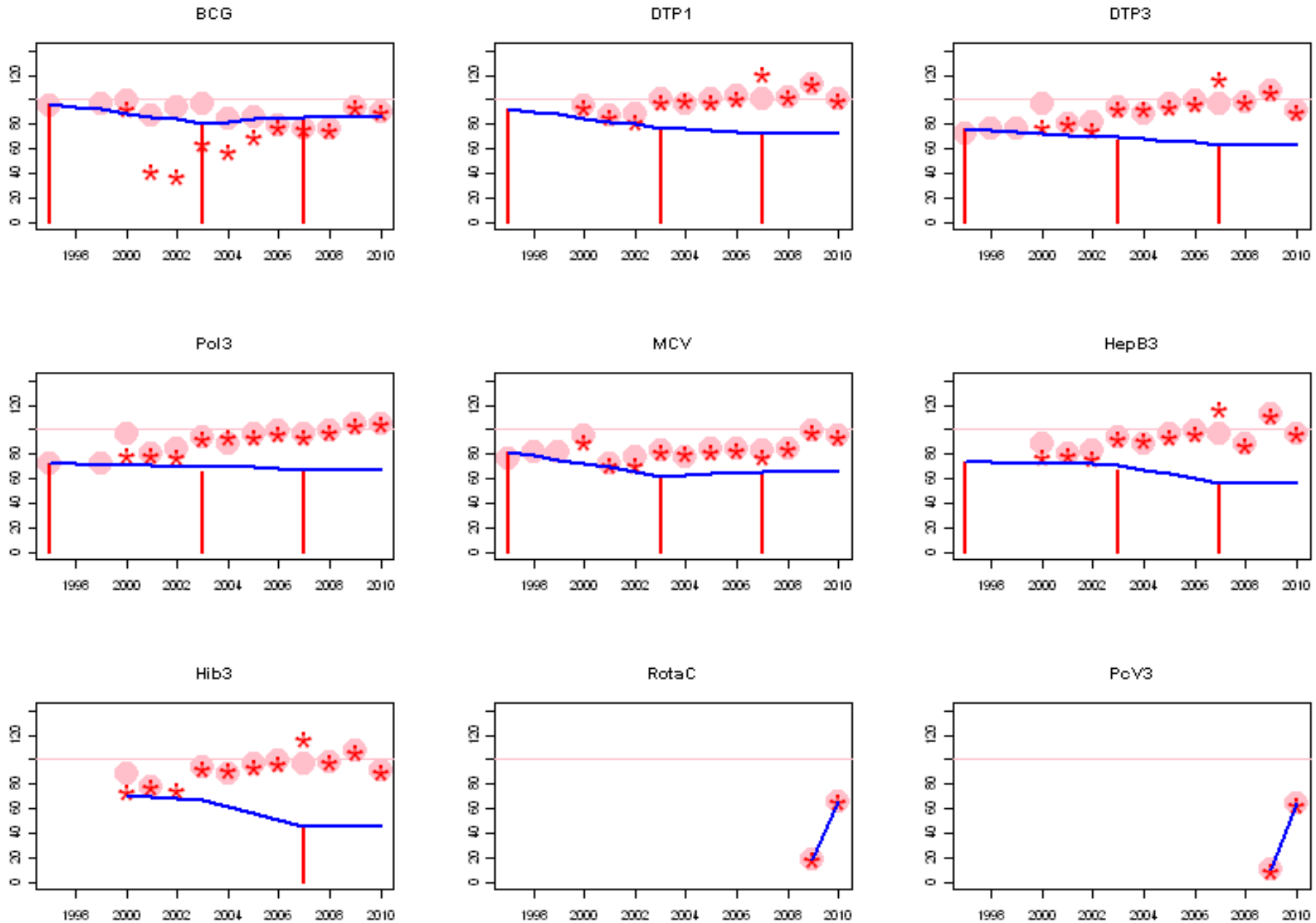
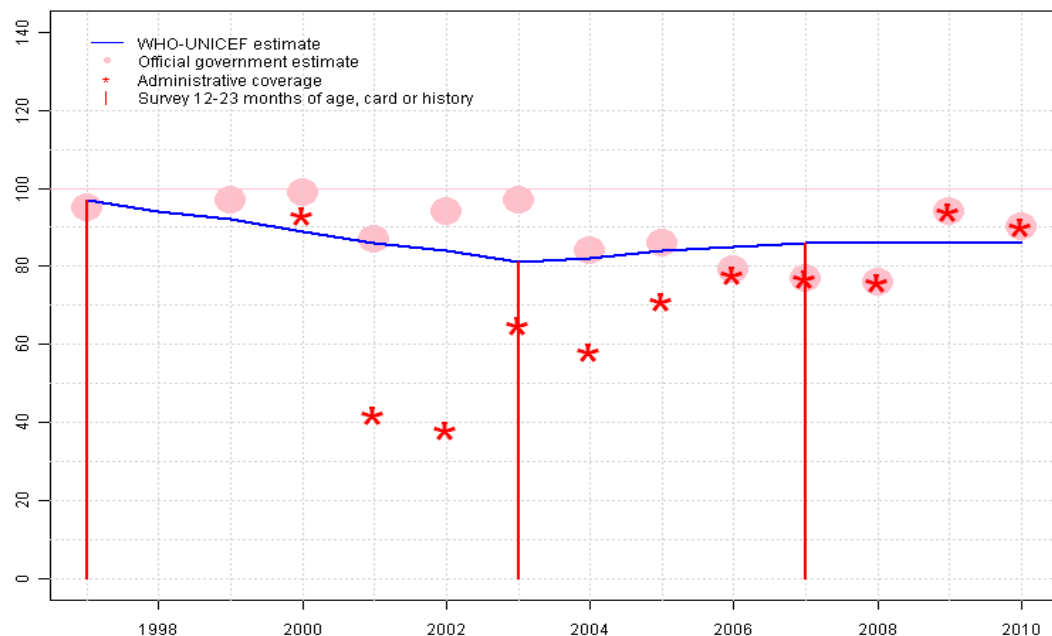


South Africa. WHO and UNICEF estimates of immunization coverage: 2010 revision



# South Africa - BCG

ZAF - BCG



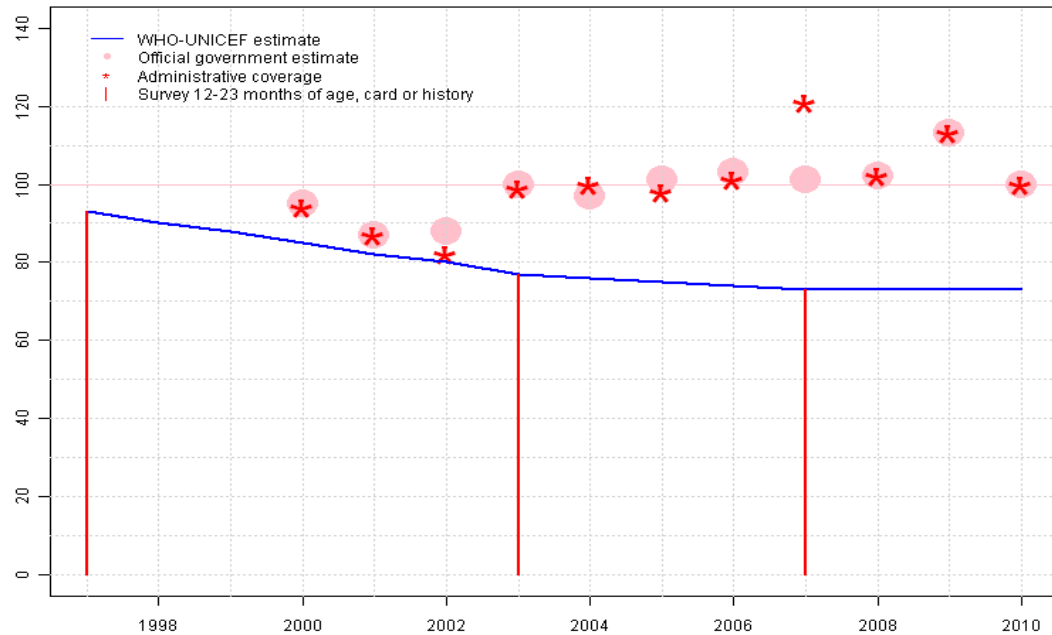
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	97	94	92	89	86	84	81	82	84	85	86	86	86	86
Official	95	NA	97	99	87	94	97	84	86	79	77	76	94	90
Administrative	NA	NA	NA	93	42	38	65	58	71	78	77	76	94	90
Survey	97	NA	NA	NA	NA	NA	81	NA	NA	NA	86	NA	NA	NA

## Description:

- 1997: Legacy estimate.
- 1998: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.
- 1999: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.
- 2000: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.
- 2001: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.
- 2002: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.
- 2003: Estimate based on survey results. 81 percent survey results does not support reported data of 97 percent.
- 2004: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained changes in numerator and denominator. Current estimate of 82 percent changed from previous revision value of 81 percent.
- 2005: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained changes in numerator and denominator. Current estimate of 84 percent changed from previous revision value of 81 percent.
- 2006: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained changes in numerator and denominator. Current estimate of 85 percent changed from previous revision value of 81 percent.
- 2007: No accepted reported data. Reported data of 97 percent estimated by extrapolating from 2003 does not support trend in reported data. 86 percent survey results Estimate not based on reported data. Unexplained changes in numerator and denominator. Current estimate of 86 percent changed from previous revision value of 81 percent.
- 2008: Estimate based on extrapolation from 2007 value of 86 percent. Estimate not based on reported data. Unexplained changes in numerator and denominator. Current estimate of 86 percent changed from previous revision value of 81 percent.
- 2009: Estimate based on extrapolation from 2007 value of 86 percent. Estimate not based on reported data. Unexplained changes in numerator and denominator. Current estimate of 86 percent changed from previous revision value of 81 percent.
- 2010: Estimate based on extrapolation from 2007 value of 86 percent. Estimate not based on reported data. Unexplained changes in numerator and denominator. WHO and UNICEF recommend a high quality coverage survey.

# South Africa - DTP1

ZAF - DTP1



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	93	90	88	85	82	80	77	76	75	74	73	73	73	73
Official	NA	NA	NA	95	87	88	100	97	101	103	101	102	113	100
Administrative	NA	NA	NA	94	87	82	99	100	98	101	121	102	113	100
Survey	93	NA	NA	NA	NA	NA	77	NA	NA	NA	73	NA	NA	NA

## Description:

- 1997: Legacy estimate.
- 1998: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.
- 1999: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.
- 2000: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.
- 2001: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.
- 2002: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.
- 2003: Estimate based on survey results. 77 percent survey results does not support reported data of 100 percent.
- 2004: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 76 percent changed from previous revision value of 77 percent.
- 2005: Estimate based on interpolation between 2003 and 2007. Reported data of 101 percent greater than 100 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 75 percent changed from previous revision value of 77 percent.
- 2006: Estimate based on interpolation between 2003 and 2007. Reported data of 103 percent greater than 100 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 74 percent changed from previous revision value of 77 percent.
- 2007: No accepted reported data. Reported data of 100 percent estimated by extrapolating from 2003 does not support trend in reported data. 73 percent survey results Reported data of 101 percent greater than 100 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 73 percent changed from previous revision value of 77 percent.
- 2008: Estimate based on extrapolation from 2007 value of 73 percent. Reported data of 102 percent greater than 100 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 73 percent changed from previous revision value of 77 percent.
- 2009: Estimate based on extrapolation from 2007 value of 73 percent. Reported data of 113 percent greater than 100 percent. Reported data not accepted due to an increase from 102 percent to 113 percent with a subsequent decrease to 100 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 73

# South Africa - DTP1

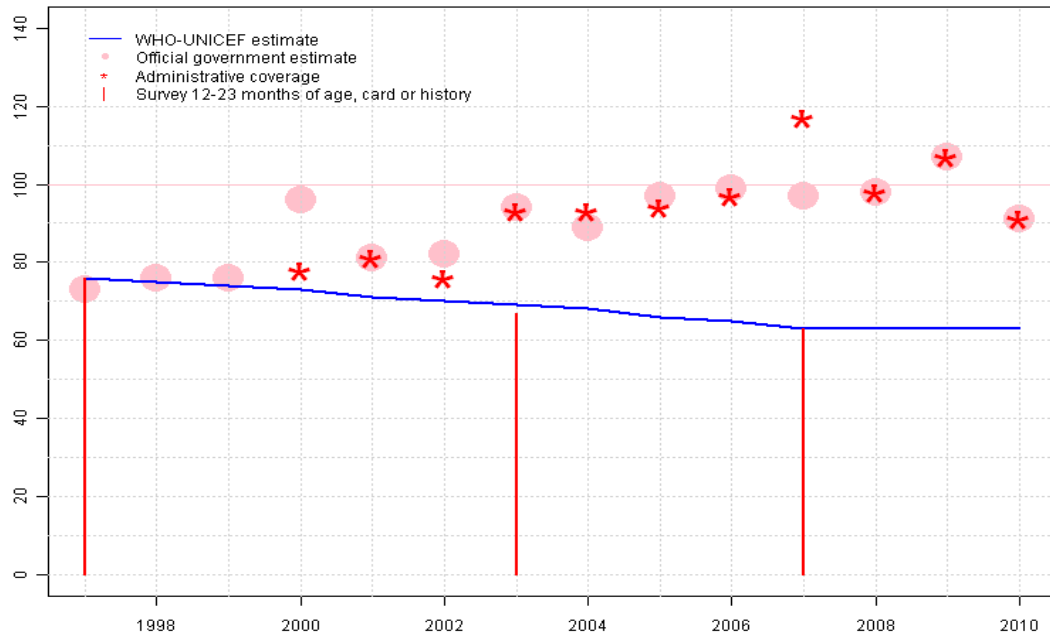
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percent changed from previous revision value of 77 percent.

2010: Estimate based on extrapolation from 2007 value of 73 percent. Reported data not accepted due to a change from 113 level to 100 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. WHO and UNICEF recommend a high quality coverage survey.

# South Africa - DTP3

ZAF - DTP3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	76	75	74	73	71	70	69	68	66	65	63	63	63	63
Official	73	76	76	96	81	82	94	89	97	99	97	98	107	91
Administrative	NA	NA	NA	78	81	76	93	93	94	97	117	98	107	91
Survey	76	NA	NA	NA	NA	NA	67	NA	NA	NA	63	NA	NA	NA

## Description:

1997: Legacy estimate.

1998: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.

1999: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.

2000: Estimate based on interpolation between 1997 and 2003. Reported data not accepted due to an increase from 76 percent to 96 percent with a subsequent decrease to 81 percent. Unexplained fluctuations in numerator and denominator levels.

2001: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.

2002: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.

2003: Estimate based on survey results. 69 percent survey results does not support reported data of 94 percent. Survey results of 67 percent modified for recall bias to 69 percent based on 1st dose card or history coverage of 77 percent, 1st dose card only coverage of 68 percent and 3d dose card only coverage of 61 percent.

2004: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 68 percent changed from previous revision value of 69 percent.

2005: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 66 percent changed from previous revision value of 69 percent.

2006: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 65 percent changed from previous revision value of 69 percent.

2007: No accepted reported data. Reported data of 94 percent estimated by extrapolating from 2003 does not support trend in reported data. 63 percent survey results Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Survey results of 63 percent modified for recall bias to 63 percent based on 1st dose card or history coverage of 73 percent, 1st dose card only coverage of 64 percent and 3d dose card only coverage of 55 percent. Current estimate of 63 percent changed from previous revision value of 69 percent.

2008: Estimate based on extrapolation from 2007 value of 63 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 63 percent changed from previous

## South Africa - DTP3

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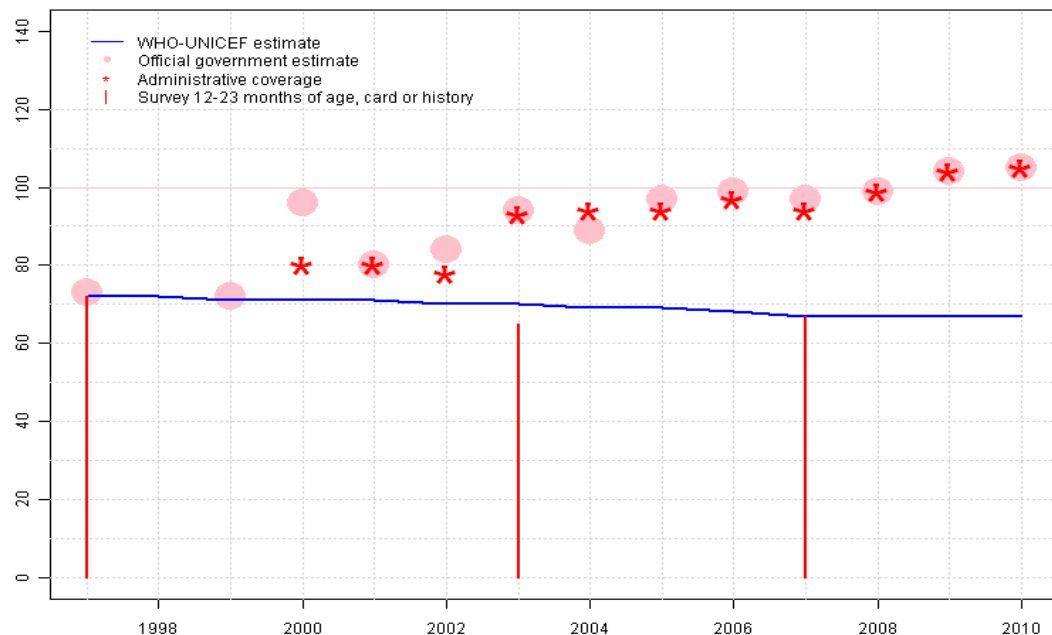
revision value of 69 percent.

2009: Estimate based on extrapolation from 2007 value of 63 percent. Reported data of 107 percent greater than 100 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 63 percent changed from previous revision value of 69 percent.

2010: Estimate based on extrapolation from 2007 value of 63 percent. Reported data not accepted due to a change from 107 level to 91 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. WHO and UNICEF recommend a high quality coverage survey.

# South Africa - Pol3

ZAF - Pol3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	72	72	71	71	71	70	70	69	69	68	67	67	67	67
Official	73	NA	72	96	80	84	94	89	97	99	97	99	104	105
Administrative	NA	NA	NA	80	80	78	93	94	94	97	94	99	104	105
Survey	72	NA	NA	NA	NA	NA	65	NA	NA	NA	67	NA	NA	NA

## Description:

1997: Legacy estimate.

1998: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.

1999: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.

2000: Estimate based on interpolation between 1997 and 2003. Reported data not accepted due to an increase from 72 percent to 96 percent with a subsequent decrease to 80 percent. Unexplained fluctuations in numerator and denominator levels.

2001: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.

2002: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.

2003: Estimate based on survey results. 70 percent survey results does not support reported data of 94 percent. Survey results of 65 percent modified for recall bias to 70 percent based on 1st dose card or history coverage of 78 percent, 1st dose card only coverage of 70 percent and 3d dose card only coverage of 63 percent.

2004: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 69 percent changed from previous revision value of 70 percent.

2005: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 69 percent changed from previous revision value of 70 percent.

2006: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 68 percent changed from previous revision value of 70 percent.

2007: No accepted reported data. Reported data of 94 percent estimated by extrapolating from 2003 does not support trend in reported data. 67 percent survey results Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 67 percent changed from previous revision value of 70 percent.

2008: Estimate based on extrapolation from 2007 value of 67 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 67 percent changed from previous revision value of 70 percent.

2009: Estimate based on extrapolation from 2007 value of 67 percent. Reported data of 104 percent greater than 100 percent. Estimate not based on

## South Africa - Pol3

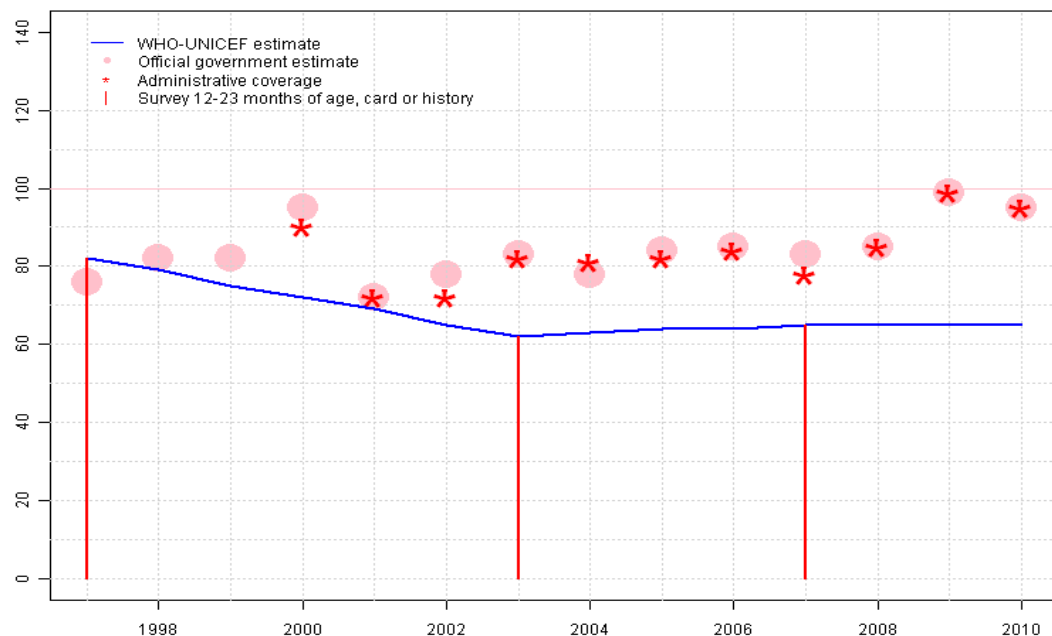
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reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 67 percent changed from previous revision value of 70 percent.

2010: Estimate based on extrapolation from 2007 value of 67 percent. Reported data of 105 percent greater than 100 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. WHO and UNICEF recommend a high quality coverage survey.

# South Africa - MCV

ZAF - MCV



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	82	79	75	72	69	65	62	63	64	64	65	65	65	65
Official	76	82	82	95	72	78	83	78	84	85	83	85	99	95
Administrative	NA	NA	NA	90	72	72	82	81	82	84	78	85	99	95
Survey	82	NA	NA	NA	NA	NA	62	NA	NA	NA	65	NA	NA	NA

## Description:

1997: Legacy estimate.

1998: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.

1999: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.

2000: Estimate based on interpolation between 1997 and 2003. Reported data not accepted due to an increase from 82 percent to 95 percent with a subsequent decrease to 72 percent. Unexplained fluctuations in numerator and denominator levels.

2001: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.

2002: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels.

2003: Estimate based on survey results. 62 percent survey results does not support reported data of 83 percent.

2004: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 63 percent changed from previous revision value of 62 percent.

2005: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 64 percent changed from previous revision value of 62 percent.

2006: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 64 percent changed from previous revision value of 62 percent.

2007: No accepted reported data. Reported data of 83 percent estimated by extrapolating from 2003 does not support trend in reported data. 65 percent survey results Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 65 percent changed from previous revision value of 62 percent.

2008: Estimate based on extrapolation from 2007 value of 65 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 65 percent changed from previous revision value of 62 percent.

2009: Estimate based on extrapolation from 2007 value of 65 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 65 percent changed from previous revision value of 62 percent.

2010: Estimate based on extrapolation from 2007 value of 65 percent. Estimate

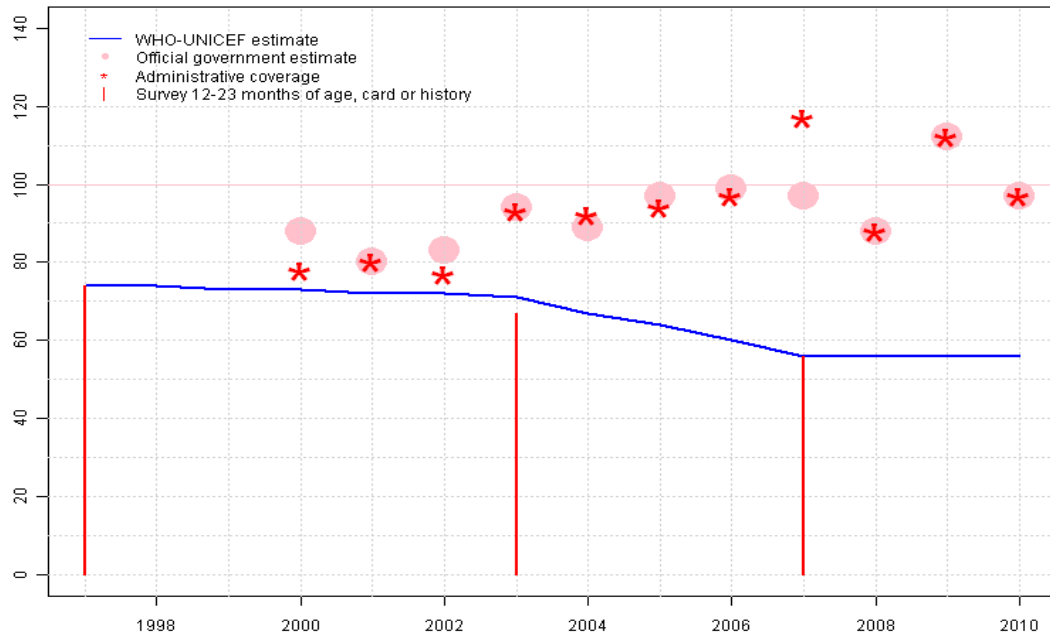
# South Africa - MCV

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not based on reported data. Unexplained fluctuations in numerator and denominator levels. WHO and UNICEF recommend a high quality coverage survey.

# South Africa - HepB3

ZAF - HepB3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	74	74	73	73	72	72	71	67	64	60	56	56	56	56
Official	NA	NA	NA	88	80	83	94	89	97	99	97	88	112	97
Administrative	NA	NA	NA	78	80	77	93	92	94	97	117	88	112	97
Survey	74	NA	NA	NA	NA	NA	67	NA	NA	NA	56	NA	NA	NA

## Description:

- 1997: Legacy estimate. HepB introduced in 1995. Reporting started in 1997. Vaccine presentation is HepB .
- 1998: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels. Current estimate of 74 percent changed from previous revision value of 73 percent.
- 1999: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels. Current estimate of 73 percent changed from previous revision value of 72 percent.
- 2000: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels. Current estimate of 73 percent changed from previous revision value of 71 percent.
- 2001: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels. Current estimate of 72 percent changed from previous revision value of 69 percent.
- 2002: Estimate based on interpolation between 1997 and 2003. Unexplained fluctuations in numerator and denominator levels. Current estimate of 72 percent changed from previous revision value of 68 percent.
- 2003: Estimate based on survey results. 71 percent survey results does not support reported data of 94 percent. Survey results of 67 percent modified for recall bias to 71 percent based on 1st dose card or history coverage of 77 percent, 1st dose card only coverage of 68 percent and 3d dose card only coverage of 63 percent. Current estimate of 71 percent changed from previous revision value of 67 percent.
- 2004: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels.
- 2005: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 64 percent changed from previous revision value of 67 percent.
- 2006: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 60 percent changed from previous revision value of 67 percent.
- 2007: No accepted reported data. Reported data of 94 percent estimated by extrapolating from 2003 does not support trend in reported data. 56 percent survey results Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 56 percent changed from previous revision value of 67 percent.
- 2008: Estimate based on extrapolation from 2007 value of 56 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and

# South Africa - HepB3

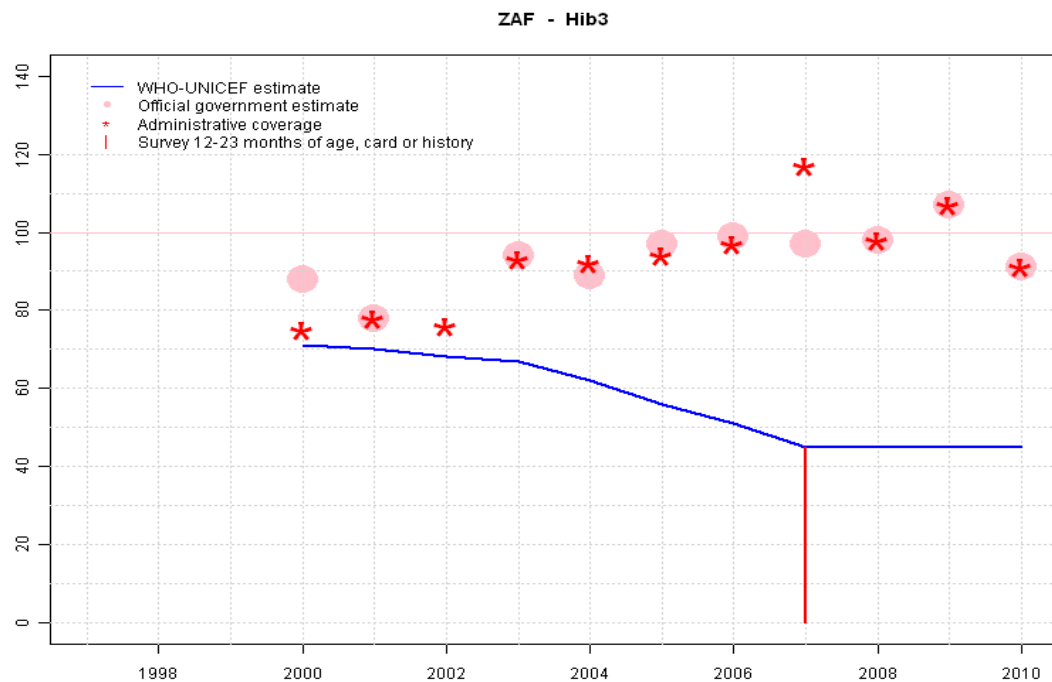
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denominator levels. Current estimate of 56 percent changed from previous revision value of 67 percent.

2009: Estimate based on extrapolation from 2007 value of 56 percent. Reported data of 112 percent greater than 100 percent. Reported data not accepted due to an increase from 88 percent to 112 percent with a subsequent decrease to 97 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 56 percent changed from previous revision value of 67 percent.

2010: Estimate based on extrapolation from 2007 value of 56 percent. Reported data not accepted due to a decline from 112 level to 97 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. WHO and UNICEF recommend a high quality coverage survey.

# South Africa - Hib3



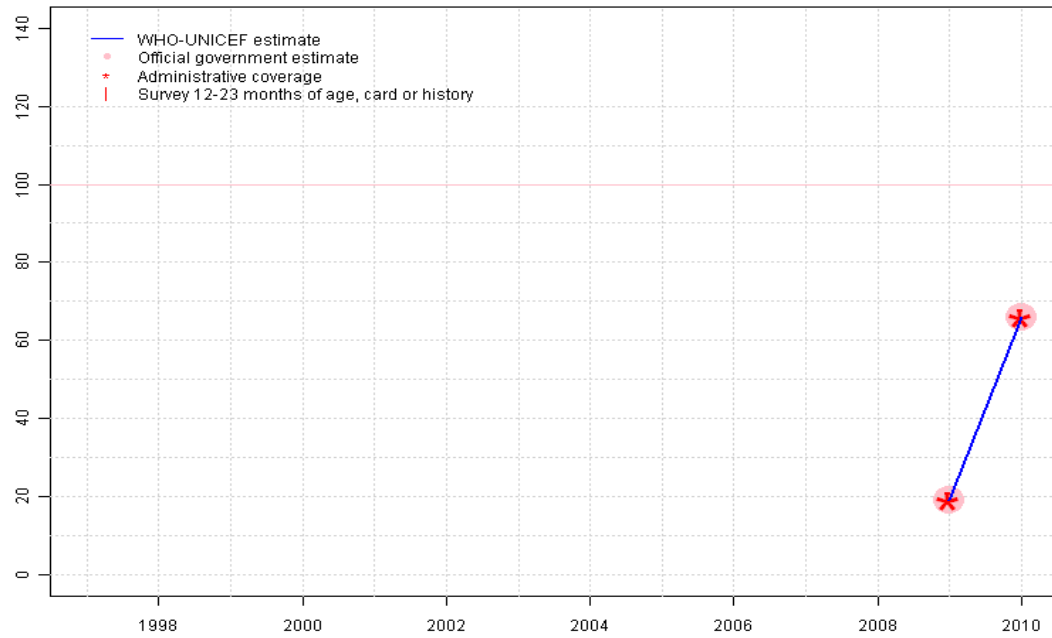
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	NA	NA	NA	71	70	68	67	62	56	51	45	45	45	45
Official	NA	NA	NA	88	78	NA	94	89	97	99	97	98	107	91
Administrative	NA	NA	NA	75	78	76	93	92	94	97	117	98	107	91
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	45	NA	NA	NA

## Description:

- 2000: Pentavalent DTP-HepB-Hib vaccine introduced in 2000. Hib introduced in 1999. Reporting started in 2000. Vaccine presentation is DTB-Hib. Unexplained fluctuations in numerator and denominator levels.
- 2001: Estimate based on interpolation between 2000 and 2003. Unexplained fluctuations in numerator and denominator levels.
- 2002: Estimate based on interpolation between 2000 and 2003. Unexplained fluctuations in numerator and denominator levels.
- 2003: Hib vaccine given as combination vaccine. Level set to DTP3 survey results.
- 2004: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 62 percent changed from previous revision value of 67 percent.
- 2005: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 56 percent changed from previous revision value of 67 percent.
- 2006: Estimate based on interpolation between 2003 and 2007. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 51 percent changed from previous revision value of 67 percent.
- 2007: No accepted reported data. Reported data of 94 percent estimated by extrapolating from 2003 does not support trend in reported data. 45 percent survey results. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 45 percent changed from previous revision value of 67 percent.
- 2008: Estimate based on extrapolation from 2007 value of 45 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 45 percent changed from previous revision value of 67 percent.
- 2009: Estimate based on extrapolation from 2007 value of 45 percent. Reported data of 107 percent greater than 100 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. Current estimate of 45 percent changed from previous revision value of 67 percent.
- 2010: Estimate based on extrapolation from 2007 value of 45 percent. Reported data not accepted due to a decline from 107 level to 91 percent. Estimate not based on reported data. Unexplained fluctuations in numerator and denominator levels. WHO and UNICEF recommend a high quality coverage survey.

# South Africa - RotaC

ZAF - RotaC



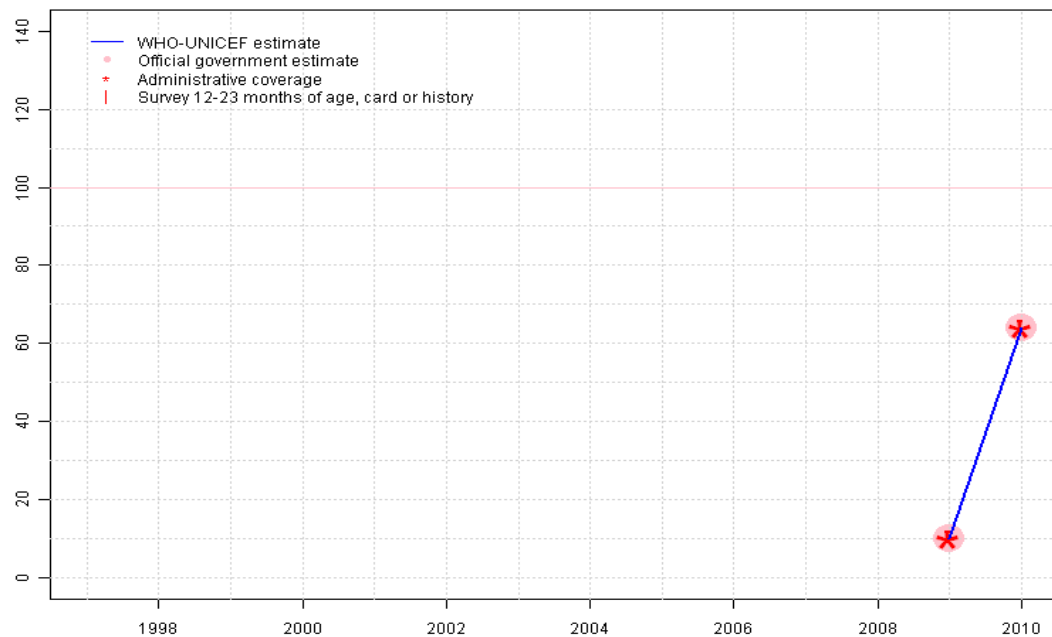
## Description:

2009: Estimate based on reported data. Rotavirus vaccine introduced in 2009  
 2010: Estimate based on reported data. WHO and UNICEF recommend a high quality coverage survey.

	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	19	66
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19	66
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19	66
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

# South Africa - PcV3

ZAF - PcV3



## Description:

2009: Estimate based on reported data. Pneumococcal conjugate vaccine introduced in 2009

2010: Estimate based on reported data. WHO and UNICEF recommend a high quality coverage survey.

	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	10	64
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	64
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	64
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

# South Africa - survey details

## 2007 South African National HIV Prevalence, Incidence, Behaviour and Communication Survey, 2008

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	74	12-23 m	776	69
BCG	History	86	12-23 m	776	69
BCG	Card or History	86	12-23 m	776	69
DTP1	Card	64	12-23 m	776	69
DTP1	History	76	12-23 m	776	69
DTP1	Card or History	73	12-23 m	776	69
DTP3	Card or History	63	12-23 m	776	69
DTP3	History	66	12-23 m	776	69
DTP3	Card	55	12-23 m	776	69
HepB3	Card	50	12-23 m	776	69
HepB3	History	56	12-23 m	776	69
HepB3	Card or History	56	12-23 m	776	69
Hib3	Card or History	45	12-23 m	776	69
Hib3	Card	40	12-23 m	776	69
Hib3	History	48	12-23 m	776	69
MCV	Card	56	12-23 m	776	69
MCV	History	69	12-23 m	776	69
MCV	Card or History	65	12-23 m	776	69
Pol3	Card or History	67	12-23 m	776	69
Pol3	Card	59	12-23 m	776	69
Pol3	History	69	12-23 m	776	69

## 2003 South Africa Demographic and Health Survey 2003

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	81	12-23 m	408	71
BCG	History	10	12-23 m	408	71
BCG	Card or History	81	12-23 m	408	71
BCG	Card	71	12-23 m	408	71
DTP1	C or H <12 months	67	12-23 m	408	71
DTP1	Card	68	12-23 m	408	71
DTP1	Card or History	77	12-23 m	408	71
DTP1	History	9	12-23 m	408	71
DTP3	C or H <12 months	50	12-23 m	408	71

DTP3	Card	61	12-23 m	408	71
DTP3	Card or History	67	12-23 m	408	71
DTP3	History	6	12-23 m	408	71
HepB1	C or H <12 months	68	12-23 m	408	71
HepB1	Card	68	12-23 m	408	71
HepB1	Card or History	77	12-23 m	408	71
HepB1	History	8	12-23 m	408	71
HepB3	History	4	12-23 m	408	71
HepB3	C or H <12 months	49	12-23 m	408	71
HepB3	Card	63	12-23 m	408	71
HepB3	Card or History	67	12-23 m	408	71
MCV	C or H <12 months	22	12-23 m	408	71
MCV	Card	56	12-23 m	408	71
MCV	Card or History	62	12-23 m	408	71
MCV	History	6	12-23 m	408	71
Pol1	C or H <12 months	69	12-23 m	408	71
Pol1	Card	70	12-23 m	408	71
Pol1	Card or History	78	12-23 m	408	71
Pol1	History	9	12-23 m	408	71
Pol3	Card or History	65	12-23 m	408	71
Pol3	History	2	12-23 m	408	71
Pol3	C or H <12 months	50	12-23 m	408	71
Pol3	Card	63	12-23 m	408	71

## 1997 South Africa Demographic and Health Survey 1998

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	96	12-23 m	973	75
BCG	Card or History	97	12-23 m	973	75
DTP1	C or H <12 months	93	12-23 m	973	75
DTP1	Card or History	93	12-23 m	973	75
DTP3	C or H <12 months	74	12-23 m	973	75
DTP3	Card or History	76	12-23 m	973	75
HepB1	C or H <12 months	88	12-23 m	973	75
HepB1	Card or History	88	12-23 m	973	75
HepB3	Card or History	74	12-23 m	973	75
HepB3	C or H <12 months	72	12-23 m	973	75
MCV	Card or History	82	12-23 m	973	75
MCV	C or H <12 months	72	12-23 m	973	75

## South Africa - survey details

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Pol1	C or H <12 months	90	12-23 m	973	75
Pol1	Card or History	91	12-23 m	973	75
Pol3	Card or History	72	12-23 m	973	75

Pol3	C or H <12 months	70	12-23 m	973	75
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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)

## South Africa

### 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	39
1998	49
1999	59
2000	68
2001	66
2002	62
2003	61
2004	60
2005	59
2006	74
2007	72
2008	75
2009	75
2010	77

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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.