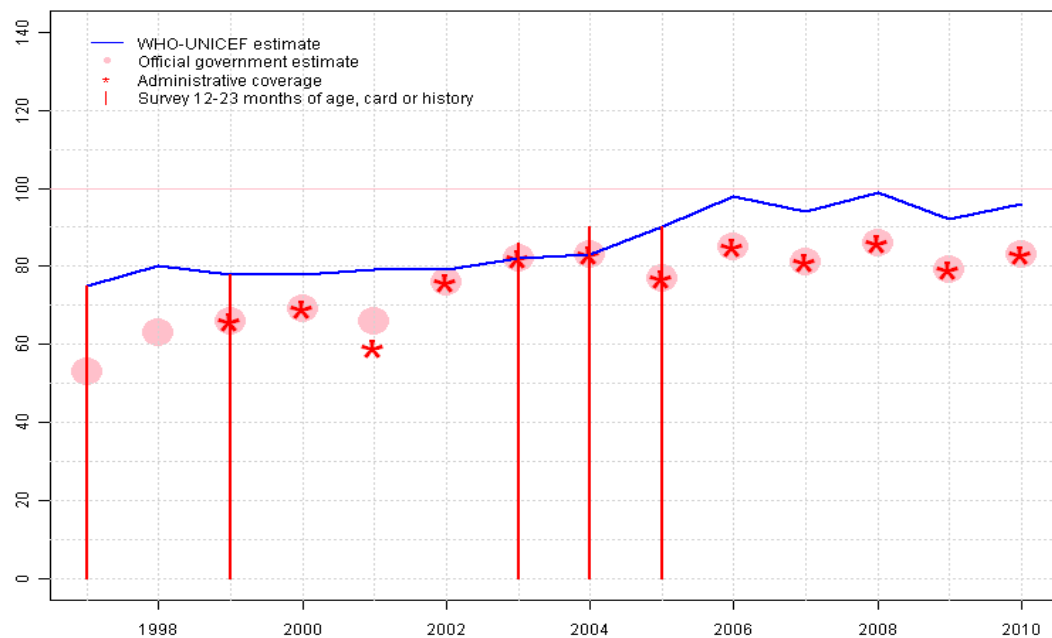


Cameroon - BCG

CMR - BCG



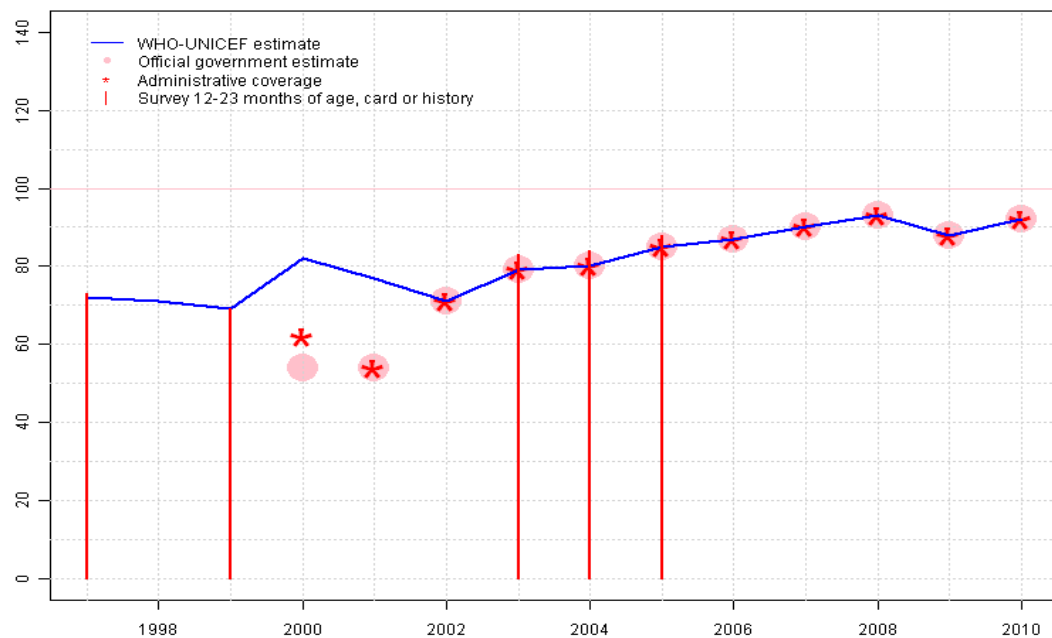
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	75	80	78	78	79	79	82	83	90	98	94	99	92	96
Official	53	63	66	69	66	76	82	83	77	85	81	86	79	83
Administrative	NA	NA	66	69	59	76	82	83	77	85	81	86	79	83
Survey	75	NA	78	NA	NA	NA	86	90	90	NA	NA	NA	NA	NA

Description:

- 1997: Legacy estimate.
- 1998: Reported data calibrated to 1997 and 1999 levels.
- 1999: Estimate based on survey results. 78 percent survey results does not support reported data of 66 percent.
- 2000: Reported data calibrated to 1999 and 2003 levels.
- 2001: Estimate based on interpolation between 2000 and 2002. Estimate not based on reported data. Decline in reported data attributed to incomplete reporting.
- 2002: Reported data calibrated to 1999 and 2003 levels.
- 2003: Estimate based on reported data. 86 percent survey results supports reported data of 82 percent.
- 2004: Estimate based on reported data. 90 percent survey results supports reported data of 83 percent. Current estimate of 83 percent changed from previous revision value of 86 percent.
- 2005: Estimate based on survey results. 90 percent survey results does not support reported data of 77 percent. BCG estimates based on survey results. Denominator for BCG varies widely
- 2006: Reported data 85 percent calibrated to 2005 levels. Current estimate of 98 percent changed from previous revision value of 90 percent.
- 2007: Reported data 81 percent calibrated to 2005 levels. Current estimate of 94 percent changed from previous revision value of 90 percent.
- 2008: Reported data 86 percent calibrated to 2005 levels. Current estimate of 99 percent changed from previous revision value of 90 percent.
- 2009: Reported data 79 percent calibrated to 2005 levels. Current estimate of 92 percent changed from previous revision value of 90 percent.
- 2010: Reported data 83 percent calibrated to 2005 levels.

Cameroon - DTP1

CMR - DTP1



Description:

1997: Legacy estimate.

1998: Estimate based on interpolation between 1997 and 1999 survey values.

1999: No accepted reported data. Reported data of 54 percent estimated by extrapolating from 2000 does not support trend in reported data. 69 percent survey results

2000: DTP1 coverage estimated based on DTP3 coverage of 62. Current estimate of 82 percent changed from previous revision value of 66 percent.

2001: Estimate based on interpolation between 2000 and 2002. Estimate not based on reported data. Decline in reported data attributed to incomplete reporting. Current estimate of 77 percent changed from previous revision value of 70 percent.

2002: Reported data calibrated to 1999 and 2003 levels. Current estimate of 71 percent changed from previous revision value of 75 percent.

2003: Estimate based on reported data. 83 percent survey results supports reported data of 79 percent.

2004: Estimate based on reported data. 84 percent survey results supports reported data of 80 percent.

2005: Estimate based on reported data. 88 percent survey results supports reported data of 85 percent.

2006: Estimate based on reported data.

2007: Estimate based on reported data.

2008: Estimate based on reported data.

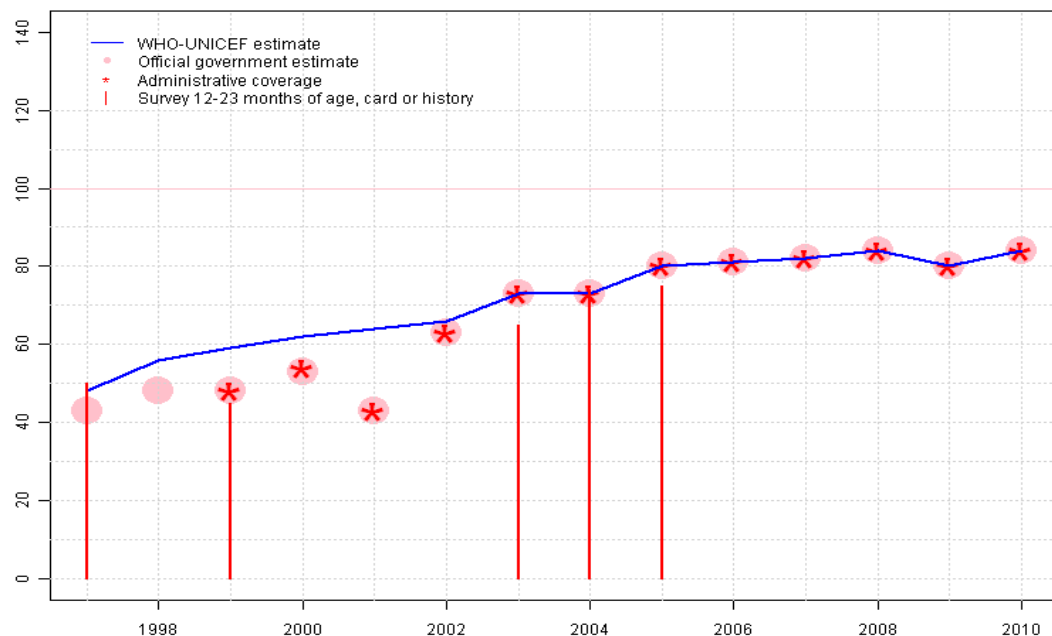
2009: Estimate based on reported data.

2010: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	72	71	69	82	77	71	79	80	85	87	90	93	88	92
Official	NA	NA	NA	54	54	71	79	80	85	87	90	93	88	92
Administrative	NA	NA	NA	62	54	71	79	80	85	87	90	93	88	92
Survey	73	NA	69	NA	NA	NA	83	84	88	NA	NA	NA	NA	NA

Cameroon - DTP3

CMR - DTP3



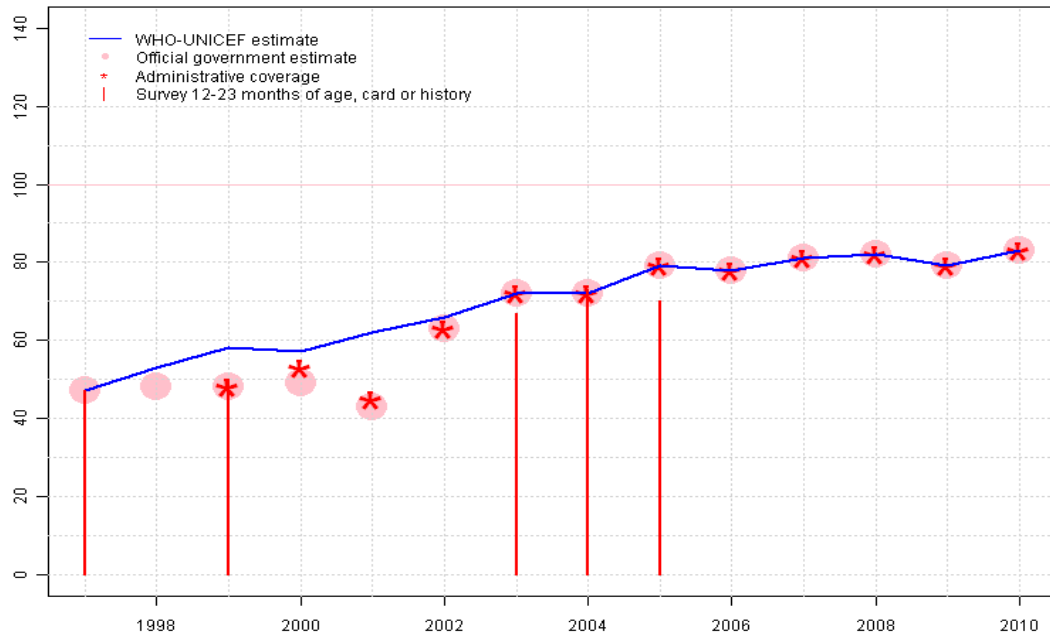
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	48	56	59	62	64	66	73	73	80	81	82	84	80	84
Official	43	48	48	53	43	63	73	73	80	81	82	84	80	84
Administrative	NA	NA	48	54	43	63	73	73	80	81	82	84	80	84
Survey	50	NA	45	NA	NA	NA	65	74	75	NA	NA	NA	NA	NA

Description:

- 1997: Legacy estimate. Survey results of 50 percent modified for recall bias to 59 percent based on 1st dose card or history coverage of 73 percent, 1st dose card only coverage of 52 percent and 3d dose card only coverage of 42 percent.
- 1998: Reported data calibrated to 1997 and 1999 levels.
- 1999: Estimate based on survey results. 59 percent survey results does not support reported data of 48 percent. Survey results of 45 percent modified for recall bias to 59 percent based on 1st dose card or history coverage of 69 percent, 1st dose card only coverage of 42 percent and 3d dose card only coverage of 36 percent.
- 2000: Reported data calibrated to 1999 and 2003 levels.
- 2001: Estimate based on interpolation between 2000 and 2002. Estimate not based on reported data. Decline in reported data attributed to incomplete reporting. Current estimate of 64 percent changed from previous revision value of 63 percent.
- 2002: Reported data calibrated to 1999 and 2003 levels.
- 2003: Estimate based on reported data. 74 percent survey results supports reported data of 73 percent. Survey results of 65 percent modified for recall bias to 74 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 56 percent and 3d dose card only coverage of 50 percent.
- 2004: Estimate based on reported data. 76 percent survey results supports reported data of 73 percent. Survey results of 74 percent modified for recall bias to 76 percent based on 1st dose card or history coverage of 84 percent, 1st dose card only coverage of 50 percent and 3d dose card only coverage of 45 percent.
- 2005: Estimate based on reported data. 80 percent survey results supports reported data of 80 percent. Survey results of 75 percent modified for recall bias to 80 percent based on 1st dose card or history coverage of 88 percent, 1st dose card only coverage of 65 percent and 3d dose card only coverage of 59 percent.
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimate based on reported data.
- 2009: Estimate based on reported data.
- 2010: Estimate based on reported data.

Cameroon - Pol3

CMR - Pol3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	47	53	58	57	62	66	72	72	79	78	81	82	79	83
Official	47	48	48	49	43	63	72	72	79	78	81	82	79	83
Administrative	NA	NA	48	53	45	63	72	72	79	78	81	82	79	83
Survey	47	NA	50	NA	NA	NA	67	73	70	NA	NA	NA	NA	NA

Description:

1997: Legacy estimate. Survey results of 47 percent modified for recall bias to 68 percent based on 1st dose card or history coverage of 84 percent, 1st dose card only coverage of 52 percent and 3d dose card only coverage of 42 percent.

1998: Reported data calibrated to 1997 and 1999 levels.

1999: Survey adjusted for recall likely includes SIAs; set to DTP3 coverage level. Survey results of 50 percent modified for recall bias to 72 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 42 percent and 3d dose card only coverage of 35 percent.

2000: Reported data calibrated to 1999 and 2003 levels.

2001: Estimate based on interpolation between 2000 and 2002. Estimate not based on reported data. Decline in reported data attributed to incomplete reporting. Current estimate of 62 percent changed from previous revision value of 61 percent.

2002: Reported data calibrated to 1999 and 2003 levels.

2003: Vaccine to vaccine consistency Survey results of 67 percent modified for recall bias to 83 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 56 percent and 3d dose card only coverage of 50 percent.

2004: Estimate based on reported data. 79 percent survey results supports reported data of 72 percent. Survey results of 73 percent modified for recall bias to 79 percent based on 1st dose card or history coverage of 88 percent, 1st dose card only coverage of 50 percent and 3d dose card only coverage of 45 percent.

2005: Estimate based on reported data. 80 percent survey results supports reported data of 79 percent. Survey results of 70 percent modified for recall bias to 80 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 65 percent and 3d dose card only coverage of 56 percent.

2006: Estimate based on reported data.

2007: Estimate based on reported data.

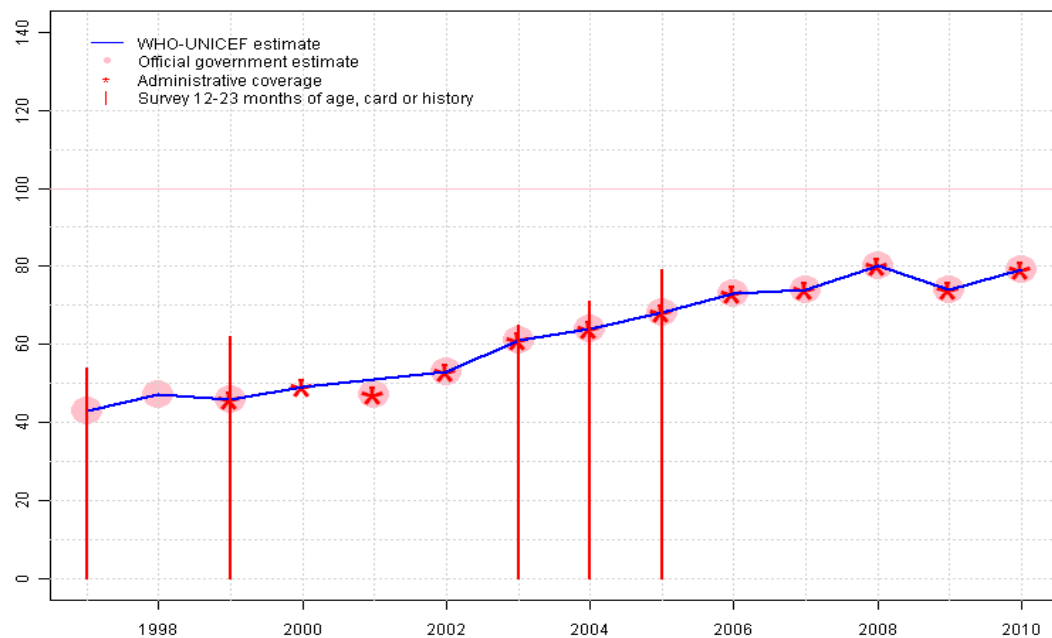
2008: Estimate based on reported data.

2009: Estimate based on reported data.

2010: Estimate based on reported data.

Cameroon - MCV

CMR - MCV



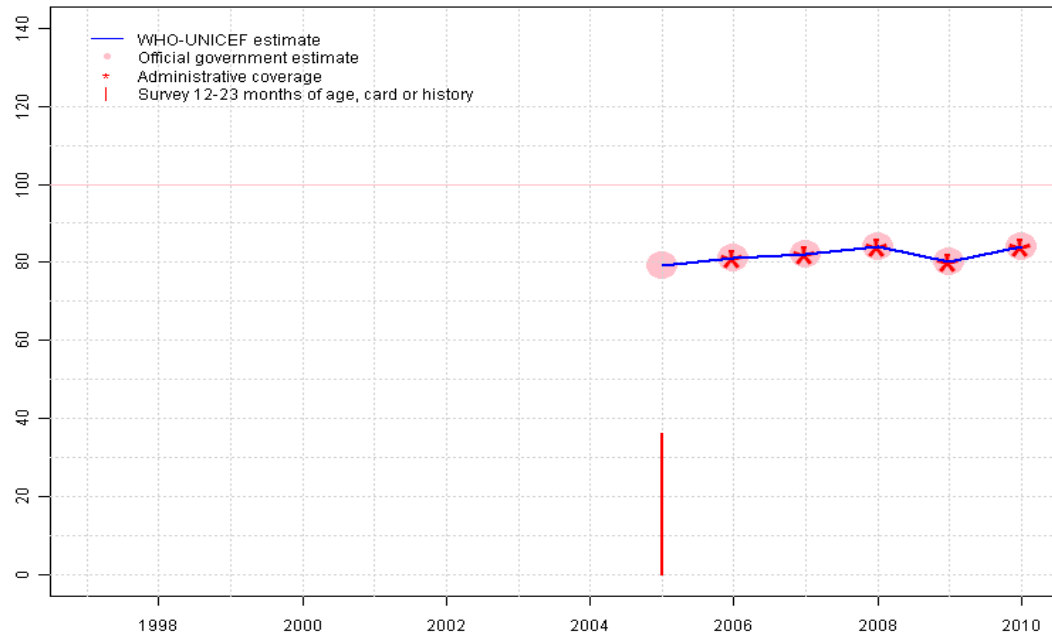
Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Survey results most likely contain immunizations administered during measles campaigns.
- 2000: Estimate based on reported data.
- 2001: Estimate based on interpolation between 2000 and 2002. Estimate not based on reported data. Decline in reported data attributed to incomplete reporting.
- 2002: Estimate based on reported data.
- 2003: Estimate based on reported data. 65 percent survey results supports reported data of 61 percent.
- 2004: Estimate based on reported data. 71 percent survey results supports reported data of 64 percent.
- 2005: Estimate based on reported data. Survey not accepted. Survey results most likely contain immunizations administered during measles campaigns.
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimate based on reported data.
- 2009: Estimate based on reported data.
- 2010: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	43	47	46	49	51	53	61	64	68	73	74	80	74	79
Official	43	47	46	NA	47	53	61	64	68	73	74	80	74	79
Administrative	NA	NA	46	49	47	53	61	64	68	73	74	80	74	79
Survey	54	NA	62	NA	NA	NA	65	71	79	NA	NA	NA	NA	NA

Cameroon - HepB3

CMR - HepB3



Description:

2005: Estimate based on reported data. Survey not accepted. Hepatitis B vaccine introduced in 2005 HepB introduced in 2005 Vaccine presentation is DTP-HepB.

2006: Estimate based on reported data.

2007: Estimate based on reported data.

2008: Estimate based on reported data.

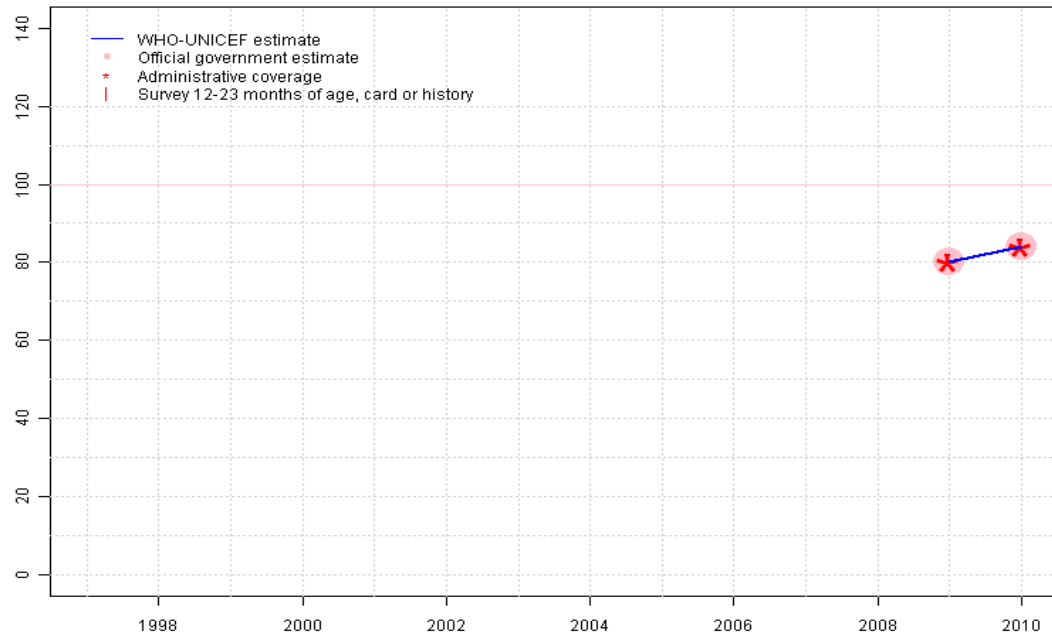
2009: Estimate based on reported data.

2010: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	79	81	82	84	80	84
Official	NA	NA	NA	NA	NA	NA	NA	NA	79	81	82	84	80	84
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	81	82	84	80	84
Survey	NA	NA	NA	NA	NA	NA	NA	NA	36	NA	NA	NA	NA	NA

Cameroon - Hib3

CMR - Hib3



Description:

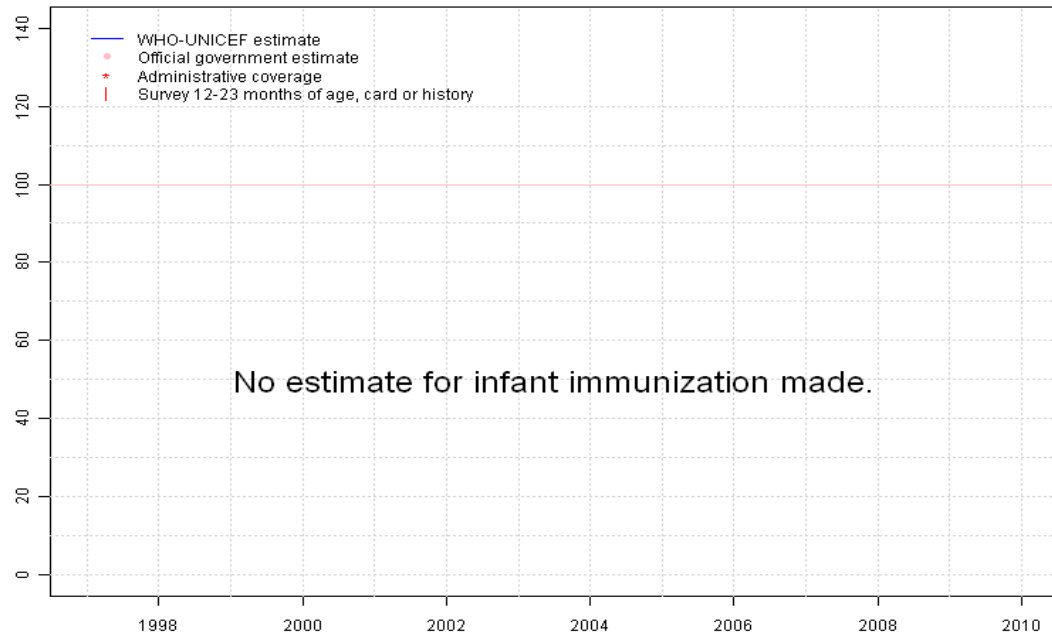
2009: Estimate based on reported data. Hib introduced in 2009 Vaccine presentation is DTP-HepB-Hib.

2010: Estimate based on reported data.

	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	80	84
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	84
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	84
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Cameroon - RotaC

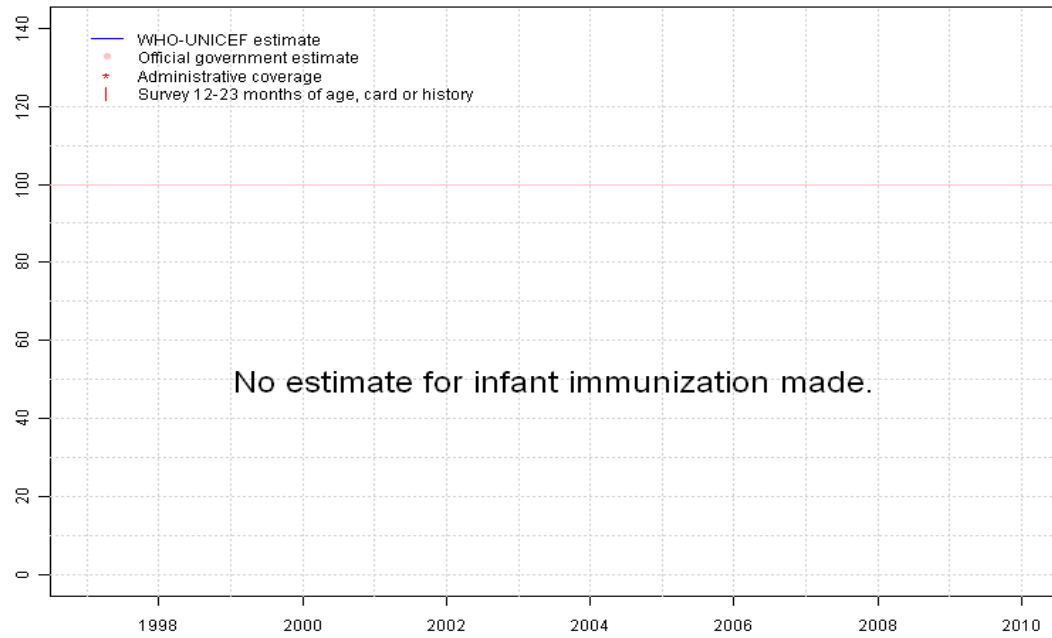
CMR - RotaC



	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

Cameroon - PcV3

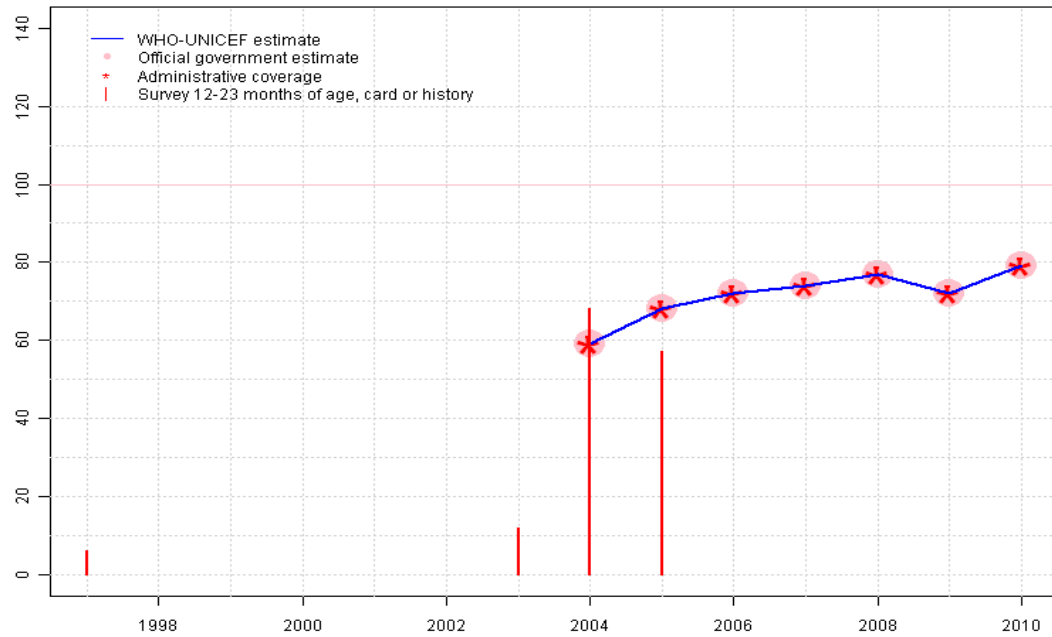
CMR - PcV3



	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

Cameroon - YFV

CMR - YFV



Description:

- 2004: Estimate based on reported data. 68 percent survey results supports reported data of 59 percent. YFV introduced in 2004
- 2005: Estimate based on reported data. Survey supports nationally reported data for other antigens.
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimate based on reported data.
- 2009: Estimate based on reported data.
- 2010: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	NA	NA	NA	NA	NA	NA	NA	59	68	72	74	77	72	79
Official	NA	NA	NA	NA	NA	NA	NA	59	68	72	74	77	72	79
Administrative	NA	NA	NA	NA	NA	NA	NA	59	68	72	74	77	72	79
Survey	6	NA	NA	NA	NA	NA	12	68	57	NA	NA	NA	NA	NA

Cameroon - survey details

2005 Cameroun, Enquête par grappes à indicateurs multiples
2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	65	12-23 m	1320	66
BCG	History	25	12-23 m	1320	66
BCG	Card or History	90	12-23 m	1320	66
BCG	C or H <12 months	89	12-23 m	1320	66
DTP1	Card or History	88	12-23 m	1320	66
DTP1	History	23	12-23 m	1320	66
DTP1	C or H <12 months	87	12-23 m	1320	66
DTP1	Card	65	12-23 m	1320	66
DTP3	Card	59	12-23 m	1320	66
DTP3	History	16	12-23 m	1320	66
DTP3	Card or History	75	12-23 m	1320	66
DTP3	C or H <12 months	72	12-23 m	1320	66
HepB1	Card or History	40	12-23 m	1320	66
HepB1	History	5	12-23 m	1320	66
HepB1	C or H <12 months	39	12-23 m	1320	66
HepB1	Card	35	CBAW	2834	66
HepB3	C or H <12 months	34	12-23 m	1320	66
HepB3	Card or History	36	12-23 m	1320	66
HepB3	Card	31	12-23 m	1320	66
HepB3	History	5	12-23 m	1320	66
MCV	C or H <12 months	72	12-23 m	1320	66
MCV	History	29	12-23 m	1320	66
MCV	Card	50	12-23 m	1320	66
MCV	Card or History	79	12-23 m	1320	66
Pol1	Card	65	12-23 m	1320	66
Pol1	Card or History	93	12-23 m	1320	66
Pol1	History	28	12-23 m	1320	66
Pol1	C or H <12 months	92	12-23 m	1320	66
Pol3	C or H <12 months	67	12-23 m	1320	66
Pol3	Card	56	12-23 m	1320	66
Pol3	History	14	12-23 m	1320	66
Pol3	Card or History	70	12-23 m	1320	66
YFV	Card or History	57	12-23 m	1320	66
YFV	History	14	12-23 m	2834	66
YFV	Card	44	12-23 m	1320	66

YFV C or H <12 months 54 12-23 m 1320 66

2004 Enquête nationale de couverture vaccinale des enfants de 12
à 23 mois au Cameroon

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	51	12-23 m	3520	52
BCG	Card or History	90	12-23 m	3520	52
DTP1	Card or History	84	12-23 m	3520	52
DTP1	Card	50	12-23 m	3520	52
DTP3	Card or History	74	12-23 m	3520	52
DTP3	Card	45	12-23 m	3520	52
MCV	Card	40	12-23 m	3520	52
MCV	Card or History	71	12-23 m	3520	52
Pol1	Card or History	88	12-23 m	3520	52
Pol1	Card	50	12-23 m	3520	52
Pol3	Card	45	12-23 m	3520	52
Pol3	Card or History	73	12-23 m	3520	52
YFV	Card	38	12-23 m	3520	52
YFV	Card or History	68	12-23 m	3520	52

2003 L'Enquête Démographique et de Santé au Cameroun

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	History	30	12-23 m	1546	57
BCG	Card	56	12-23 m	1546	57
BCG	Card or history	86	12-23 m	1546	57
BCG	C or H <12 months	85	12-23 m	1546	57
DTP1	Card or history	83	12-23 m	1546	57
DTP1	C or H <12 months	81	12-23 m	1546	57
DTP1	History	27	12-23 m	1546	57
DTP1	Card	56	12-23 m	1546	57
DTP3	Card	50	12-23 m	1546	57
DTP3	History	16	12-23 m	1546	57
DTP3	Card or history	65	12-23 m	1546	57
DTP3	C or H <12 months	63	12-23 m	1546	57
MCV	C or H <12 months	56	12-23 m	1546	57

Cameroon - survey details

MCV	Card	44	12-23 m	1546	57
MCV	History	21	12-23 m	1546	57
MCV	Card or history	65	12-23 m	1546	57
Pol1	C or H <12 months	91	12-23 m	1546	57
Pol1	Card or history	93	12-23 m	1546	57
Pol1	Card	56	12-23 m	1546	57
Pol1	History	37	12-23 m	1546	57
Pol3	Card	50	12-23 m	1546	57
Pol3	History	17	12-23 m	1546	57
Pol3	Card or history	67	12-23 m	1546	57
Pol3	C or H <12 months	65	12-23 m	1546	57
YFV	Card	7	12-23 m	1546	57
YFV	History	5	12-23 m	1546	57
YFV	Card or history	12	12-23 m	1546	57
YFV	C or H <12 months	7	12-23 m	1546	57

1999 Enquête à Indicateurs Multiples (MICS) au Cameroun 2000, 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	History	37	12-23 m	661	49
BCG	C or H <12 months	76	12-23 m	661	49
BCG	Card or History	78	12-23 m	661	49
BCG	Card	41	12-23 m	661	49
DTP1	C or H <12 months	66	12-23 m	661	49
DTP1	Card	42	12-23 m	661	49
DTP1	Card or History	69	12-23 m	661	49
DTP1	History	27	12-23 m	661	49
DTP3	Card or History	45	12-23 m	661	49
DTP3	C or H <12 months	43	12-23 m	661	49
DTP3	Card	36	12-23 m	661	49
DTP3	History	9	12-23 m	661	49
MCV	History	29	12-23 m	661	49
MCV	Card or History	62	12-23 m	661	49
MCV	Card	33	12-23 m	661	49
MCV	C or H <12 months	56	12-23 m	661	49
Pol1	C or H <12 months	83	12-23 m	661	49
Pol1	Card	42	12-23 m	661	49

Pol1	Card or History	86	12-23 m	661	49
Pol1	History	44	12-23 m	661	49
Pol3	C or H <12 months	47	12-23 m	661	49
Pol3	History	14	12-23 m	661	49
Pol3	Card or History	50	12-23 m	661	49
Pol3	Card	35	12-23 m	661	49

1997 Enquête Démographique et de Santé Cameroun 1998, 1999

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	History	25	12-23 m	748	55
BCG	Card or History	75	12-23 m	748	55
BCG	C or H <12 months	72	12-23 m	748	55
BCG	Card	50	12-23 m	748	55
DTP1	Card	52	12-23 m	748	55
DTP1	Card or History	73	12-23 m	748	55
DTP1	History	21	12-23 m	748	55
DTP1	C or H <12 months	70	12-23 m	748	55
DTP3	Card	42	12-23 m	748	55
DTP3	Card or History	50	12-23 m	748	55
DTP3	History	9	12-23 m	748	55
DTP3	C or H <12 months	46	12-23 m	748	55
MCV	History	16	12-23 m	748	55
MCV	C or H <12 months	44	12-23 m	748	55
MCV	Card	39	12-23 m	748	55
MCV	Card or History	54	12-23 m	748	55
Pol1	Card	52	12-23 m	748	55
Pol1	Card or History	84	12-23 m	748	55
Pol1	History	32	12-23 m	748	55
Pol1	C or H <12 months	80	12-23 m	748	55
Pol3	C or H <12 months	42	12-23 m	748	55
Pol3	Card	42	12-23 m	748	55
Pol3	Card or History	47	12-23 m	748	55
Pol3	History	5	12-23 m	748	55
YFV	C or H <12 months	4	12-23 m	748	55
YFV	Card	2	12-23 m	748	55
YFV	Card or History	6	12-23 m	748	55

Cameroon - survey details

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

Cameroon

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	40
1998	47
1999	55
2000	54
2001	52
2002	65
2003	71
2004	73
2005	76
2006	81
2007	83
2008	86
2009	91
2010	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.