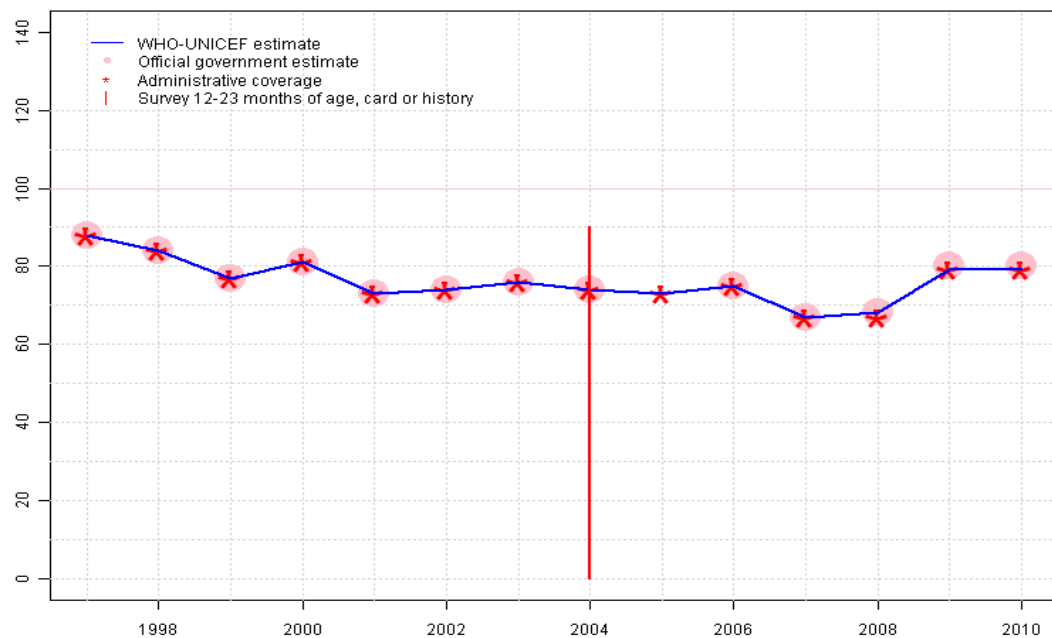


Papua New Guinea - BCG

PNG - BCG



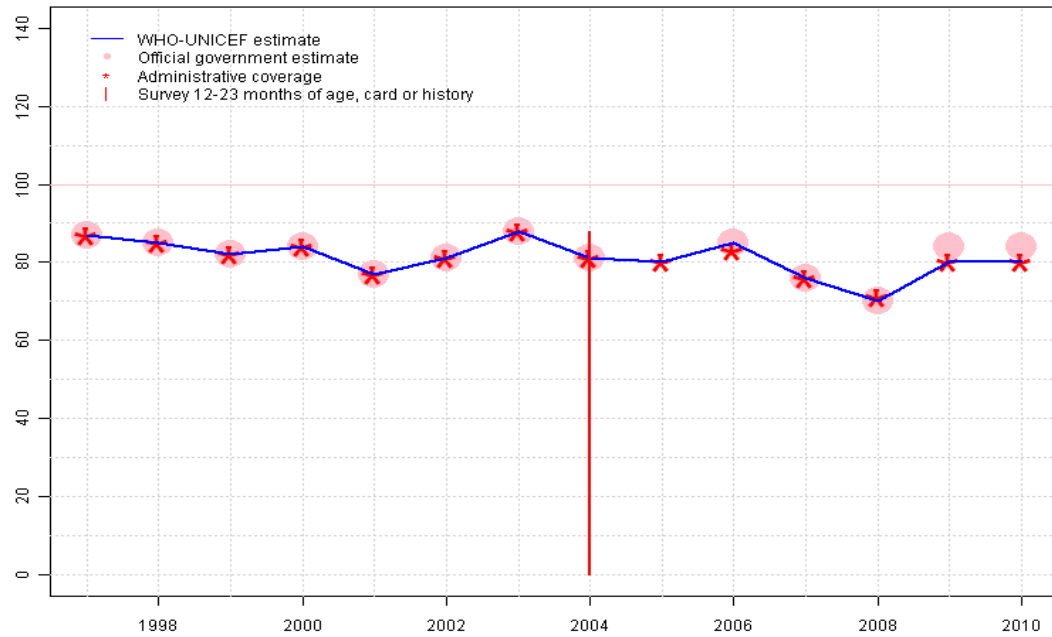
Description:

- 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.
- 2002: Estimate based on reported data.
- 2003: Estimate based on reported data.
- 2004: Estimate based on reported data. Survey not accepted. Survey results not consistent with comparable survey data.
- 2005: Estimate based on reported data.
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimate based on reported data.
- 2009: Estimate based on reported data. Public - private sector discrepancy noted by WHO and UNICEF, however, adjustment inconsistently applied across antigens. Current estimate of 79 percent changed from previous revision value of 80 percent.
- 2010: Estimate based on reported data. Public - private sector discrepancy noted by WHO and UNICEF, however, adjustment inconsistently applied across antigens.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	88	84	77	81	73	74	76	74	73	75	67	68	79	79
Official	88	84	77	81	73	74	76	74	NA	75	67	68	80	80
Administrative	88	84	77	81	73	74	76	74	73	75	67	67	79	79
Survey	NA	NA	NA	NA	NA	NA	NA	90	NA	NA	NA	NA	NA	NA

Papua New Guinea - DTP1

PNG - DTP1



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.

2002: Estimate based on reported data.

2003: Estimate based on reported data.

2004: Estimate based on reported data. 88 percent survey results supports reported data of 81 percent.

2005: Estimate based on reported data.

2006: Estimate based on reported data.

2007: Estimate based on reported data.

2008: Estimate based on reported data. Decline was the results of five months vaccine shortage.

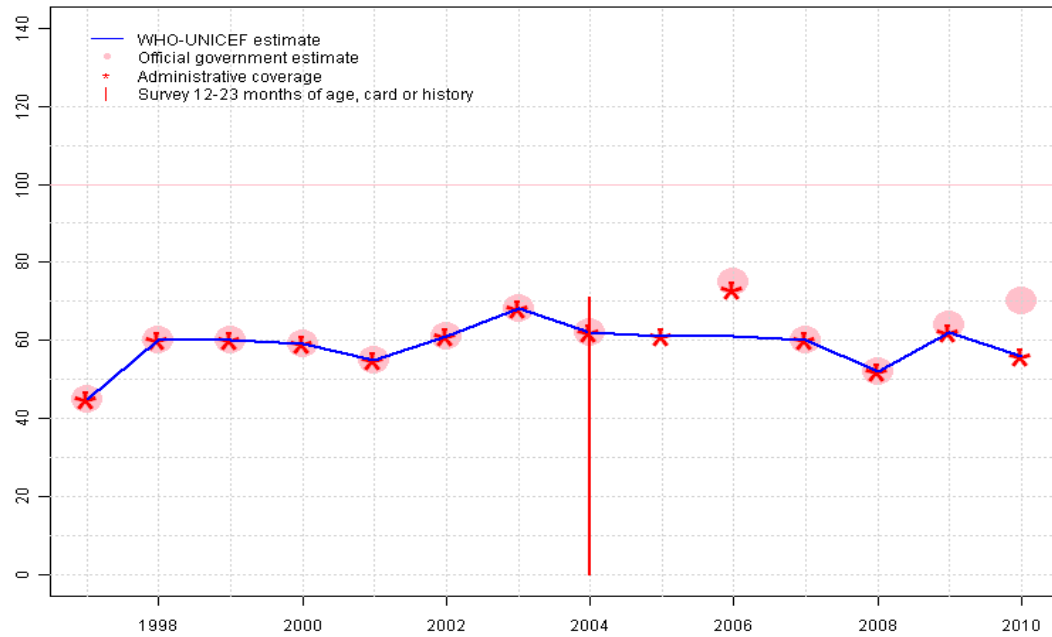
2009: Estimate based on reported data. Public - private sector discrepancy noted by WHO and UNICEF, however, adjustment inconsistently applied across antigens. Current estimate of 80 percent changed from previous revision value of 84 percent.

2010: Estimate based on reported data. Public - private sector discrepancy noted by WHO and UNICEF, however, adjustment inconsistently applied across antigens.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	87	85	82	84	77	81	88	81	80	85	76	70	80	80
Official	87	85	82	84	77	81	88	81	NA	85	76	70	84	84
Administrative	87	85	82	84	77	81	88	81	80	83	76	71	80	80
Survey	NA	NA	NA	NA	NA	NA	NA	88	NA	NA	NA	NA	NA	NA

Papua New Guinea - DTP3

PNG - DTP3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	45	60	60	59	55	61	68	62	61	61	60	52	62	56
Official	45	60	60	59	55	61	68	62	NA	75	60	52	64	70
Administrative	45	60	60	59	55	61	68	62	61	73	60	52	62	56
Survey	NA	NA	NA	NA	NA	NA	NA	71	NA	NA	NA	NA	NA	NA

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.

2002: Estimate based on reported data.

2003: Estimate based on reported data.

2004: Estimate based on reported data. 72 percent survey results supports reported data of 62 percent. Survey results of 71 percent modified for recall bias to 72 percent based on 1st dose card or history coverage of 88 percent, 1st dose card only coverage of 82 percent and 3d dose card only coverage of 67 percent.

2005: Estimate based on reported data.

2006: Estimate based on interpolation between 2005 and 2007. Reported data not accepted due to an increase from 61 percent to 75 percent with a subsequent decrease to 60 percent.

2007: Estimate based on reported data.

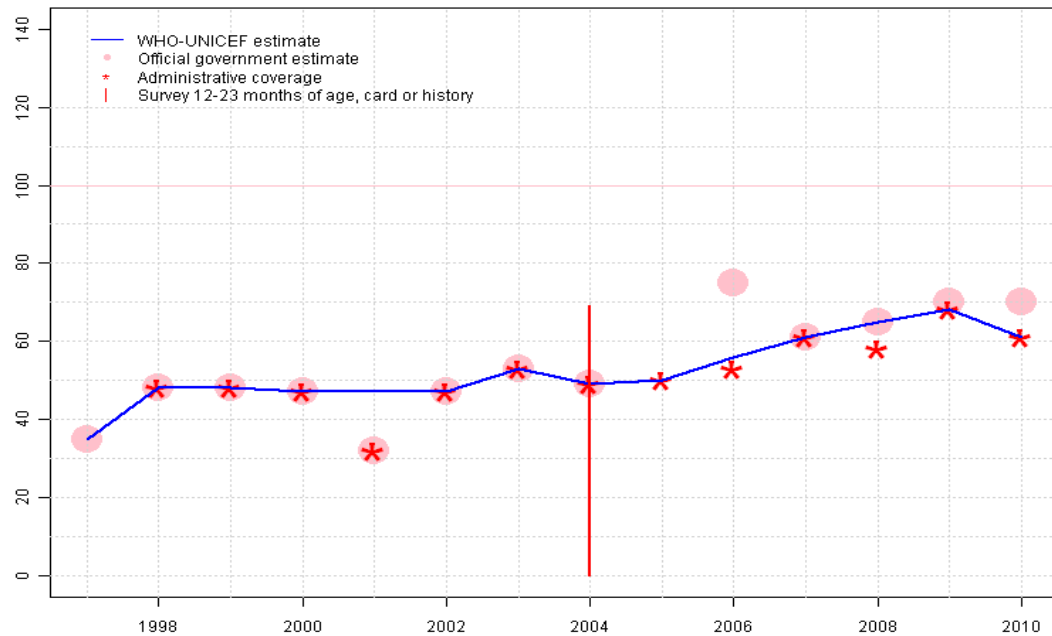
2008: Estimate based on reported data. Decline was the results of five months vaccine shortage.

2009: Estimate based on reported data. Public - private sector discrepancy noted by WHO and UNICEF, however, adjustment inconsistently applied across antigens. Current estimate of 62 percent changed from previous revision value of 64 percent.

2010: Estimate based on reported data. Public - private sector discrepancy noted by WHO and UNICEF, however, adjustment inconsistently applied across antigens.

Papua New Guinea - Pol3

PNG - Pol3



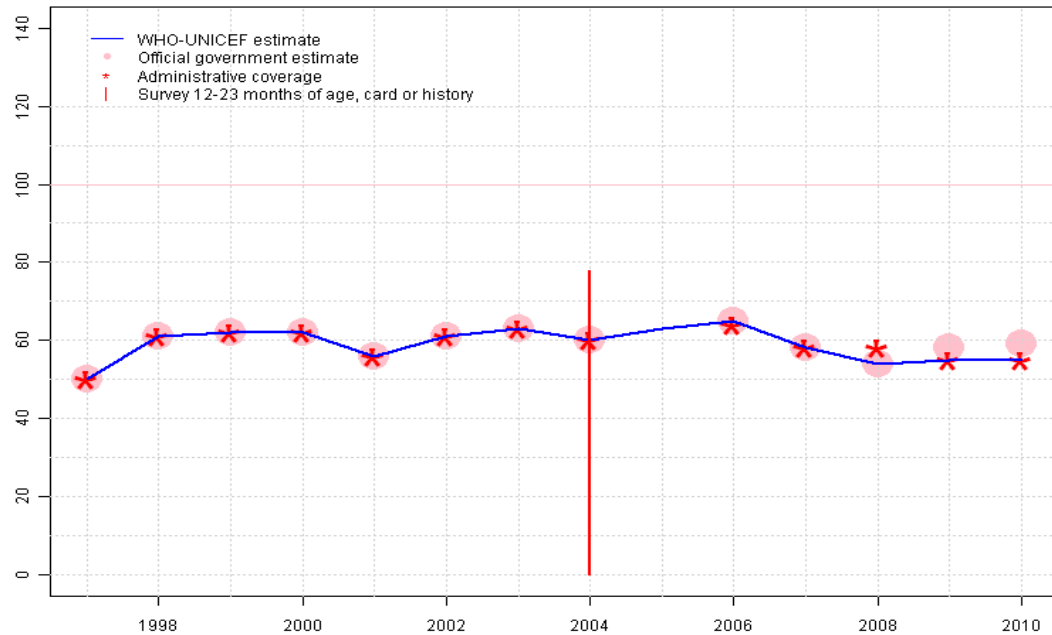
Description:

- 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 interpolation between 2000 and 2002. Reported data not accepted due to a decline from 47 percent to 32 percent with a subsequent increase to 47 percent.
- 2002: Estimate based on reported data.
- 2003: Estimate based on reported data.
- 2004: Estimate based on reported data. Survey not accepted. Survey results likely include doses administered during campaigns.
- 2005: Estimate based on reported data.
- 2006: Estimate based on interpolation between 2005 and 2007. Reported data not accepted due to an increase from 50 percent to 75 percent with a subsequent decrease to 61 percent.
- 2007: Estimate based on reported data.
- 2008: Estimate based on reported data.
- 2009: Estimate based on reported data. Public - private sector discrepancy noted by WHO and UNICEF, however, adjustment inconsistently applied across antigens. Current estimate of 68 percent changed from previous revision value of 70 percent.
- 2010: Estimate based on reported data. Public - private sector discrepancy noted by WHO and UNICEF, however, adjustment inconsistently applied across antigens.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	35	48	48	47	47	47	53	49	50	56	61	65	68	61
Official	35	48	48	47	32	47	53	49	NA	75	61	65	70	70
Administrative	NA	48	48	47	32	47	53	49	50	53	61	58	68	61
Survey	NA	NA	NA	NA	NA	NA	NA	69	NA	NA	NA	NA	NA	NA

Papua New Guinea - MCV

PNG - 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.

2002: Estimate based on reported data.

2003: Estimate based on reported data.

2004: Estimate based on reported data. Survey not accepted. Survey results likely include doses administered during campaigns.

2005: Estimate based on interpolation between 2004 and 2006.

2006: Estimate based on reported data.

2007: Estimate based on reported data.

2008: Estimate based on reported data.

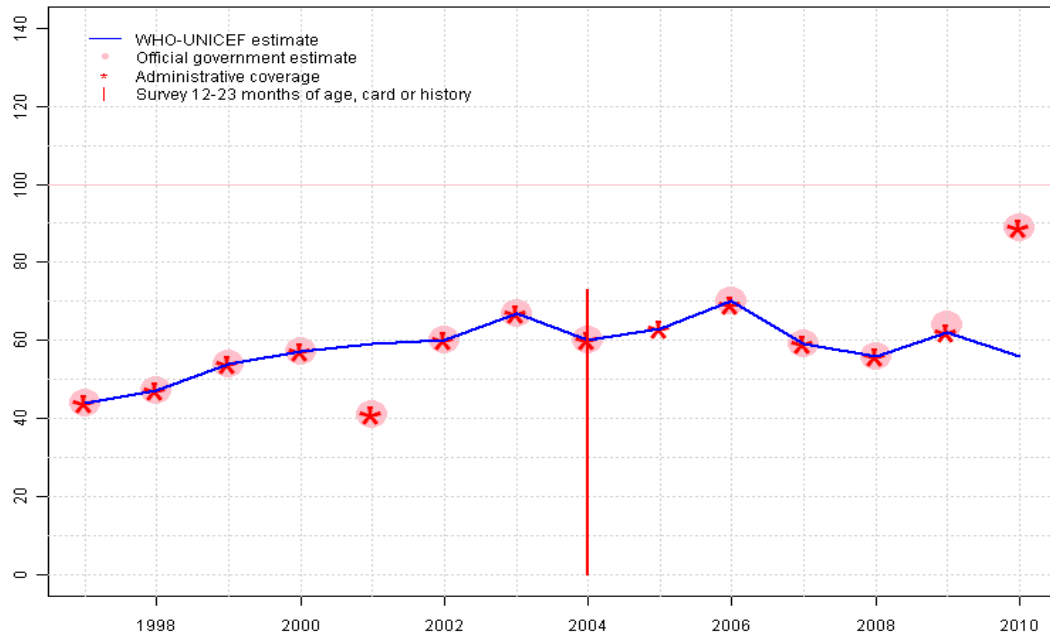
2009: Estimate based on reported data. Public - private sector discrepancy noted by WHO and UNICEF, however, adjustment inconsistently applied across antigens. Current estimate of 55 percent changed from previous revision value of 58 percent.

2010: Estimate based on reported data. Public - private sector discrepancy noted by WHO and UNICEF, however, adjustment inconsistently applied across antigens.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	50	61	62	62	56	61	63	60	63	65	58	54	55	55
Official	50	61	62	62	56	61	63	60	NA	65	58	54	58	59
Administrative	50	61	62	62	56	61	63	60	NA	64	58	58	55	55
Survey	NA	NA	NA	NA	NA	NA	NA	78	NA	NA	NA	NA	NA	NA

Papua New Guinea - HepB3

PNG - HepB3



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 interpolation between 2000 and 2002. Reported data not accepted due to a decline from 57 percent to 41 percent with a subsequent increase to 60 percent.

2002: Estimate based on reported data.

2003: Estimate based on reported data.

2004: Estimate based on reported data. Survey not accepted. Survey results not consistent with comparable survey data.

2005: Estimate based on reported data.

2006: Estimate based on reported data.

2007: Estimate based on reported data.

2008: Estimate based on reported data. Decline was the results of five months vaccine shortage.

2009: Estimate based on reported data. Public - private sector discrepancy noted by WHO and UNICEF, however, adjustment inconsistently applied across antigens. Current estimate of 62 percent changed from previous revision value of 64 percent.

2010: Estimate set to DTP3 level. Vaccine presentation as DTP-HepB-Hib Estimate not based on reported data. Public - private sector discrepancy noted by WHO and UNICEF, however, adjustment inconsistently applied across antigens.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	44	47	54	57	59	60	67	60	63	70	59	56	62	56
Official	44	47	54	57	41	60	67	60	NA	70	59	56	64	89
Administrative	44	47	54	57	41	60	67	60	63	69	59	56	62	89
Survey	NA	NA	NA	NA	NA	NA	NA	73	NA	NA	NA	NA	NA	NA

Papua New Guinea - Hib3

PNG - Hib3



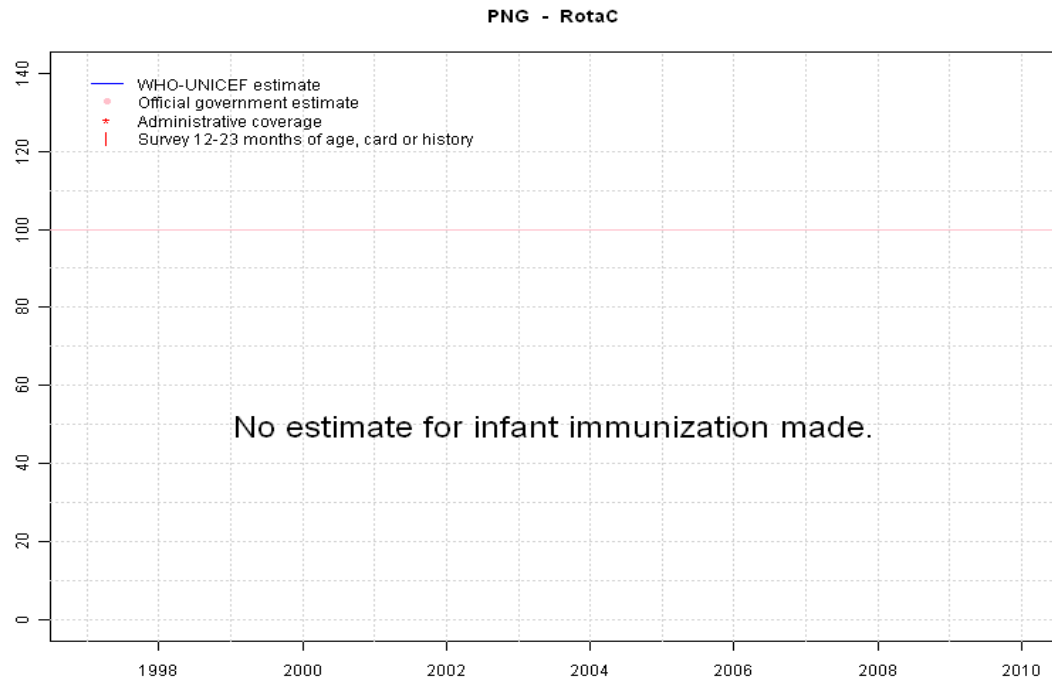
Description:

2009: Estimate based on reported data. Hib introduced in 2008. Reporting started in 2009. Public - private sector discrepancy noted by WHO and UNICEF, however, adjustment inconsistently applied across antigens. Current estimate of 62 percent changed from previous revision value of 64 percent.

2010: Estimate based on reported data. Public - private sector discrepancy noted by WHO and UNICEF, however, adjustment inconsistently applied across antigens.

	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	62	56
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	64	70
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	62	56
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

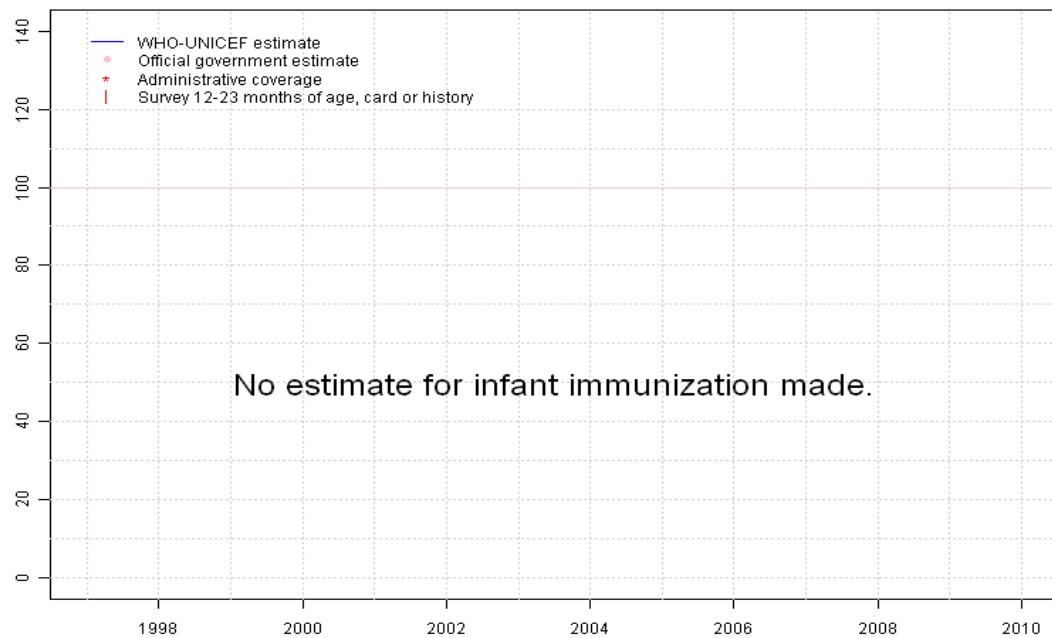
Papua New Guinea - RotaC



	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

Papua New Guinea - PcV3

PNG - 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

Papua New Guinea - survey details

2004 National Immunization Coverage Survey 2005-2006, Papua New Guinea

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	90	12-23 m	783	93
BCG	History	9	12-23 m	783	93
BCG	Card	81	12-23 m	783	93
DTP1	Card	82	12-23 m	776	93
DTP1	Card or History	88	12-23 m	776	93
DTP1	History	6	12-23 m	776	93
DTP3	Card	67	12-23 m	783	93
DTP3	Card or History	71	12-23 m	783	93
DTP3	History	4	12-23 m	783	93
HepB1	History	6	12-23 m	774	93

HepB1	Card	82	12-23 m	774	93
HepB1	Card or History	88	12-23 m	774	93
HepB3	Card or History	73	12-23 m	774	93
HepB3	History	4	12-23 m	774	93
HepB3	Card	69	12-23 m	774	93
MCV	Card	72	12-23 m	776	93
MCV	Card or History	78	12-23 m	776	93
MCV	History	6	12-23 m	776	93
Pol1	Card	79	12-23 m	774	93
Pol1	Card or History	85	12-23 m	774	93
Pol1	History	5	12-23 m	774	93
Pol3	History	5	12-23 m	776	93
Pol3	Card	64	12-23 m	776	93
Pol3	Card or History	69	12-23 m	776	93

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

Papua New Guinea

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	68
1998	31
1999	30
2000	24
2001	45
2002	47
2003	46
2004	49
2005	53
2006	57
2007	60
2008	61
2009	61
2010	61

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.