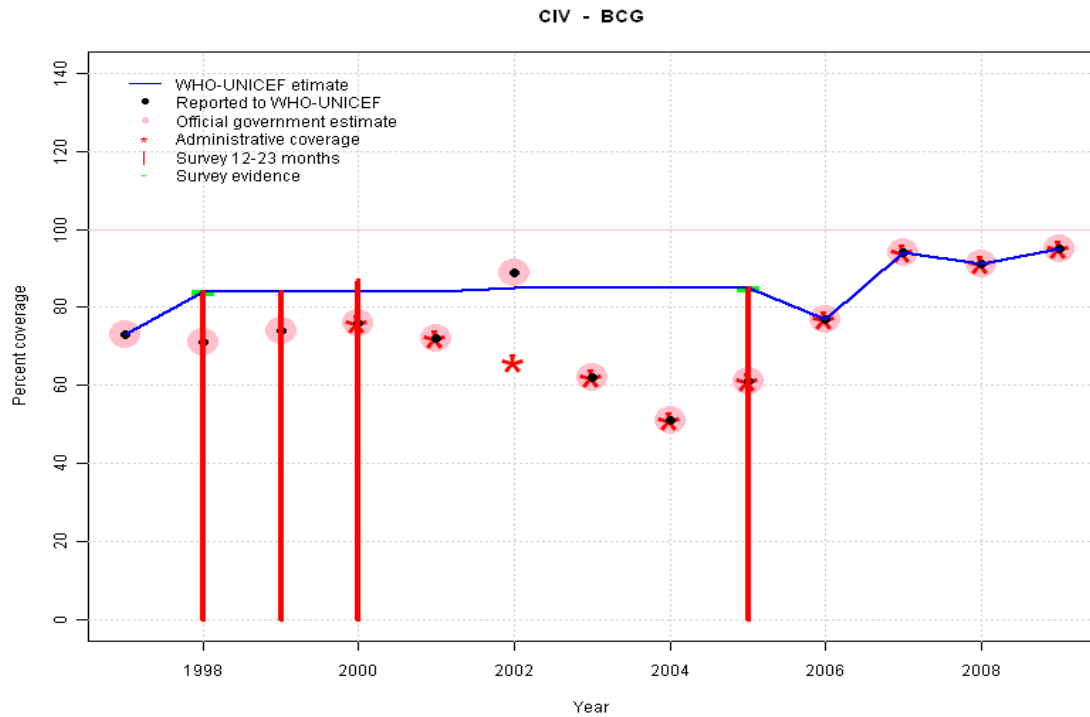


# Côte d'Ivoire - BCG

## Description:



1997: Legacy estimate.

1998: Estimate based on survey results. Reported data (71 percent) not consistent with survey results (84 percent).

1999: Estimate interpolated between 1998 and 2005 estimates. Survey results of 84 percent with sample size 0 ignored; sample size less than 300.

2000: Estimate interpolated between 1998 and 2005 estimates. Survey results of 87 percent with sample size 0 ignored; sample size less than 300.

2001: Estimate interpolated between 1998 and 2005 estimates.

2002: Estimate interpolated between 1998 and 2005 estimates. 2002 reported data (89 percent) inconsistent with data from other years.

2003: Estimate interpolated between 1998 and 2005 estimates.

2004: Estimate interpolated between 1998 and 2005 estimates.

2005: Estimate based on survey results. Reported data (61 percent) not consistent with survey results (85 percent).

2006: The increase in reported coverage is attributable to revised denominator estimate.

2007: Estimate based on reported data.

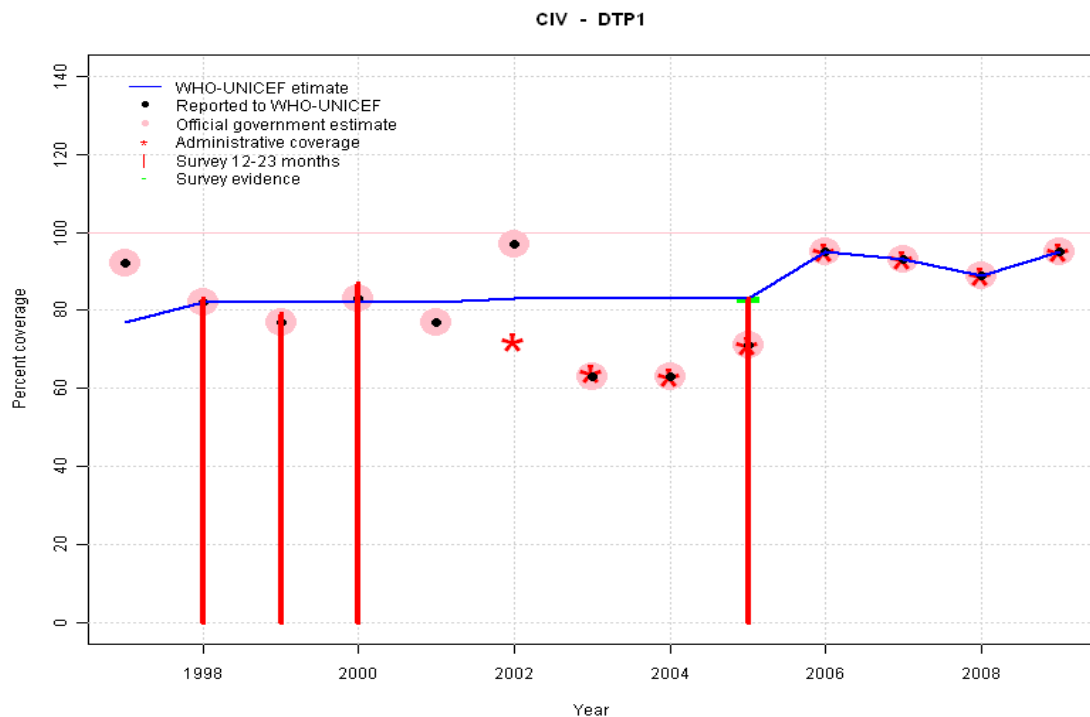
2008: Estimate based on reported data.

2009: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	73	84	84	84	84	85	85	85	85	77	94	91	95
Reported	73	71	74	76	72	89	62	51	61	77	94	91	95
Official	73	71	74	76	72	89	62	51	61	77	94	91	95
Administrative	NA	NA	NA	76	72	66	62	51	61	77	94	91	95
Survey	NA	84	NA	NA	NA	NA	NA	NA	85	NA	NA	NA	NA

# Côte d'Ivoire - DTP1

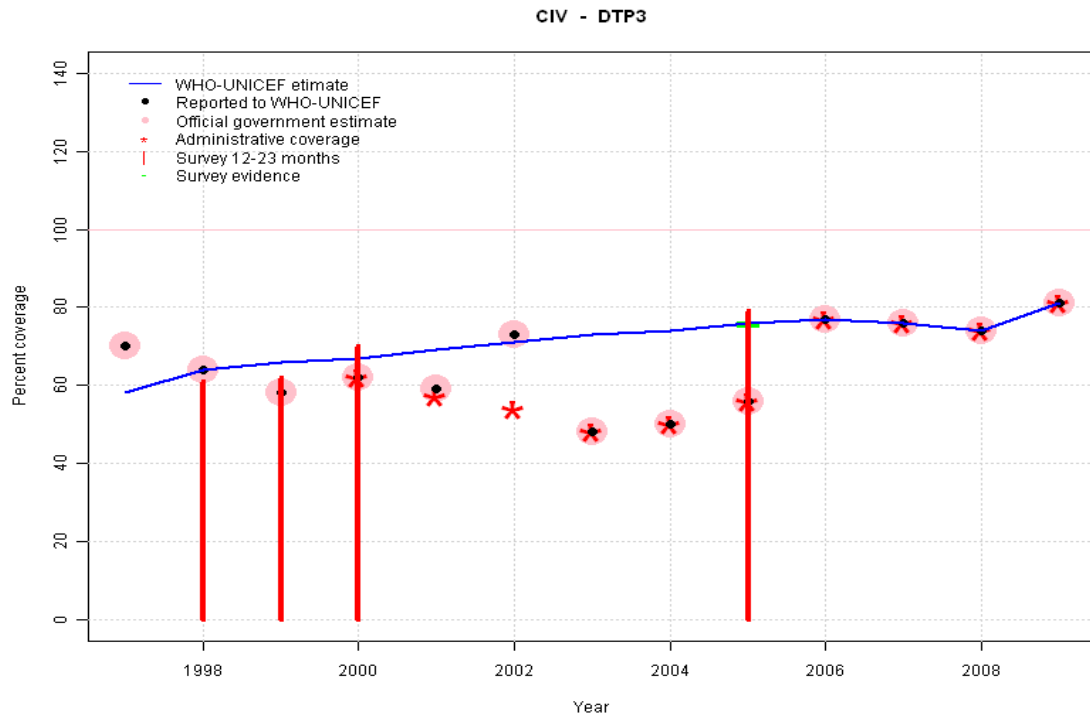
## Description:



- 1997: Legacy estimate.
- 1998: Estimate based on reported data (82 percent) confirmed by survey (83 percent).
- 1999: Estimate interpolated between 1998 and 2005 estimates. Survey results of 79 percent with sample size 0 ignored; sample size less than 300.
- 2000: Estimate interpolated between 1998 and 2005 estimates. Survey results of 87 percent with sample size 0 ignored; sample size less than 300.
- 2001: Estimate interpolated between 1998 and 2005 estimates.
- 2002: Estimate interpolated between 1998 and 2005 estimates. 2002 reported data (97 percent) inconsistent with data from other years.
- 2003: Estimate interpolated between 1998 and 2005 estimates.
- 2004: Estimate interpolated between 1998 and 2005 estimates.
- 2005: Estimate based on survey results. Reported data (71 percent) not consistent with survey results (83 percent).
- 2006: The increase in reported coverage is attributable to revised denominator estimate.
- 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	77	82	82	82	82	83	83	83	83	95	93	89	95
Reported	92	82	77	83	77	97	63	63	71	95	93	89	95
Official	92	82	77	83	77	97	63	63	71	95	93	89	95
Administrative	NA	NA	NA	NA	NA	72	64	63	71	95	93	89	95
Survey	NA	83	NA	NA	NA	NA	NA	NA	83	NA	NA	NA	NA

# Côte d'Ivoire - DTP3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	58	64	66	67	69	71	73	74	76	77	76	74	81
Reported	70	64	58	62	59	73	48	50	56	77	76	74	81
Official	70	64	58	62	59	73	48	50	56	77	76	74	81
Administrative	NA	NA	NA	62	57	54	48	50	56	77	76	74	81
Survey	NA	65	NA	NA	NA	NA	NA	NA	76	NA	NA	NA	NA

## Description:

1997: Legacy estimate.

1998: Estimate based on reported data (64 percent) confirmed by survey (65 percent). Survey results (61 percent) adjusted for recall bias to 65 percent based on first dose card or history coverage (83 percent) and documented drop-out between first (69 percent) and third (54 percent) doses.

1999: Estimate interpolated between 1998 and 2005 estimates. Survey results of 62 percent with sample size 0 ignored; sample size less than 300.

2000: Estimate interpolated between 1998 and 2005 estimates. Survey results of 70 percent with sample size 0 ignored; sample size less than 300.

2001: Estimate interpolated between 1998 and 2005 estimates.

2002: Estimate interpolated between 1998 and 2005 estimates. 2002 reported data (73 percent) inconsistent with data from other years.

2003: Estimate interpolated between 1998 and 2005 estimates.

2004: Estimate interpolated between 1998 and 2005 estimates.

2005: Estimate based on survey results. Reported data (56 percent) not consistent with survey results (76 percent). Survey results (79 percent) adjusted for recall bias to 76 percent based on first dose card or history coverage (83 percent) and documented drop-out between first (72 percent) and third (66 percent) doses.

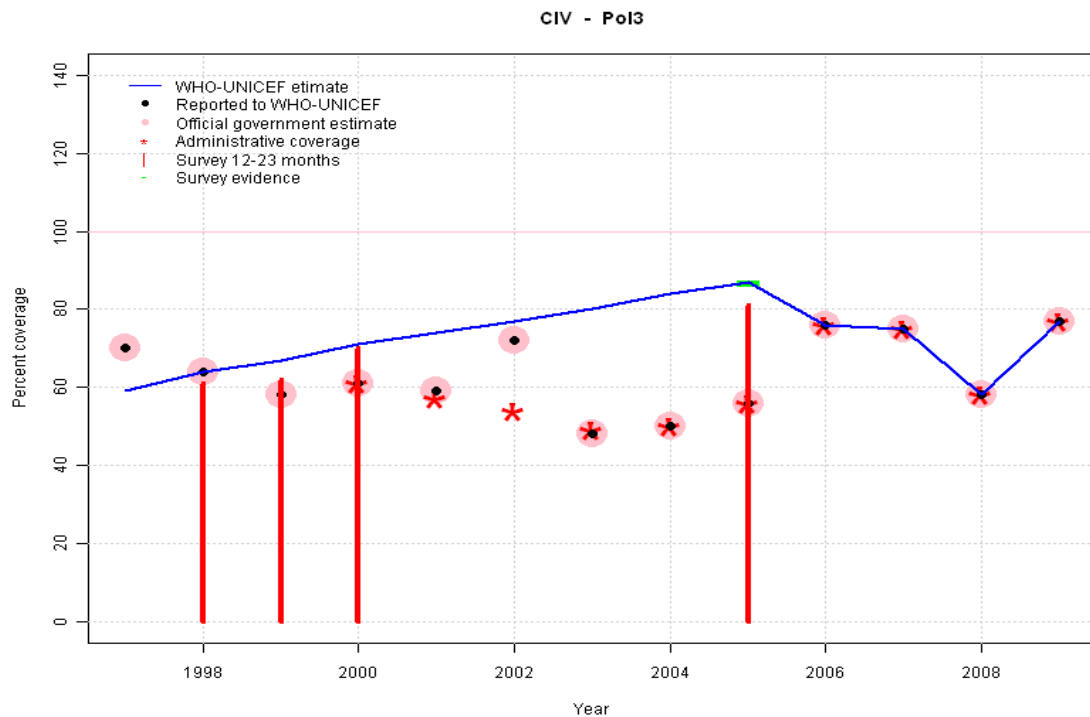
2006: The increase in reported coverage is attributable to revised denominator estimate.

2007: Estimate based on reported data.

2008: Estimate based on reported data.

2009: Estimate based on reported data.

# Côte d'Ivoire - Pol3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	59	64	67	71	74	77	80	84	87	76	75	58	77
Reported	70	64	58	61	59	72	48	50	56	76	75	58	77
Official	70	64	58	61	59	72	48	50	56	76	75	58	77
Administrative	NA	NA	NA	61	57	54	49	50	56	76	75	58	77
Survey	NA	66	NA	NA	NA	NA	NA	NA	87	NA	NA	NA	NA

## Description:

1997: Legacy estimate.

1998: Estimate based on reported data (64 percent) confirmed by survey (66 percent). Survey results (61 percent) adjusted for recall bias to 66 percent based on first dose card or history coverage (86 percent) and documented drop-out between first (70 percent) and third (54 percent) doses.

1999: Estimate interpolated between 1998 and 2005 estimates. Survey results of 62 percent with sample size 0 ignored; sample size less than 300.

2000: Estimate interpolated between 1998 and 2005 estimates. Survey results of 70 percent with sample size 0 ignored; sample size less than 300.

2001: Estimate interpolated between 1998 and 2005 estimates.

2002: Estimate interpolated between 1998 and 2005 estimates. 2002 reported data (72 percent) inconsistent with data from other years.

2003: Estimate interpolated between 1998 and 2005 estimates.

2004: Estimate interpolated between 1998 and 2005 estimates.

2005: Estimate based on survey results. Reported data (56 percent) not consistent with survey results (87 percent). Survey results (81 percent) adjusted for recall bias to 87 percent based on first dose card or history coverage (94 percent) and documented drop-out between first (71 percent) and third (66 percent) doses.

2006: The increase in reported coverage is attributable to revised denominator estimate.

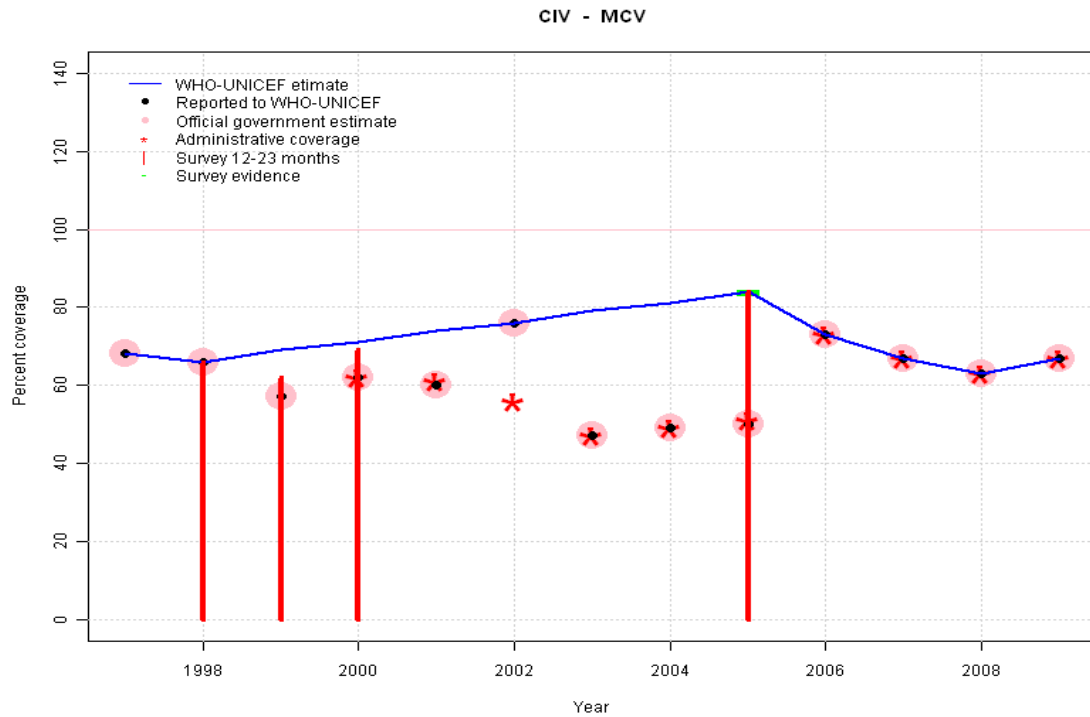
2007: Estimate based on reported data.

2008: Estimate based on reported data. Decline in coverage is attributed to two months shortage of vaccine.

2009: Estimate based on reported data.

# Côte d'Ivoire - MCV

## Description:

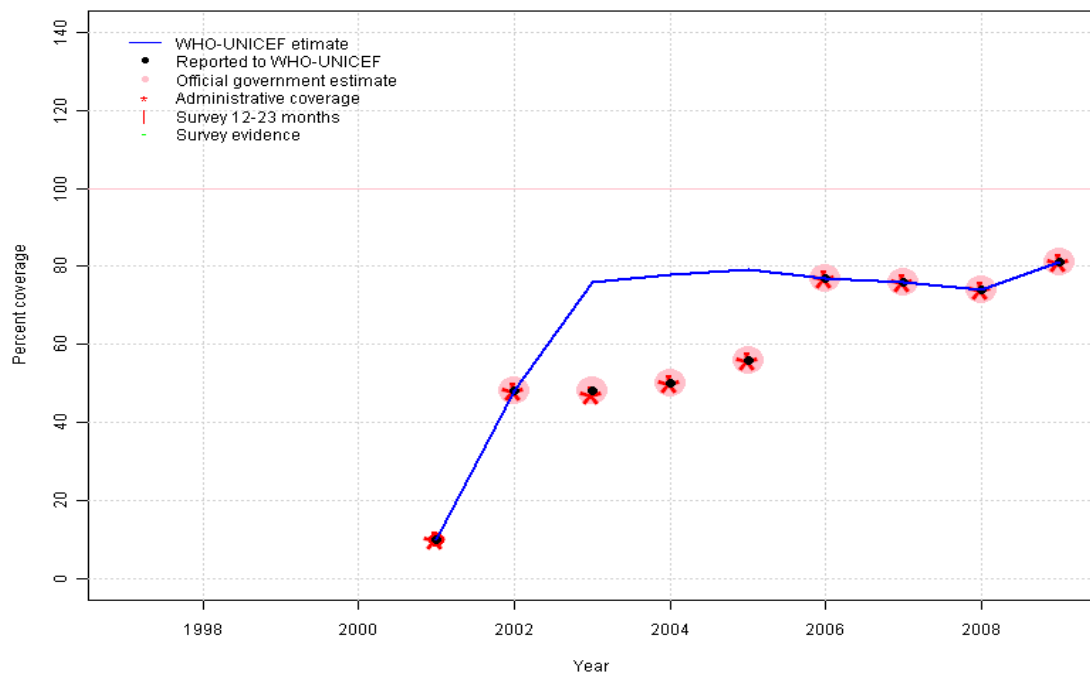


- 1997: Legacy estimate.
- 1998: Estimate based on reported data (66 percent) confirmed by survey (66 percent).
- 1999: Estimate interpolated between 1998 and 2005 estimates. Survey results of 62 percent with sample size 0 ignored; sample size less than 300.
- 2000: Estimate interpolated between 1998 and 2005 estimates. Survey results of 69 percent with sample size 0 ignored; sample size less than 300.
- 2001: Estimate interpolated between 1998 and 2005 estimates.
- 2002: Estimate interpolated between 1998 and 2005 estimates. 2002 reported data (76 percent) inconsistent with data from other years.
- 2003: Estimate interpolated between 1998 and 2005 estimates.
- 2004: Estimate interpolated between 1998 and 2005 estimates.
- 2005: Estimate based on survey results. Reported data (50 percent) not consistent with survey results (84 percent).
- 2006: The increase in reported coverage is attributable to revised denominator estimate.
- 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	68	66	69	71	74	76	79	81	84	73	67	63	67
Reported	68	66	57	62	60	76	47	49	50	73	67	63	67
Official	68	66	57	62	60	76	47	49	50	73	67	63	67
Administrative	NA	NA	NA	62	61	56	47	49	51	73	67	63	67
Survey	NA	66	NA	NA	NA	NA	NA	NA	84	NA	NA	NA	NA

# Côte d'Ivoire - HepB3

CIV - HepB3



## Description:

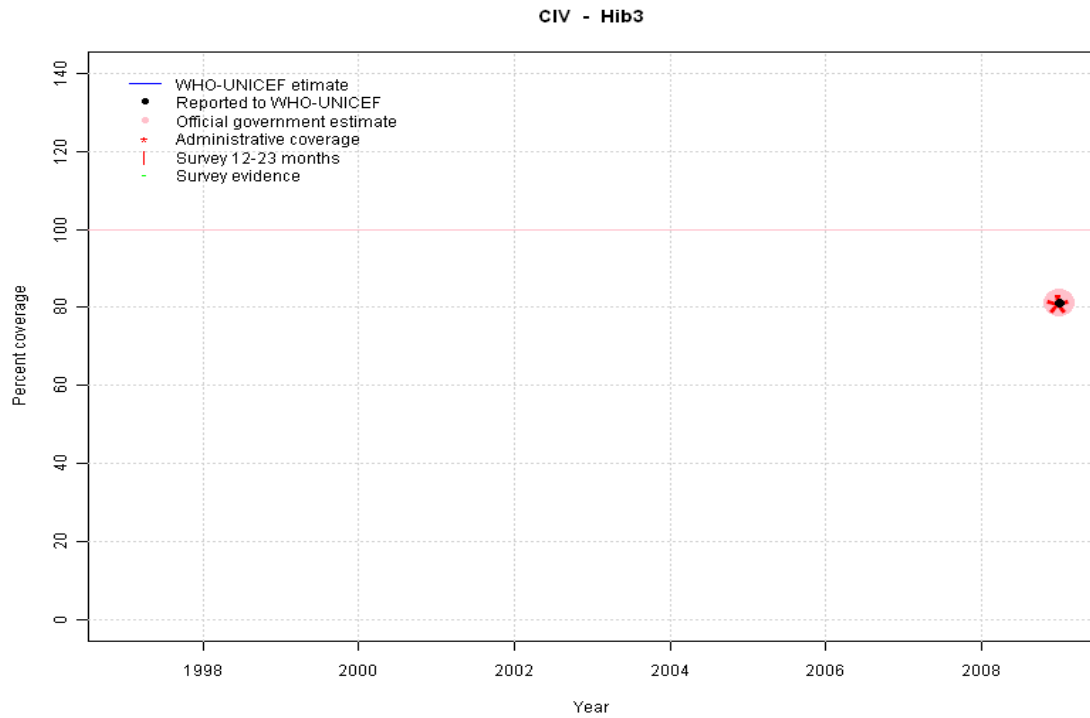
- 2001: Estimate based on reported data. HepB partially introduced in 1999 nationally in 2003 reporting started in 2001.
- 2002: Estimate based on reported data.
- 2003: Estimate assigned by working group. DTP-HepB combination vaccine available nationally. Estimate based on DTP3 estimate.
- 2004: Estimate assigned by working group. DTP-HepB combination vaccine available nationally. Estimate based on DTP3 estimate.
- 2005: Estimate assigned by working group. DTP-HepB combination vaccine available nationally. Estimate based on DTP3 estimate.
- 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	NA	NA	NA	NA	10	48	76	78	79	77	76	74	81
Reported	NA	NA	NA	NA	10	48	48	50	56	77	76	74	81
Official	NA	NA	NA	NA	NA	48	48	50	56	77	76	74	81
Administrative	NA	NA	NA	NA	10	48	47	50	56	77	76	74	81
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

# Côte d'Ivoire - Hib3

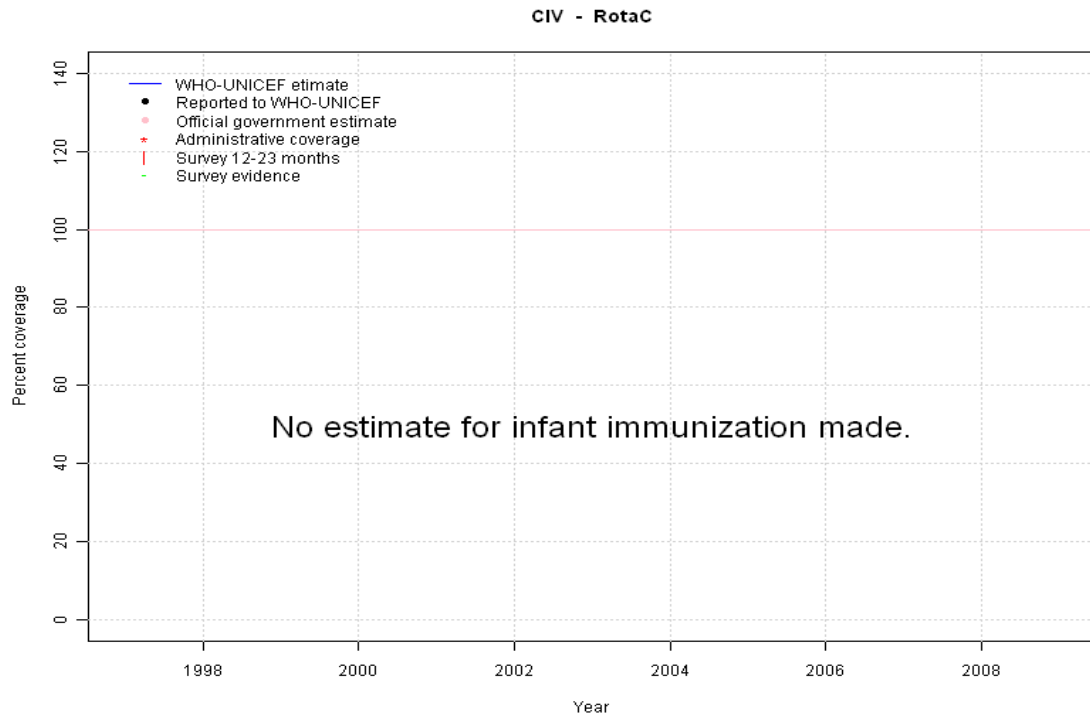
## Description:

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



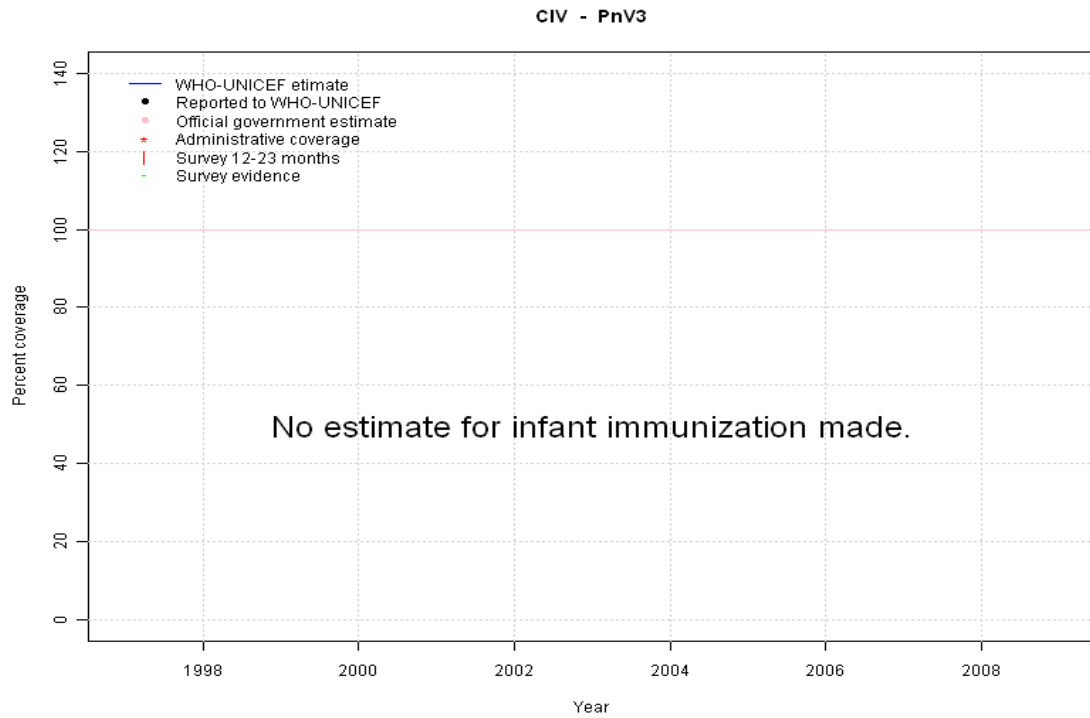
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	81
Reported	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	81
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	81
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	81
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

# Côte d'Ivoire - 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

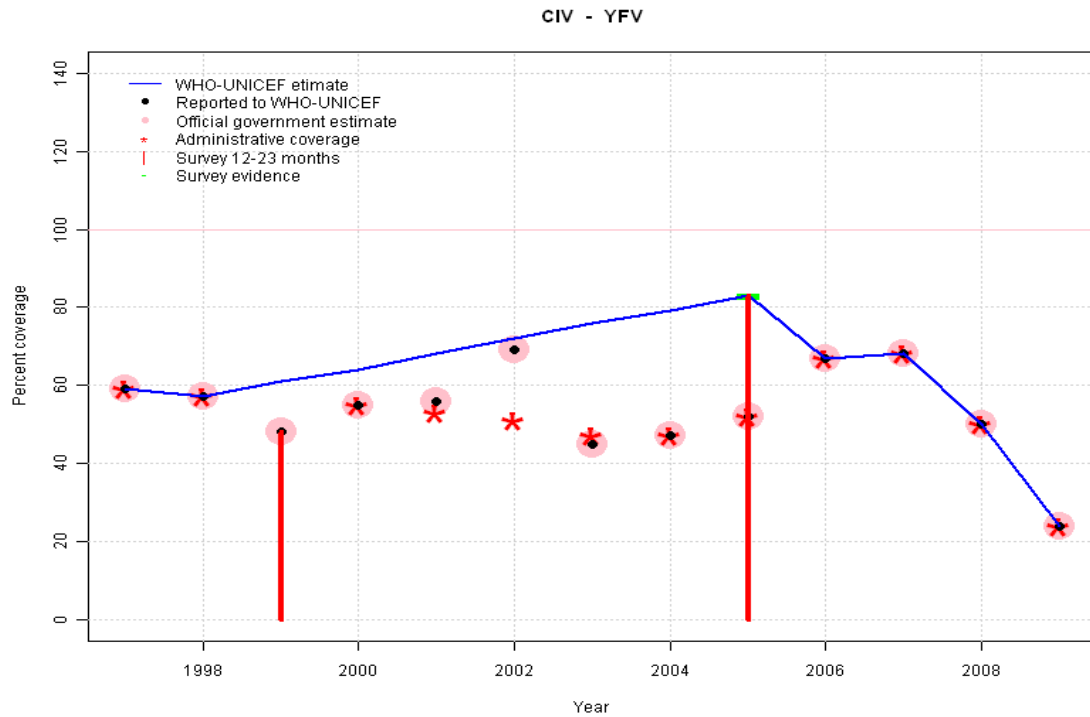
# Côte d'Ivoire - PnV3



	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

# Côte d'Ivoire - YFV

## Description:



- 1997: Estimate is based on the reported data.  
 1998: Estimate is based on the reported data.  
 1999: Estimate interpolated between 1998 and 2005 estimates. Survey results of 48 percent with sample size 0 ignored; sample size less than 300.  
 2000: Estimate interpolated between 1998 and 2005 estimates.  
 2001: Estimate interpolated between 1998 and 2005 estimates.  
 2002: Estimate interpolated between 1998 and 2005 estimates. 2002 reported data (69 percent) inconsistent with data from other years.  
 2003: Estimate interpolated between 1998 and 2005 estimates.  
 2004: Estimate interpolated between 1998 and 2005 estimates.  
 2005: Estimate based on survey results. Reported data (52 percent) not consistent with survey results (83 percent).  
 2006: The increase in reported coverage is attributable to revised denominator estimate.  
 2007: Estimate based on reported data.  
 2008: Estimate based on reported data.  
 2009: Estimate based on reported data. Ten-month vaccine stock-out reported.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	59	57	61	64	68	72	76	79	83	67	68	50	24
Reported	59	57	48	55	56	69	45	47	52	67	68	50	24
Official	59	57	48	55	56	69	45	47	52	67	68	50	24
Administrative	59	57	NA	55	53	51	47	47	52	67	68	50	24
Survey	NA	NA	NA	NA	NA	NA	NA	NA	83	NA	NA	NA	NA

# Côte d'Ivoire - survey details

2005 Enquête par grappes à indicateurs multiples, Côte d'Ivoire, 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	85	12-23 m	1751	73
BCG	Card	72	12-23 m	1751	73
BCG	Card or History	85	12-23 m	1751	73
BCG	History	13	12-23 m	1751	73
DTP1	Card or History	83	12-23 m	1751	73
DTP1	Card	72	12-23 m	1751	73
DTP1	History	11	12-23 m	1751	73
DTP1	C or H <12 months	81	12-23 m	1751	73
DTP3	History	12	12-23 m	1751	73
DTP3	C or H <12 months	74	12-23 m	1751	73
DTP3	Card	66	12-23 m	1751	73
DTP3	Card or History	79	12-23 m	1751	73
MCV	History	16	12-23 m	1751	73
MCV	Card or History	84	12-23 m	1751	73
MCV	Card	68	12-23 m	1751	73
MCV	C or H <12 months	72	12-23 m	1751	73
Pol1	C or H <12 months	91	12-23 m	1751	73
Pol1	Card	71	12-23 m	1751	73
Pol1	Card or History	94	12-23 m	1751	73
Pol1	History	23	12-23 m	1751	73
Pol3	History	15	12-23 m	1751	73
Pol3	Card	66	12-23 m	1751	73
Pol3	Card or History	81	12-23 m	1751	73
Pol3	C or H <12 months	76	12-23 m	1751	73
YFV	History	9	12-23 m	1751	73
YFV	Card or History	83	12-23 m	1751	73
YFV	Card	74	12-23 m	1751	73
YFV	C or H <12 months	71	12-23 m	1751	73

2000 Revue externe du PEV 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	87	12-23 m	0	98
DTP1	Card or History	87	12-23 m	0	98

DTP3	Card or History	70	12-23 m	0	98
MCV	Card or History	69	12-23 m	0	98
Pol3	Card or History	70	12-23 m	0	98

1999 Côte d'Ivoire, Enquête à Indicateurs Multiples MICS 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	71	12-23 m	0	77
BCG	Card or History	84	12-23 m	0	77
BCG	C or H <12 months	83	12-23 m	0	77
BCG	History	13	12-23 m	0	77
DTP1	C or H <12 months	75	12-23 m	0	77
DTP1	Card	70	12-23 m	0	77
DTP1	Card or History	79	12-23 m	0	77
DTP1	History	9	12-23 m	0	77
DTP3	History	6	12-23 m	0	77
DTP3	Card	56	12-23 m	0	77
DTP3	Card or History	62	12-23 m	0	77
DTP3	C or H <12 months	56	12-23 m	0	77
MCV	Card or History	62	12-23 m	0	77
MCV	Card	52	12-23 m	0	77
MCV	C or H <12 months	53	12-23 m	0	77
MCV	History	10	12-23 m	0	77
Pol1	C or H <12 months	82	12-23 m	0	77
Pol1	Card	71	12-23 m	0	77
Pol1	Card or History	86	12-23 m	0	77
Pol1	History	14	12-23 m	0	77
Pol3	History	7	12-23 m	0	77
Pol3	C or H <12 months	56	12-23 m	0	77
Pol3	Card	55	12-23 m	0	77
Pol3	Card or History	62	12-23 m	0	77
YFV	History	1	12-23 m	0	77
YFV	Card	47	12-23 m	0	77
YFV	Card or History	48	12-23 m	0	77

1998 Enquête Démographique et de Santé, Côte d'Ivoire 1998-99, 2001

# Côte d'Ivoire - survey details

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen	MCV	C or H <12 months		12-23 m	439	73
BCG	Card	70	12-23 m	439	73	MCV	History	9	12-23 m	439	73
BCG	Card or History	84	12-23 m	439	73	MCV	Card or History	66	12-23 m	439	73
BCG	History	14	12-23 m	439	73	MCV	Card	57	12-23 m	439	73
BCG	C or H <12 months	82	12-23 m	439	73	MCV	C or H <12 months	47	24-35 m	371	64
BCG	C or H <12 months	74	24-35 m	371	64	MCV	C or H <12 months	45	36-47 m	338	62
BCG	C or H <12 months	80	36-47 m	338	62	MCV	C or H <12 months	41	48-59 m	350	54
BCG	C or H <12 months	72	48-59 m	350	54	Pol1	C or H <12 months	82	12-23 m	439	73
DTP1	Card	69	12-23 m	439	73	Pol1	Card	70	12-23 m	439	73
DTP1	History	14	12-23 m	439	73	Pol1	Card or History	86	12-23 m	439	73
DTP1	Card or History	83	12-23 m	439	73	Pol1	History	16	12-23 m	439	73
DTP1	C or H <12 months	80	12-23 m	439	73	Pol1	C or H <12 months	77	24-35 m	371	64
DTP1	C or H <12 months	75	24-35 m	371	64	Pol1	C or H <12 months	79	36-47 m	338	62
DTP1	C or H <12 months	77	36-47 m	338	62	Pol1	C or H <12 months	78	48-59 m	350	54
DTP1	C or H <12 months	73	48-59 m	350	54	Pol3	C or H <12 months	55	12-23 m	439	73
DTP3	C or H <12 months	55	12-23 m	439	73	Pol3	Card	54	12-23 m	439	73
DTP3	History	7	12-23 m	439	73	Pol3	Card or History	61	12-23 m	439	73
DTP3	Card or History	61	12-23 m	439	73	Pol3	History	7	12-23 m	439	73
DTP3	Card	54	12-23 m	439	73	Pol3	C or H <12 months	48	24-35 m	371	64
DTP3	C or H <12 months	48	24-35 m	371	64	Pol3	C or H <12 months	48	36-47 m	338	62
DTP3	C or H <12 months	50	36-47 m	338	62	Pol3	C or H <12 months	42	48-59 m	350	54
DTP3	C or H <12 months	44	48-59 m	350	54						

Further information and estimates for 1980-1996 are available at:

[http://www.childinfo.org/immunization\\_countryreports.html](http://www.childinfo.org/immunization_countryreports.html)

[http://www.who.int/immunization\\_monitoring/routine/immunization\\_coverage/en/index4.html](http://www.who.int/immunization_monitoring/routine/immunization_coverage/en/index4.html)

## Côte d'Ivoire

### 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	54
1998	60
1999	71
2000	76
2001	76
2002	76
2003	76
2004	76
2005	75
2006	75
2007	74
2008	92
2009	92

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<sup>1</sup> 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.