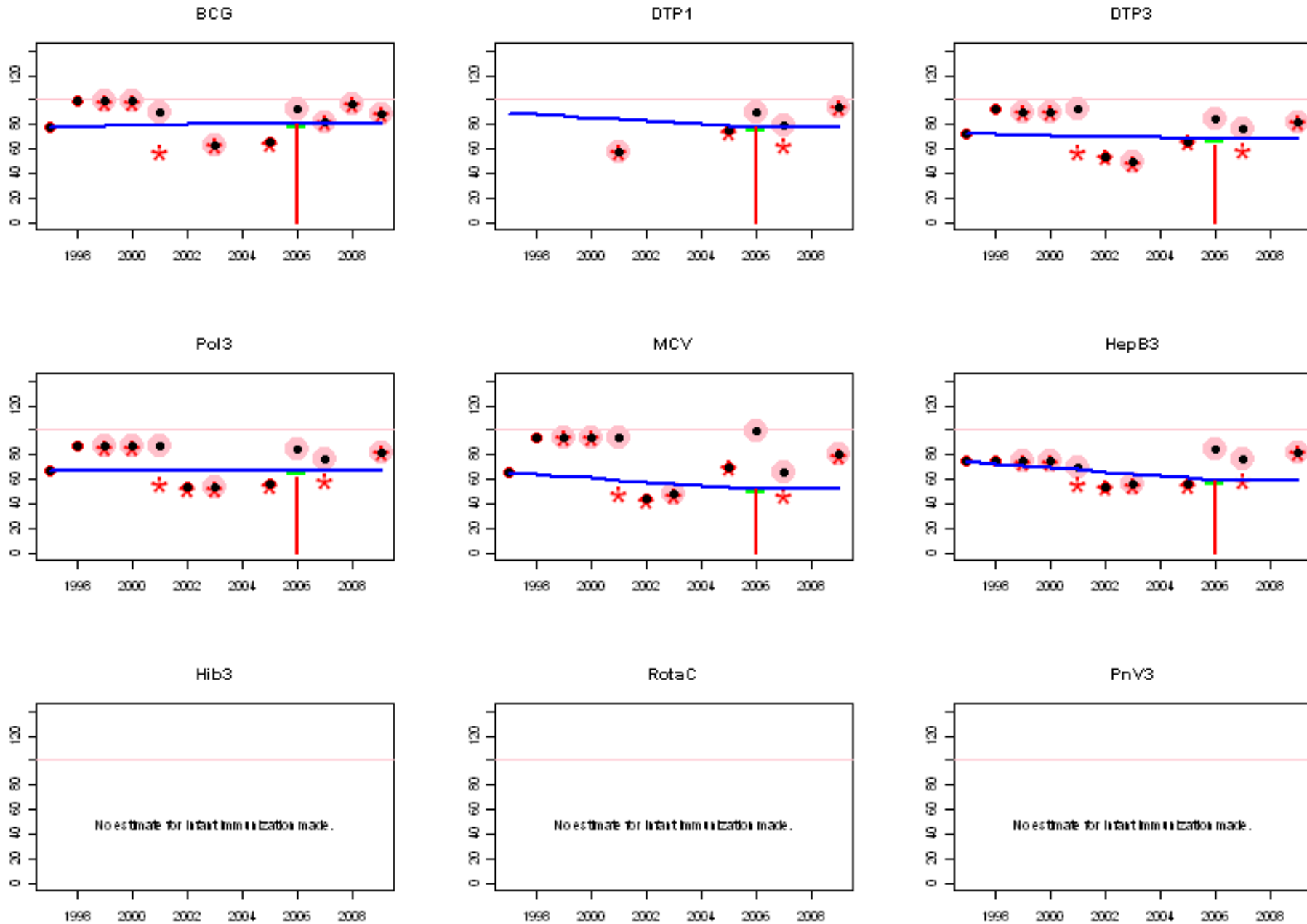
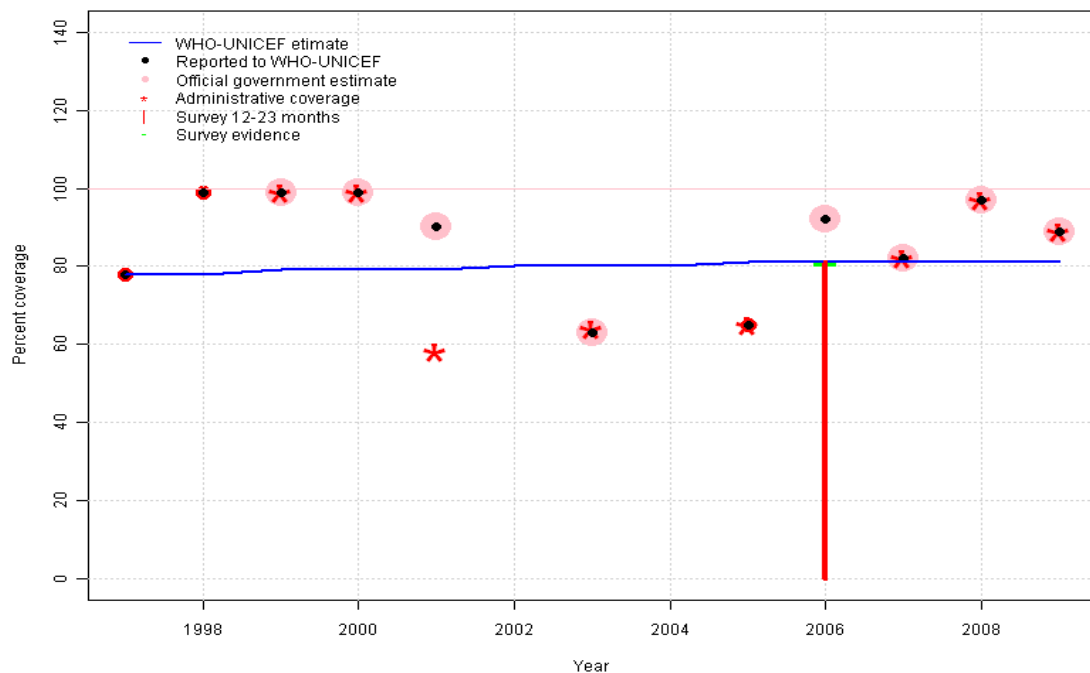


Vanuatu: WHO and UNICEF estimates of immunization coverage, 1997 - 2009



Vanuatu - BCG

VUT - BCG

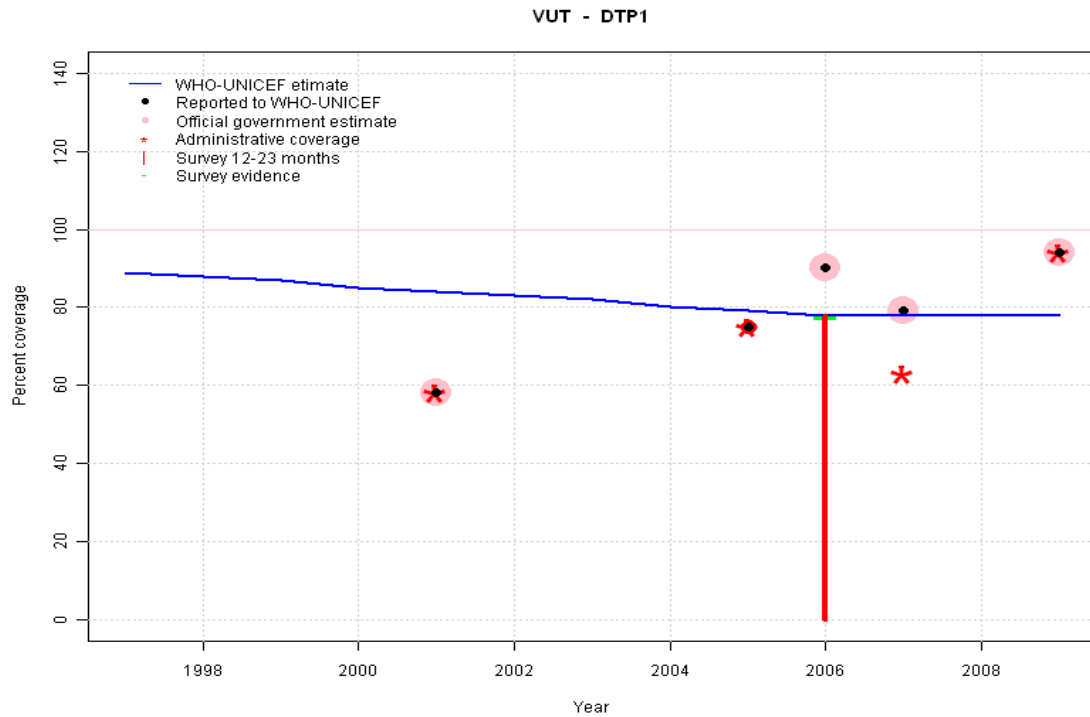


Description:

- 1997: Legacy estimate.
- 1998: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 1999: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2000: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2001: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2002: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2003: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2004: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2005: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2006: Estimate based on survey results. Reported data (92 percent) not consistent with survey results (81 percent).
- 2007: Estimate extrapolated from 2006 level (81 percent).
- 2008: Estimate extrapolated from 2006 level (81 percent).
- 2009: Estimate extrapolated from 2006 level (81 percent).

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	78	78	79	79	79	80	80	80	81	81	81	81	81
Reported	78	99	99	99	90	NA	63	NA	65	92	82	97	89
Official	NA	NA	99	99	90	NA	63	NA	NA	92	82	97	89
Administrative	NA	NA	99	99	58	NA	64	NA	65	NA	82	97	89
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	81	NA	NA	NA

Vanuatu - DTP1



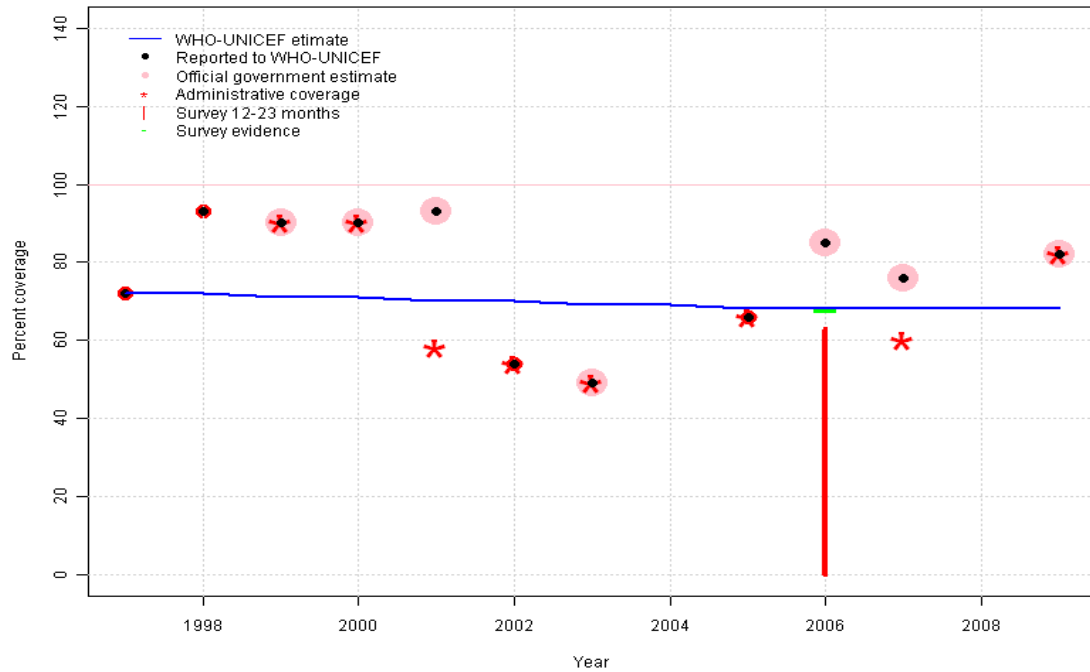
Description:

- 1997: Legacy estimate.
- 1998: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 1999: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2000: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2001: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2002: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2003: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2004: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2005: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2006: Estimate follows survey result. 2006 reported data (90 percent) inconsistent with data from other years.
- 2007: Estimate extrapolated from 2006 level (78 percent).
- 2008: Estimate extrapolated from 2006 level (78 percent).
- 2009: Estimate extrapolated from 2006 level (78 percent).

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	89	88	87	85	84	83	82	80	79	78	78	78	78
Reported	NA	NA	NA	NA	58	NA	NA	NA	75	90	79	NA	94
Official	NA	NA	NA	NA	58	NA	NA	NA	NA	90	79	NA	94
Administrative	NA	NA	NA	NA	58	NA	NA	NA	75	NA	63	NA	94
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	78	NA	NA	NA

Vanuatu - DTP3

VUT - DTP3



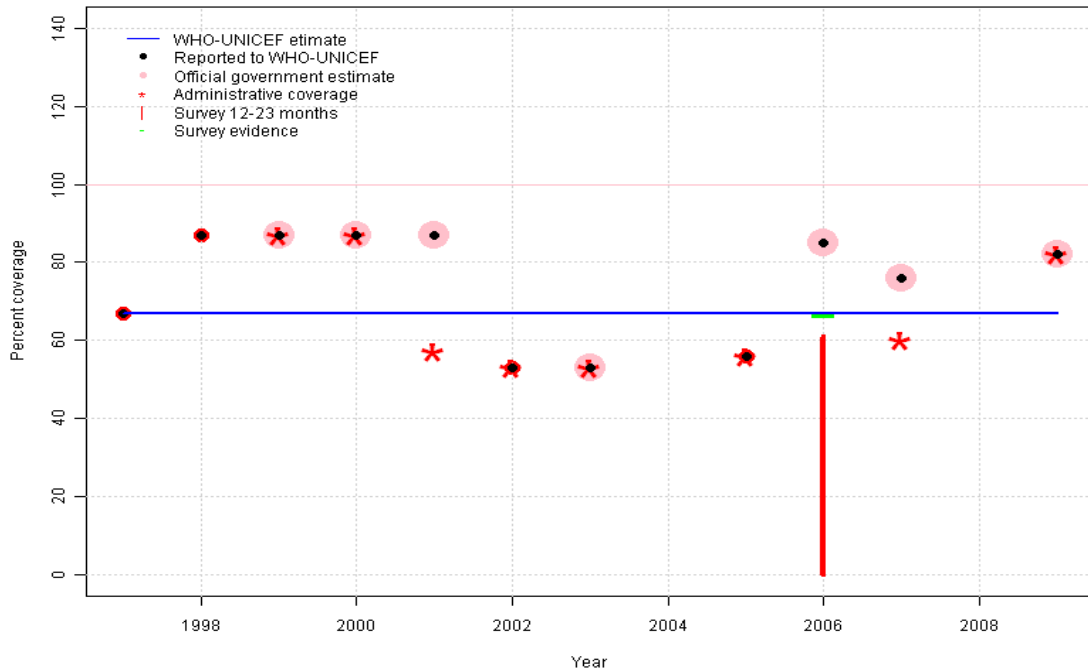
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	72	72	71	71	70	70	69	69	68	68	68	68	68
Reported	72	93	90	90	93	54	49	NA	66	85	76	NA	82
Official	NA	NA	90	90	93	NA	49	NA	NA	85	76	NA	82
Administrative	NA	NA	90	90	58	54	49	NA	66	NA	60	NA	82
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	68	NA	NA	NA

Description:

- 1997: Legacy estimate.
- 1998: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 1999: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2000: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2001: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2002: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2003: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2004: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2005: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2006: Estimate based on survey results. Reported data (85 percent) not consistent with survey results (68 percent). Survey results (63 percent) adjusted for recall bias to 68 percent based on first dose card or history coverage (78 percent) and documented drop-out between first (67 percent) and third (58 percent) doses.
- 2007: Estimate extrapolated from 2006 level (68 percent).
- 2008: Estimate extrapolated from 2006 level (68 percent).
- 2009: Estimate extrapolated from 2006 level (68 percent).

Vanuatu - Pol3

VUT - Pol3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	67	67	67	67	67	67	67	67	67	67	67	67	67
Reported	67	87	87	87	87	53	53	NA	56	85	76	NA	82
Official	NA	NA	87	87	87	NA	53	NA	NA	85	76	NA	82
Administrative	NA	NA	87	87	57	53	53	NA	56	NA	60	NA	82
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	67	NA	NA	NA

Description:

1997: Legacy estimate.

1998: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

1999: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

2000: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

2001: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

2002: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

2003: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

2004: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

2005: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

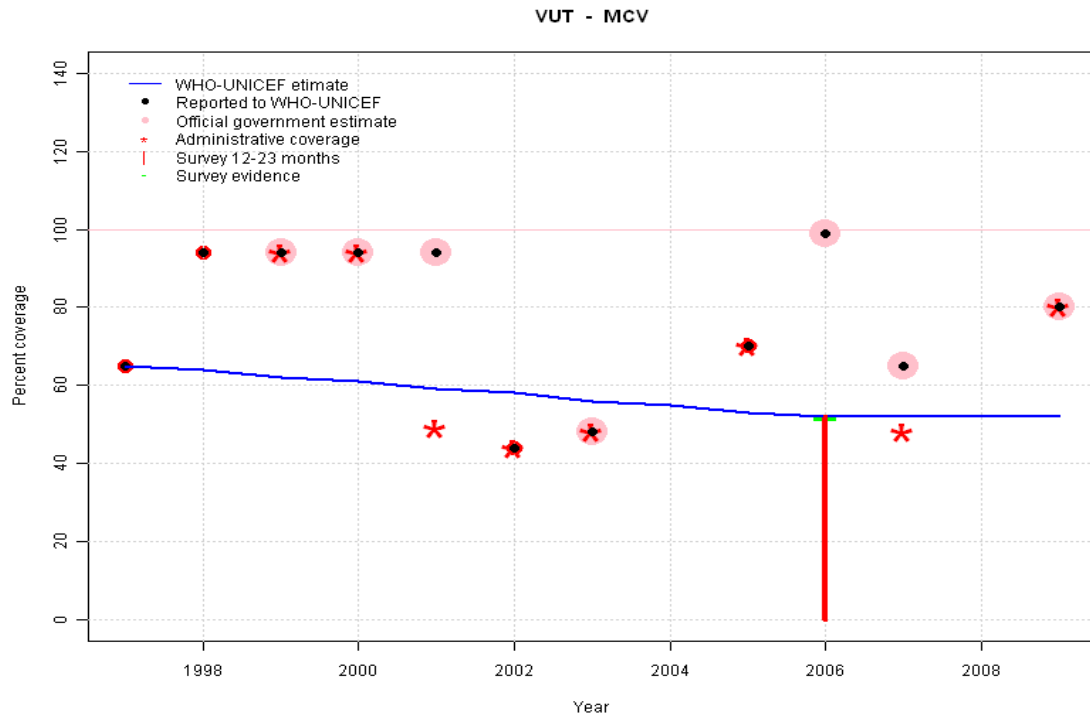
2006: Estimate based on survey results. Reported data (85 percent) not consistent with survey results (67 percent). Survey results (61 percent) adjusted for recall bias to 67 percent based on first dose card or history coverage (78 percent) and documented drop-out between first (66 percent) and third (57 percent) doses.

2007: Estimate extrapolated from 2006 level (67 percent).

2008: Estimate extrapolated from 2006 level (67 percent).

2009: Estimate extrapolated from 2006 level (67 percent).

Vanuatu - MCV



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	65	64	62	61	59	58	56	55	53	52	52	52	52
Reported	65	94	94	94	94	44	48	NA	70	99	65	NA	80
Official	NA	NA	94	94	94	NA	48	NA	NA	99	65	NA	80
Administrative	NA	NA	94	94	49	44	48	NA	70	NA	48	NA	80
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	52	NA	NA	NA

Description:

1997: Legacy estimate.

1998: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

1999: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

2000: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

2001: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

2002: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

2003: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

2004: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

2005: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.

2006: Estimate based on survey results. Reported data (68 percent) not consistent with survey results (52 percent). 2006 reported data (99 percent) inconsistent with data from other years. Reported coverage includes doses administered during the 2006 measles campaign.

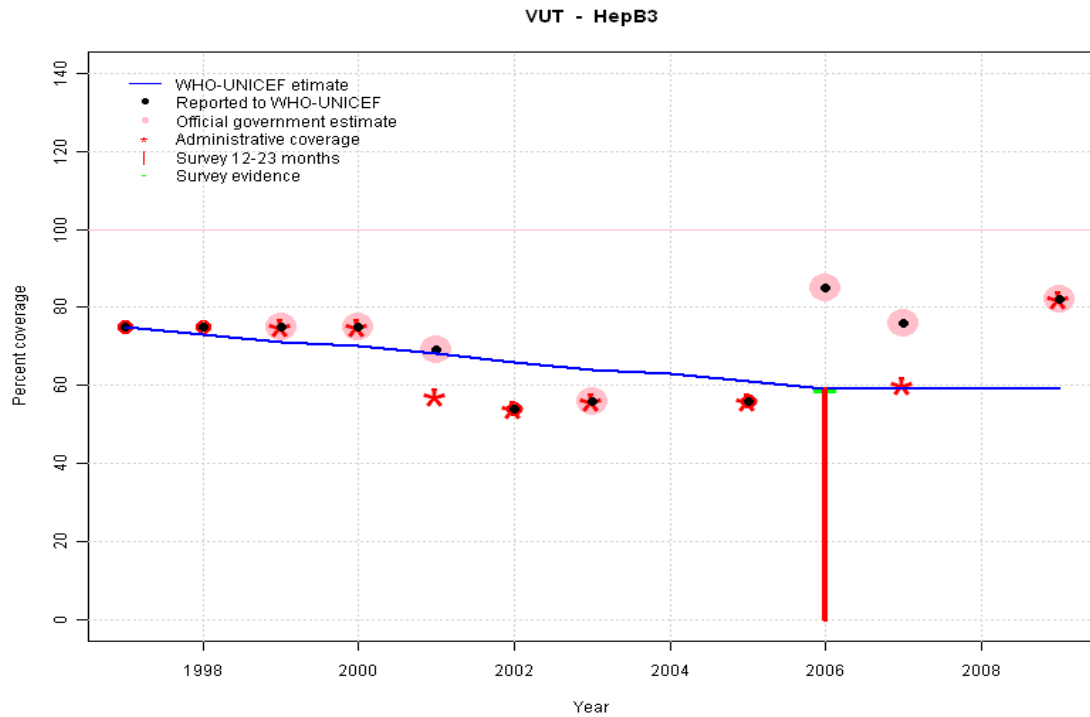
2007: Estimate extrapolated from 2006 level (52 percent).

2008: Estimate extrapolated from 2006 level (52 percent).

2009: Estimate extrapolated from 2006 level (52 percent).

Vanuatu - HepB3

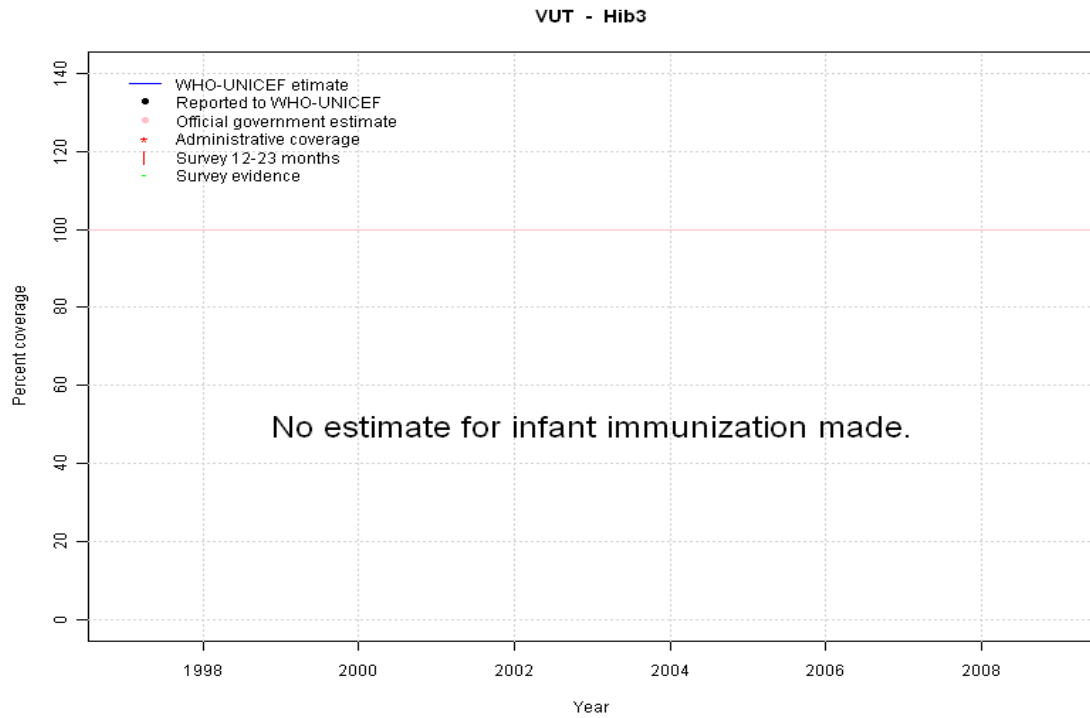
Description:



- 1997: Legacy estimate.
- 1998: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 1999: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2000: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2001: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2002: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2003: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2004: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2005: Estimate based on working group decision to interpolated between 1997 and 2006. Fluctuating and inconsistent data suggest poor reporting.
- 2006: Estimate based on survey results. Reported data (85 percent) not consistent with survey results (59 percent).
- 2007: Estimate extrapolated from 2006 level (59 percent).
- 2008: Estimate extrapolated from 2006 level (59 percent).
- 2009: Estimate extrapolated from 2006 level (59 percent).

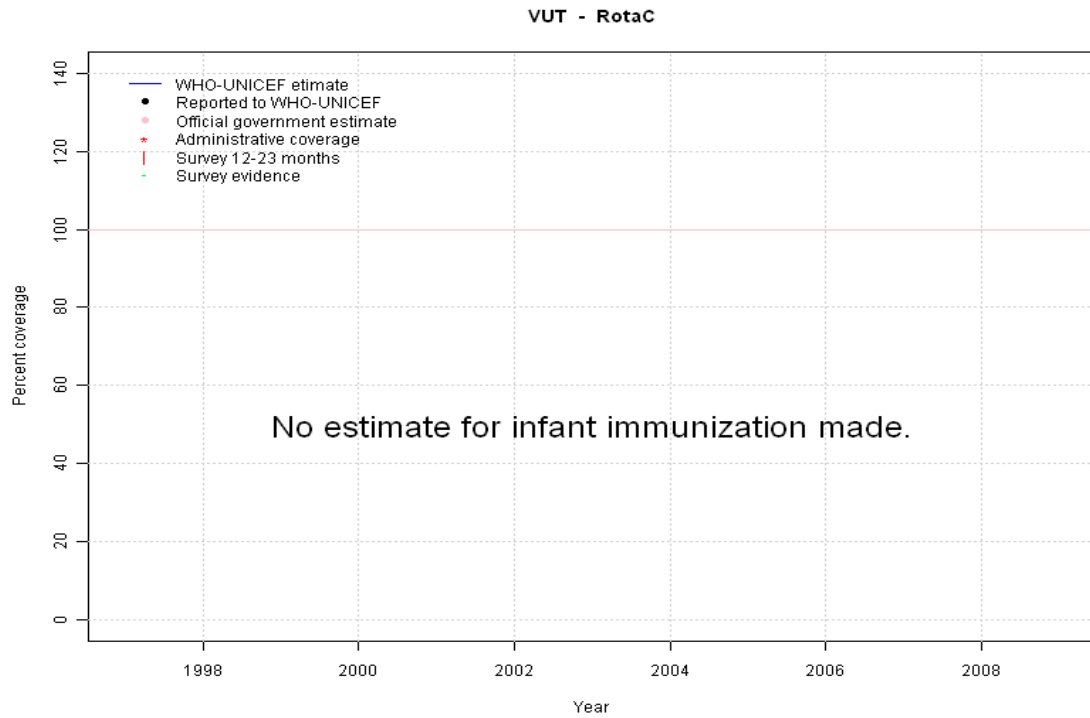
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	75	73	71	70	68	66	64	63	61	59	59	59	59
Reported	75	75	75	75	69	54	56	NA	56	85	76	NA	82
Official	NA	NA	75	75	69	NA	56	NA	NA	85	76	NA	82
Administrative	NA	NA	75	75	57	54	56	NA	56	NA	60	NA	82
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	59	NA	NA	NA

Vanuatu - Hib3



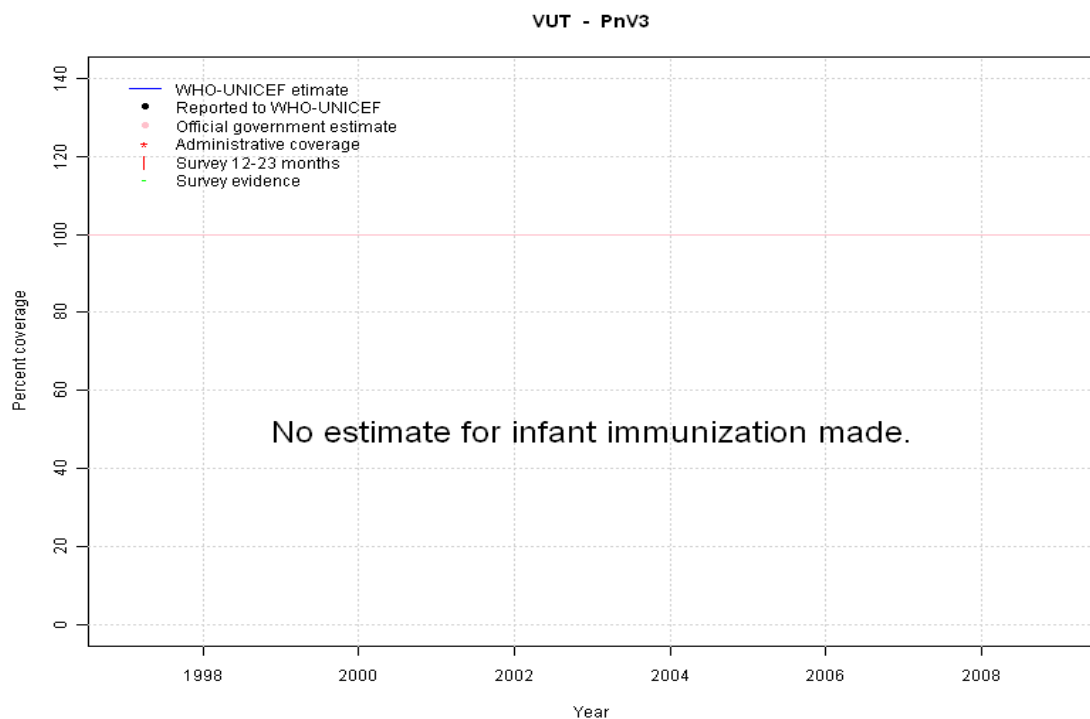
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reported	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA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

Vanuatu - 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

Vanuatu - 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

Vanuatu - survey details

2006 Vanuatu Multiple Indicator Cluster Survey 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	History	13	12-23 m	359	69
BCG	Card	68	12-23 m	359	69
BCG	C or H <12 months	79	12-23 m	359	69
BCG	Card or History	81	12-23 m	359	69
DTP1	History	11	12-23 m	359	69
DTP1	Card	67	12-23 m	359	69
DTP1	Card or History	78	12-23 m	359	69
DTP1	C or H <12 months	74	12-23 m	359	69
DTP3	Card	58	12-23 m	359	69
DTP3	C or H <12 months	58	12-23 m	359	69
DTP3	Card or History	63	12-23 m	359	69
DTP3	History	5	12-23 m	359	69
HepB1	History	0	12-23 m	359	69
HepB1	Card or History	66	12-23 m	359	69
HepB1	C or H <12 months	65	12-23 m	359	69

HepB1	Card	66	12-23 m	359	69
HepB3	Card	59	12-23 m	359	69
HepB3	History	0	12-23 m	359	69
HepB3	Card or History	59	12-23 m	359	69
HepB3	C or H <12 months	55	12-23 m	359	69
MCV	Card or History	52	12-23 m	359	69
MCV	History	9	12-23 m	359	69
MCV	Card	44	12-23 m	359	69
MCV	C or H <12 months	37	12-23 m	359	69
Pol1	C or H <12 months	76	12-23 m	359	69
Pol1	Card	66	12-23 m	359	69
Pol1	History	12	12-23 m	359	69
Pol1	Card or History	78	12-23 m	359	69
Pol3	History	4	12-23 m	359	69
Pol3	Card or History	61	12-23 m	359	69
Pol3	C or H <12 months	55	12-23 m	359	69
Pol3	Card	57	12-23 m	359	69

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

Vanuatu

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	23
1998	76
1999	84
2000	86
2001	87
2002	82
2003	77
2004	78
2005	84
2006	88
2007	73
2008	73
2009	73

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.