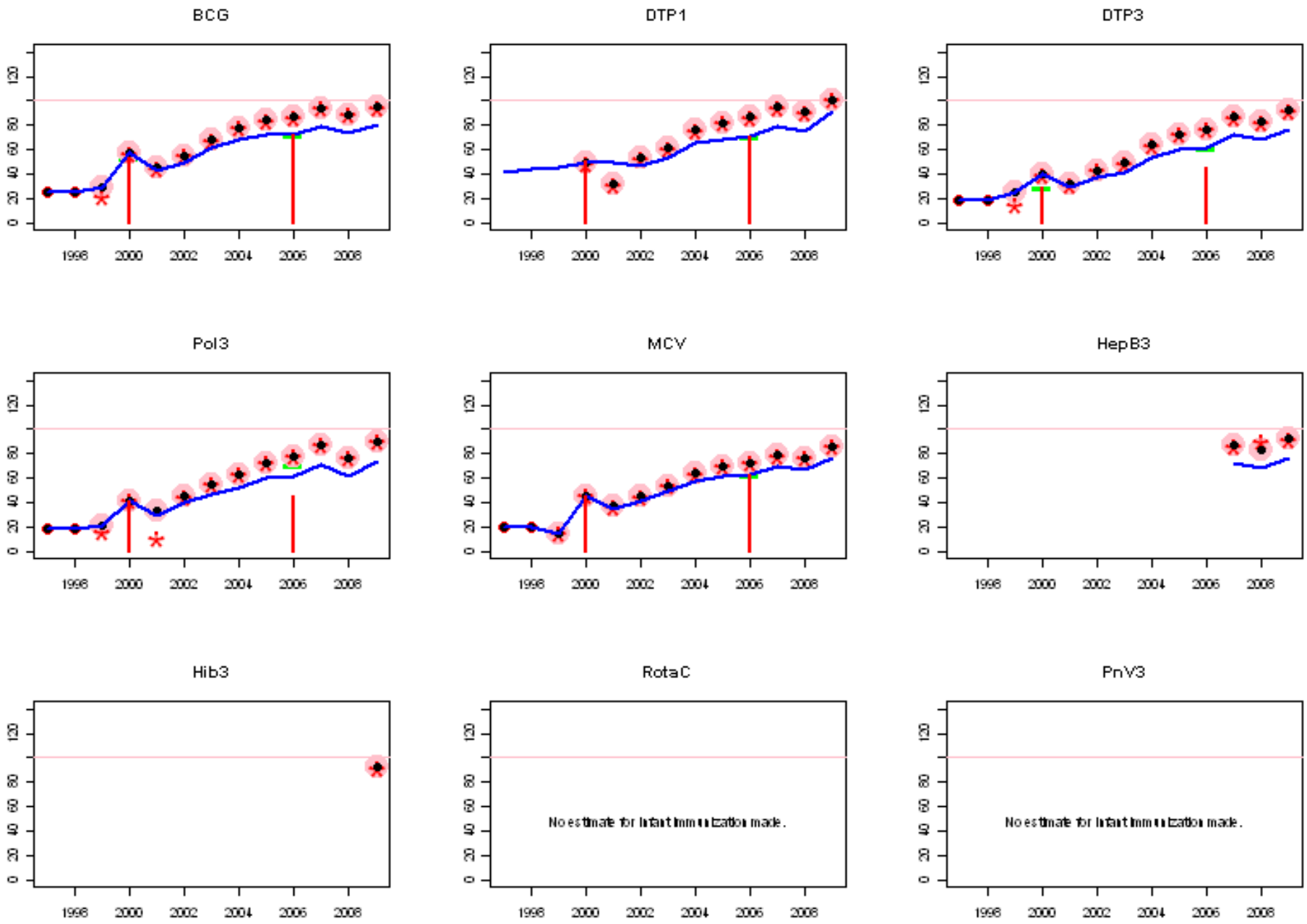
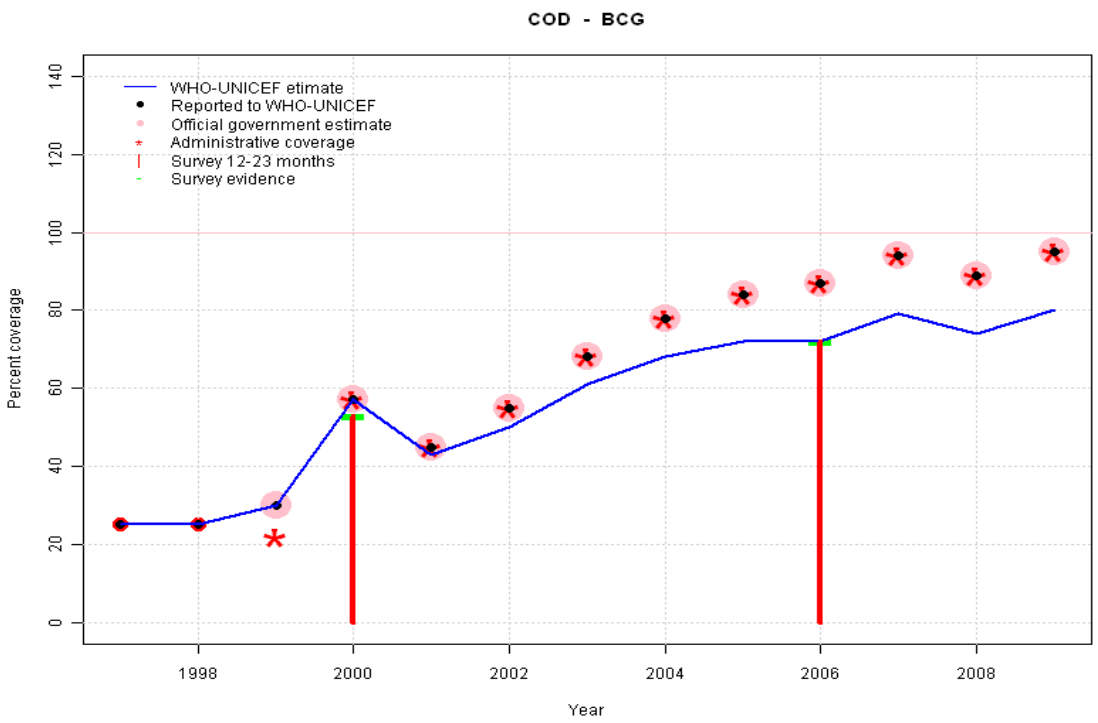

BCG
DTP1
DTP3
Pol3
MCV
HepB3
Hib3
RotaC
PnV3
No estimate for infant immunization made.
No estimate for infant immunization made.
0
20
40
60
80
120
1998
2000
2002
2004
2006
2008

Democratic Republic of the Congo - BCG

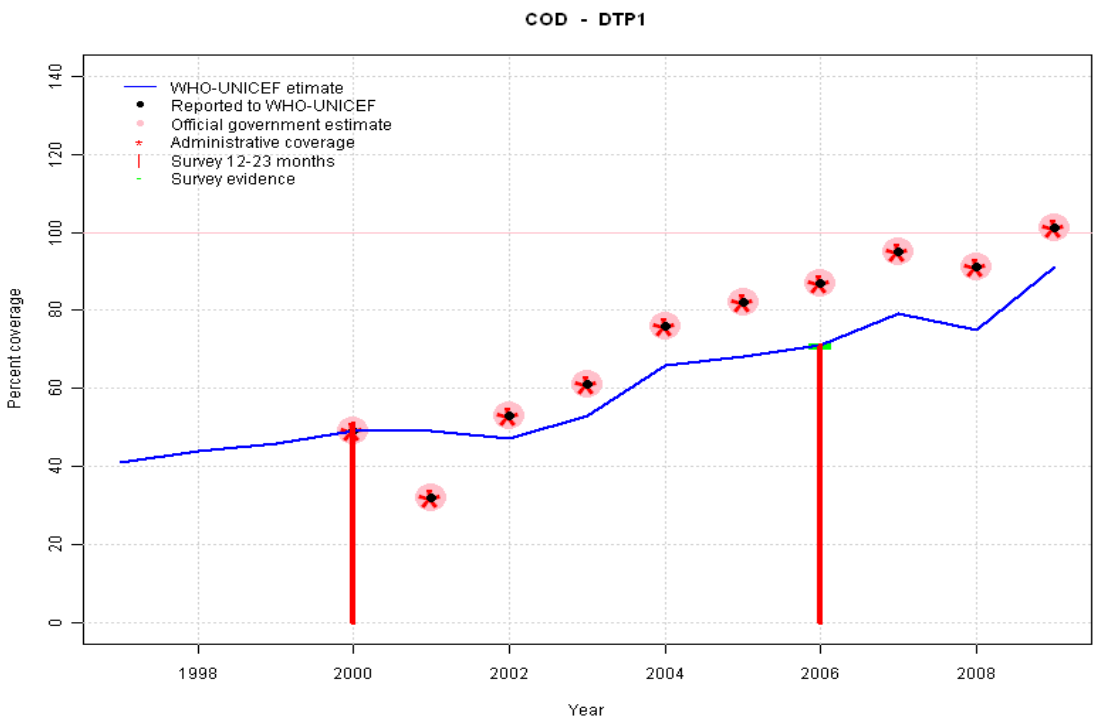


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	25	25	30	57	43	50	61	68	72	72	79	74	80
Reported	25	25	30	57	45	55	68	78	84	87	94	89	95
Official	NA	NA	30	57	45	55	68	78	84	87	94	89	95
Administrative	NA	NA	22	57	45	55	68	78	84	87	94	89	95
Survey	NA	NA	NA	53	NA	NA	NA	NA	NA	72	NA	NA	NA

Description:

1997: Legacy estimate.
1998: Estimate based on reported data.
1999: Estimate based on reported data.
2000: Estimate based on reported data (57 percent) confirmed by survey (53 percent).
2001: Reported data (45 percent) calibrated to 2000 and 2006 levels.
2002: Reported data (55 percent) calibrated to 2000 and 2006 levels.
2003: Reported data (68 percent) calibrated to 2000 and 2006 levels.
2004: Reported data (78 percent) calibrated to 2000 and 2006 levels.
2005: Reported data (84 percent) calibrated to 2000 and 2006 levels.
2006: Estimate based on survey results. Reported data (87 percent) not consistent with survey results (72 percent).
2007: Reported data (94 percent) calibrated to 2006 level (72 percent).
2008: Reported data (89 percent) calibrated to 2006 level (72 percent). The decline in coverage in 2008 is attributed to vaccine shortage.
2009: Reported data (95 percent) calibrated to 2006 level (72 percent).

Democratic Republic of the Congo - DTP1

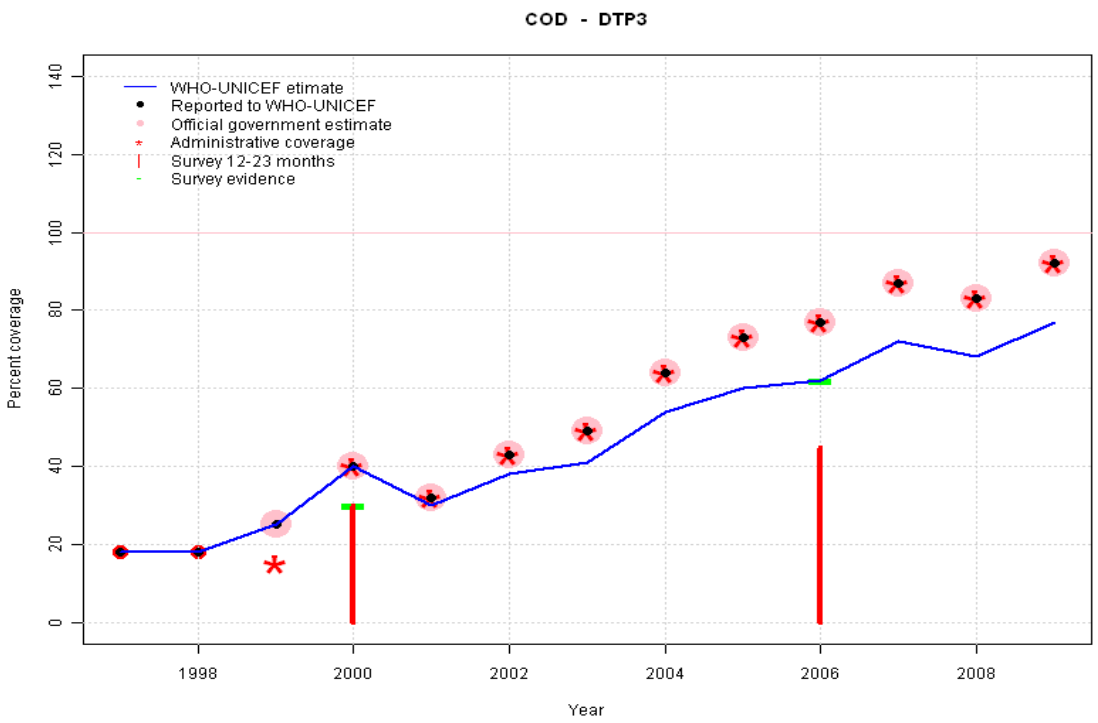


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	41	44	46	49	49	47	53	66	68	71	79	75	91
Reported	NA	NA	NA	49	32	53	61	76	82	87	95	91	101
Official	NA	NA	NA	49	32	53	61	76	82	87	95	91	101
Administrative	NA	NA	NA	49	32	53	61	76	82	87	95	91	101
Survey	NA	NA	NA	51	NA	NA	NA	NA	NA	71	NA	NA	NA

Description:

1997: Legacy estimate.
1998: Estimate interpolated between 1997 and 2000 estimates.
1999: Estimate interpolated between 1997 and 2000 estimates.
2000: Estimate based on reported data (49 percent) confirmed by survey (51 percent).
2001: Reported data (51 percent) calibrated to 2000 and 2006 levels. Missing or ignored reported value estimated by interpolation between reported values of 49 percent in 2000 and 53 percent in 2002. 2001 reported data (32 percent) inconsistent with data from other years.
2002: Reported data (53 percent) calibrated to 2000 and 2006 levels.
2003: Reported data (61 percent) calibrated to 2000 and 2006 levels.
2004: Reported data (76 percent) calibrated to 2000 and 2006 levels.
2005: Reported data (82 percent) calibrated to 2000 and 2006 levels.
2006: Estimate based on survey results. Reported data (87 percent) not consistent with survey results (71 percent).
2007: Reported data (95 percent) calibrated to 2006 level (71 percent).
2008: Reported data (91 percent) calibrated to 2006 level (71 percent). The decline in coverage in 2008 is attributed to vaccine shortage.
2009: Estimated DTP3 greater than estimated DTP1; DTP1 estimate based on the relationship between DTP1 and DTP3 from 282 surveys.

Democratic Republic of the Congo - DTP3

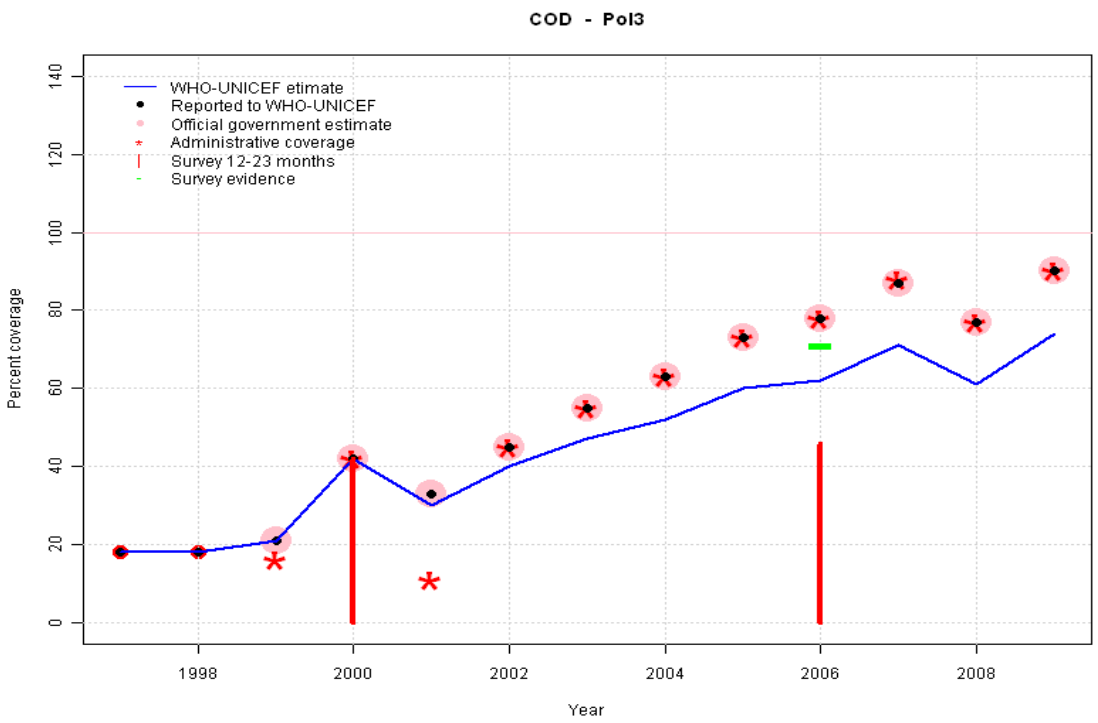


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	18	18	25	40	30	38	41	54	60	62	72	68	77
Reported	18	18	25	40	32	43	49	64	73	77	87	83	92
Official	NA	NA	25	40	32	43	49	64	73	77	87	83	92
Administrative	NA	NA	15	40	32	43	49	64	73	77	87	83	92
Survey	NA	NA	NA	30	NA	NA	NA	NA	NA	62	NA	NA	NA

Description:

1997: Legacy estimate.
1998: Estimate based on reported data.
1999: Estimate based on reported data.
2000: Estimate based on reported data (40 percent) confirmed by survey (30 percent).
2001: Reported data (32 percent) calibrated to 2000 and 2006 levels.
2002: Reported data (43 percent) calibrated to 2000 and 2006 levels.
2003: Reported data (49 percent) calibrated to 2000 and 2006 levels.
2004: Reported data (64 percent) calibrated to 2000 and 2006 levels.
2005: Reported data (73 percent) calibrated to 2000 and 2006 levels.
2006: Estimate based on survey results. Reported data (77 percent) not consistent with survey results (62 percent). Survey results (45 percent) adjusted for recall bias to 62 percent based on first dose card or history coverage (71 percent) and documented drop-out between first (23 percent) and third (20 percent) doses.
2007: Reported data (87 percent) calibrated to 2006 level (62 percent).
2008: Reported data (83 percent) calibrated to 2006 level (62 percent). The decline in coverage in 2008 is attributed to vaccine shortage.
2009: Reported data (92 percent) calibrated to 2006 level (62 percent).

Democratic Republic of the Congo - Pol3

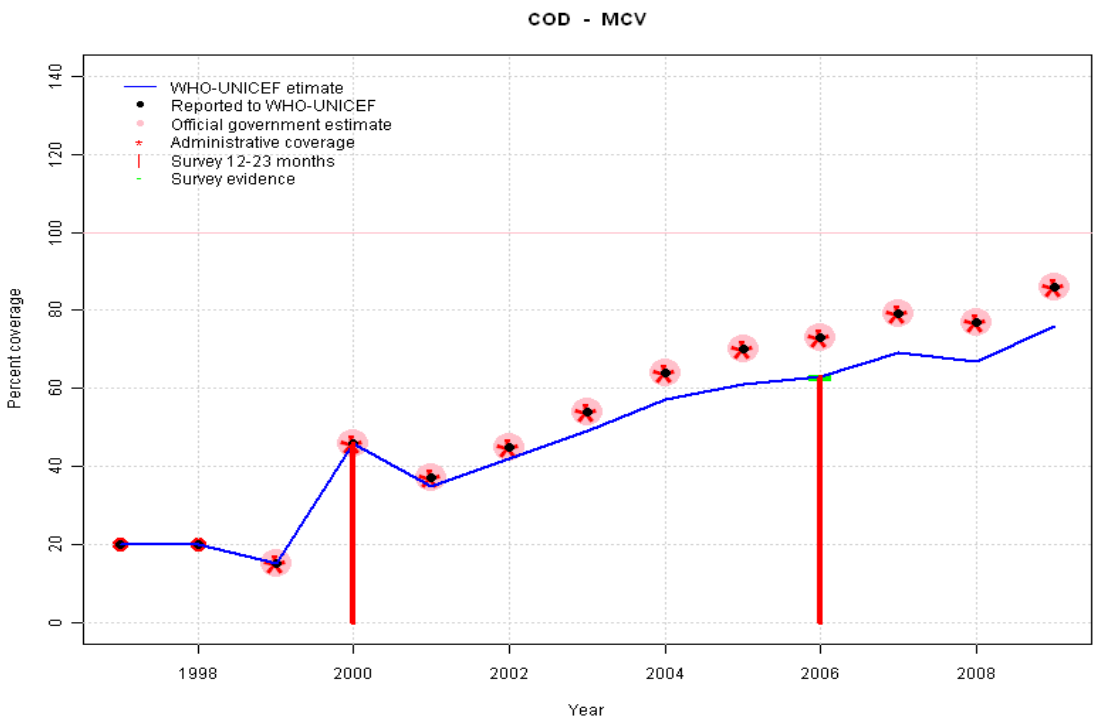


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	18	18	21	42	30	40	47	52	60	62	71	61	74
Reported	18	18	21	42	33	45	55	63	73	78	87	77	90
Official	NA	NA	21	42	33	45	55	63	73	78	87	77	90
Administrative	NA	NA	16	42	11	45	55	63	73	78	88	77	90
Survey	NA	NA	NA	42	NA	NA	NA	NA	NA	71	NA	NA	NA

Description:

1997: Legacy estimate.
1998: Estimate based on reported data.
1999: Estimate based on reported data.
2000: Estimate based on reported data (42 percent) confirmed by survey (42 percent).
2001: Reported data (33 percent) calibrated to 2000 and 2006 levels.
2002: Reported data (45 percent) calibrated to 2000 and 2006 levels.
2003: Reported data (55 percent) calibrated to 2000 and 2006 levels.
2004: Reported data (63 percent) calibrated to 2000 and 2006 levels.
2005: Reported data (73 percent) calibrated to 2000 and 2006 levels.
2006: Survey does not support reported for other antigens. Recall bias adjustment likely includes doses administered during SIAs. Recall bias factor recalibrated to reflect the adjustment for DTP3 for the same survey. Survey results (46 percent) adjusted for recall bias to 71 percent based on first dose card or history coverage (78 percent) and documented drop-out between first (23 percent) and third (21 percent) doses.
2007: Reported data (87 percent) calibrated to 2006 level (62 percent).
2008: Reported data (77 percent) calibrated to 2006 level (62 percent). The decline in coverage in 2008 is attributed to vaccine shortage.
2009: Reported data (90 percent) calibrated to 2006 level (62 percent). Estimate follows reported data.

Democratic Republic of the Congo - MCV

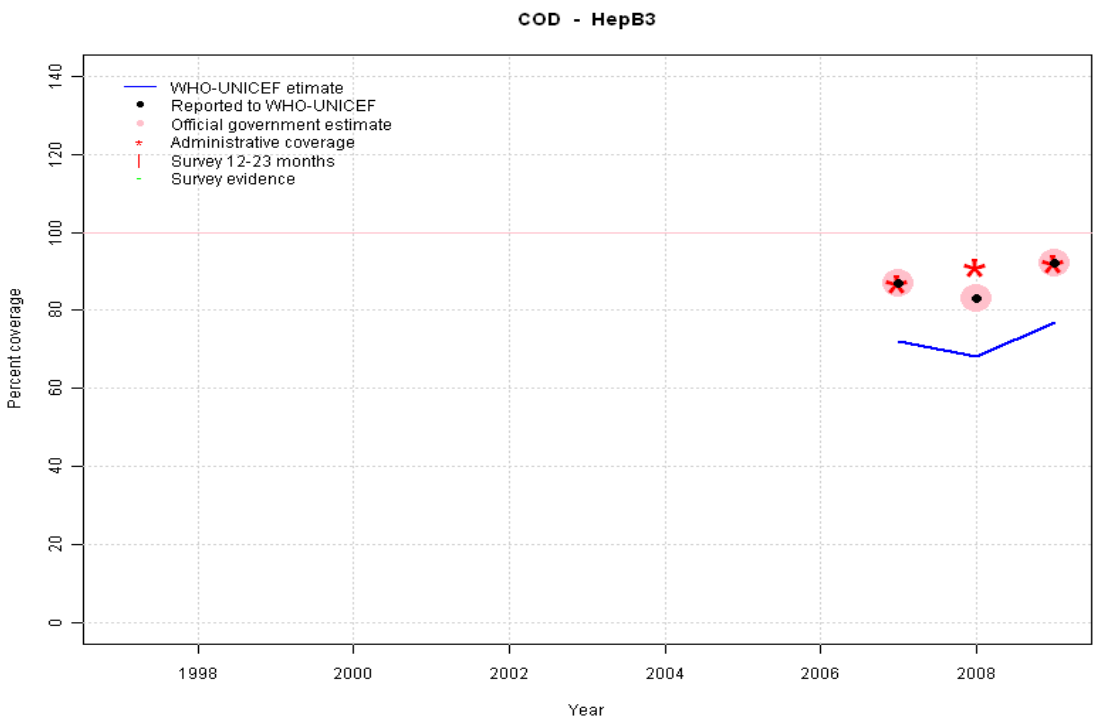


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	20	20	15	46	35	42	49	57	61	63	69	67	76
Reported	20	20	15	46	37	45	54	64	70	73	79	77	86
Official	NA	NA	15	46	37	45	54	64	70	73	79	77	86
Administrative	NA	NA	15	46	37	45	54	64	70	73	79	77	86
Survey	NA	NA	NA	46	NA	NA	NA	NA	NA	63	NA	NA	NA

Description:

1997: Legacy estimate.
1998: Estimate based on reported data.
1999: Estimate based on reported data.
2000: Estimate based on reported data (46 percent) confirmed by survey (46 percent).
2001: Reported data (37 percent) calibrated to 2000 and 2006 levels.
2002: Reported data (45 percent) calibrated to 2000 and 2006 levels.
2003: Reported data (54 percent) calibrated to 2000 and 2006 levels.
2004: Reported data (64 percent) calibrated to 2000 and 2006 levels.
2005: Reported data (70 percent) calibrated to 2000 and 2006 levels.
2006: DTP3 and Pol3 estimates are based on survey results. MCV estimates based on survey to maintain consistency
2007: Reported data (79 percent) calibrated to 2006 level (63 percent).
2008: Reported data (77 percent) calibrated to 2006 level (63 percent). The decline in coverage in 2008 is attributed to vaccine shortage.
2009: Reported data (86 percent) calibrated to 2006 level (63 percent).

Democratic Republic of the Congo - HepB3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	72	68	77
Reported	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	87	83	92
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	87	83	92
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	87	91	92
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

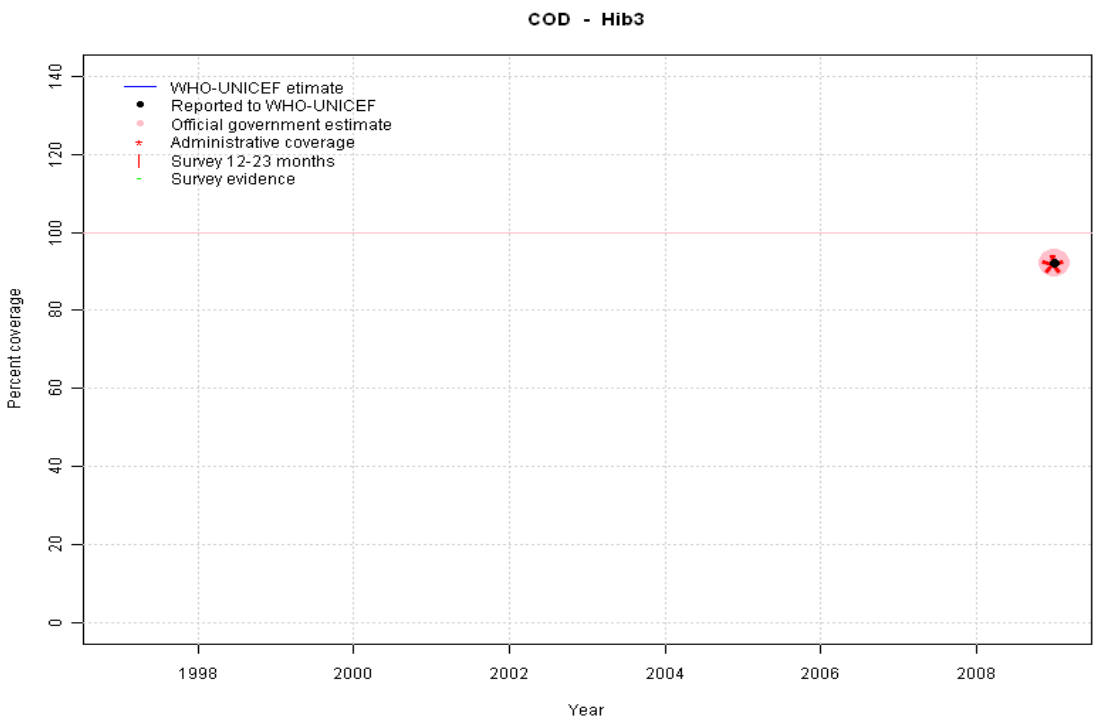
Description:

2007: Estimate assigned by working group. Estimate follows DTP3 coverage levels. The vaccine presentation is DTP-HepB. HepB introduced in 2007

2008: Estimate assigned by working group. Estimate follows DTP3 coverage levels. The vaccine presentation is DTP-HepB. The decline in coverage in 2008 is attributed to vaccine shortage.

2009: Estimate assigned by working group. Estimate follows DTP3 coverage levels. The vaccine presentation is DTP-HepB-Hib.

Democratic Republic of the Congo - Hib3

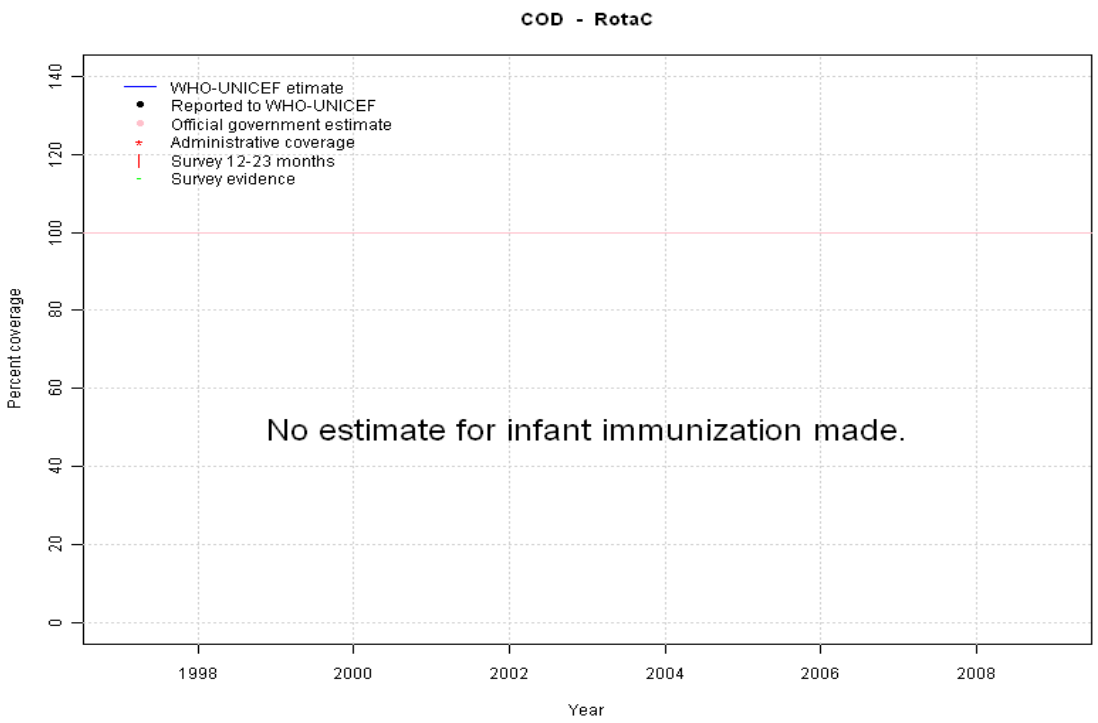


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	77
Reported	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	92
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	92
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	92
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Description:

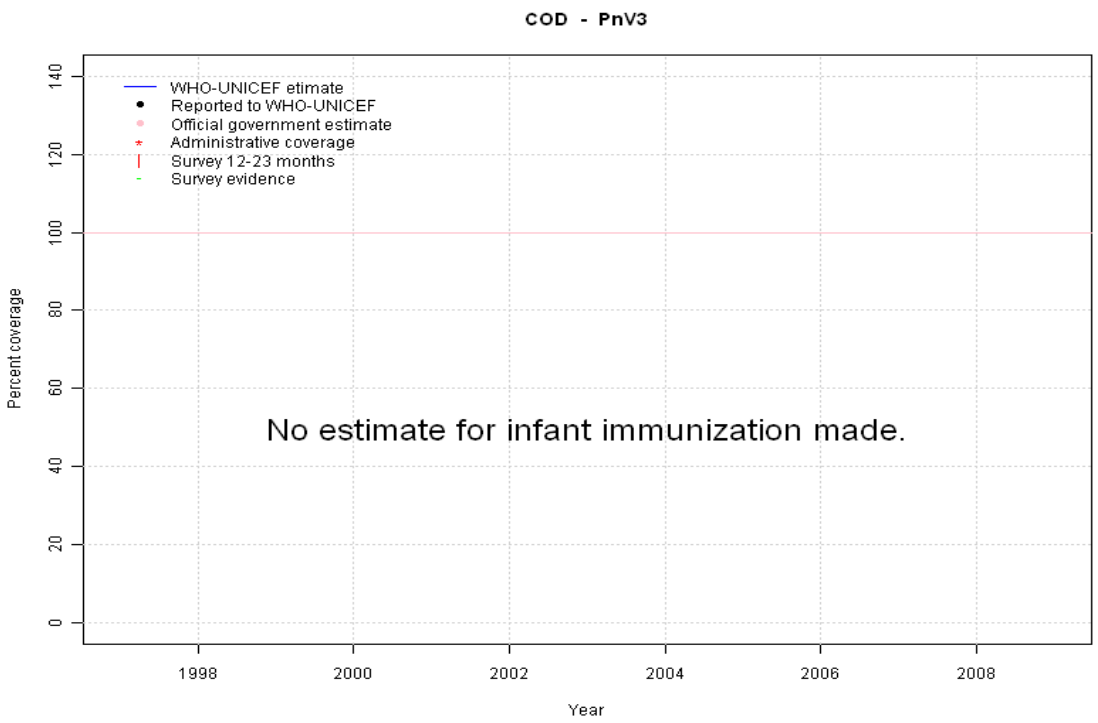
2009: Estimate assigned by working group. Estimate follows DTP3 coverage levels. The vaccine presentation is DTP-HepB-Hib. Hib introduced in 2009 Vaccine presentation is DTP-HepB-Hib.

Democratic Republic of the Congo - RotaC



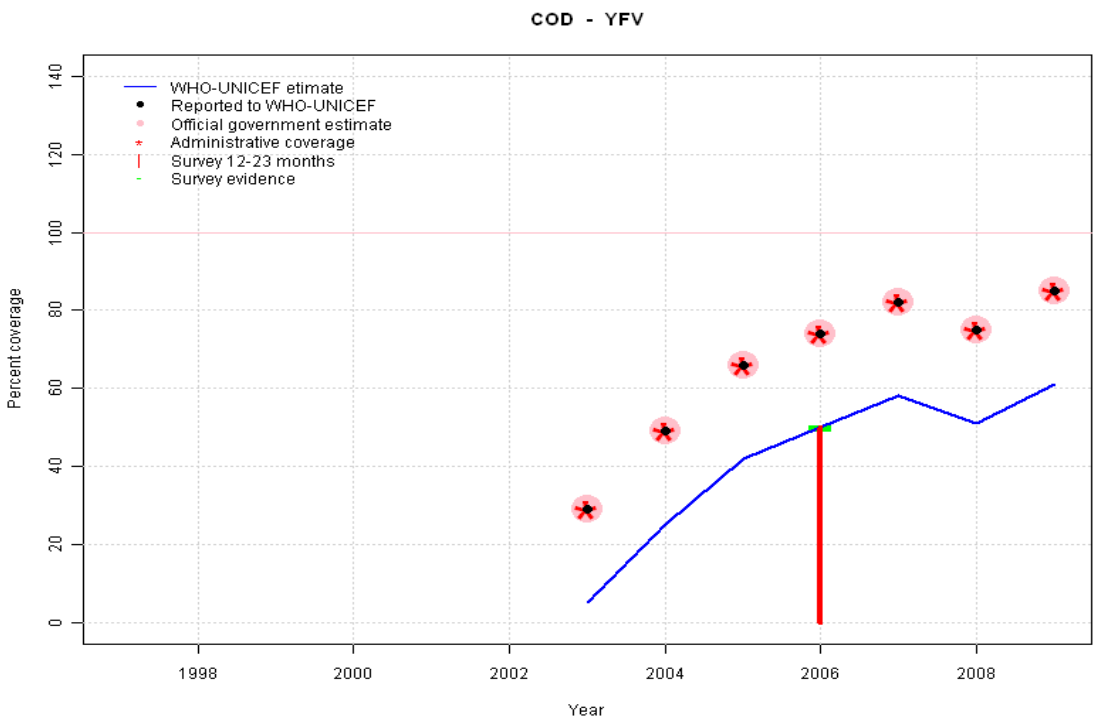
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reported	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA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

Democratic Republic of the 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

Democratic Republic of the Congo - YFV



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	NA	NA	NA	NA	NA	NA	5	25	42	50	58	51	61
Reported	NA	NA	NA	NA	NA	NA	29	49	66	74	82	75	85
Official	NA	NA	NA	NA	NA	NA	29	49	66	74	82	75	85
Administrative	NA	NA	NA	NA	NA	NA	29	49	66	74	82	75	85
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	50	NA	NA	NA

Description:

2003: Estimate calibrated to 2006 level (50 percent) and reported coverage (29 percent). YFV partially introduced in 2003 nationally in 2004 reporting started in 2003

2004: Estimate calibrated to 2006 level (50 percent) and reported coverage (49 percent).

2005: Estimate calibrated to 2006 level (50 percent) and reported coverage (66 percent).

2006: Estimate based on survey results. Reported data (74 percent) not consistent with survey results (50 percent).

2007: Estimate calibrated to 2006 level (50 percent) and reported coverage (82 percent).

2008: Estimate calibrated to 2006 level (50 percent) and reported coverage (75 percent). The decline in coverage in 2008 is attributed to vaccine shortage.

2009: Estimate calibrated to 2006 level (50 percent) and reported coverage (85 percent).

Democratic Republic of the Congo - survey details

2006 Enquête Démographique et de Santé République Démocratique du Congo 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	72	12-23 m	1585	24
BCG	Card	22	12-23 m	1585	24
BCG	Card or History	72	12-23 m	1585	24
BCG	History	49	12-23 m	1585	24
DTP1	C or H <12 months	70	12-23 m	1585	24
DTP1	Card	23	12-23 m	1585	24
DTP1	Card or History	71	12-23 m	1585	24
DTP1	History	48	12-23 m	1585	24
DTP3	History	25	12-23 m	1585	24
DTP3	C or H <12 months	44	12-23 m	1585	24
DTP3	Card	20	12-23 m	1585	24
DTP3	Card or History	45	12-23 m	1585	24
MCV	Card or History	63	12-23 m	1585	24
MCV	Card	20	12-23 m	1585	24
MCV	C or H <12 months	55	12-23 m	1585	24
MCV	History	42	12-23 m	1585	24
Pol1	C or H <12 months	77	12-23 m	1585	24
Pol1	Card	23	12-23 m	1585	24
Pol1	Card or History	78	12-23 m	1585	24
Pol1	History	54	12-23 m	1585	24
Pol3	C or H <12 months	44	12-23 m	1585	24
Pol3	History	25	12-23 m	1585	24
Pol3	Card	21	12-23 m	1585	24
Pol3	Card or History	46	12-23 m	1585	24
YFV	History	31	12-23 m	1585	24
YFV	C or H <12 months	42	12-23 m	1585	24
YFV	Card	19	12-23 m	1585	24
YFV	Card or History	50	12-23 m	1585	24

2000 DR Congo MICS 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	53	12-23 m	2690	22
DTP1	Card or History	51	12-23 m	2690	22
DTP3	Card or History	30	12-23 m	2690	22
MCV	Card or History	46	12-23 m	2690	22
Pol3	Card or History	42	12-23 m	2690	22

Further information and estmates 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

Democratic Republic of the 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	33
1998	50
1999	33
2000	45
2001	43
2002	61
2003	66
2004	67
2005	67
2006	66
2007	70
2008	75
2009	85

[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.