA	NA	NA	NA	NA
Administrative	96	96	94	97	98	96	93	97	95	93	83	92	97
Survey	NA	NA	NA	NA	NA	NA	NA	NA	89	NA	NA	NA	NA

Viet Nam - HepB3

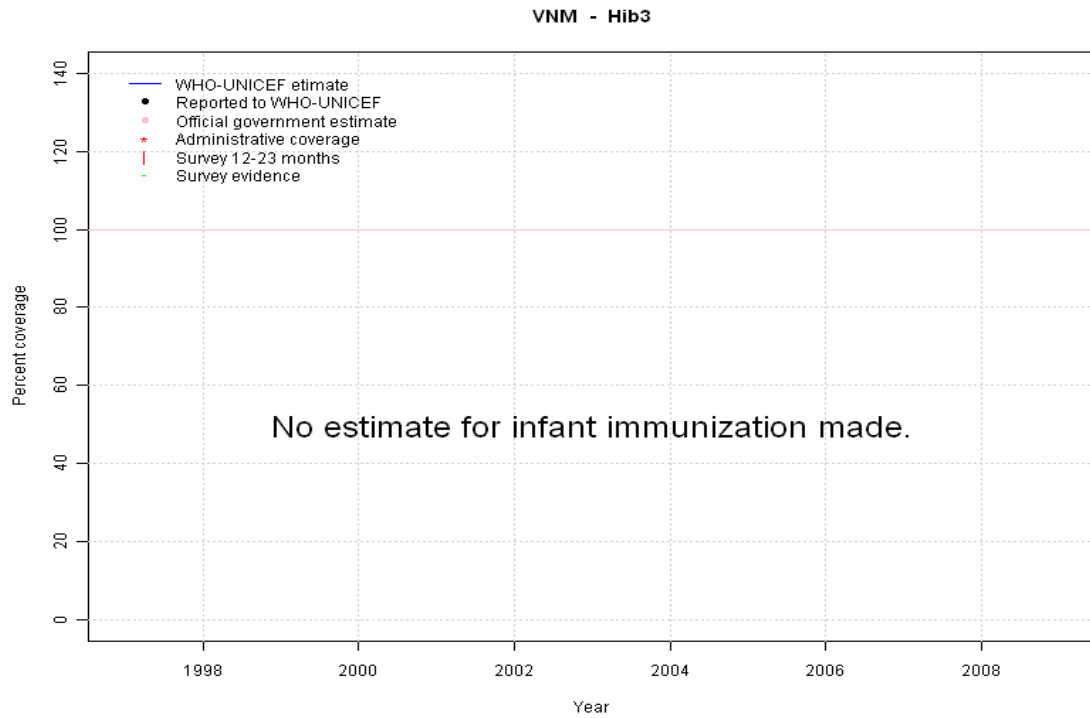


Description:

- 2003: Estimate based on reported data. HepB introduced in 2003 Vaccine presentation is HepB .
- 2004: Estimate based on reported data.
- 2005: Estimate based on reported data. Survey results of 34 percent ignored by working group. The 2006 MICS survey has a card retention rate of 38.42006: Estimate based on reported data.
- 2007: Estimate based on reported data. There was a stock-out of one month in 2007.
- 2008: Estimate based on reported data.
- 2009: Estimate based on reported data.

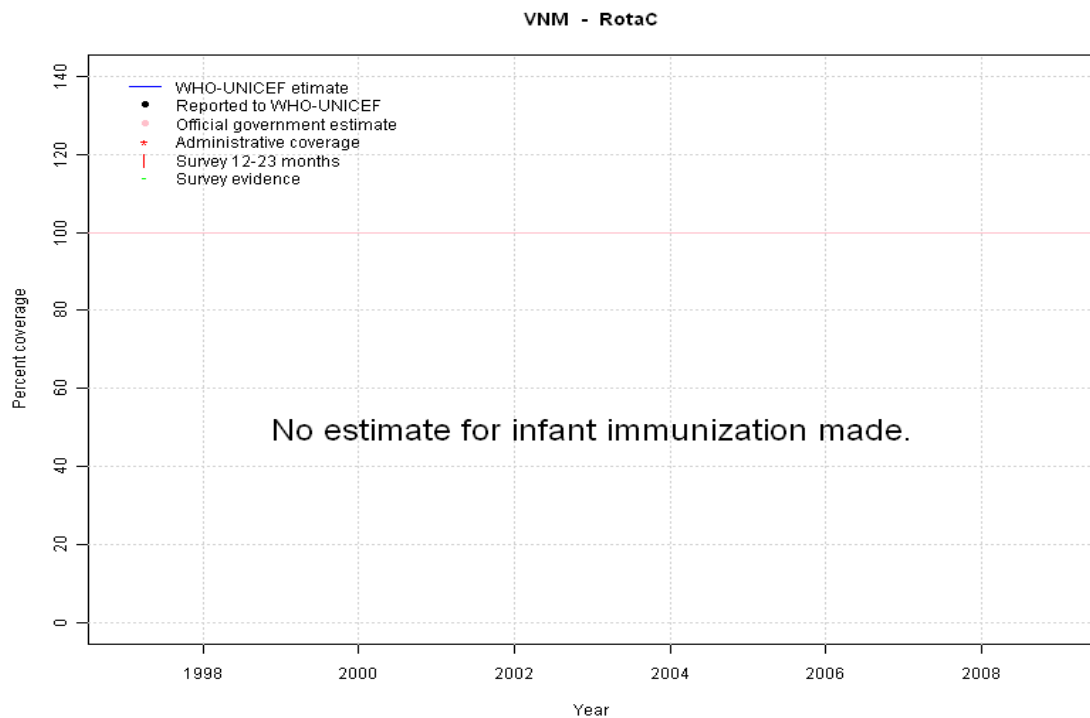
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	NA	NA	NA	NA	NA	NA	78	94	94	93	67	87	94
Reported	NA	NA	NA	NA	NA	NA	78	94	94	93	67	87	94
Official	NA	NA	NA	NA	NA	NA	78	94	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	78	94	94	93	67	87	94
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Viet Nam - Hib3



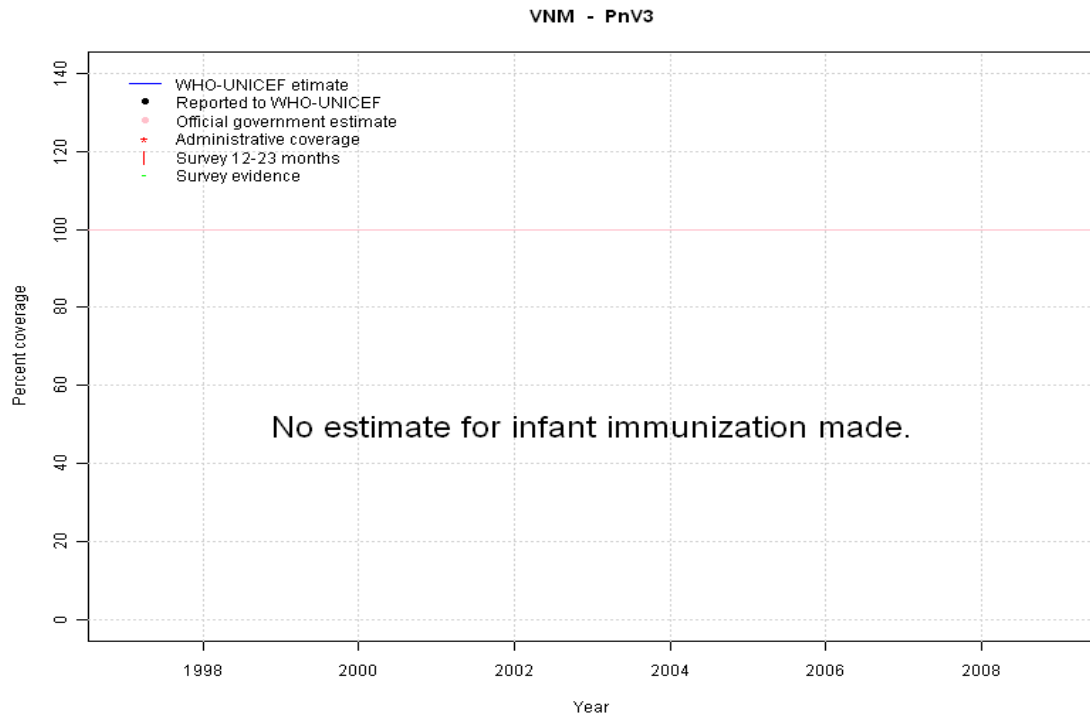
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reported	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA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

Viet Nam - RotaC



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

Viet Nam - PnV3



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

Viet Nam - survey details

2005 Dieu tra đánh giá các mục tiêu về trẻ em và phụ nữ Việt Nam 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	History	57	12-23 m	555	38
BCG	C or H <12 months	94	12-23 m	555	38
BCG	Card	38	12-23 m	555	38
BCG	Card or History	95	12-23 m	555	38
DTP1	Card	38	12-23 m	555	38
DTP1	Card or History	94	12-23 m	555	38
DTP1	History	56	12-23 m	555	38
DTP1	C or H <12 months	92	12-23 m	555	38
DTP3	C or H <12 months	76	12-23 m	555	38
DTP3	Card	36	12-23 m	555	38
DTP3	Card or History	79	12-23 m	555	38
DTP3	History	43	12-23 m	555	38
HepB1	Card or History	38	12-23 m	555	38
HepB1	Card	36	12-23 m	555	38
HepB1	History	1	12-23 m	555	38
HepB1	C or H <12 months	37	12-23 m	555	38
HepB3	C or H <12 months	32	12-23 m	555	38
HepB3	Card	34	12-23 m	555	38
HepB3	Card or History	34	12-23 m	555	38
HepB3	History	0	12-23 m	555	38
MCV	C or H <12 months	87	12-23 m	555	38
MCV	Card	34	12-23 m	555	38
MCV	Card or History	89	12-23 m	555	38
MCV	History	55	12-23 m	555	38
Pol1	C or H <12 months	94	12-23 m	555	38
Pol1	Card	38	12-23 m	555	38
Pol1	Card or History	96	12-23 m	555	38
Pol1	History	58	12-23 m	555	38
Pol3	Card	36	12-23 m	555	38
Pol3	Card or History	76	12-23 m	555	38
Pol3	History	39	12-23 m	555	38
Pol3	C or H <12 months	74	12-23 m	555	38

2001 Children Indicators in Vietnam 2001, 2002

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	97	12-23 m	0	0
DTP3	Card or History	96	12-23 m	0	0
MCV	Card or History	98	12-23 m	0	0
Pol3	Card or History	96	12-23 m	0	0

2001 Vietnam Demographic and Health Survey 2002, 2003

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	93	12-23 m	457	40
BCG	History	54	12-23 m	457	40
DTP1	Card	38	12-23 m	457	40
DTP1	Card or History	88	12-23 m	457	40
DTP1	History	50	12-23 m	457	40
DTP3	History	38	12-23 m	457	40
DTP3	Card or History	72	12-23 m	457	40
DTP3	Card	35	12-23 m	457	40
MCV	Card	36	12-23 m	457	40
MCV	Card or History	83	12-23 m	457	40
MCV	History	47	12-23 m	457	40
Pol1	Card	39	12-23 m	457	40
Pol1	Card or History	93	12-23 m	457	40
Pol1	History	54	12-23 m	457	40
Pol3	History	39	12-23 m	457	40
Pol3	Card	36	12-23 m	457	40
Pol3	Card or History	76	12-23 m	457	40

1997 National Review for the EPI 1998

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	94	12-23 m	1057	0
BCG	Card or History	96	12-23 m	1057	0

Viet Nam - survey details

Further information and estimates 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

Viet Nam

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.

From 2003 onward, reported PAB estimates have been used.

Year	PAB coverage estimate (%)
1997	86
1998	82
1999	83
2000	86
2001	86
2002	86
2003	85
2004	85
2005	86
2006	87
2007	86
2008	84
2009	87

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.