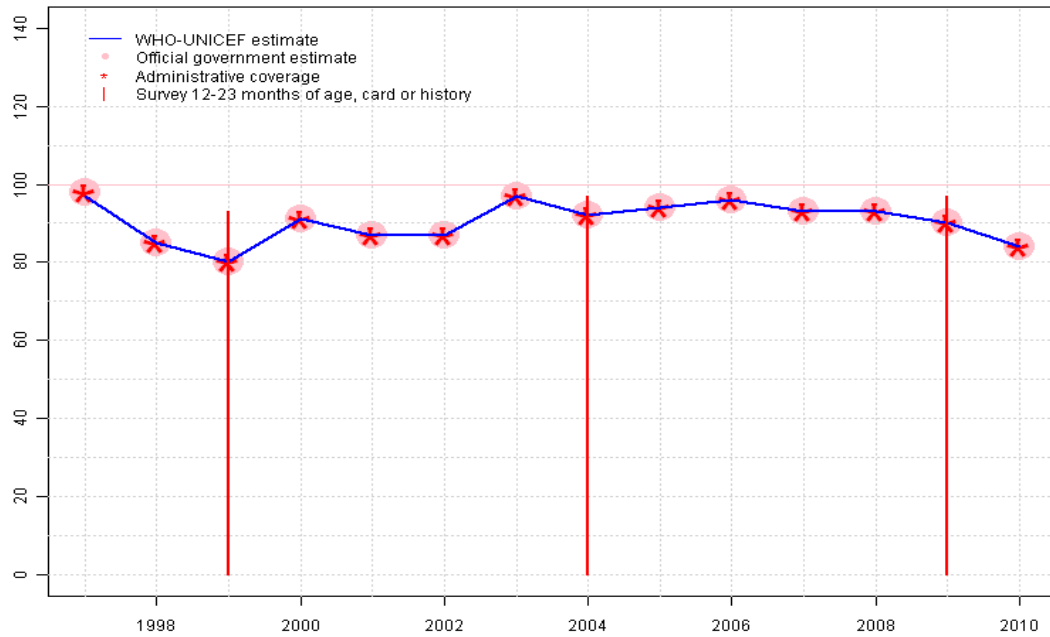


# Colombia - BCG

COL - BCG



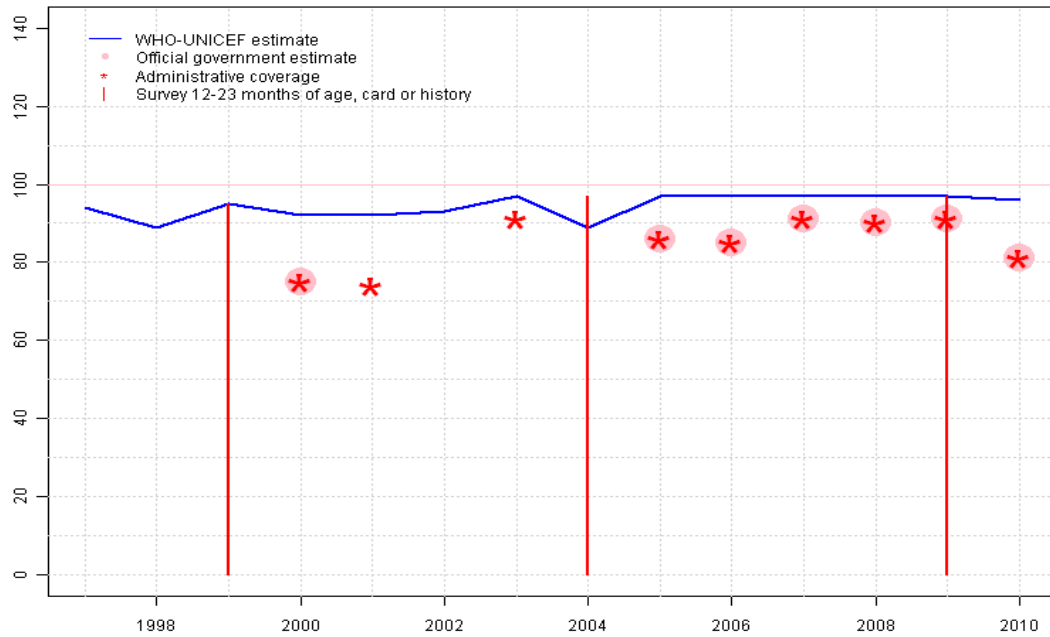
## Description:

- 1997: Legacy estimate.
- 1998: Reported data calibrated to 1997 and 1999 levels.
- 1999: Survey confirms high levels of coverage and supports nationally reported data for other antigens.
- 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. 97 percent survey results supports reported data of 92 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.
- 2009: Estimate based on reported data. 97 percent survey results supports reported data of 90 percent.
- 2010: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	97	85	80	91	87	87	97	92	94	96	93	93	90	84
Official	98	85	80	91	87	87	97	92	94	96	93	93	90	84
Administrative	98	85	80	91	87	87	97	92	94	96	93	93	90	84
Survey	NA	NA	93	NA	NA	NA	NA	97	NA	NA	NA	NA	97	NA

# Colombia - DTP1

COL - DTP1



## Description:

1997: Legacy estimate.

1998: No accepted DTP1 data. Estimate based on DTP3 coverage of 73. Current estimate of 89 percent changed from previous revision value of 95 percent.

1999: No accepted reported data. Reported data of 75 percent estimated by extrapolating from 2000 does not support trend in reported data. 95 percent survey results

2000: DTP1 coverage estimated based on DTP3 coverage of 79. Current estimate of 92 percent changed from previous revision value of 94 percent.

2001: DTP1 coverage estimated based on DTP3 coverage of 80. Current estimate of 92 percent changed from previous revision value of 93 percent.

2002: No accepted DTP1 data. Estimate based on DTP3 coverage of 81. Current estimate of 93 percent changed from previous revision value of 91 percent.

2003: DTP1 coverage estimated based on DTP3 coverage of 92.

2004: No accepted reported data. Reported data of 89 percent estimated by interpolation between 2003 and 2005 supports trend in reported data. 97 percent survey results

2005: DTP1 coverage estimated based on DTP3 coverage of 93.

2006: DTP1 coverage estimated based on DTP3 coverage of 93.

2007: DTP1 coverage estimated based on DTP3 coverage of 93.

2008: DTP1 coverage estimated based on DTP3 coverage of 92.

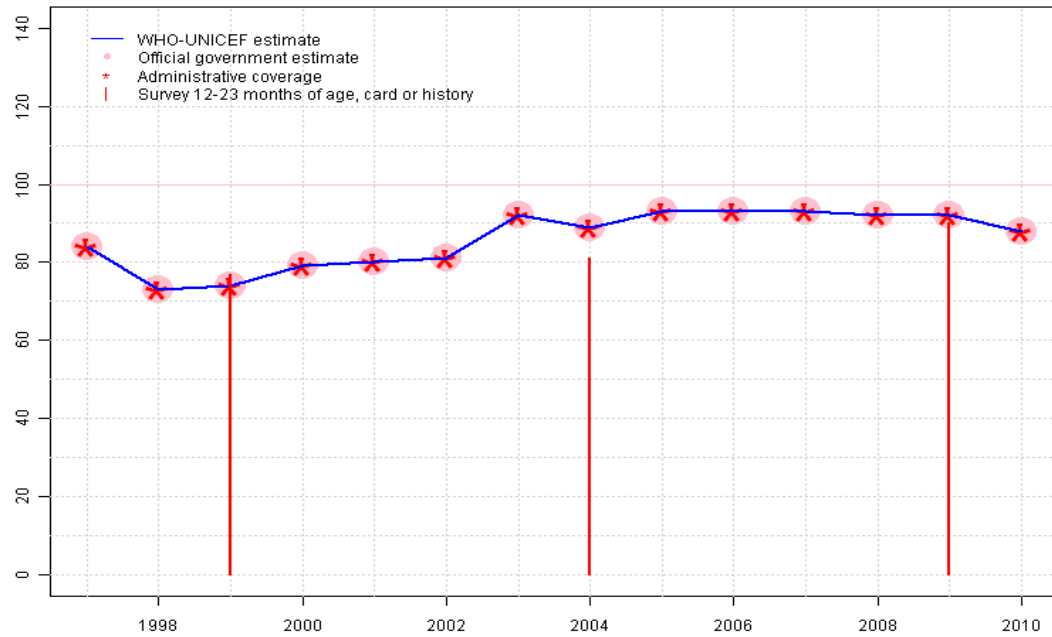
2009: DTP1 coverage estimated based on DTP3 coverage of 92.

2010: DTP1 coverage estimated based on DTP3 coverage of 88.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	94	89	95	92	92	93	97	89	97	97	97	97	97	96
Official	NA	NA	NA	75	NA	NA	NA	NA	86	85	91	90	91	81
Administrative	NA	NA	NA	75	74	NA	91	NA	86	85	91	90	91	81
Survey	NA	NA	95	NA	NA	NA	NA	97	NA	NA	NA	NA	97	NA

# Colombia - DTP3

COL - DTP3



## Description:

1997: Legacy estimate.

1998: Estimate based on reported data.

1999: Estimate based on reported data. 82 percent survey results supports reported data of 74 percent. Survey results of 77 percent modified for recall bias to 82 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 73 percent and 3d dose card only coverage of 63 percent.

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. 89 percent survey results supports reported data of 89 percent. Survey results of 81 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 77 percent and 3d dose card only coverage of 71 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.

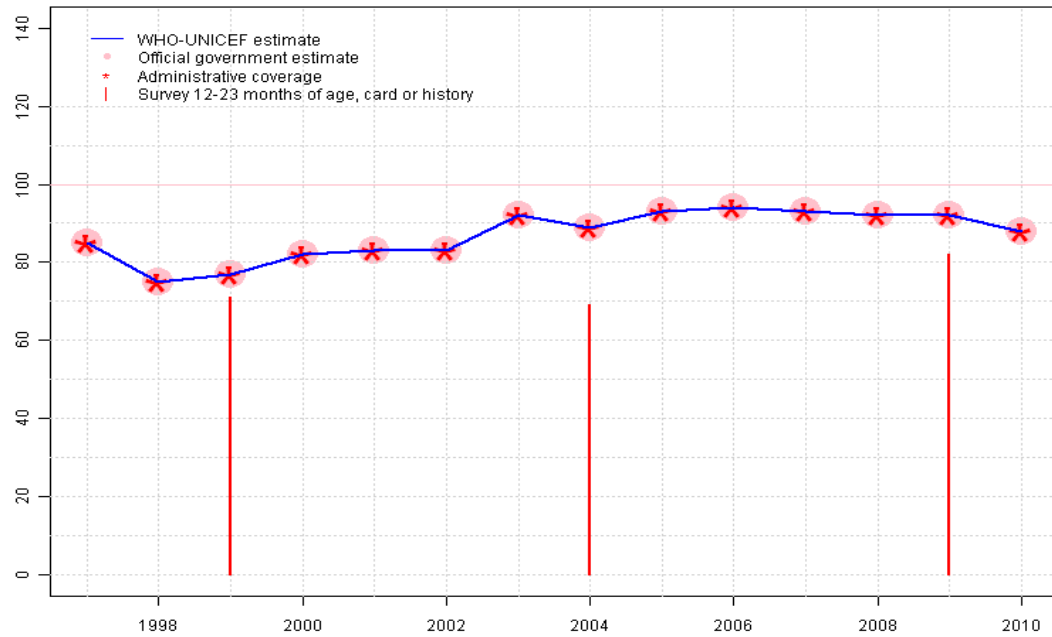
2009: Estimate based on reported data. 92 percent survey results supports reported data of 92 percent. Survey results of 90 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 82 percent and 3d dose card only coverage of 78 percent.

2010: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	84	73	74	79	80	81	92	89	93	93	93	92	92	88
Official	84	73	74	79	80	81	92	89	93	93	93	92	92	88
Administrative	84	73	74	79	80	81	92	89	93	93	93	92	92	88
Survey	NA	NA	77	NA	NA	NA	NA	81	NA	NA	NA	NA	90	NA

# Colombia - Pol3

COL - Pol3



## Description:

1997: Legacy estimate.

1998: Estimate based on reported data.

1999: Estimate based on reported data. 81 percent survey results supports reported data of 77 percent. Survey results of 71 percent modified for recall bias to 81 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 74 percent and 3d dose card only coverage of 62 percent.

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. Survey not accepted. Polio results inconsistent with other vaccines. Polio birth dose may have been recorded as first recommended dose.

2005: Estimate based on reported data.

2006: Estimate based on reported data.

2007: Estimate based on reported data.

2008: Estimate based on reported data.

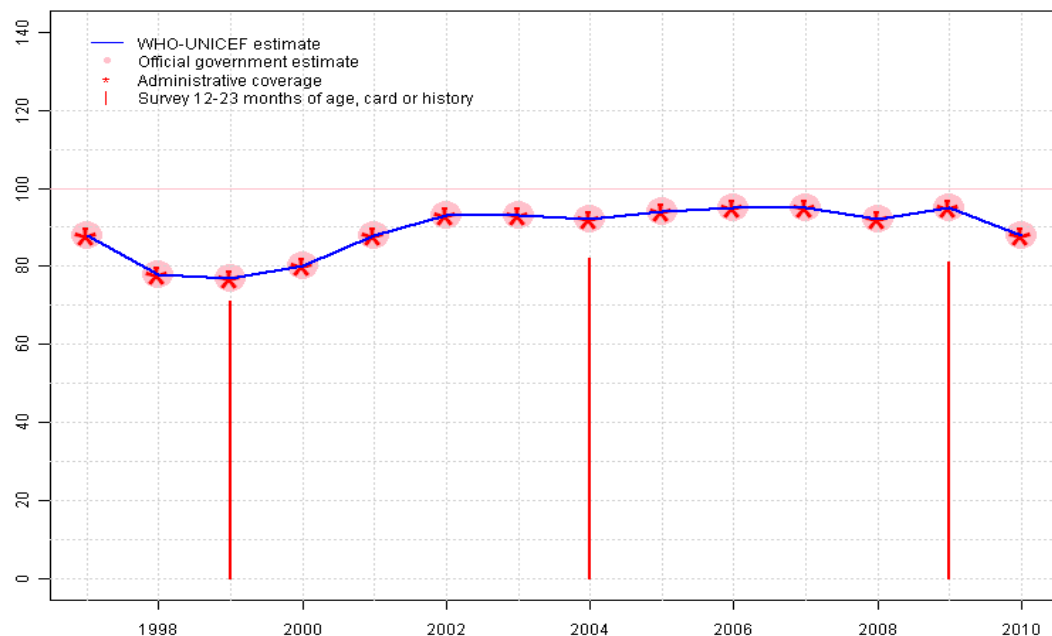
2009: Estimate based on reported data. 89 percent survey results supports reported data of 92 percent. Survey results of 82 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 80 percent and 3d dose card only coverage of 76 percent.

2010: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	85	75	77	82	83	83	92	89	93	94	93	92	92	88
Official	85	75	77	82	83	83	92	89	93	94	93	92	92	88
Administrative	85	75	77	82	83	83	92	89	93	94	93	92	92	88
Survey	NA	NA	71	NA	NA	NA	NA	69	NA	NA	NA	NA	82	NA

# Colombia - MCV

COL - MCV



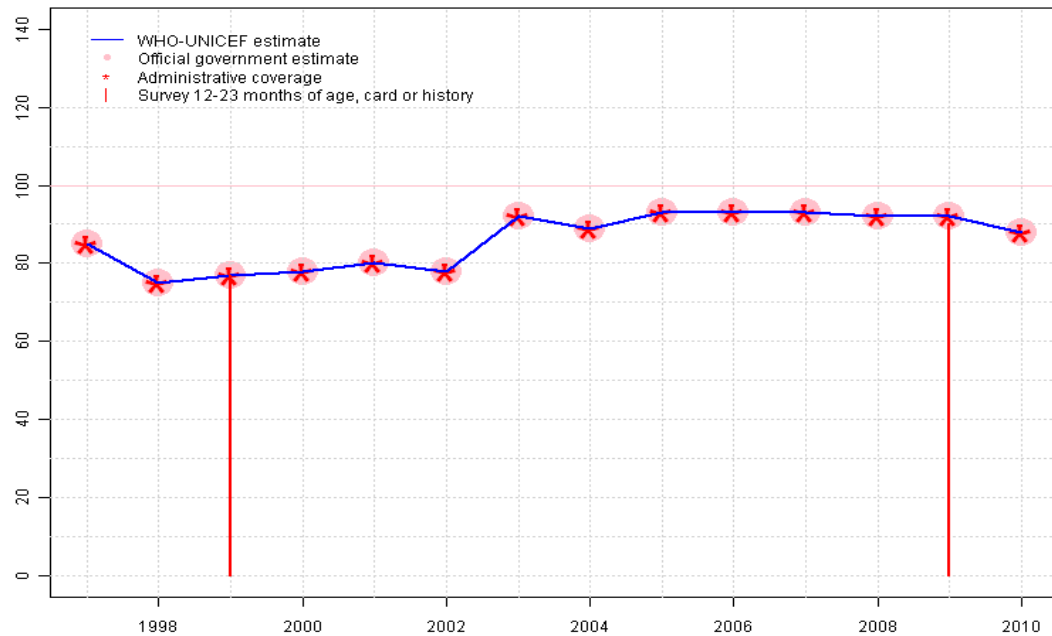
## Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data. Survey not accepted. Measles vaccination is recommend between 12-23 months of age. Survey cohort underestimates coverage.
- 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. Survey not accepted. Measles vaccination is recommend between 12-23 months of age. Survey cohort underestimates coverage.
- 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. Survey not accepted. Measles vaccination is recommend between 12-23 months of age. Survey cohort underestimates coverage.
- 2010: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	88	78	77	80	88	93	93	92	94	95	95	92	95	88
Official	88	78	77	80	88	93	93	92	94	95	95	92	95	88
Administrative	88	78	77	80	88	93	93	92	94	95	95	92	95	88
Survey	NA	NA	71	NA	NA	NA	NA	82	NA	NA	NA	NA	81	NA

# Colombia - HepB3

COL - HepB3



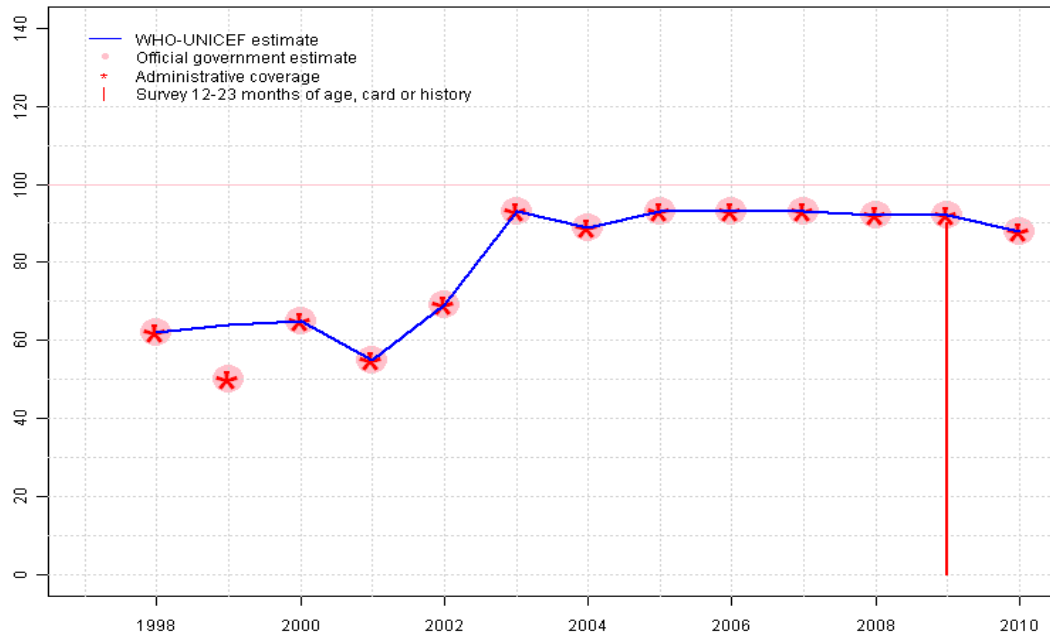
## Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data. 77 percent survey results supports reported data of 77 percent.
- 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.
- 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. 92 percent survey results supports reported data of 92 percent. Survey results of 90 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 82 percent and 3d dose card only coverage of 78 percent.
- 2010: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	85	75	77	78	80	78	92	89	93	93	93	92	92	88
Official	85	75	77	78	80	78	92	89	93	93	93	92	92	88
Administrative	85	75	77	78	80	78	92	89	93	93	93	92	92	88
Survey	NA	NA	77	NA	NA	NA	NA	NA	NA	NA	NA	NA	90	NA

# Colombia - Hib3

COL - Hib3



## Description:

1998: Estimate based on reported data. Hib introduced in 1998. Vaccine presentation is DTP-HepB-Hib.

1999: Estimate based on interpolation between 1998 and 2000. Reported data not accepted due to a decline from 62 percent to 50 percent with a subsequent increase to 65 percent.

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.

2005: Estimate based on reported data.

2006: Estimate based on reported data.

2007: Estimate based on reported data.

2008: Estimate based on reported data.

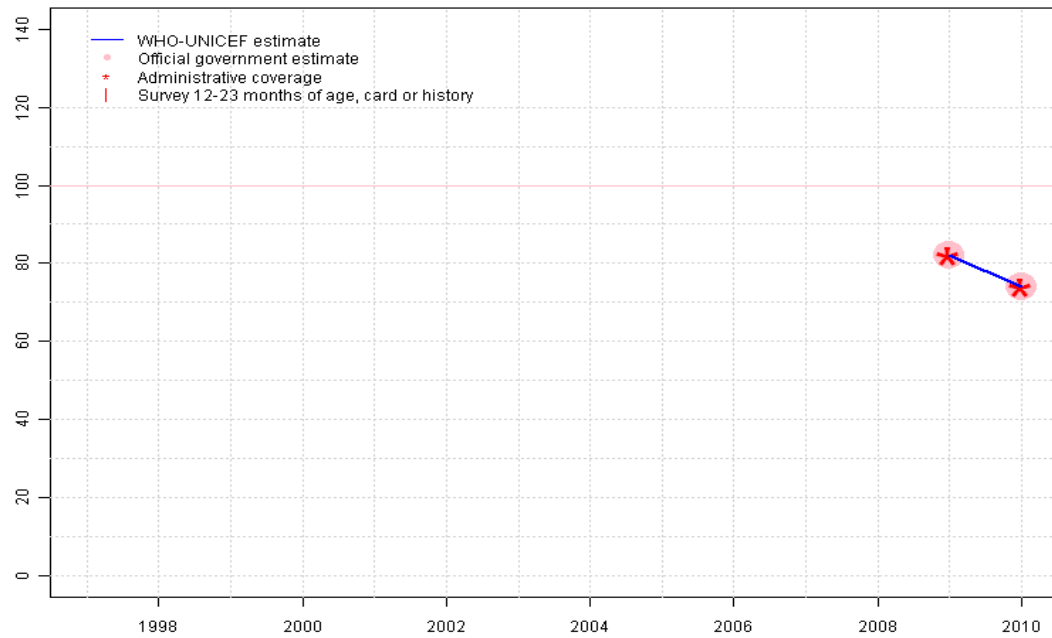
2009: Estimate based on reported data. 92 percent survey results supports reported data of 92 percent. Survey results of 90 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 82 percent and 3d dose card only coverage of 78 percent.

2010: Estimate based on reported data.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	NA	62	64	65	55	69	93	89	93	93	93	92	92	88
Official	NA	62	50	65	55	69	93	89	93	93	93	92	92	88
Administrative	NA	62	50	65	55	69	93	89	93	93	93	92	92	88
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	90	NA

# Colombia - RotaC

COL - RotaC



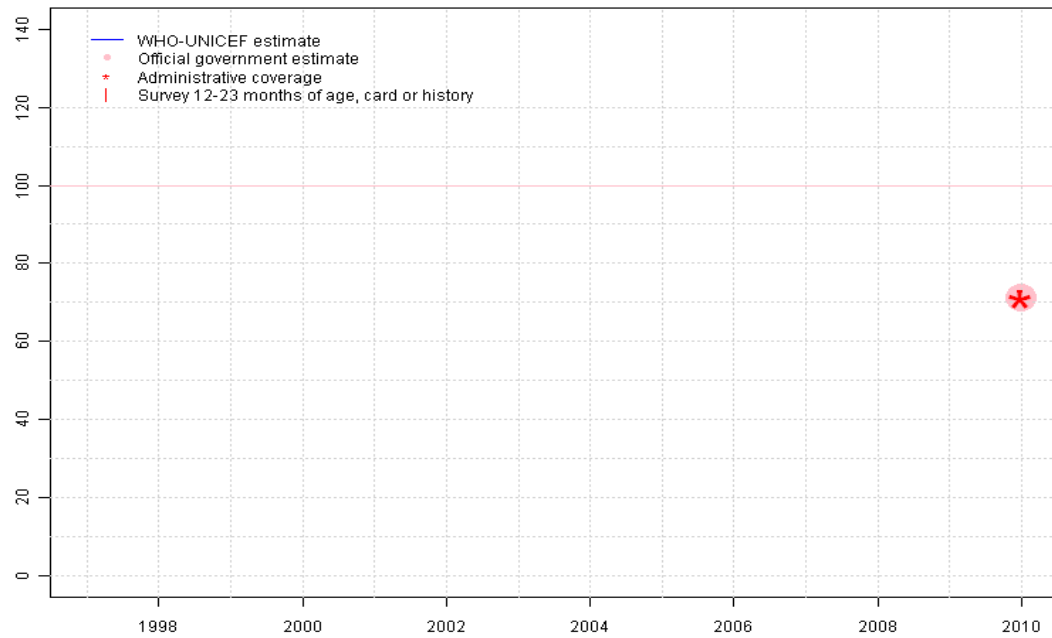
## Description:

2009: Estimate based on reported data. Rotavirus vaccine introduced in 2009.  
 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	82	74
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	82	74
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	82	74
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

# Colombia - PcV3

COL - PcV3



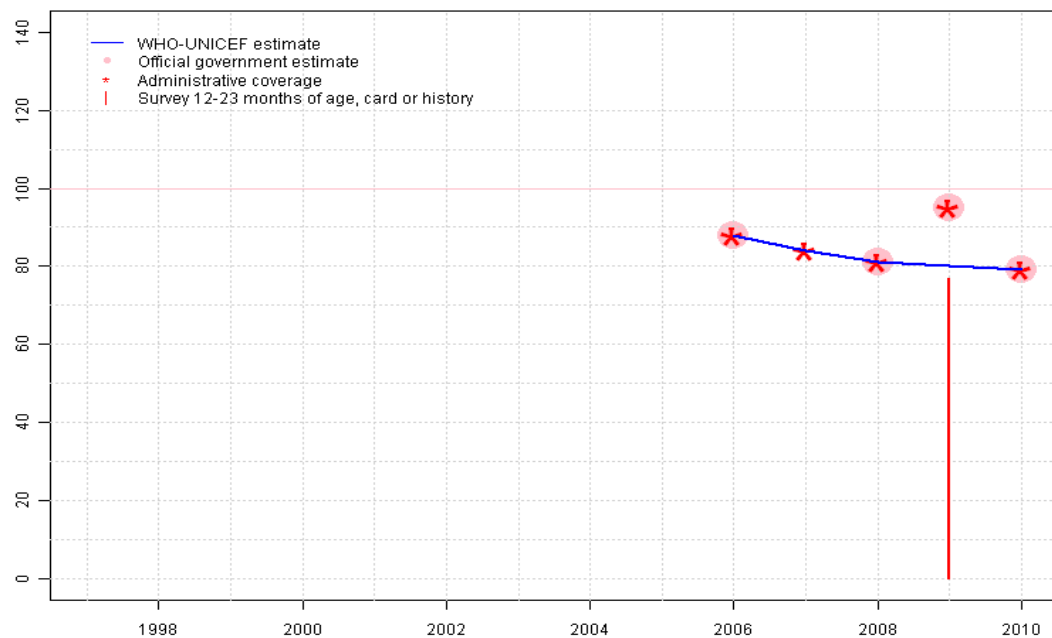
Description:

2010: Estimate based on reported data. PCV vaccine was introduced in 2010.

	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	71
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	71
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	71
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

# Colombia - YFV

COL - YFV



## Description:

- 2006: Estimate based on reported data. YFV introduced in 2003 reporting started in 2006
- 2007: Estimate based on reported data.
- 2008: Estimate based on reported data. Decline attributed to vaccine shortage.
- 2009: No accepted reported data. Reported data of 80 percent estimated by interpolation between 2008 and 2010 supports trend in reported data. 77 percent survey results Reported data not accepted due to an increase from 81 percent to 95 percent with a subsequent decrease to 79 percent. Current estimate of 80 percent changed from previous revision value of 95 percent.
- 2010: Estimate based on reported data. 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	88	84	81	80	79
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	88	84	81	95	79
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	88	84	81	95	79
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	77	NA

# Colombia - survey details

## 2009 Encuesta Nacional de Demografía y Salud 2010, República de Colombia

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	97	12-23 m	3046	83
BCG	Card	82	12-23 m	3046	83
BCG	History	15	12-23 m	3046	83
BCG	C or H <12 months	97	12-23 m	3046	83
DTP1	Card or History	97	12-23 m	3046	83
DTP1	Card	82	12-23 m	3046	83
DTP1	History	15	12-23 m	3046	83
DTP1	C or H <12 months	97	12-23 m	3046	83
DTP3	Card or History	90	12-23 m	3046	83
DTP3	Card	78	12-23 m	3046	83
DTP3	History	12	12-23 m	3046	83
DTP3	C or H <12 months	86	12-23 m	3046	83
HepB1	C or H <12 months	97	12-23 m	3046	83
HepB1	Card or History	97	12-23 m	3046	83
HepB1	History	15	12-23 m	3046	83
HepB1	Card	82	12-23 m	3046	83
HepB3	C or H <12 months	86	12-23 m	3046	83
HepB3	History	12	12-23 m	3046	83
HepB3	Card	78	12-23 m	3046	83
HepB3	Card or History	90	12-23 m	3046	83
Hib1	C or H <12 months	97	12-23 m	3046	83
Hib1	History	15	12-23 m	3046	83
Hib1	Card	82	12-23 m	3046	83
Hib1	Card or History	97	12-23 m	3046	83
Hib3	History	12	12-23 m	3046	83
Hib3	Card or History	90	12-23 m	3046	83
Hib3	Card	78	12-23 m	3046	83
Hib3	C or H <12 months	86	12-23 m	3046	83
MCV	Card	68	12-23 m	3046	83
MCV	Card or History	81	12-23 m	3046	83
MCV	C or H <12 months	3	12-23 m	3046	83
MCV	History	13	12-23 m	3046	83
Pol1	Card or History	94	12-23 m	3046	83
Pol1	Card	80	12-23 m	3046	83
Pol1	History	14	12-23 m	3046	83

Pol1	C or H <12 months	93	12-23 m	3046	83
Pol3	Card or History	82	12-23 m	3046	83
Pol3	Card	76	12-23 m	3046	83
Pol3	C or H <12 months	79	12-23 m	3046	83
Pol3	History	6	12-23 m	3046	83
YFV	Card or History	77	12-23 m	3046	83

## 2004 Salud sexual y reproductiva en Colombia, Encuesta nacional de demografía y salud 2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	History	20	12-23 m	2705	78
BCG	C or H <12 months	96	12-23 m	2705	78
BCG	Card	76	12-23 m	2705	78
BCG	Card or History	97	12-23 m	2705	78
DTP1	History	20	12-23 m	2705	78
DTP1	Card or History	97	12-23 m	2705	78
DTP1	C or H <12 months	96	12-23 m	2705	78
DTP1	Card	77	12-23 m	2705	78
DTP3	History	10	12-23 m	2705	78
DTP3	C or H <12 months	76	12-23 m	2705	78
DTP3	Card	71	12-23 m	2705	78
DTP3	Card or History	81	12-23 m	2705	78
MCV	Card	65	12-23 m	2705	78
MCV	Card or History	82	12-23 m	2705	78
MCV	History	17	12-23 m	2705	78
MCV	C or H <12 months	52	12-23 m	2705	78
Pol1	C or H <12 months	88	12-23 m	2705	78
Pol1	Card	71	12-23 m	2705	78
Pol1	Card or History	89	12-23 m	2705	78
Pol1	History	18	12-23 m	2705	78
Pol3	Card or History	69	12-23 m	2705	78
Pol3	History	5	12-23 m	2705	78
Pol3	Card	64	12-23 m	2705	78
Pol3	C or H <12 months	65	12-23 m	2705	78

## 1999 Salud Sexual y Reproductiva en Colombia, Resultados Encuesta Nacional de Demografía y Salud 2000

## Colombia - survey details

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen						
BCG	History	23	12-23 m	890	75	DTP3	C or H <12 months	74	36-47 m	848	62
BCG	Card	70	12-23 m	890	75	DTP3	C or H <12 months	74	48-59 m	888	57
BCG	Card or History	93	12-23 m	890	75	HepB3	Card or History	77	12-23 m	890	75
BCG	C or H <12 months	92	12-23 m	890	75	MCV	History	19	12-23 m	890	75
BCG	C or H <12 months	92	24-35 m	894	63	MCV	Card or History	71	12-23 m	890	75
BCG	C or H <12 months	93	36-47 m	848	62	MCV	Card	52	12-23 m	890	75
BCG	C or H <12 months	93	48-59 m	888	57	Pol1	C or H <12 months	95	12-23 m	890	75
DTP1	Card	73	12-23 m	890	75	Pol1	Card	74	12-23 m	890	75
DTP1	History	22	12-23 m	890	75	Pol1	Card or History	97	12-23 m	890	75
DTP1	Card or History	95	12-23 m	890	75	Pol1	History	24	12-23 m	890	75
DTP1	C or H <12 months	93	12-23 m	890	75	Pol1	C or H <12 months	94	24-35 m	894	63
DTP1	C or H <12 months	94	24-35 m	894	63	Pol1	C or H <12 months	94	36-47 m	848	62
DTP1	C or H <12 months	93	36-47 m	848	62	Pol1	C or H <12 months	94	48-59 m	888	57
DTP1	C or H <12 months	93	48-59 m	888	57	Pol3	C or H <12 months	63	12-23 m	890	75
DTP3	C or H <12 months	67	12-23 m	890	75	Pol3	Card	62	12-23 m	890	75
DTP3	History	13	12-23 m	890	75	Pol3	Card or History	71	12-23 m	890	75
DTP3	Card or History	77	12-23 m	890	75	Pol3	History	9	12-23 m	890	75
DTP3	Card	63	12-23 m	890	75	Pol3	C or H <12 months	60	24-35 m	894	63
DTP3	C or H <12 months	71	24-35 m	894	63	Pol3	C or H <12 months	63	36-47 m	848	62
						Pol3	C or H <12 months	65	48-59 m	888	57

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)

## Colombia

### 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	66
1998	67
1999	69
2000	70
2001	71
2002	72
2003	73
2004	76
2005	77
2006	77
2007	78
2008	78
2009	78
2010	79

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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.