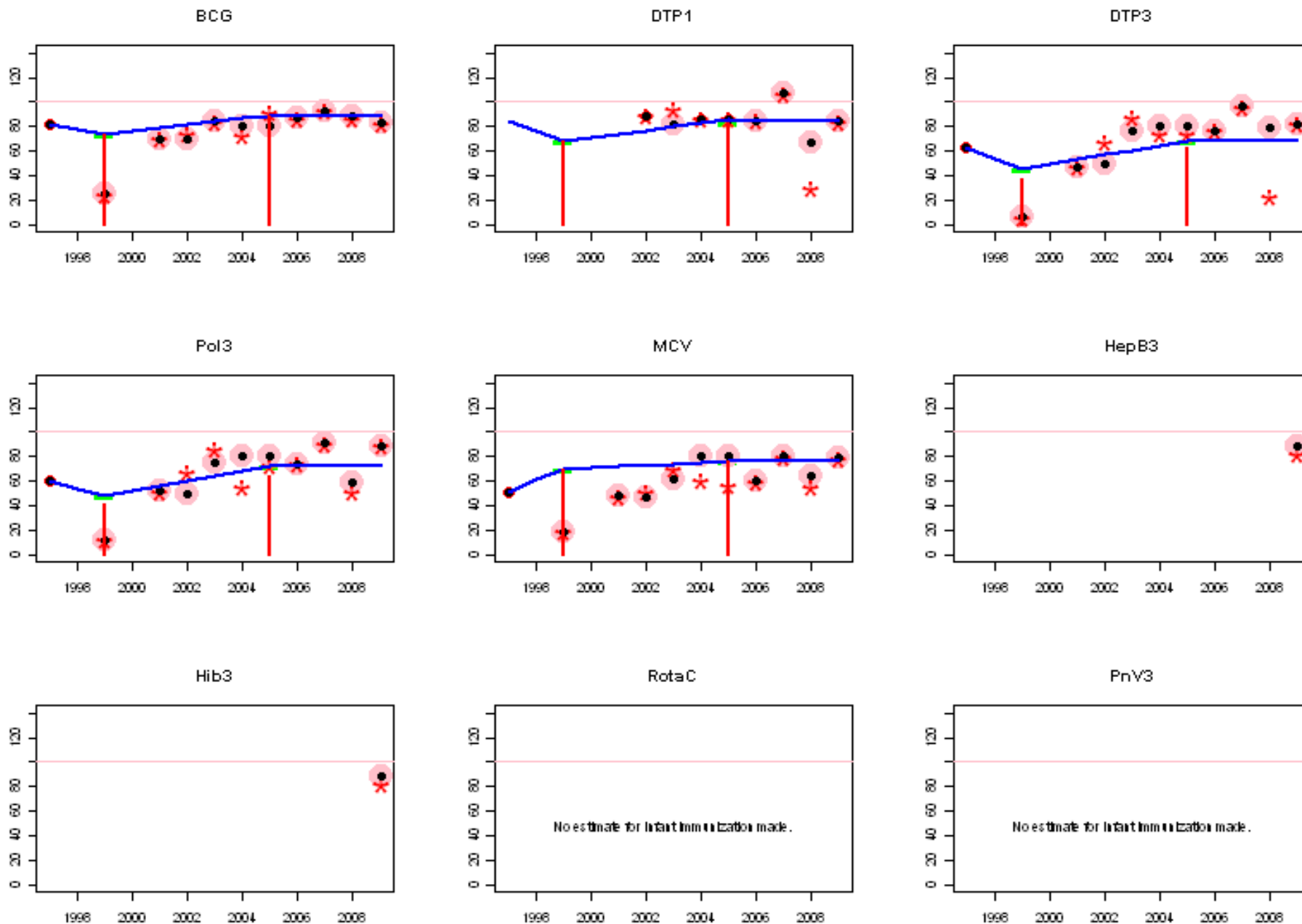
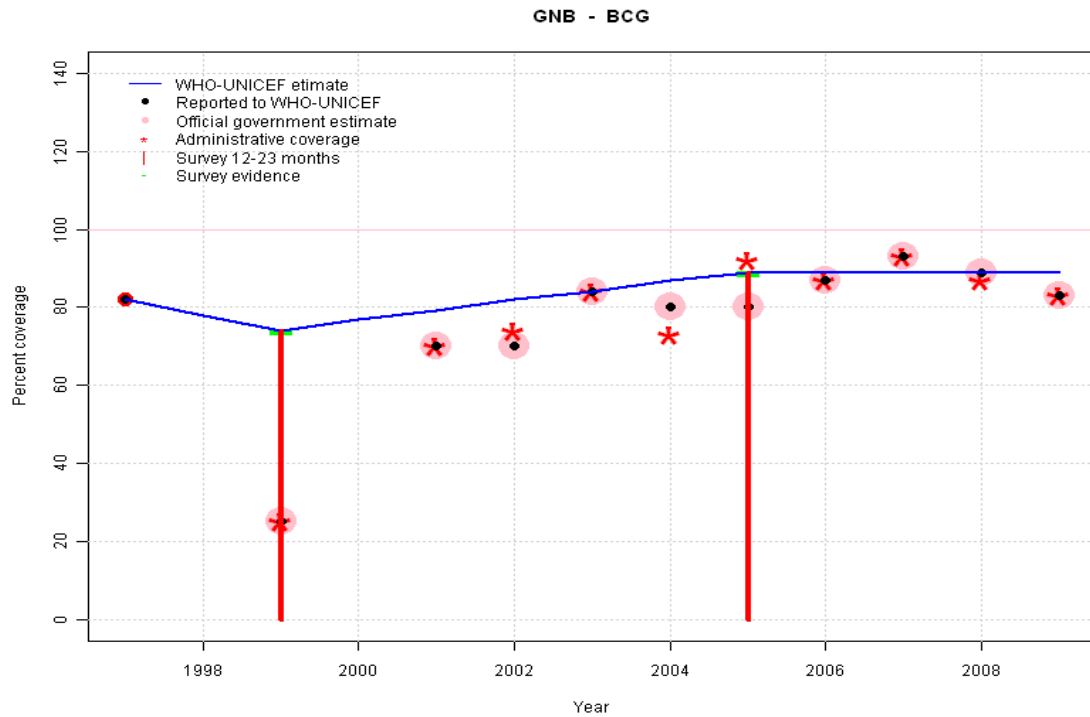


Guinea-Bissau: WHO and UNICEF estimates of immunization coverage, 1997 - 2009



Guinea-Bissau - BCG



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	82	78	74	77	79	82	84	87	89	89	89	89	89
Reported	82	NA	25	NA	70	70	84	80	80	87	93	89	83
Official	NA	NA	25	NA	70	70	84	80	80	87	93	89	83
Administrative	NA	NA	25	NA	70	74	84	73	92	87	93	87	83
Survey	NA	NA	74	NA	NA	NA	NA	NA	89	NA	NA	NA	NA

Description:

1997: Legacy estimate.

1998: Reported data (54 percent) calibrated to 1997 and 1999 levels. Missing or ignored reported value estimated by interpolation between reported values of 82 percent in 1997 and 25 percent in 1999.

1999: Estimate based on survey results. Reported data (25 percent) not consistent with survey results (74 percent).

2000: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2001: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2002: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2003: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2004: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2005: Estimate based on survey data.

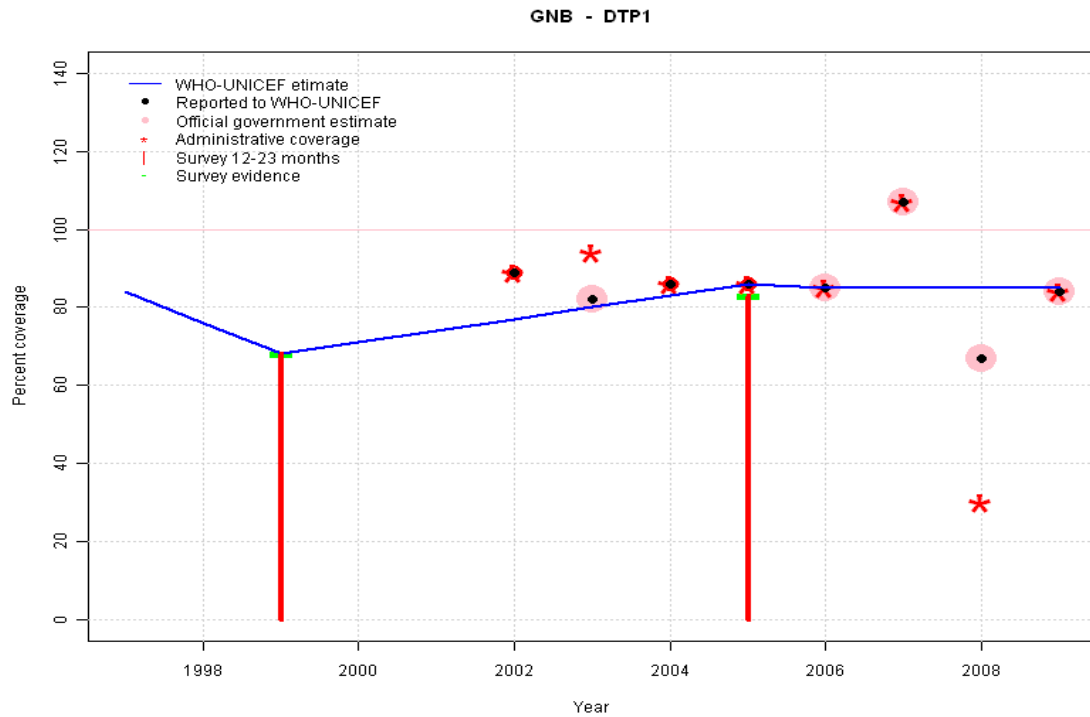
2006: Estimate extrapolated from 2005 level (89 percent).

2007: Estimate extrapolated from 2005 level (89 percent).

2008: Estimate extrapolated from 2005 level (89 percent).

2009: Estimate extrapolated from 2005 level (89 percent).

Guinea-Bissau - DTP1

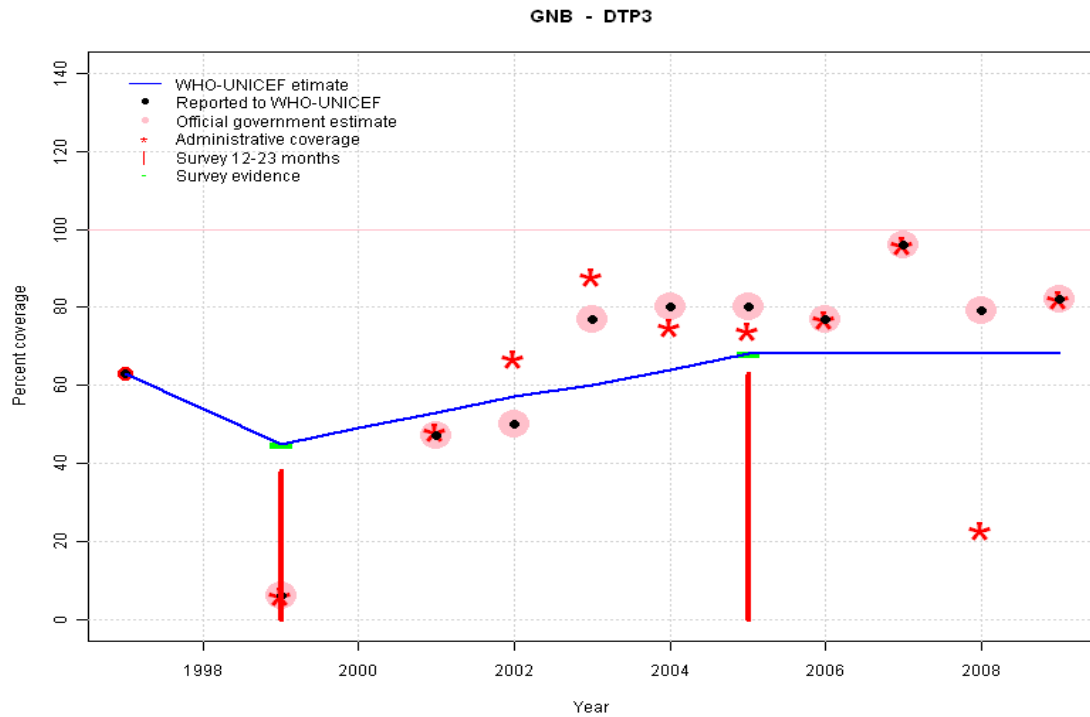


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	84	76	68	71	74	77	80	83	86	85	85	85	85
Reported	NA	NA	NA	NA	NA	89	82	86	86	85	107	67	84
Official	NA	NA	NA	NA	NA	NA	82	NA	NA	85	107	67	84
Administrative	NA	NA	NA	NA	NA	89	94	86	86	85	107	30	84
Survey	NA	NA	68	NA	NA	NA	NA	NA	83	NA	NA	NA	NA

Description:

- 1997: Legacy estimate.
- 1998: Estimate interpolated between 1997 and 1999 estimates.
- 1999: Estimate based on survey results. Reported data (89 percent) not consistent with survey results (68 percent).
- 2000: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.
- 2001: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.
- 2002: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.
- 2003: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.
- 2004: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.
- 2005: Estimate based on reported data (86 percent) confirmed by survey (83 percent).
- 2006: Estimate based on reported data.
- 2007: Estimate based on trend in reported data. Missing or ignored reported value estimated by extrapolation from 2006 reported value of 85 percent. 2007 reported data (107 percent) ignored; greater than 100 percent. 2007 reported data (107 percent) inconsistent with data from other years.
- 2008: Estimate based on trend in reported data. Missing or ignored reported value estimated by extrapolation from 2006 reported value of 85 percent. 2008 reported data (67 percent) inconsistent with data from other years.
- 2009: Estimate based on trend in reported data. Missing or ignored reported value estimated by extrapolation from 2006 reported value of 85 percent. 2009 reported data (84 percent) inconsistent with data from other years.

Guinea-Bissau - DTP3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	63	54	45	49	53	57	60	64	68	68	68	68	68
Reported	63	NA	6	NA	47	50	77	80	80	77	96	79	82
Official	NA	NA	6	NA	47	50	77	80	80	77	96	79	82
Administrative	NA	NA	6	NA	48	67	88	75	74	77	96	23	82
Survey	NA	NA	45	NA	NA	NA	NA	NA	68	NA	NA	NA	NA

Description:

1997: Legacy estimate.

1998: Reported data (35 percent) calibrated to 1997 and 1999 levels. Missing or ignored reported value estimated by interpolation between reported values of 63 percent in 1997 and 6 percent in 1999.

1999: Estimate based on survey results. Reported data (6 percent) not consistent with survey results (45 percent). Survey results (38 percent) adjusted for recall bias to 45 percent based on first dose card or history coverage (68 percent) and documented drop-out between first (38 percent) and third (25 percent) doses.

2000: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2001: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2002: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2003: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2004: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2005: Estimate based on survey results. Reported data (80 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 (83 percent) and documented drop-out between first (70 percent) and third (57 percent) doses.

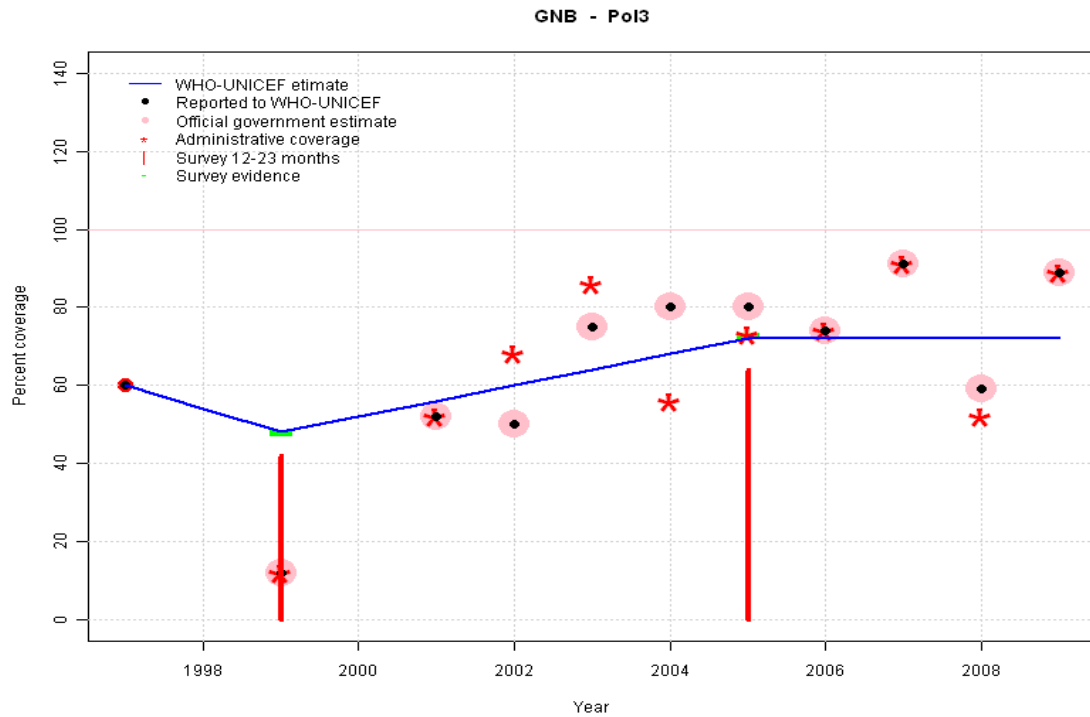
2006: Estimate extrapolated from 2005 level (68 percent).

2007: Estimate extrapolated from 2005 level (68 percent). 2007 reported data (96 percent) inconsistent with data from other years.

2008: Estimate extrapolated from 2005 level (68 percent).

2009: Estimate extrapolated from 2005 level (68 percent).

Guinea-Bissau - Pol3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	60	54	48	52	56	60	64	68	72	72	72	72	72
Reported	60	NA	12	NA	52	50	75	80	80	74	91	59	89
Official	NA	NA	12	NA	52	50	75	80	80	74	91	59	89
Administrative	NA	NA	12	NA	52	68	86	56	73	74	91	52	89
Survey	NA	NA	48	NA	NA	NA	NA	NA	73	NA	NA	NA	NA

Description:

1997: Legacy estimate.

1998: Reported data (36 percent) calibrated to 1997 and 1999 levels. Missing or ignored reported value estimated by interpolation between reported values of 60 percent in 1997 and 12 percent in 1999.

1999: Estimate based on survey results. Reported data (12 percent) not consistent with survey results (48 percent). Survey results (42 percent) adjusted for recall bias to 48 percent based on first dose card or history coverage (76 percent) and documented drop-out between first (44 percent) and third (28 percent) doses.

2000: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2001: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2002: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2003: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2004: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.

2005: Estimate follows survey result adjusted for recall bias. Survey results (64 percent) adjusted for recall bias to 73 percent based on first dose card or history coverage (87 percent) and documented drop-out between first (73 percent) and third (61 percent) doses.

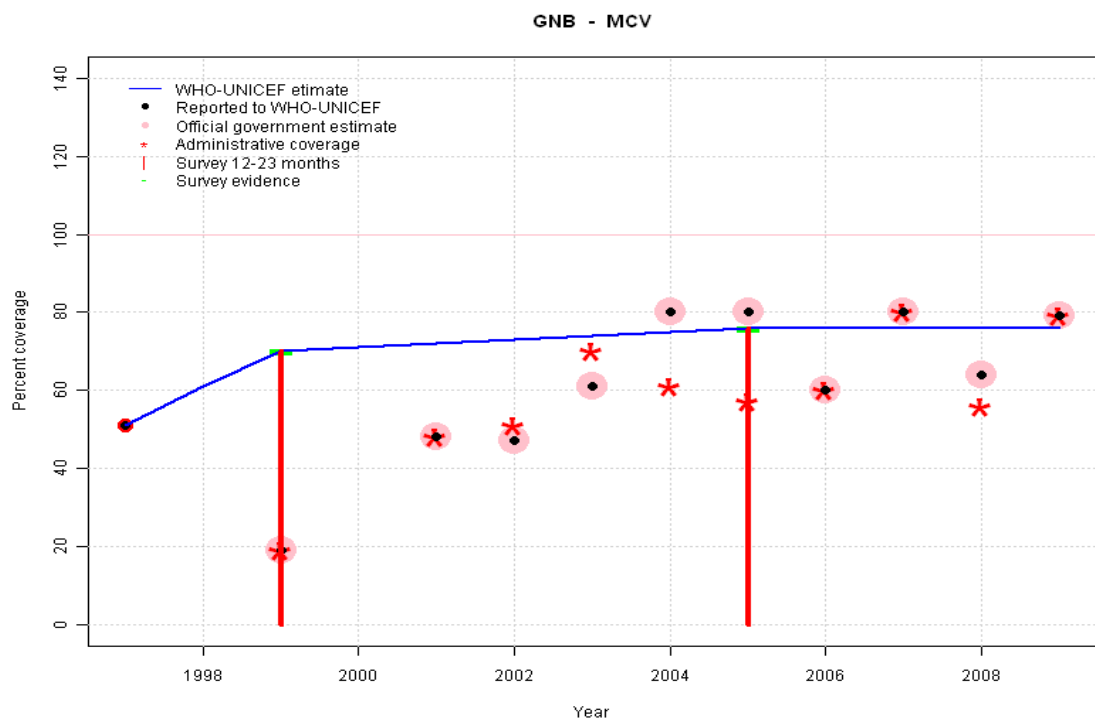
2006: Estimate extrapolated from 2005 level (72 percent).

2007: Estimate extrapolated from 2005 level (72 percent). 2007 reported data (91 percent) inconsistent with data from other years.

2008: Estimate extrapolated from 2005 level (72 percent). 2008 reported data (59 percent) inconsistent with data from other years.

2009: Estimate extrapolated from 2005 level (72 percent). 2009 reported data (89 percent) inconsistent with data from other years.

Guinea-Bissau - MCV



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	51	61	70	71	72	73	74	75	76	76	76	76	76
Reported	51	NA	19	NA	48	47	61	80	80	60	80	64	79
Official	NA	NA	19	NA	48	47	61	80	80	60	80	64	79
Administrative	NA	NA	19	NA	48	51	70	61	57	60	80	56	79
Survey	NA	NA	70	NA	NA	NA	NA	NA	76	NA	NA	NA	NA

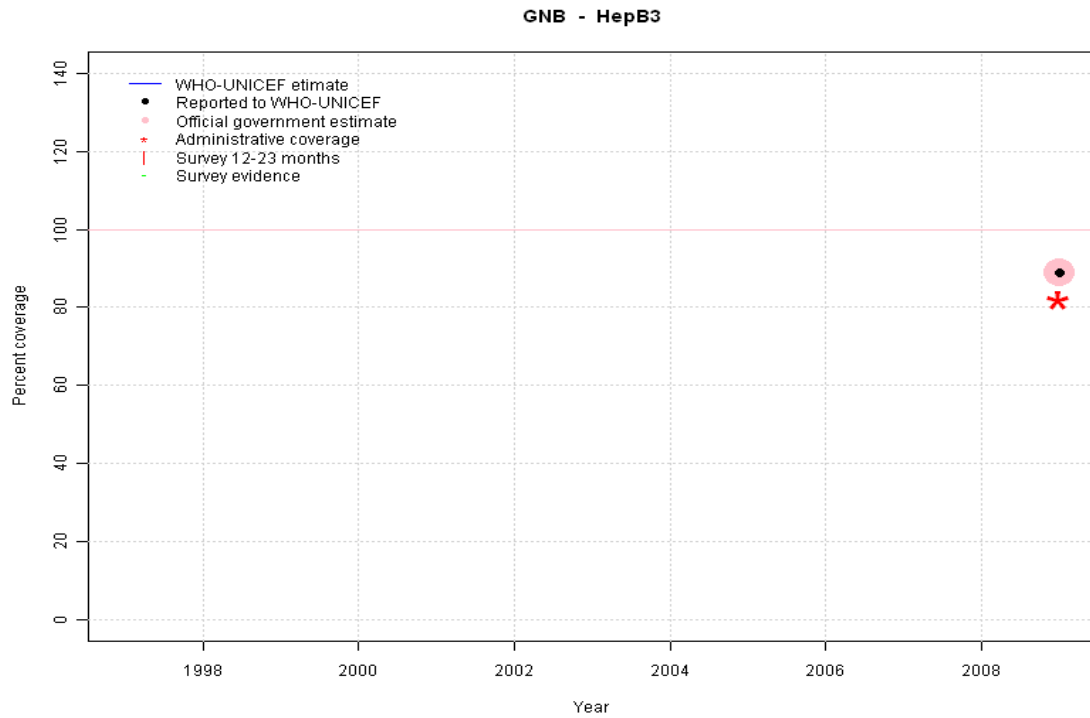
Description:

- 1997: Legacy estimate.
- 1998: Estimate interpolated between 1997 and 1999 estimates.
- 1999: Estimate based on survey results. Reported data (19 percent) not consistent with survey results (70 percent).
- 2000: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.
- 2001: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.
- 2002: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.
- 2003: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.
- 2004: Estimate based on working group decision to interpolated between 1999 and 2005. Reported data varies widely.
- 2005: Estimate based on survey data.
- 2006: Estimate extrapolated from 2005 level (76 percent). 2006 reported data (60 percent) inconsistent with data from other years.
- 2007: Estimate extrapolated from 2005 level (76 percent). 2007 reported data (80 percent) inconsistent with data from other years.
- 2008: Estimate extrapolated from 2005 level (76 percent). 2008 reported data (64 percent) inconsistent with data from other years.
- 2009: Estimate extrapolated from 2005 level (76 percent). 2009 reported data (79 percent) inconsistent with data from other years.

Guinea-Bissau - HepB3

Description:

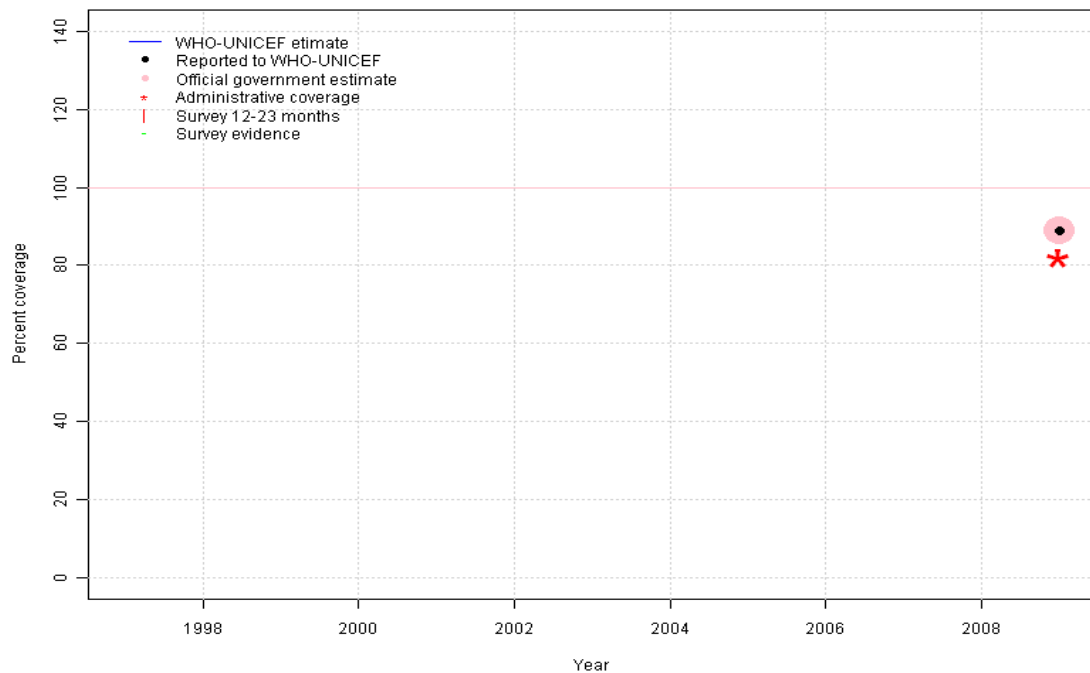
2009: Estimate follows DTP3 coverage levels. HepB introduced in 2008. Reporting started in 2009. Vaccine presentation is DTP-HepB-Hib.



	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	68
Reported	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	89
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	89
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	82
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Guinea-Bissau - Hib3

GNB - Hib3

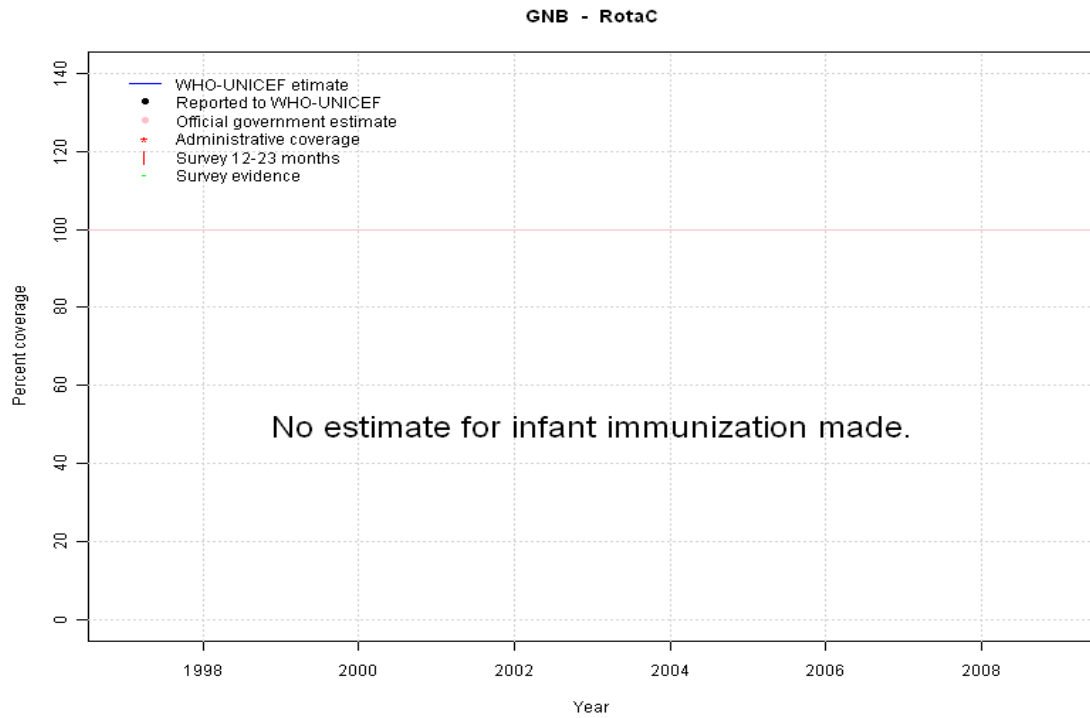


Description:

2009: Estimate follows DTP3 coverage levels. Hib introduced in 2008. Reporting started in 2009. Vaccine presentation is DTP-HepB-Hib.

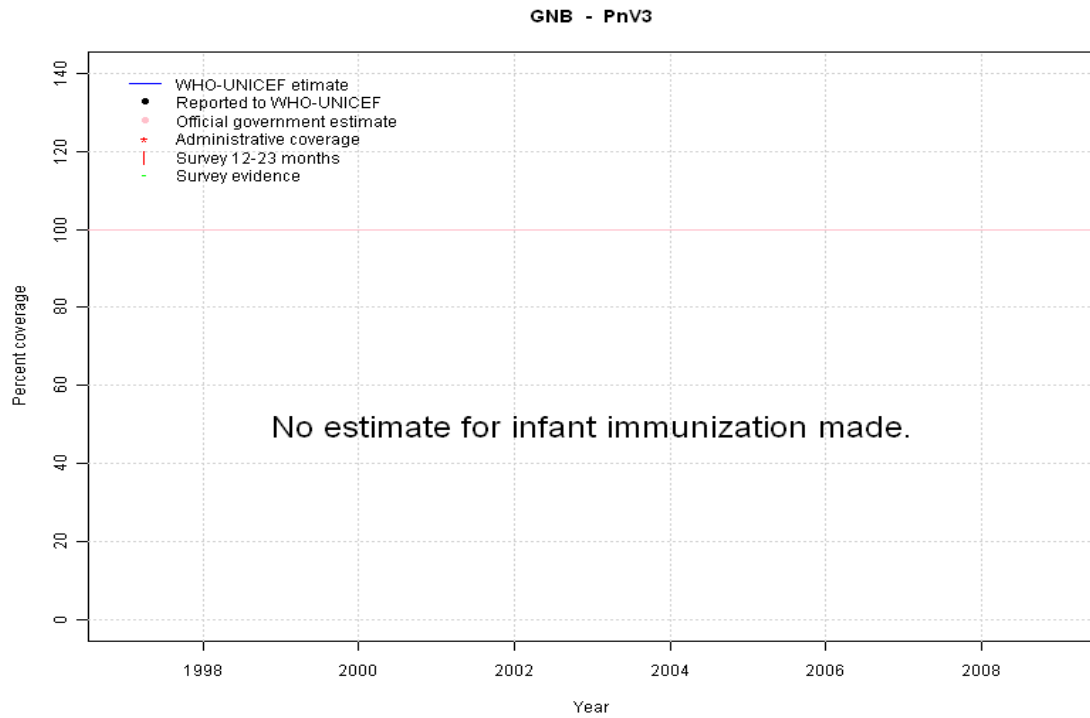
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	68
Reported	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	89
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	89
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	82
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Guinea-Bissau - 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

Guinea-Bissau - 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

Guinea-Bissau - YFV

Description:

2008: Estimate follows reported data. YFV introduced in 2008

2009: Estimate follows MCV coverage levels.



	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	37	76
Reported	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37	80
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37	80
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	32	80
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Guinea-Bissau - survey details

2005 Guinée-Bissau, Enquête par Grappes à Indicateurs Multiples, 2006

Pol3	History	3	12-23 m	1275	78
Pol3	C or H <12 months	60	12-23 m	1275	78

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	History	13	12-23 m	1275	78
BCG	C or H <12 months	87	12-23 m	1275	78
BCG	Card or History	89	12-23 m	1275	78
BCG	Card	76	12-23 m	1275	78
DTP1	C or H <12 months	80	12-23 m	1275	78
DTP1	Card	70	12-23 m	1275	78
DTP1	Card or History	83	12-23 m	1275	78
DTP1	History	12	12-23 m	1275	78
DTP3	History	5	12-23 m	1275	78
DTP3	C or H <12 months	59	12-23 m	1275	78
DTP3	Card	57	12-23 m	1275	78
DTP3	Card or History	63	12-23 m	1275	78
MCV	Card	64	12-23 m	1275	78
MCV	Card or History	76	12-23 m	1275	78
MCV	History	12	12-23 m	1275	78
MCV	C or H <12 months	71	12-23 m	1275	78
Pol1	C or H <12 months	85	12-23 m	1275	78
Pol1	Card	73	12-23 m	1275	78
Pol1	Card or History	87	12-23 m	1275	78
Pol1	History	14	12-23 m	1275	78
Pol3	Card	61	12-23 m	1275	78
Pol3	Card or History	64	12-23 m	1275	78

1999 Multiple Indicator Cluster Survey Guinea Bissau, 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	74	12-23 m	1119	36
BCG	History	32	12-23 m	1119	36
BCG	Card	42	12-23 m	1119	36
DTP1	Card	38	12-23 m	1119	36
DTP1	Card or History	68	12-23 m	1119	36
DTP1	History	31	12-23 m	1119	36
DTP3	History	12	12-23 m	1119	36
DTP3	Card	25	12-23 m	1119	36
DTP3	Card or History	38	12-23 m	1119	36
MCV	Card or History	70	12-23 m	1119	36
MCV	History	32	12-23 m	1119	36
MCV	Card	38	12-23 m	1119	36
Pol1	Card	44	12-23 m	1119	36
Pol1	Card or History	76	12-23 m	1119	36
Pol1	History	33	12-23 m	1119	36
Pol3	Card	28	12-23 m	1119	36
Pol3	Card or History	42	12-23 m	1119	36
Pol3	History	14	12-23 m	1119	36

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

Guinea-Bissau

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	63
1998	49
1999	41
2000	49
2001	60
2002	62
2003	62
2004	64
2005	65
2006	69
2007	92
2008	94
2009	94

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.