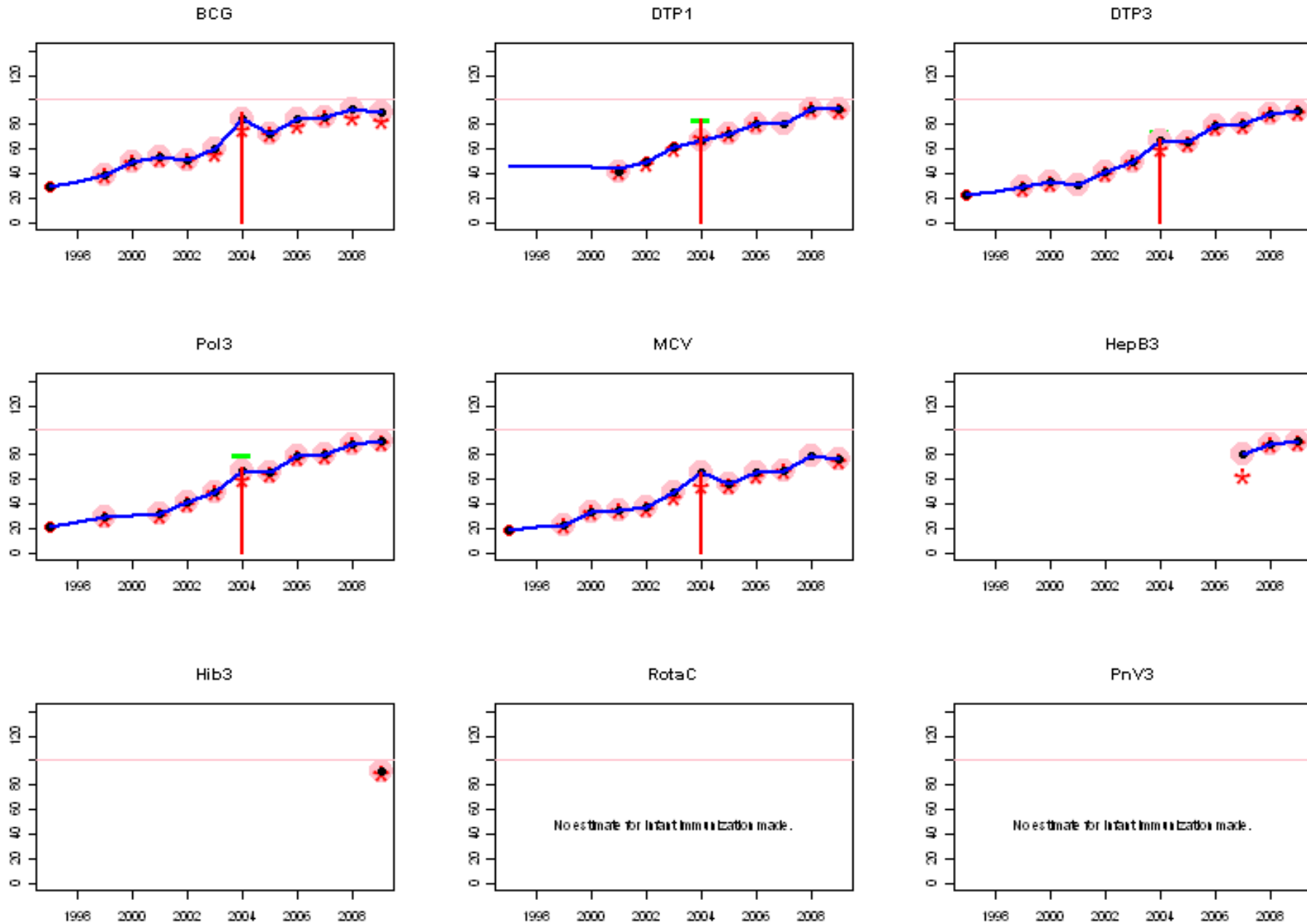
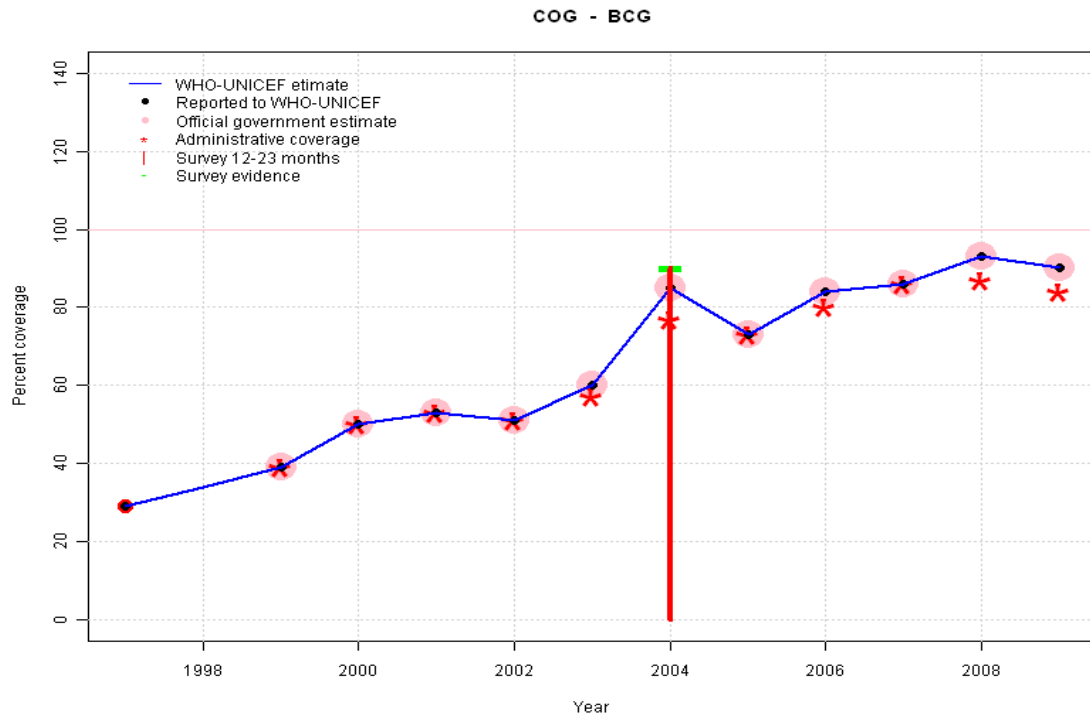


Congo: WHO and UNICEF estimates of immunization coverage, 1997 - 2009



Congo - BCG



Description:

1997: Legacy estimate.

1998: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 29 percent in 1997 and 39 percent in 1999.

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 (85 percent) confirmed by survey (90 percent). Survey supports reported for all other antigens.

2005: Estimate based on reported data.

2006: Estimate based on reported data.

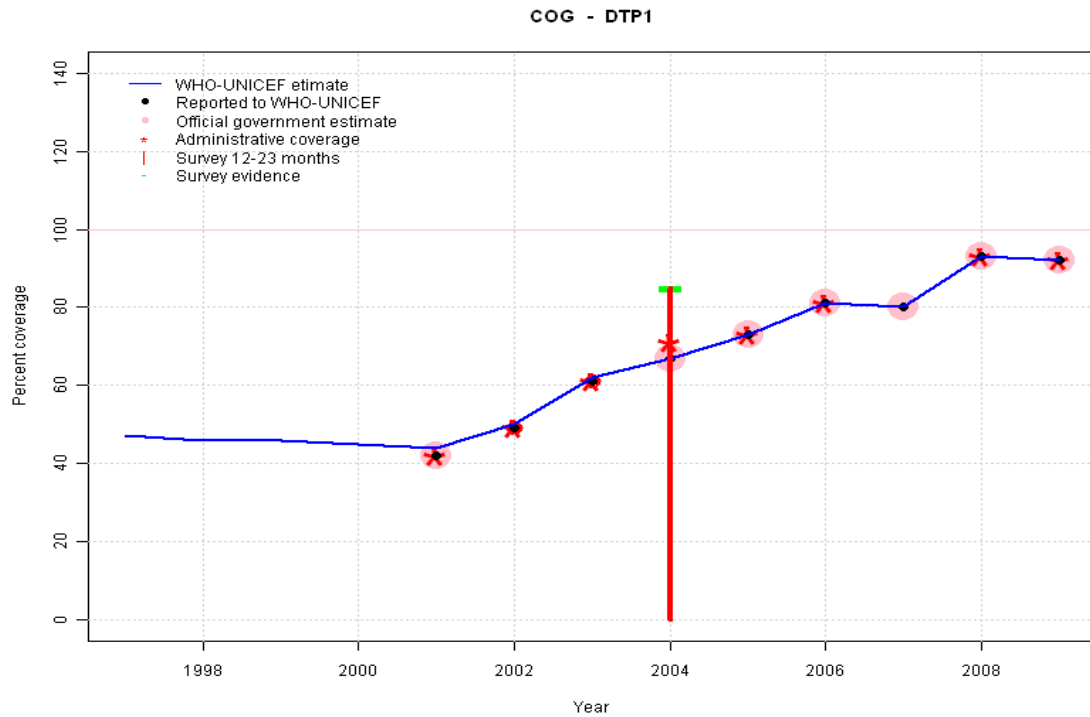
2007: Estimate based on reported data.

2008: Estimate based on reported data.

2009: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	29	34	39	50	53	51	60	85	73	84	86	93	90
Reported	29	NA	39	50	53	51	60	85	73	84	86	93	90
Official	NA	NA	39	50	53	51	60	85	73	84	86	93	90
Administrative	NA	NA	39	50	53	51	57	77	73	80	86	87	84
Survey	NA	NA	NA	NA	NA	NA	NA	90	NA	NA	NA	NA	NA

Congo - DTP1



Description:

1997: Legacy estimate.

1998: Reported data (42 percent) calibrated to 1997 and 2004 levels. Missing or ignored reported value estimated by extrapolation from 2001 reported value of 42 percent.

1999: Reported data (42 percent) calibrated to 1997 and 2004 levels. Missing or ignored reported value estimated by extrapolation from 2001 reported value of 42 percent.

2000: Reported data (42 percent) calibrated to 1997 and 2004 levels. Missing or ignored reported value estimated by extrapolation from 2001 reported value of 42 percent.

2001: Reported data (42 percent) calibrated to 1997 and 2004 levels.

2002: Reported data (49 percent) calibrated to 1997 and 2004 levels.

2003: Reported data (61 percent) calibrated to 1997 and 2004 levels.

2004: Survey suggests higher level of coverage than nationally reported coverage. Survey supports reported data for other antigens.

2005: Estimate based on reported data.

2006: Estimate based on reported data.

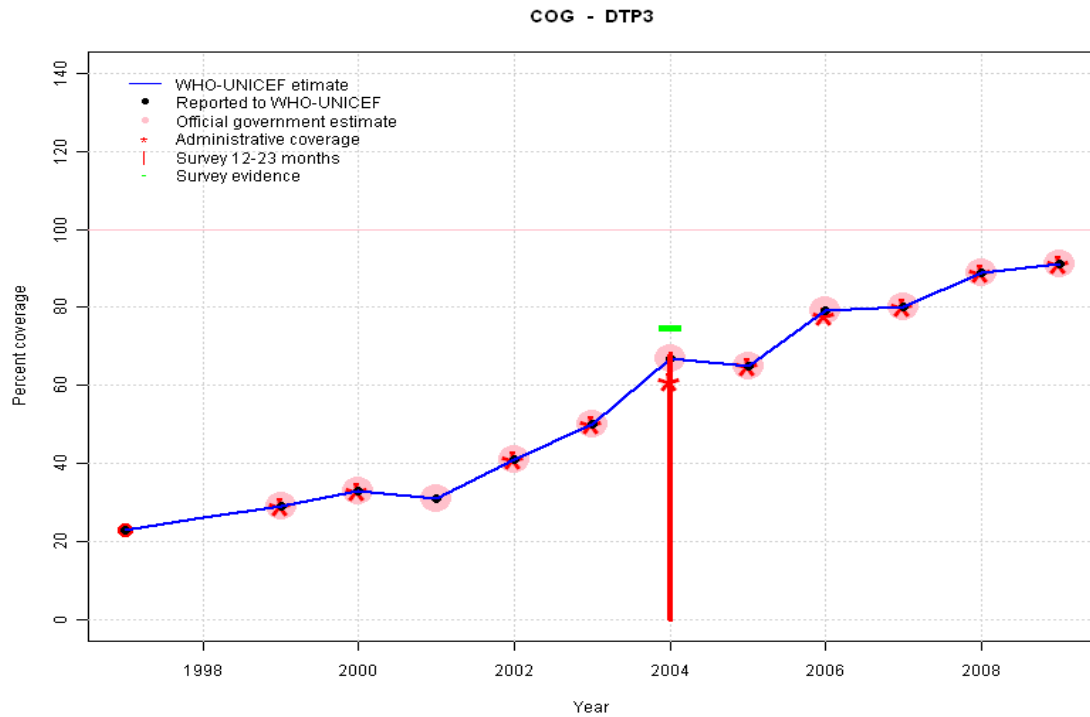
2007: Estimate based on reported data.

2008: Estimate based on reported data.

2009: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	47	46	46	45	44	50	62	67	73	81	80	93	92
Reported	NA	NA	NA	NA	42	49	61	67	73	81	80	93	92
Official	NA	NA	NA	NA	42	NA	NA	67	73	81	80	93	92
Administrative	NA	NA	NA	NA	42	49	61	71	73	81	NA	93	92
Survey	NA	NA	NA	NA	NA	NA	NA	85	NA	NA	NA	NA	NA

Congo - DTP3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	23	26	29	33	31	41	50	67	65	79	80	89	91
Reported	23	NA	29	33	31	41	50	67	65	79	80	89	91
Official	NA	NA	29	33	31	41	50	67	65	79	80	89	91
Administrative	NA	NA	29	33	NA	41	50	61	65	78	80	89	91
Survey	NA	NA	NA	NA	NA	NA	NA	75	NA	NA	NA	NA	NA

Description:

1997: Legacy estimate.

1998: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 23 percent in 1997 and 29 percent in 1999.

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 (67 percent) confirmed by survey (75 percent). Survey results (68 percent) adjusted for recall bias to 75 percent based on first dose card or history coverage (85 percent) and documented drop-out between first (59 percent) and third (52 percent) doses.

2005: Estimate based on reported data.

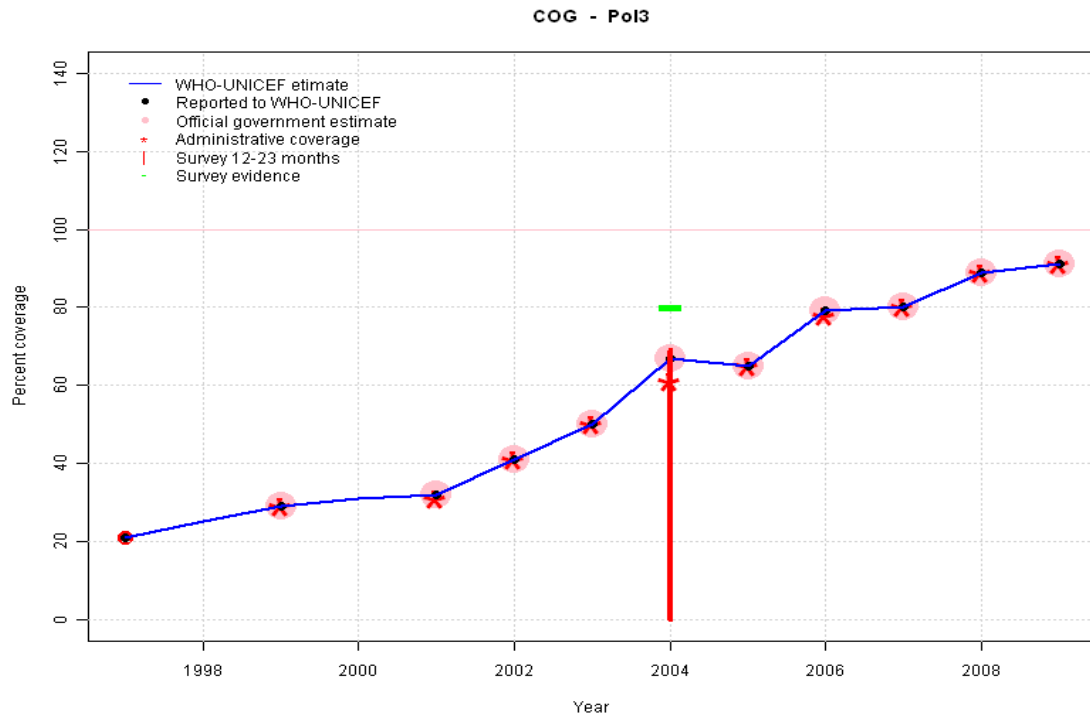
2006: Estimate based on reported data.

2007: Estimate based on reported data.

2008: Estimate based on reported data.

2009: Estimate based on reported data.

Congo - Pol3



Description:

1997: Legacy estimate.

1998: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 21 percent in 1997 and 29 percent in 1999.

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 29 percent in 1999 and 32 percent in 2001.

2001: Estimate based on reported data.

2002: Estimate based on reported data.

2003: Estimate based on reported data.

2004: Survey suggests higher level of coverage than nationally reported coverage. Survey supports reported data for other antigens. Survey results (69 percent) adjusted for recall bias to 80 percent based on first dose card or history coverage (93 percent) and documented drop-out between first (59 percent) and third (51 percent) doses.

2005: Estimate based on reported data.

2006: Estimate based on reported data.

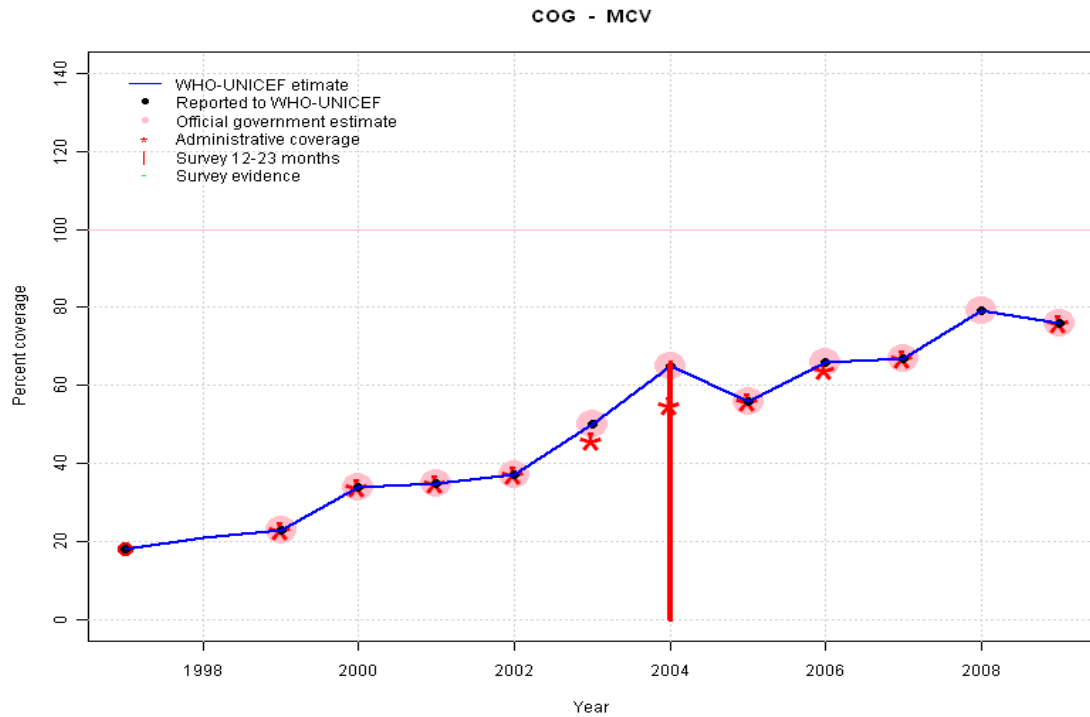
2007: Estimate based on reported data.

2008: Estimate based on reported data.

2009: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	21	25	29	31	32	41	50	67	65	79	80	89	91
Reported	21	NA	29	NA	32	41	50	67	65	79	80	89	91
Official	NA	NA	29	NA	32	41	50	67	65	79	80	89	91
Administrative	NA	NA	29	NA	31	41	50	61	65	78	80	89	91
Survey	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA

Congo - MCV



Description:

1997: Legacy estimate.

1998: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 18 percent in 1997 and 23 percent in 1999.

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 (65 percent) confirmed by survey (66 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. All other antigens show significant increase.

2009: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	18	21	23	34	35	37	50	65	56	66	67	79	76
Reported	18	NA	23	34	35	37	50	65	56	66	67	79	76
Official	NA	NA	23	34	35	37	50	65	56	66	67	79	76
Administrative	NA	NA	23	34	35	37	46	55	56	64	67	NA	76
Survey	NA	NA	NA	NA	NA	NA	NA	66	NA	NA	NA	NA	NA

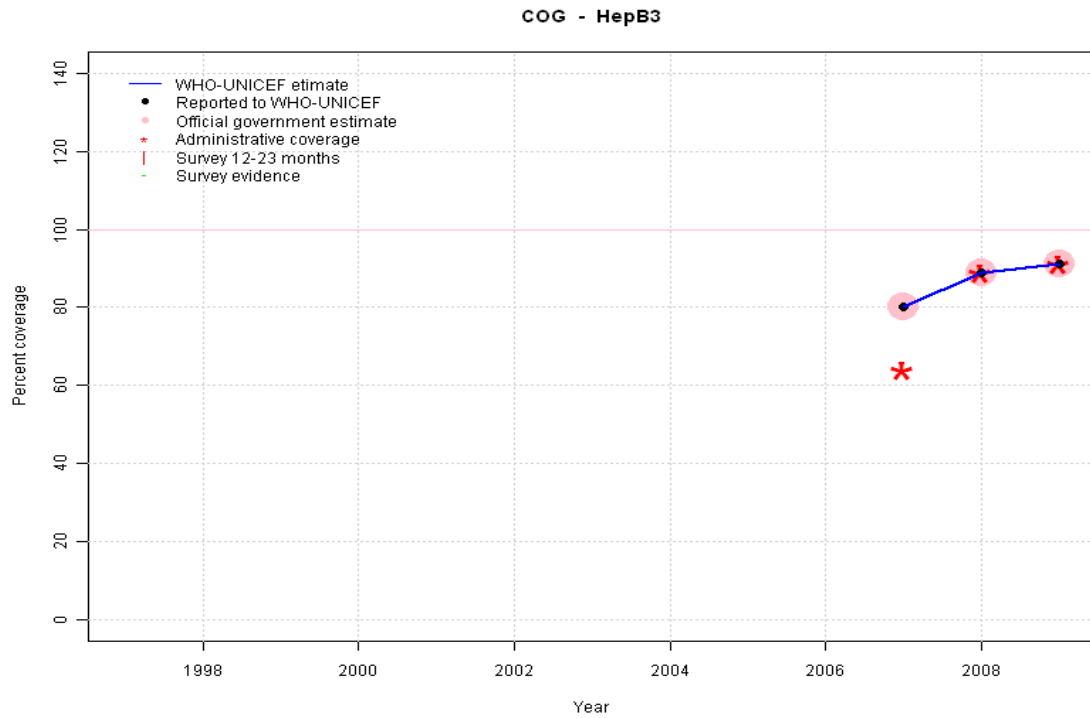
Congo - HepB3

Description:

2007: Estimate based on reported data. HepB introduced in 2007

2008: Estimate based on reported data.

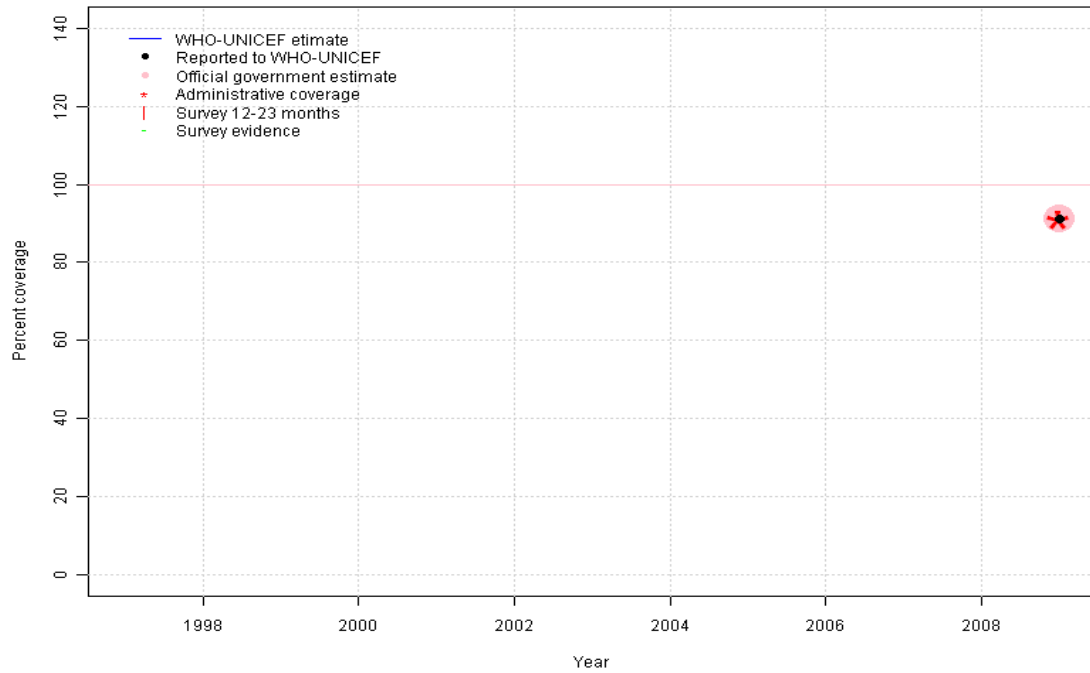
2009: Estimate based on reported data.



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	89	91
Reported	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	89	91
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	89	91
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	64	89	91
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Congo - Hib3

COG - Hib3

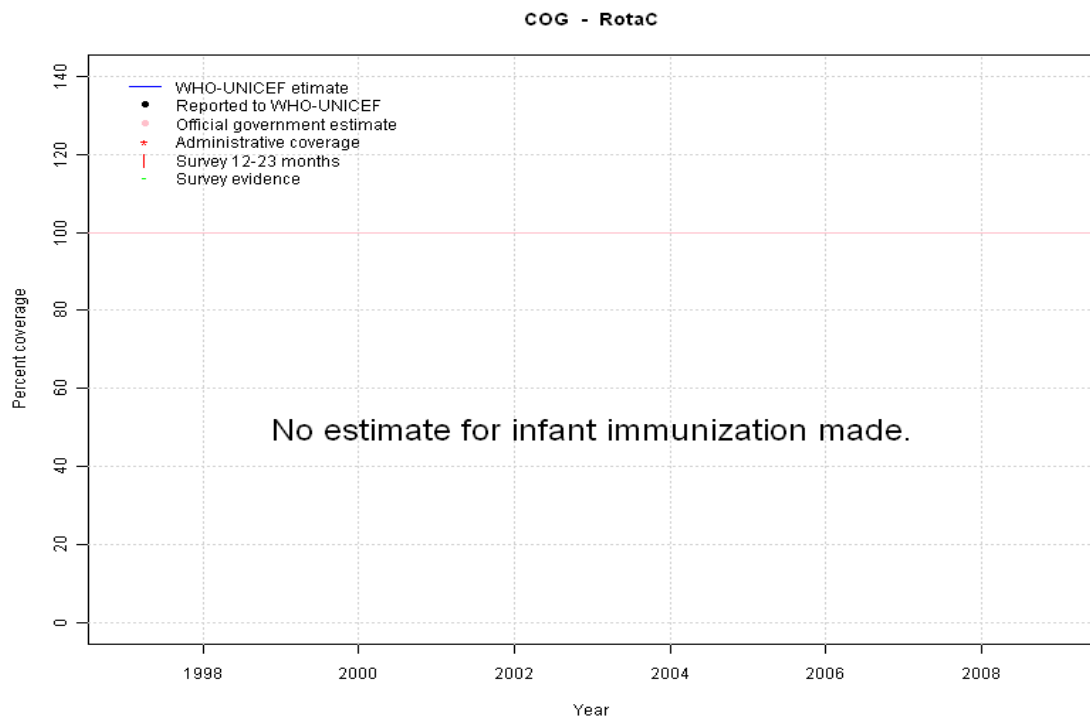


Description:

2009: Estimate based on reported data. Hib introduced in 2009 Vaccine presentation is DTP-HepB-Hib.

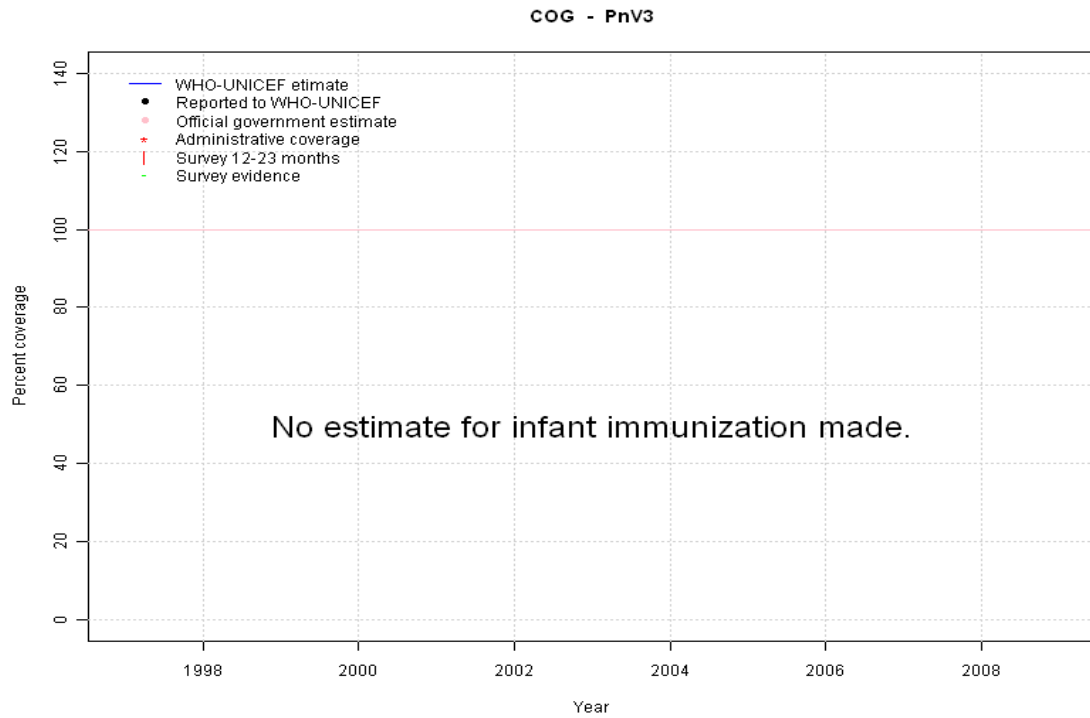
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	91
Reported	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	91
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	91
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	91
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Congo - 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

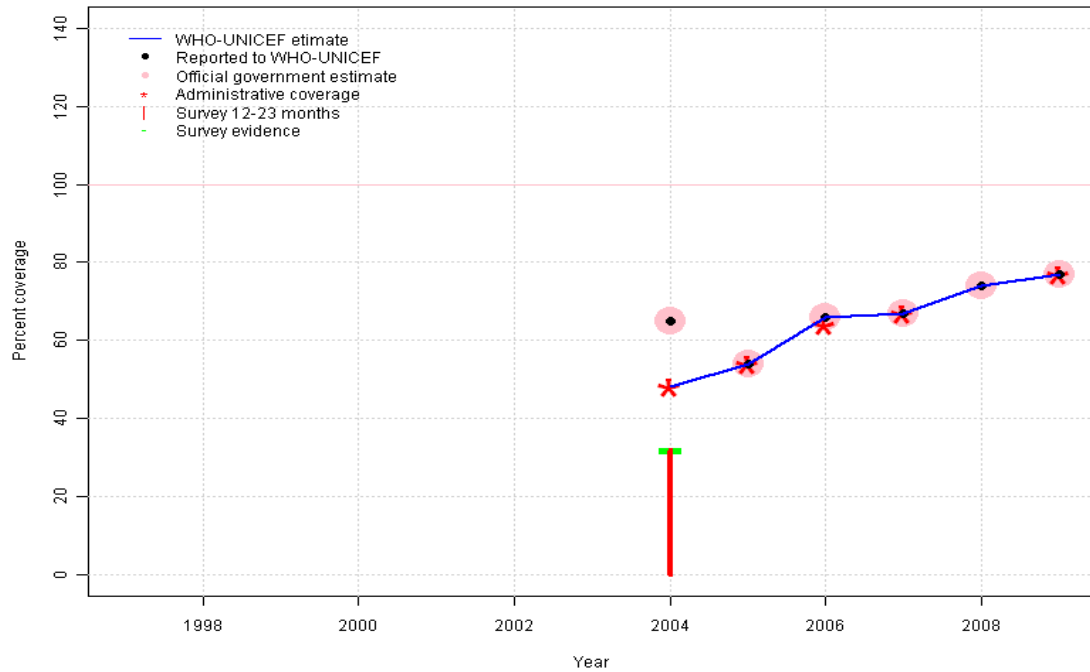
Congo - PnV3



	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

Congo - YFV

COG - YFV



Description:

2004: YFV introduced in 2004

2005: Estimate based on nationally reported data. 2005 reported data (54 percent) inconsistent with data from other years.

2006: Estimate based on nationally 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	NA	NA	NA	NA	NA	NA	NA	48	54	66	67	74	77
Reported	NA	NA	NA	NA	NA	NA	NA	65	54	66	67	74	77
Official	NA	NA	NA	NA	NA	NA	NA	65	54	66	67	74	77
Administrative	NA	NA	NA	NA	NA	NA	NA	48	54	64	67	NA	77
Survey	NA	NA	NA	NA	NA	NA	NA	32	NA	NA	NA	NA	NA

Congo - survey details

2004 Enquête démographique and de santé du Congo, 2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	59	12-23 m	899	60
BCG	Card or History	90	12-23 m	899	60
BCG	History	31	12-23 m	899	60
BCG	C or H <12 months	90	12-23 m	899	60
DTP1	C or H <12 months	84	12-23 m	899	60
DTP1	Card	59	12-23 m	899	60
DTP1	Card or History	85	12-23 m	899	60
DTP1	History	26	12-23 m	899	60
DTP3	C or H <12 months	66	12-23 m	899	60
DTP3	Card	52	12-23 m	899	60
DTP3	Card or History	68	12-23 m	899	60
DTP3	History	16	12-23 m	899	60
MCV	Card or History	66	12-23 m	899	60

MCV	Card	47	12-23 m	899	60
MCV	History	20	12-23 m	899	60
MCV	C or H <12 months	58	12-23 m	899	60
Pol1	C or H <12 months	92	12-23 m	899	60
Pol1	Card	59	12-23 m	899	60
Pol1	Card or History	93	12-23 m	899	60
Pol1	History	34	12-23 m	899	60
Pol3	C or H <12 months	66	12-23 m	899	60
Pol3	Card	51	12-23 m	899	60
Pol3	Card or History	69	12-23 m	899	60
Pol3	History	18	12-23 m	899	60
YFV	History	11	12-23 m	899	60
YFV	C or H <12 months	26	12-23 m	899	60
YFV	Card	21	12-23 m	899	60
YFV	Card or History	32	12-23 m	899	60

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

Congo

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	62
1998	62
1999	63
2000	67
2001	67
2002	69
2003	79
2004	74
2005	75
2006	81
2007	82
2008	82
2009	82

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.