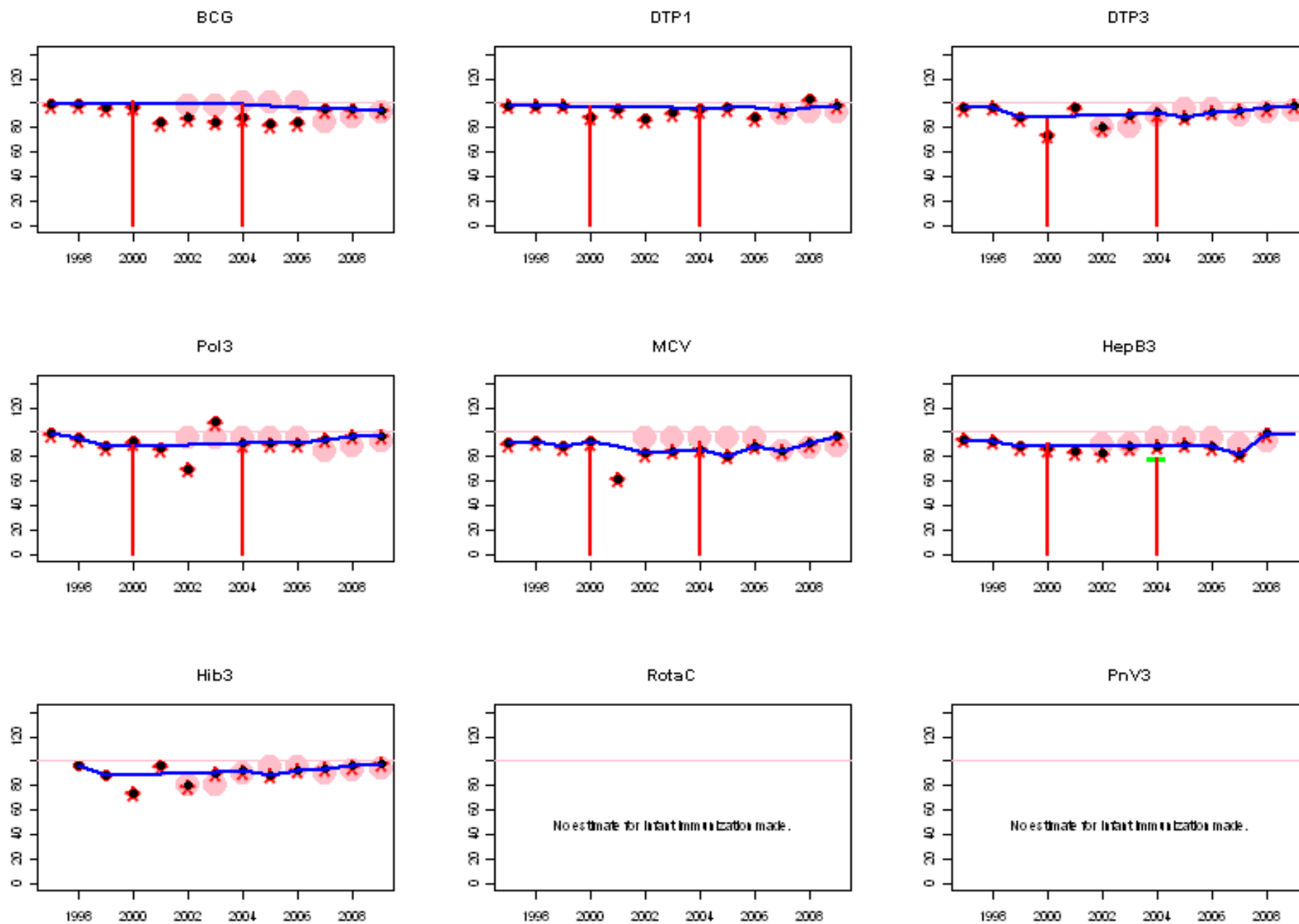
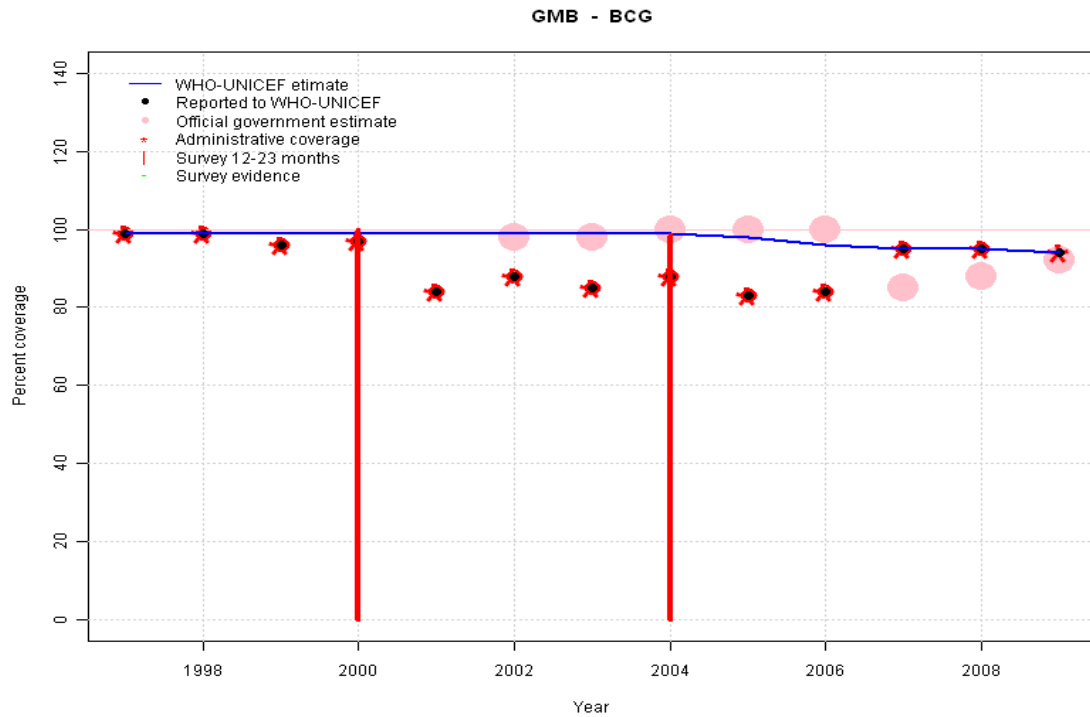


Gambia: WHO and UNICEF estimates of immunization coverage, 1997 - 2009



Gambia - BCG



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	99	99	99	99	99	99	99	99	98	96	95	95	94
Reported	99	99	96	97	84	88	85	88	83	84	95	95	94
Official	NA	NA	NA	NA	NA	98	98	100	100	100	85	88	92
Administrative	99	99	96	97	84	88	85	88	83	84	95	95	94
Survey	NA	NA	NA	NA	NA	NA	NA	99	NA	NA	NA	NA	NA

Description:

1997: Legacy estimate.

1998: Estimate interpolated between 1997 and 2004 estimates.

1999: Estimate interpolated between 1997 and 2004 estimates.

2000: Estimate interpolated between 1997 and 2004 estimates. Survey results of 100.0 percent with sample size 0 ignored; sample size less than 300. 2000 reported data (97 percent) ignored by working group. Reported data ignored, unexplained temporal change.

2001: Estimate interpolated between 1997 and 2004 estimates. 2001 reported data (84 percent) ignored by working group. Reported data ignored, unexplained temporal change.

2002: Estimate interpolated between 1997 and 2004 estimates. 2002 reported data (88 percent) ignored by working group. Reported data ignored, unexplained temporal change.

2003: Estimate interpolated between 1997 and 2004 estimates. 2003 reported data (85 percent) ignored by working group. Reported data ignored, unexplained temporal change.

2004: Estimate based on survey results. Reported data (88 percent) not consistent with survey results (99 percent).

2005: Estimate interpolated between 2004 and 2007 estimates.

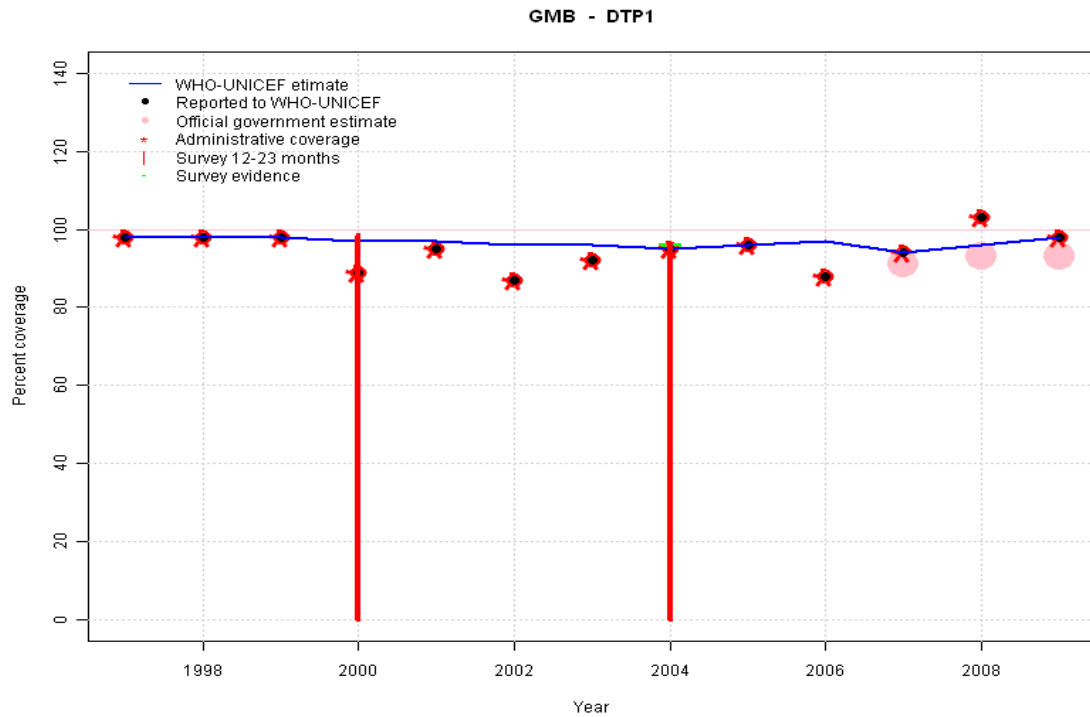
2006: Estimate interpolated between 2004 and 2007 estimates.

2007: Estimate based on reported data.

2008: Estimate based on reported data. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.

2009: Estimate based on reported data. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.

Gambia - DTP1



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	98	98	98	97	97	96	96	95	96	97	94	96	98
Reported	98	98	98	89	95	87	92	95	96	88	94	103	98
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	91	93	93
Administrative	98	98	98	89	95	87	92	95	96	88	94	103	98
Survey	NA	NA	NA	NA	NA	NA	NA	96	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 trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 98 percent in 1999 and 95 percent in 2004. Survey results of 98.4 percent with sample size 0 ignored; sample size less than 300. 2000 reported data (89 percent) ignored by working group. Reported data ignored, unexplained temporal change.

2001: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 98 percent in 1999 and 95 percent in 2004. 2001 reported data (95 percent) ignored by working group. Reported data ignored, unexplained temporal change.

2002: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 98 percent in 1999 and 95 percent in 2004. 2002 reported data (87 percent) ignored by working group. Reported data ignored, unexplained temporal change.

2003: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 98 percent in 1999 and 95 percent in 2004. 2003 reported data (92 percent) ignored by working group. Reported data ignored, unexplained temporal change.

2004: Estimate based on reported data (95 percent) confirmed by survey (96 percent).

2005: Estimate based on reported data.

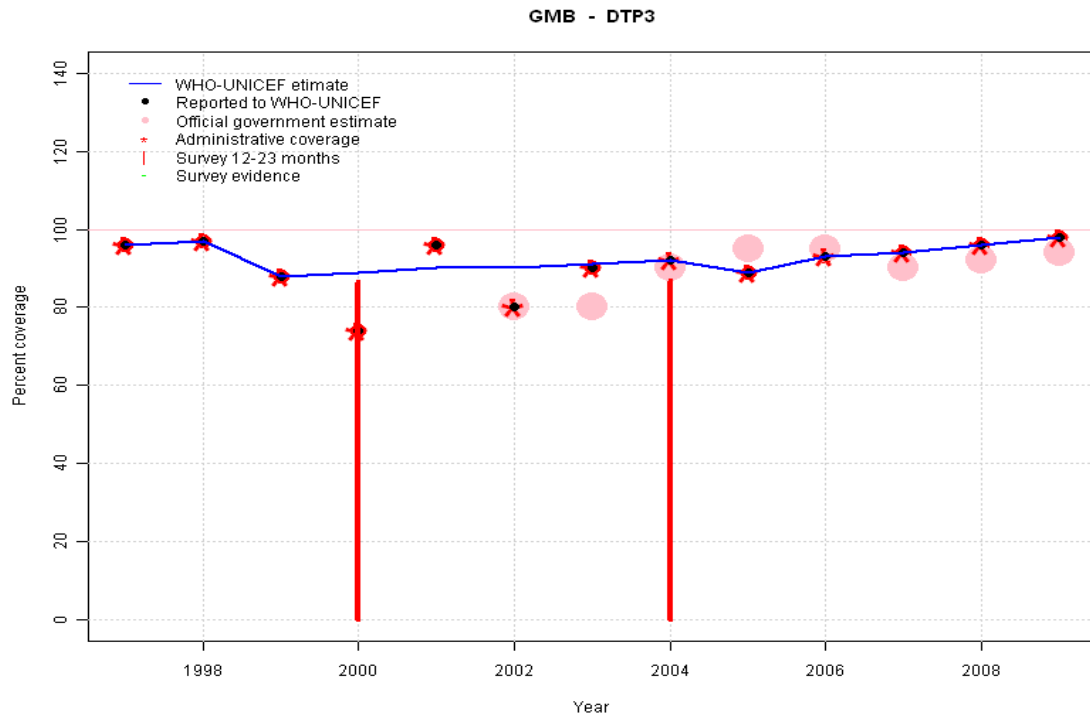
2006: Estimated DTP3 greater than estimated DTP1; DTP1 estimate based on the relationship between DTP1 and DTP3 from 282 surveys.

2007: Estimate based on reported data.

2008: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 94 percent in 2007 and 98 percent in 2009. 2008 reported data (103 percent) ignored; greater than 100 percent. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.

2009: Estimate based on reported data. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.

Gambia - DTP3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	96	97	88	89	90	90	91	92	89	93	94	96	98
Reported	96	97	88	74	96	80	90	92	89	93	94	96	98
Official	NA	NA	NA	NA	NA	80	80	90	95	95	90	92	94
Administrative	96	97	88	74	96	80	90	92	89	93	94	96	98
Survey	NA	NA	NA	NA	NA	NA	NA	89	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 trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 92 percent in 2004. Survey results of 86.5 percent with sample size 0 ignored; sample size less than 300. 2000 reported data (74 percent) inconsistent with data from other years. 2000 reported data (74 percent) ignored by working group. Reported data ignored, unexplained temporal change.
- 2001: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 92 percent in 2004. 2001 reported data (96 percent) inconsistent with data from other years. 2001 reported data (96 percent) ignored by working group. Reported data ignored, unexplained temporal change.
- 2002: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 92 percent in 2004. 2002 reported data (80 percent) ignored by working group. Reported data ignored, unexplained temporal change.
- 2003: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 92 percent in 2004. 2003 reported data (90 percent) ignored by working group. Reported data ignored, unexplained temporal change.
- 2004: Estimate based on reported data (92 percent) confirmed by survey (89 percent). Survey results (86.8 percent) adjusted for recall bias to 89 percent based on first dose card or history coverage (96.1 percent) and documented drop-out between first (87.7 percent) and third (81.6 percent) doses.
- 2005: Estimate based on reported data.
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimate based on reported data. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.
- 2009: Estimate based on reported data. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.

Gambia - Pol3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	99	95	88	89	89	90	90	91	91	91	94	97	97
Reported	99	95	88	92	87	70	108	91	91	91	94	97	97
Official	NA	NA	NA	NA	NA	95	95	95	95	95	85	88	92
Administrative	99	95	88	92	87	70	108	91	91	91	94	97	97
Survey	NA	NA	NA	NA	NA	NA	NA	93	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 trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 91 percent in 2004. Survey results of 90.3 percent with sample size 0 ignored; sample size less than 300. 2000 reported data (92 percent) ignored by working group. Reported data ignored, unexplained temporal change.

2001: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 91 percent in 2004. 2001 reported data (87 percent) ignored by working group. Reported data ignored, unexplained temporal change.

2002: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 91 percent in 2004. 2002 reported data (70 percent) inconsistent with data from other years. 2002 reported data (70 percent) ignored by working group. Reported data ignored, unexplained temporal change.

2003: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 91 percent in 2004. 2003 reported data (108 percent) ignored; greater than 100 percent. 2003 reported data (108 percent) inconsistent with data from other years. 2003 reported data (108 percent) ignored by working group. Reported data ignored, unexplained temporal change.

2004: Estimate based on reported data (91 percent) confirmed by survey (93 percent). Survey results (87.6 percent) adjusted for recall bias to 93 percent based on first dose card or history coverage (95.5 percent) and documented drop-out between first (86.6 percent) and third (84.1 percent) doses.

2005: Estimate based on reported data.

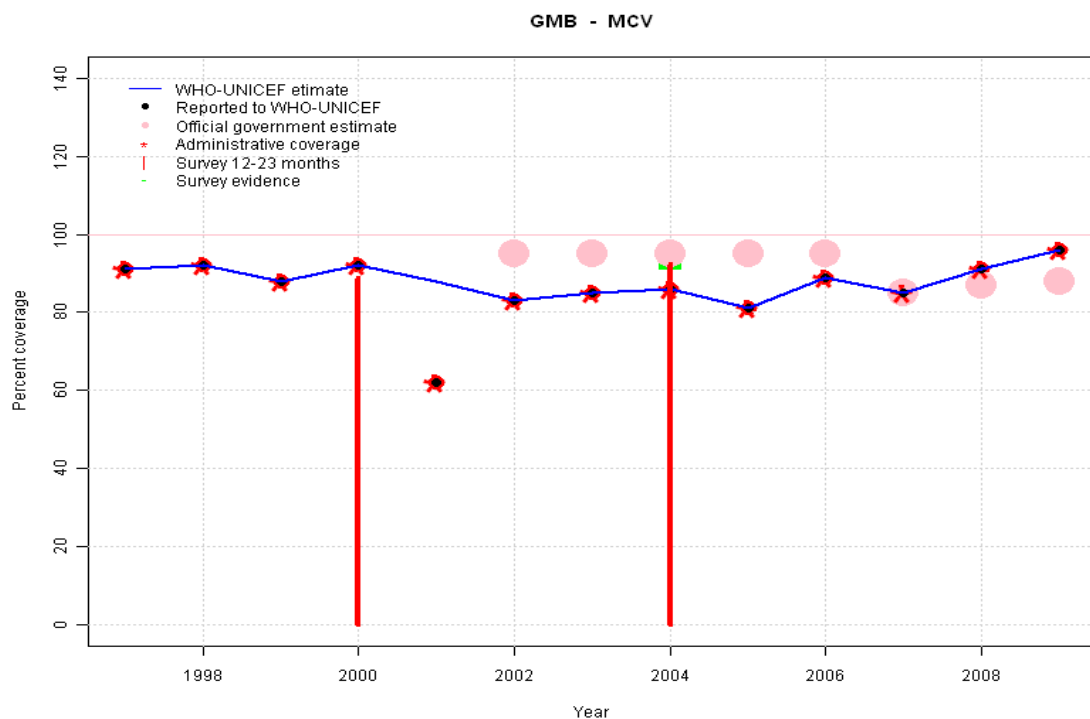
2006: Estimate based on reported data.

2007: Estimate based on reported data.

2008: Estimate based on reported data. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.

2009: Estimate based on reported data. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.

Gambia - MCV

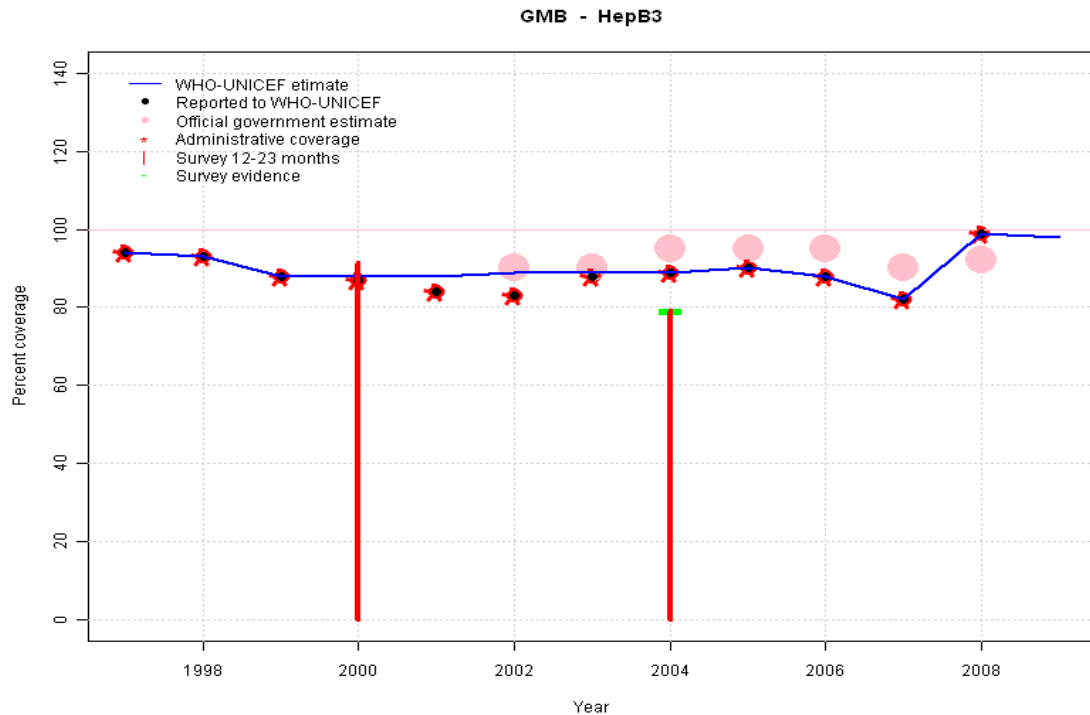


Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data.
- 2000: Estimate based on reported data. Survey results of 88.7 percent with sample size 0 ignored; sample size less than 300.
- 2001: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 92 percent in 2000 and 83 percent in 2002. 2001 reported data (62 percent) inconsistent with data from other years.
- 2002: Estimate based on reported data.
- 2003: Estimate based on reported data.
- 2004: Estimate based on reported data (86 percent) confirmed by survey (92 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. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.
- 2009: Estimate based on reported data. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	91	92	88	92	88	83	85	86	81	89	85	91	96
Reported	91	92	88	92	62	83	85	86	81	89	85	91	96
Official	NA	NA	NA	NA	NA	95	95	95	95	95	85	87	88
Administrative	91	92	88	92	62	83	85	86	81	89	85	91	96
Survey	NA	NA	NA	NA	NA	NA	NA	92	NA	NA	NA	NA	NA

Gambia - HepB3

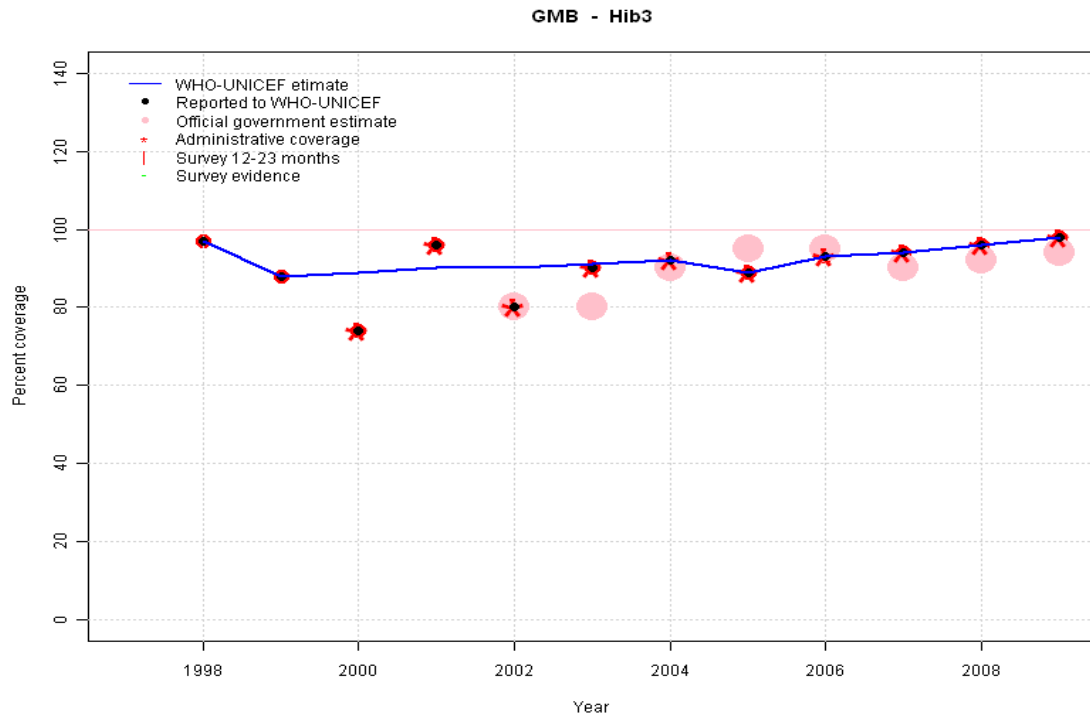


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	94	93	88	88	88	89	89	89	90	88	82	99	98
Reported	94	93	88	87	84	83	88	89	90	88	82	99	NA
Official	NA	NA	NA	NA	NA	90	90	95	95	95	90	92	NA
Administrative	94	93	88	87	84	83	88	89	90	88	82	99	NA
Survey	NA	NA	NA	NA	NA	NA	NA	79	NA	NA	NA	NA	NA

Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data.
- 2000: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 89 percent in 2004. Survey results of 91.5 percent with sample size 0 ignored; sample size less than 300. 2000 reported data (87 percent) ignored by working group. Reported data ignored, unexplained temporal change.
- 2001: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 89 percent in 2004. 2001 reported data (84 percent) ignored by working group. Reported data ignored, unexplained temporal change.
- 2002: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 89 percent in 2004. 2002 reported data (83 percent) ignored by working group. Reported data ignored, unexplained temporal change.
- 2003: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 89 percent in 2004. 2003 reported data (88 percent) ignored by working group. Reported data ignored, unexplained temporal change.
- 2004: Estimate based on reported data (89 percent) confirmed by survey (79 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. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.
- 2009: Estimate assigned by working group. Estimate based on DTP3 coverage. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.

Gambia - Hib3

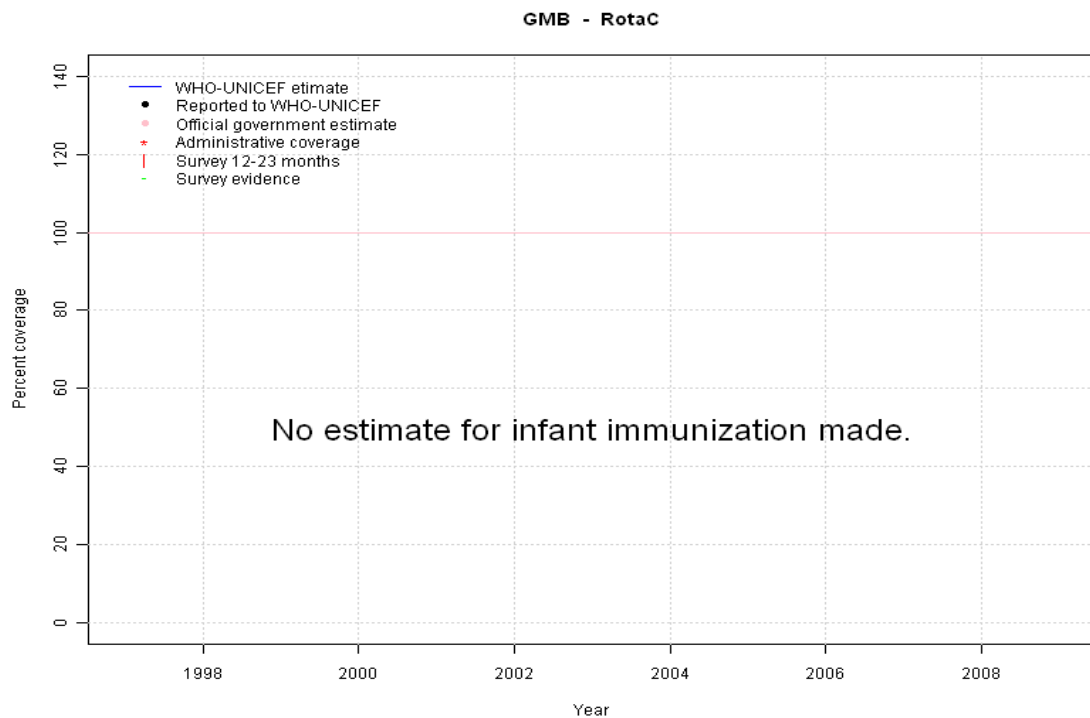


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	NA	97	88	89	90	90	91	92	89	93	94	96	98
Reported	NA	97	88	74	96	80	90	92	89	93	94	96	98
Official	NA	NA	NA	NA	NA	80	80	90	95	95	90	92	94
Administrative	NA	NA	NA	74	96	80	90	92	89	93	94	96	98
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Description:

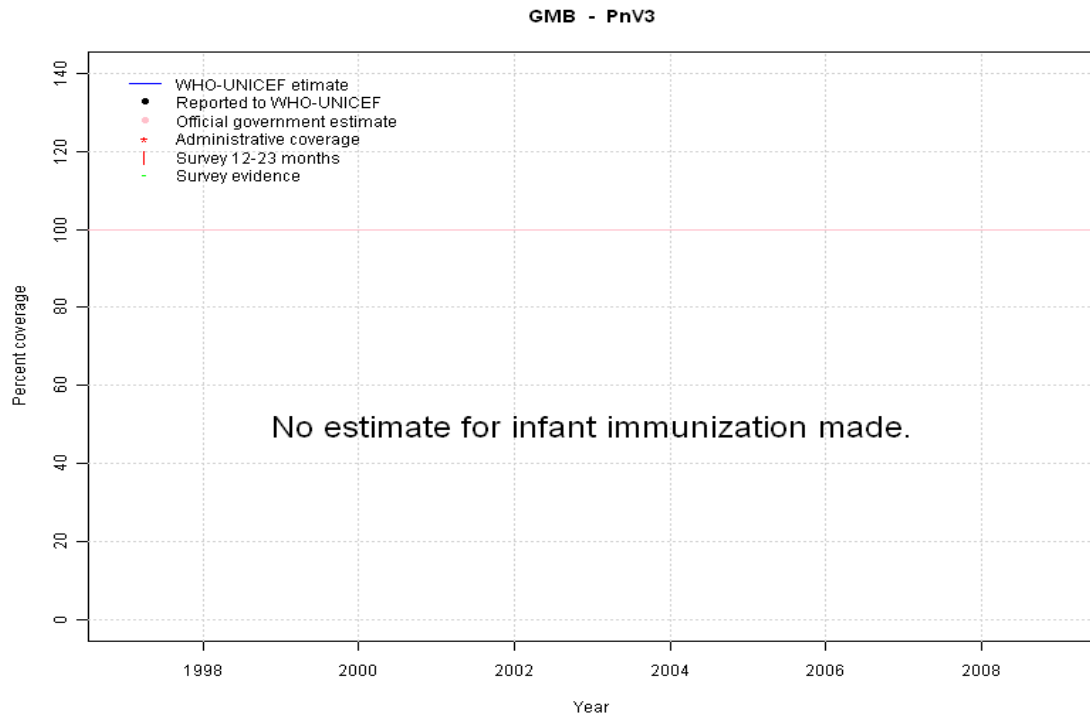
- 1998: Estimate based on reported data. Hib introduced in 1997. Reporting started in 1998.
- 1999: Estimate based on reported data.
- 2000: Estimate based on reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 92 percent in 2004. 2000 reported data (74 percent) inconsistent with data from other years. 2000 reported data (74 percent) ignored by working group. Reported data ignored, unexplained temporal change.
- 2001: Estimate based on reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 92 percent in 2004. 2001 reported data (96 percent) inconsistent with data from other years. 2001 reported data (96 percent) ignored by working group. Reported data ignored, unexplained temporal change.
- 2002: Estimate based on reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 92 percent in 2004. 2002 reported data (80 percent) ignored by working group. Reported data ignored, unexplained temporal change.
- 2003: Estimate based on reported data. Missing or ignored reported value estimated by interpolation between reported values of 88 percent in 1999 and 92 percent in 2004. 2003 reported data (90 percent) ignored by working group. Reported data ignored, unexplained temporal change.
- 2004: Estimate based on reported 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. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.
- 2009: Estimate based on reported data. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.

Gambia - RotaC



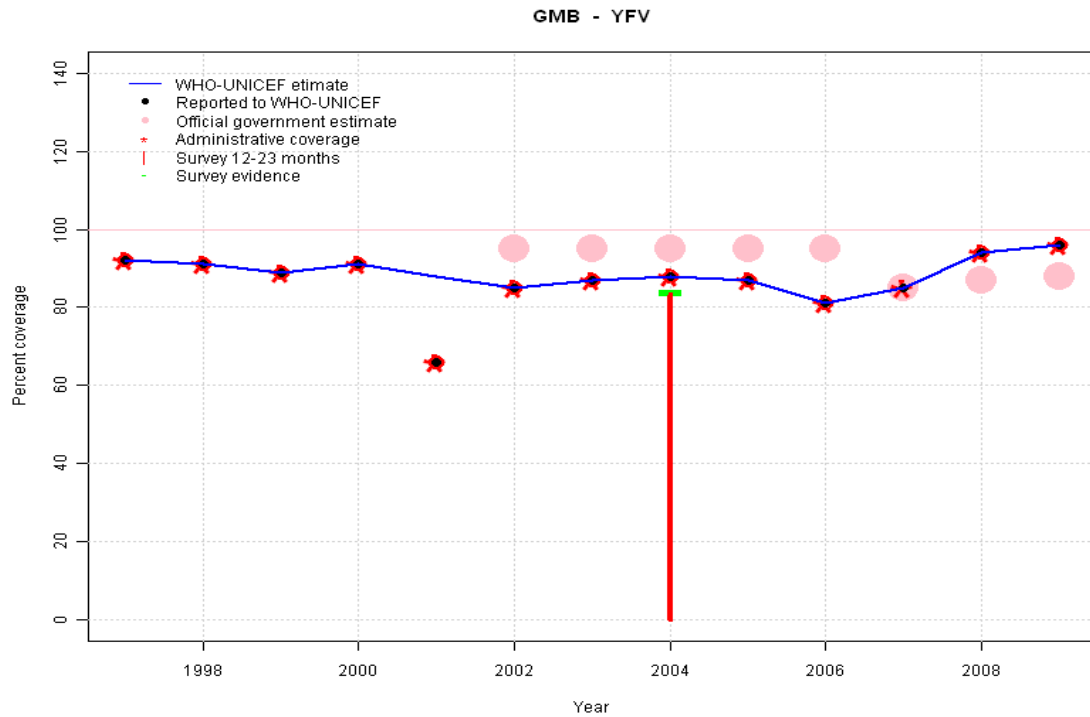
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reported	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA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

Gambia - 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

Gambia - YFV



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	92	91	89	91	88	85	87	88	87	81	85	94	96
Reported	92	91	89	91	66	85	87	88	87	81	85	94	96
Official	NA	NA	NA	NA	NA	95	95	95	95	95	85	87	88
Administrative	92	91	89	91	66	85	87	88	87	81	85	94	96
Survey	NA	NA	NA	NA	NA	NA	NA	84	NA	NA	NA	NA	NA

Description:

- 1997: Estimate based on trend in reported data.
- 1998: Estimate based on trend in reported data.
- 1999: Estimate based on trend in reported data.
- 2000: Estimate based on trend in reported data.
- 2001: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 91 percent in 2000 and 85 percent in 2002. 2001 reported data (66 percent) inconsistent with data from other years.
- 2002: Estimate based on trend in reported data.
- 2003: Estimate based on trend in reported data.
- 2004: Estimate based on reported data (88 percent) confirmed by survey (84 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. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved.
- 2009: Estimate based on reported data. Ministry of Health reports targets set in their 2007-2011 national comprehensive multi-year plan for immunization as their estimate of coverage levels achieved. Estimates based on administrative coverage.

Gambia - survey details

2005 The Gambia Immunisation Survey for 2004

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	n.a.	98.3	12-23 m	0	0
DTP3	n.a.	95.1	12-23 m	0	0
HepB3	n.a.	95.4	12-23 m	0	0
Hib3	n.a.	95.1	12-23 m	0	0
MCV	n.a.	90.9	12-23 m	0	0
Pol3	n.a.	93.8	12-23 m	0	0
YFV	n.a.	90.7	12-23 m	0	0

2004 The Gambia Immunisation Survey for 2003

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	n.a.	99.2	12-23 m	1470	0
DTP3	n.a.	92.2	12-23 m	1470	0
HepB3	n.a.	94.9	12-23 m	1470	0
MCV	n.a.	89.3	12-23 m	1470	0
Pol3	n.a.	91.6	12-23 m	1470	0
YFV	n.a.	88.7	12-23 m	1470	0

2004 The Gambia Multiple Indicator Cluster Survey 2005/2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	89.7	12-23 m	1486	90
BCG	Card or History	98.7	12-23 m	1486	90
BCG	History	9	12-23 m	1486	90
BCG	C or H <12 months	97.6	12-23 m	1486	90
DTP1	C or H <12 months	93.1	12-23 m	1486	90
DTP1	Card	87.7	12-23 m	1486	90
DTP1	Card or History	96.1	12-23 m	1486	90
DTP1	History	8.3	12-23 m	1486	90
DTP3	History	5.2	12-23 m	1486	90
DTP3	Card	81.6	12-23 m	1486	90
DTP3	Card or History	86.8	12-23 m	1486	90
DTP3	C or H <12 months	82.4	12-23 m	1486	90

HepB1	History	0.1	12-23 m	1486	90
HepB1	Card or History	85.6	12-23 m	1486	90
HepB1	Card	85.5	12-23 m	1486	90
HepB1	C or H <12 months	83.8	12-23 m	1486	90
HepB3	Card	79	12-23 m	1486	90
HepB3	C or H <12 months	75.4	12-23 m	1486	90
HepB3	History	0	12-23 m	1486	90
HepB3	Card or History	79	12-23 m	1486	90
MCV	Card or History	92.4	12-23 m	1486	90
MCV	History	8.6	12-23 m	1486	90
MCV	Card	83.8	12-23 m	1486	90
MCV	C or H <12 months	84.9	12-23 m	1486	90
Pol1	C or H <12 months	92.8	12-23 m	1486	90
Pol1	Card	86.6	12-23 m	1486	90
Pol1	Card or History	95.5	12-23 m	1486	90
Pol1	History	8.9	12-23 m	1486	90
Pol3	C or H <12 months	83.3	12-23 m	1486	90
Pol3	Card	84.1	12-23 m	1486	90
Pol3	Card or History	87.6	12-23 m	1486	90
Pol3	History	3.6	12-23 m	1486	90
YFV	C or H <12 months	76.9	12-23 m	1486	90
YFV	History	0	12-23 m	1486	90
YFV	Card	83.5	12-23 m	1486	90
YFV	Card or History	83.5	12-23 m	1486	90

2001 Gambia Immunization Coverage Survey for 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	n.a.	99.6	12-23 m	0	0
DTP3	n.a.	86.7	12-23 m	0	0
HepB3	n.a.	91.5	12-23 m	0	0
Hib3	n.a.	86.7	12-23 m	0	0
MCV	n.a.	88.7	12-23 m	0	0
Pol3	n.a.	60.3	12-23 m	0	0
YFV	n.a.	84	12-23 m	0	0

2000 EPI Cluster Survey 2001

Gambia - survey details

port, 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	100	12-23 m	0	100
DTP1	Card or History	98.4	12-23 m	0	100
DTP3	Card or History	86.5	12-23 m	0	100
HepB3	Card or History	91.5	12-23 m	0	100
MCV	Card or History	88.7	12-23 m	0	100
Pol3	Card or History	90.3	12-23 m	0	100

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	99	12-23 m	0	91
DTP1	C or H <12 months	97	12-23 m	0	91
DTP3	C or H <12 months	90	12-23 m	0	91
MCV	C or H <12 months	88	12-23 m	0	91
Pol1	C or H <12 months	97	12-23 m	0	91
Pol3	C or H <12 months	88	12-23 m	0	91

1999 The Gambia Multiple Indicator Cluster Survey, Draft Re-

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

Gambia

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	91
1998	94
1999	91
2000	92
2001	90
2002	94
2003	94
2004	94
2005	89
2006	94
2007	90
2008	91
2009	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.