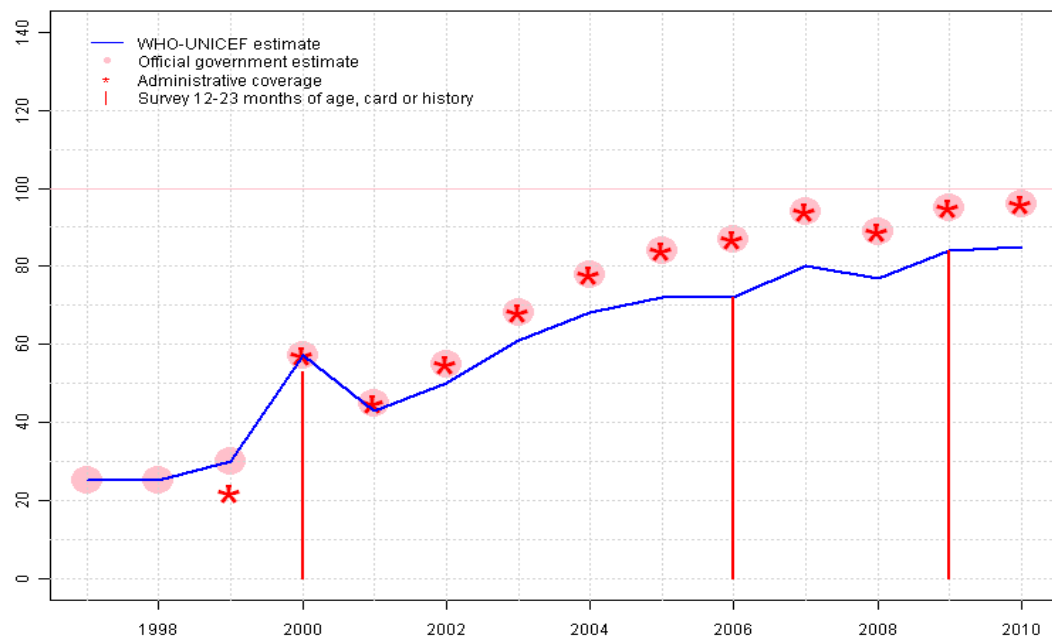


Democratic Republic of the Congo - BCG

COD - BCG



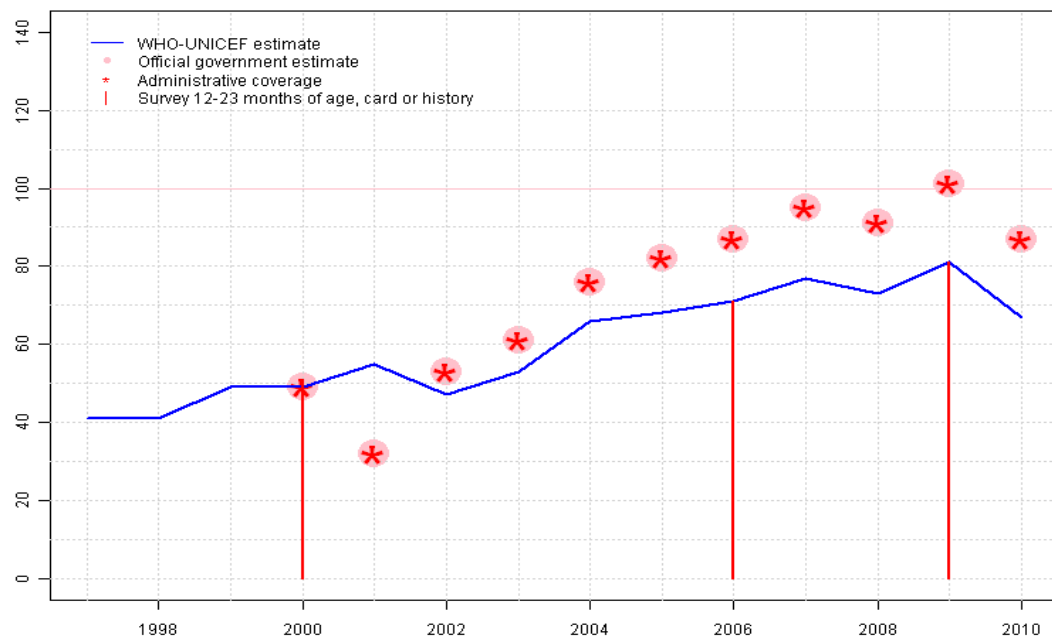
Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data.
- 2000: Estimate based on reported data. 53 percent survey results supports reported data of 57 percent. Estimate follows reported data.
- 2001: Reported data calibrated to 2000 and 2006 levels.
- 2002: Reported data calibrated to 2000 and 2006 levels.
- 2003: Reported data calibrated to 2000 and 2006 levels.
- 2004: Reported data calibrated to 2000 and 2006 levels.
- 2005: Reported data calibrated to 2000 and 2006 levels.
- 2006: Estimate based on survey results. 72 percent survey results does not support reported data of 87 percent.
- 2007: Reported data calibrated to 2006 and 2009 levels. Current estimate of 80 percent changed from previous revision value of 79 percent.
- 2008: Reported data calibrated to 2006 and 2009 levels. The decline in coverage is attributed to vaccine shortage. Current estimate of 77 percent changed from previous revision value of 74 percent.
- 2009: Estimate based on survey results. 84 percent survey results does not support reported data of 95 percent. Current estimate of 84 percent changed from previous revision value of 80 percent.
- 2010: Reported data 96 percent calibrated to 2009 levels.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	25	25	30	57	43	50	61	68	72	72	80	77	84	85
Official	25	25	30	57	45	55	68	78	84	87	94	89	95	96
Administrative	NA	NA	22	57	45	55	68	78	84	87	94	89	95	96
Survey	NA	NA	NA	53	NA	NA	NA	NA	NA	72	NA	NA	84	NA

Democratic Republic of the Congo - DTP1

COD - DTP1



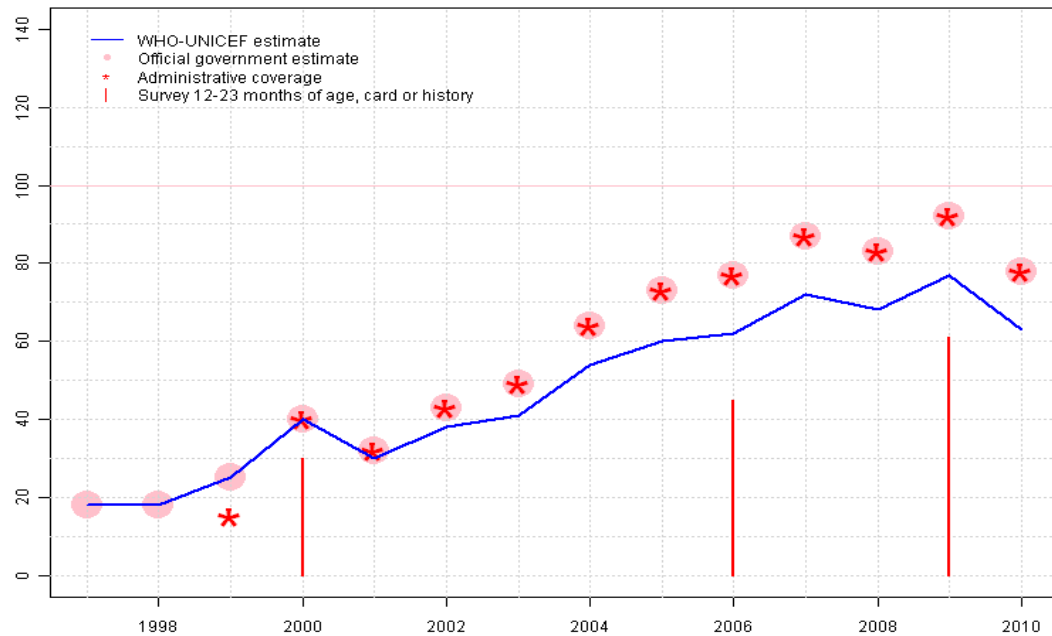
Description:

- 1997: Legacy estimate.
- 1998: No DTP1 data. Estimate based on DTP3 coverage of 18. Current estimate of 41 percent changed from previous revision value of 44 percent.
- 1999: No DTP1 data. Estimate based on DTP3 coverage of 25. Current estimate of 49 percent changed from previous revision value of 46 percent.
- 2000: Estimate based on reported data. 51 percent survey results supports reported data of 49 percent.
- 2001: No DTP1 data. Estimate based on DTP3 coverage of 30. Reported data not accepted due to a decline from 49 percent to 32 percent with a subsequent increase to 53 percent. Current estimate of 55 percent changed from previous revision value of 49 percent.
- 2002: Reported data calibrated to 2000 and 2006 levels.
- 2003: Reported data calibrated to 2000 and 2006 levels.
- 2004: Reported data calibrated to 2000 and 2006 levels.
- 2005: Reported data calibrated to 2000 and 2006 levels.
- 2006: Estimate based on survey results. 71 percent survey results does not support reported data of 87 percent.
- 2007: Reported data calibrated to 2006 and 2009 levels. Current estimate of 77 percent changed from previous revision value of 79 percent.
- 2008: Reported data calibrated to 2006 and 2009 levels. The decline in coverage is attributed to vaccine shortage. Current estimate of 73 percent changed from previous revision value of 75 percent.
- 2009: Estimate based on survey results. 81 percent survey results does not support reported data of 101 percent. Estimate follows reported data. Current estimate of 81 percent changed from previous revision value of 91 percent.
- 2010: Reported data 87 percent calibrated to 2009 levels. The decline in coverage is attributed to vaccine shortage.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	41	41	49	49	55	47	53	66	68	71	77	73	81	67
Official	NA	NA	NA	49	32	53	61	76	82	87	95	91	101	87
Administrative	NA	NA	NA	49	32	53	61	76	82	87	95	91	101	87
Survey	NA	NA	NA	51	NA	NA	NA	NA	NA	71	NA	NA	81	NA

Democratic Republic of the Congo - DTP3

COD - DTP3



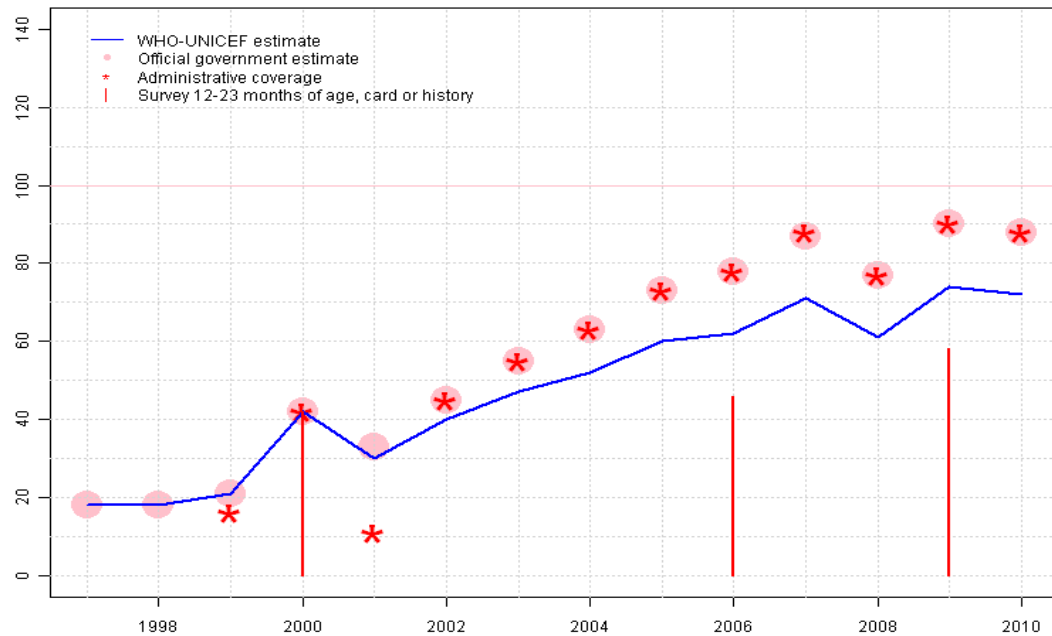
Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data.
- 2000: Estimate based on reported data. 30 percent survey results supports reported data of 40 percent.
- 2001: Reported data calibrated to 2000 and 2006 levels.
- 2002: Reported data calibrated to 2000 and 2006 levels.
- 2003: Reported data calibrated to 2000 and 2006 levels.
- 2004: Reported data calibrated to 2000 and 2006 levels.
- 2005: Reported data calibrated to 2000 and 2006 levels.
- 2006: Estimate based on survey results. 62 percent survey results does not support reported data of 77 percent. Survey results of 45 percent modified for recall bias to 62 percent based on 1st dose card or history coverage of 71 percent, 1st dose card only coverage of 23 percent and 3d dose card only coverage of 20 percent.
- 2007: Reported data 87 percent calibrated to 2006 levels.
- 2008: Reported data 83 percent calibrated to 2006 levels. The decline in coverage is attributed to vaccine shortage.
- 2009: Reported data 92 percent calibrated to 2006 levels. Survey not accepted. Preliminary survey results do not allow for recall bias calculation.
- 2010: Reported data 78 percent calibrated to 2006 levels. The decline in coverage is attributed to vaccine shortage.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	18	18	25	40	30	38	41	54	60	62	72	68	77	63
Official	18	18	25	40	32	43	49	64	73	77	87	83	92	78
Administrative	NA	NA	15	40	32	43	49	64	73	77	87	83	92	78
Survey	NA	NA	NA	30	NA	NA	NA	NA	NA	45	NA	NA	61	NA

Democratic Republic of the Congo - Pol3

COD - Pol3



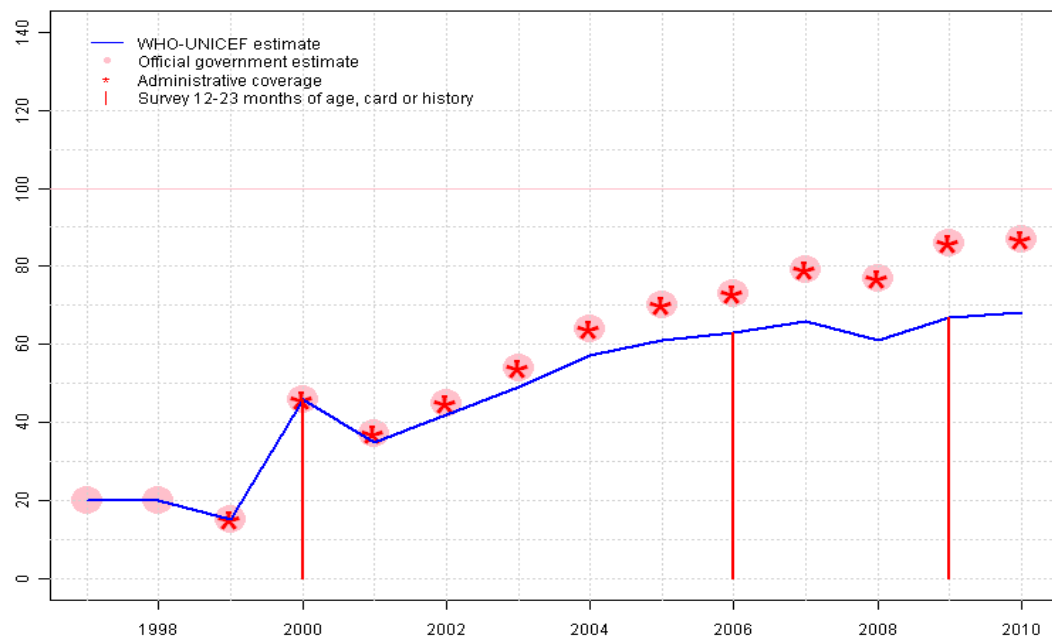
Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data.
- 2000: Estimate based on reported data. 42 percent survey results supports reported data of 42 percent.
- 2001: Reported data calibrated to 2000 and 2006 levels.
- 2002: Reported data calibrated to 2000 and 2006 levels.
- 2003: Reported data calibrated to 2000 and 2006 levels.
- 2004: Reported data calibrated to 2000 and 2006 levels.
- 2005: Reported data 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 of 46 percent modified for recall bias to 71 percent based on 1st dose card or history coverage of 78 percent, 1st dose card only coverage of 23 percent and 3d dose card only coverage of 21 percent.
- 2007: Reported data 87 percent calibrated to 2006 levels.
- 2008: Reported data 77 percent calibrated to 2006 levels. The decline in coverage is attributed to vaccine shortage. Estimate follows reported data.
- 2009: Reported data 90 percent calibrated to 2006 levels. Survey not accepted. Preliminary survey results do not allow for recall bias calculation. Estimate follows reported data.
- 2010: Reported data 88 percent calibrated to 2006 levels.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	18	18	21	42	30	40	47	52	60	62	71	61	74	72
Official	18	18	21	42	33	45	55	63	73	78	87	77	90	88
Administrative	NA	NA	16	42	11	45	55	63	73	78	88	77	90	88
Survey	NA	NA	NA	42	NA	NA	NA	NA	NA	46	NA	NA	58	NA

Democratic Republic of the Congo - MCV

COD - MCV



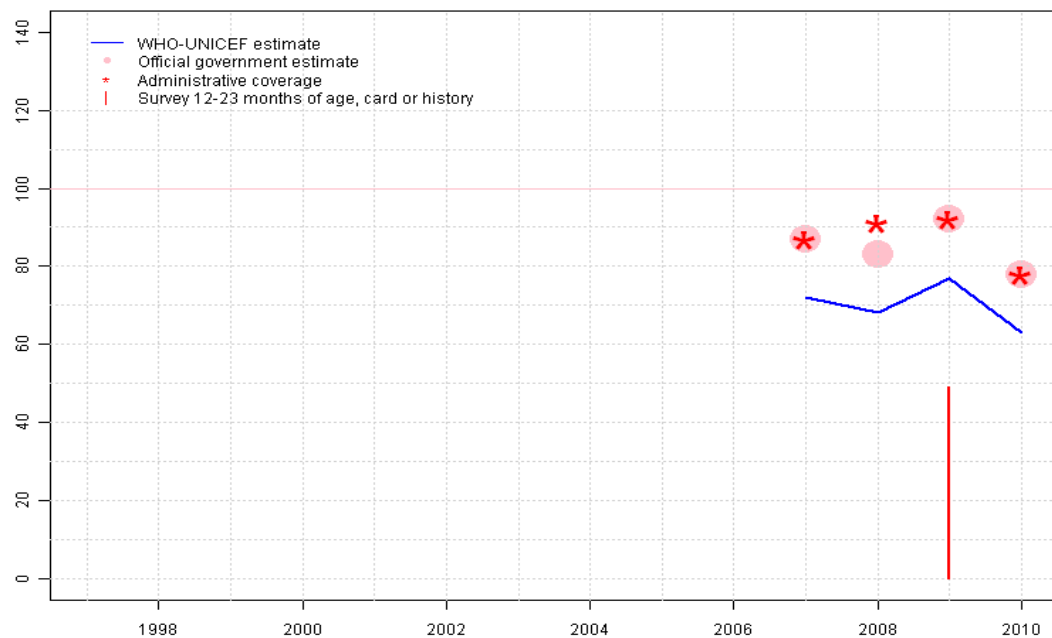
Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data.
- 2000: Estimate based on reported data. 46 percent survey results supports reported data of 46 percent.
- 2001: Reported data calibrated to 2000 and 2006 levels.
- 2002: Reported data calibrated to 2000 and 2006 levels.
- 2003: Reported data calibrated to 2000 and 2006 levels.
- 2004: Reported data calibrated to 2000 and 2006 levels.
- 2005: Reported data 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 calibrated to 2006 and 2009 levels. Current estimate of 66 percent changed from previous revision value of 69 percent.
- 2008: Reported data calibrated to 2006 and 2009 levels. The decline in coverage is attributed to vaccine shortage. Current estimate of 61 percent changed from previous revision value of 67 percent.
- 2009: Estimate based on survey results. 67 percent survey results does not support reported data of 86 percent. Current estimate of 67 percent changed from previous revision value of 76 percent.
- 2010: Reported data 87 percent calibrated to 2009 levels.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	20	20	15	46	35	42	49	57	61	63	66	61	67	68
Official	20	20	15	46	37	45	54	64	70	73	79	77	86	87
Administrative	NA	NA	15	46	37	45	54	64	70	73	79	77	86	87
Survey	NA	NA	NA	46	NA	NA	NA	NA	NA	63	NA	NA	67	NA

Democratic Republic of the Congo - HepB3

COD - HepB3



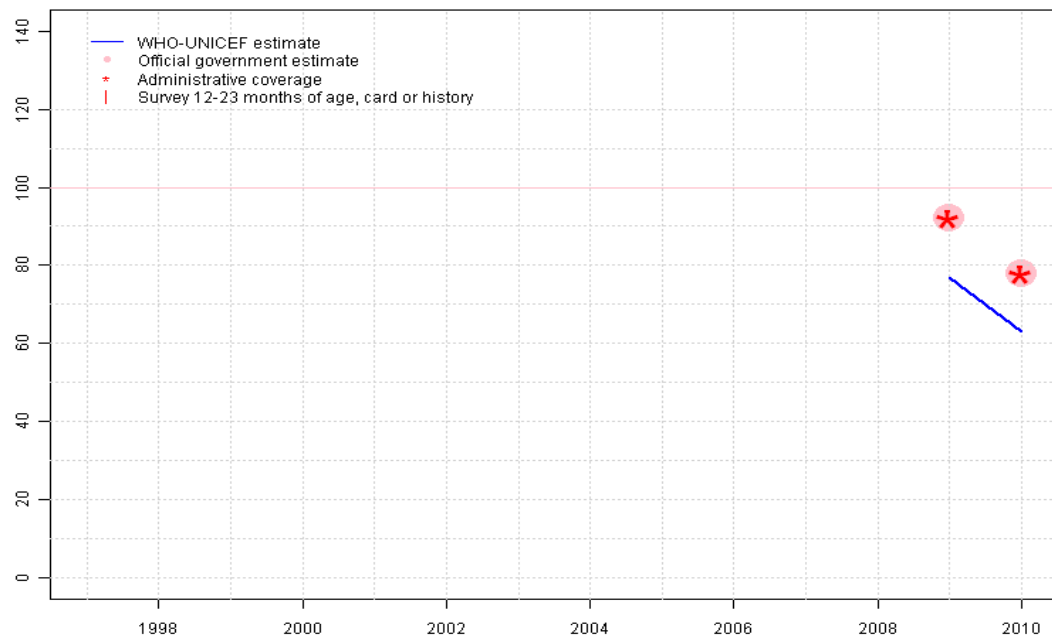
Description:

- 2007: Estimate follows DTP3 coverage levels. HepB introduced in 2007
- 2008: Estimate follows DTP3 coverage levels. The decline in coverage is attributed to vaccine shortage.
- 2009: Estimate follows DTP3 coverage levels. Survey not accepted. Preliminary survey results do not allow for recall bias calculation.
- 2010: Estimate follows DTP3 coverage levels. Reported data not accepted due to a decline from 92 level to 78 percent. The decline in coverage is attributed to vaccine shortage.

	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	72	68	77	63
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	87	83	92	78
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	87	91	92	78
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	49	NA

Democratic Republic of the Congo - Hib3

COD - Hib3



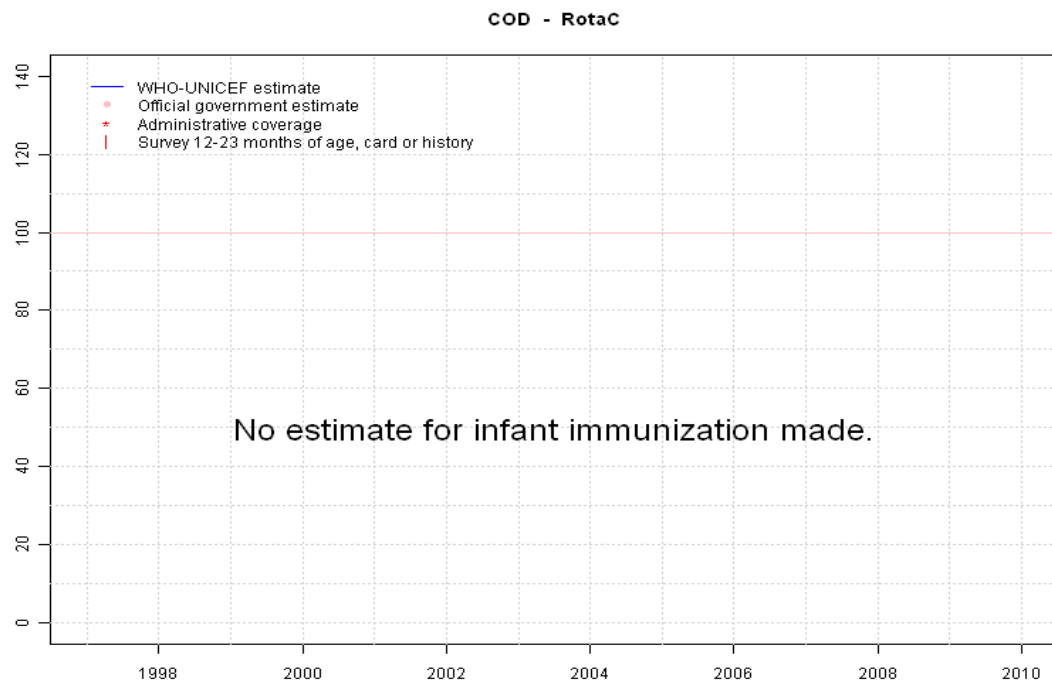
Description:

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

2010: Estimate follows DTP3 coverage levels. Reported data not accepted due to a decline from 92 level to 78 percent. The decline in coverage is attributed to vaccine shortage.

	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	77	63
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	92	78
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	92	78
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

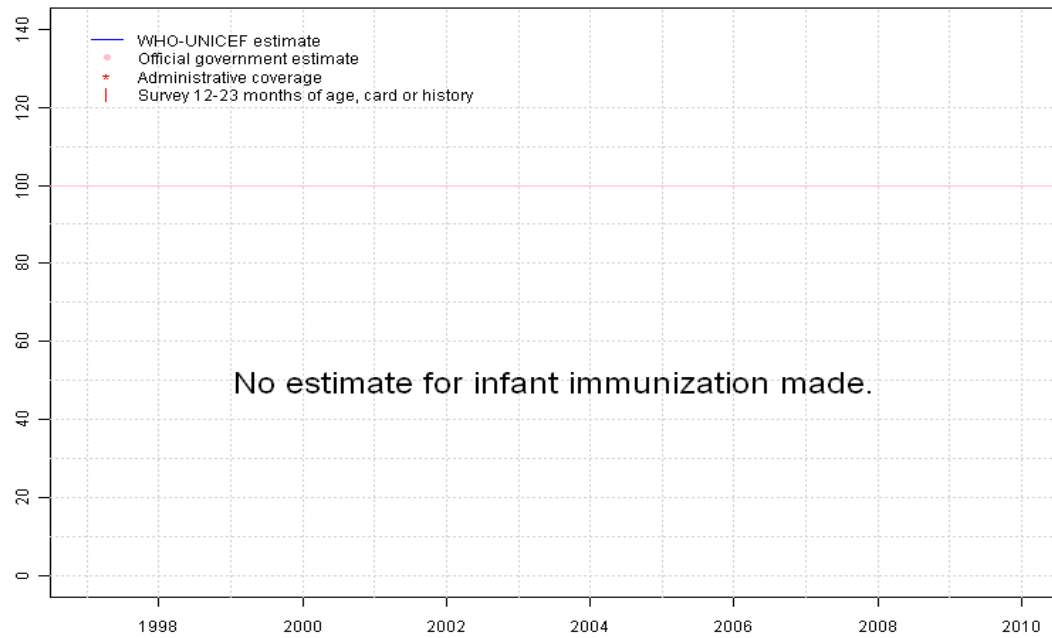
Democratic Republic of the Congo - RotaC



	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

Democratic Republic of the Congo - PcV3

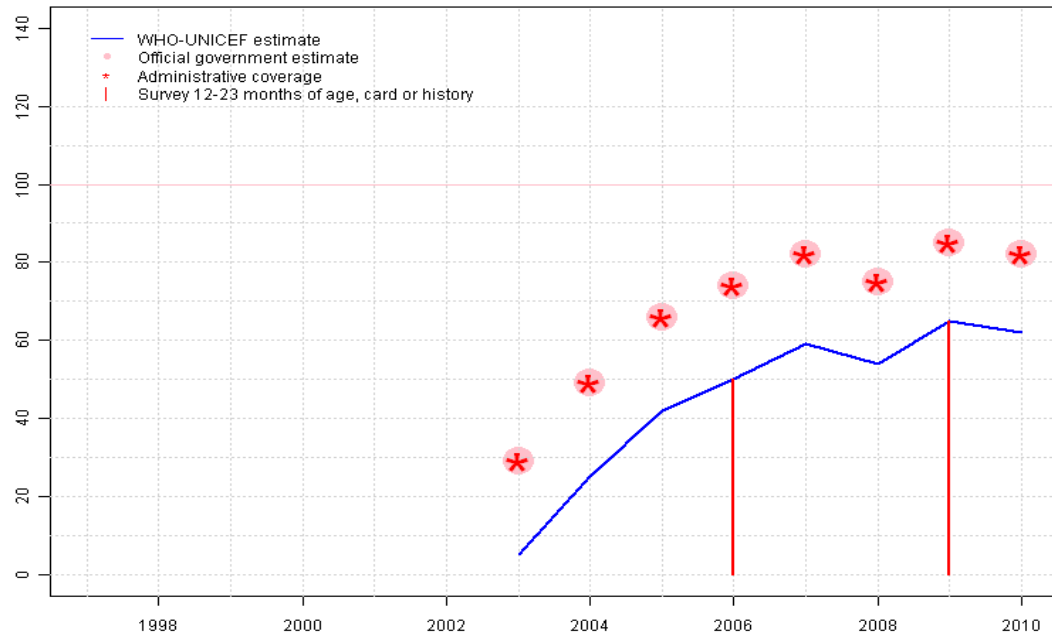
COD - PcV3



	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

Democratic Republic of the Congo - YFV

COD - YFV



Description:

- 2003: Reported data 29 percent calibrated to 2006 levels. YFV partially introduced in 2003 nationally in 2004 reporting started in 2003
- 2004: Reported data 49 percent calibrated to 2006 levels.
- 2005: Reported data 66 percent calibrated to 2006 levels.
- 2006: Estimate based on survey results. 50 percent survey results does not support reported data of 74 percent.
- 2007: Reported data calibrated to 2006 and 2009 levels. Current estimate of 59 percent changed from previous revision value of 58 percent.
- 2008: Reported data calibrated to 2006 and 2009 levels. The decline in coverage is attributed to vaccine shortage. Current estimate of 54 percent changed from previous revision value of 51 percent.
- 2009: Estimate based on survey results. 65 percent survey results does not support reported data of 85 percent. Current estimate of 65 percent changed from previous revision value of 61 percent.
- 2010: Reported data 82 percent calibrated to 2009 levels.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	NA	NA	NA	NA	NA	NA	5	25	42	50	59	54	65	62
Official	NA	NA	NA	NA	NA	NA	29	49	66	74	82	75	85	82
Administrative	NA	NA	NA	NA	NA	NA	29	49	66	74	82	75	85	82
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	50	NA	NA	65	NA

Democratic Republic of the Congo - survey details

2009 Democratic Republic of the Congo Multiple Indicator Cluster Survey 2010, Preliminary Findings

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	84	12-23 m	11093	0
DTP1	Card or History	81	12-23 m	11093	0
DTP3	Card or History	61	12-23 m	11093	0
HepB1	Card or History	70	12-23 m	11093	0
HepB3	Card or History	49	12-23 m	11093	0
MCV	Card or History	67	12-23 m	11093	0
Pol1	Card or History	85	12-23 m	11093	0
Pol3	Card or History	58	12-23 m	11093	0
YFV	Card or History	65	12-23 m	11093	0

2006 Enquête Démographique et de Santé République Démocratique du Congo 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	22	12-23 m	1585	24
BCG	Card or History	72	12-23 m	1585	24
BCG	C or H <12 months	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	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
DTP3	History	25	12-23 m	1585	24
MCV	History	42	12-23 m	1585	24
MCV	C or H <12 months	55	12-23 m	1585	24
MCV	Card or History	63	12-23 m	1585	24
MCV	Card	20	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	Card or History	46	12-23 m	1585	24
Pol3	History	25	12-23 m	1585	24
Pol3	Card	21	12-23 m	1585	24
Pol3	C or H <12 months	44	12-23 m	1585	24
YFV	Card	19	12-23 m	1585	24
YFV	Card or History	50	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

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 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

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
2010	77

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.