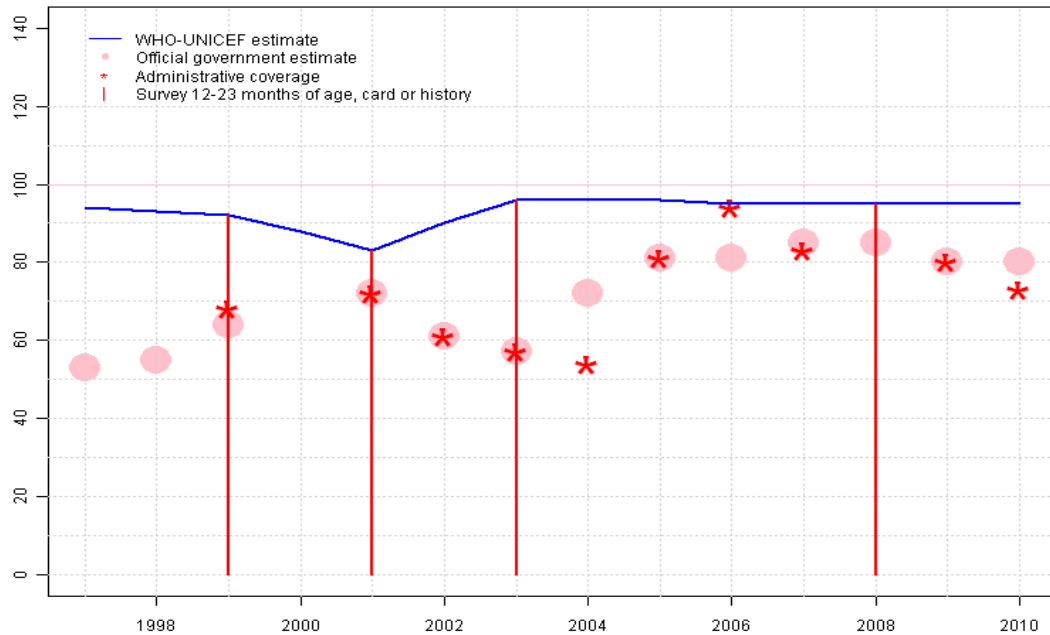


# Lesotho - BCG

LSO - BCG



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	94	93	92	88	83	90	96	96	96	95	95	95	95	95
Official	53	55	64	NA	72	61	57	72	81	81	85	85	80	80
Administrative	NA	NA	68	NA	72	61	57	54	81	94	83	NA	80	73
Survey	NA	NA	92	NA	83	NA	96	NA	NA	NA	NA	95	NA	NA

## Description:

1997: Legacy estimate.

1998: Estimate based on interpolation between 1997 and 1999. Fluctuations in reported data suggest poor quality administrative recording and reporting.

1999: Estimate based on survey results. 92 percent survey results does not support reported data of 64 percent.

2000: Estimate based on interpolation between 1999 and 2001. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2001: No accepted reported data. Reported data of 62 percent estimated by interpolation between 1999 and 2002 does not support trend in reported data. 83 percent survey results Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2002: Estimate based on interpolation between 2001 and 2003. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2003: Estimate based on survey results. 96 percent survey results does not support reported data of 57 percent.

2004: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2005: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2006: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting. Current estimate of 95 percent changed from previous revision value of 96 percent.

2007: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting. Current estimate of 95 percent changed from previous revision value of 96 percent.

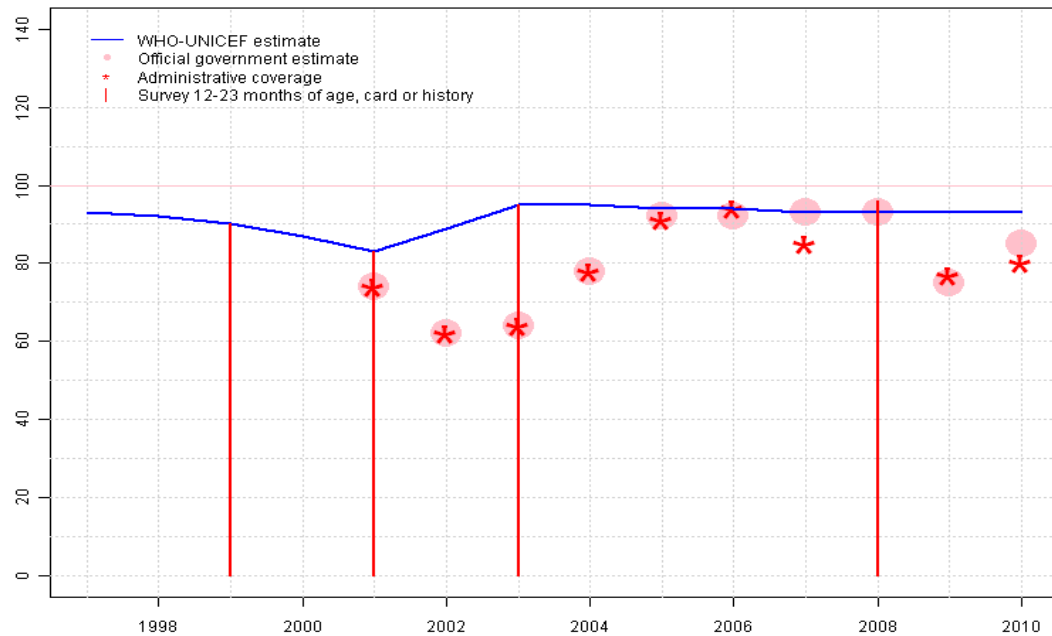
2008: Fluctuations in reported data suggest poor quality administrative recording and reporting. Current estimate of 95 percent changed from previous revision value of 96 percent.

2009: Estimate based on extrapolation from 2008 value of 95 percent. Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting. Current estimate of 95 percent changed from previous revision value of 96 percent.

2010: Estimate based on extrapolation from 2008 value of 95 percent. Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

# Lesotho - DTP1

LSO - DTP1



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	93	92	90	87	83	89	95	95	94	94	93	93	93	93
Official	NA	NA	NA	NA	74	62	64	78	92	92	93	93	75	85
Administrative	NA	NA	NA	NA	74	62	64	78	91	94	85	NA	77	80
Survey	NA	NA	90	NA	83	NA	95	NA	NA	NA	NA	96	NA	NA

## Description:

1997: Legacy estimate.

1998: Estimate based on interpolation between 1997 and 1999. Fluctuations in reported data suggest poor quality administrative recording and reporting.

1999: No accepted reported data. Reported data of 62 percent estimated by extrapolating from 2002 does not support trend in reported data. 90 percent survey results

2000: Estimate based on interpolation between 1999 and 2001. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2001: No accepted reported data. Reported data of 62 percent estimated by extrapolating from 2002 does not support trend in reported data. 83 percent survey results Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2002: Estimate based on interpolation between 2001 and 2003. Fluctuations in reported data suggest poor quality administrative recording and reporting. Current estimate of 89 percent changed from previous revision value of 88 percent.

2003: Estimate based on survey results. 95 percent survey results does not support reported data of 64 percent.

2004: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2005: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2006: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2007: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting.

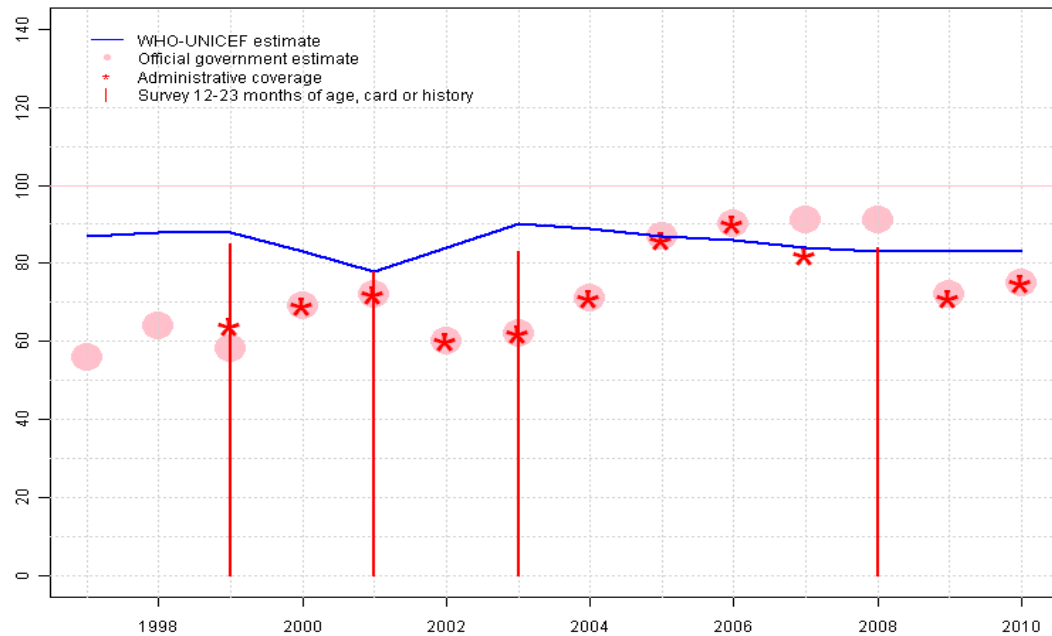
2008: Estimate based on reported data. 96 percent survey results supports reported data of 93 percent.

2009: Estimate based on extrapolation from 2008 value of 93 percent. Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2010: Estimate based on extrapolation from 2008 value of 93 percent. Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

# Lesotho - DTP3

LSO - DTP3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	87	88	88	83	78	84	90	89	87	86	84	83	83	83
Official	56	64	58	69	72	60	62	71	87	90	91	91	72	75
Administrative	NA	NA	64	69	72	60	62	71	86	90	82	NA	71	75
Survey	NA	NA	85	NA	78	NA	83	NA	NA	NA	NA	84	NA	NA

## Description:

1997: Legacy estimate.

1998: Estimate based on interpolation between 1997 and 1999. Fluctuations in reported data suggest poor quality administrative recording and reporting.

1999: Estimate based on survey results. 88 percent survey results does not support reported data of 58 percent. Survey results of 85 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 90 percent, 1st dose card only coverage of 82 percent and 3d dose card only coverage of 80 percent.

2000: Estimate based on interpolation between 1999 and 2001. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2001: No accepted reported data. Reported data of 65 percent estimated by interpolation between 2000 and 2002 does not support trend in reported data. 78 percent survey results Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2002: Estimate based on interpolation between 2001 and 2003. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2003: Estimate based on survey results. 90 percent survey results does not support reported data of 62 percent. Survey results of 83 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 76 percent and 3d dose card only coverage of 72 percent.

2004: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2005: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2006: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2007: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting.

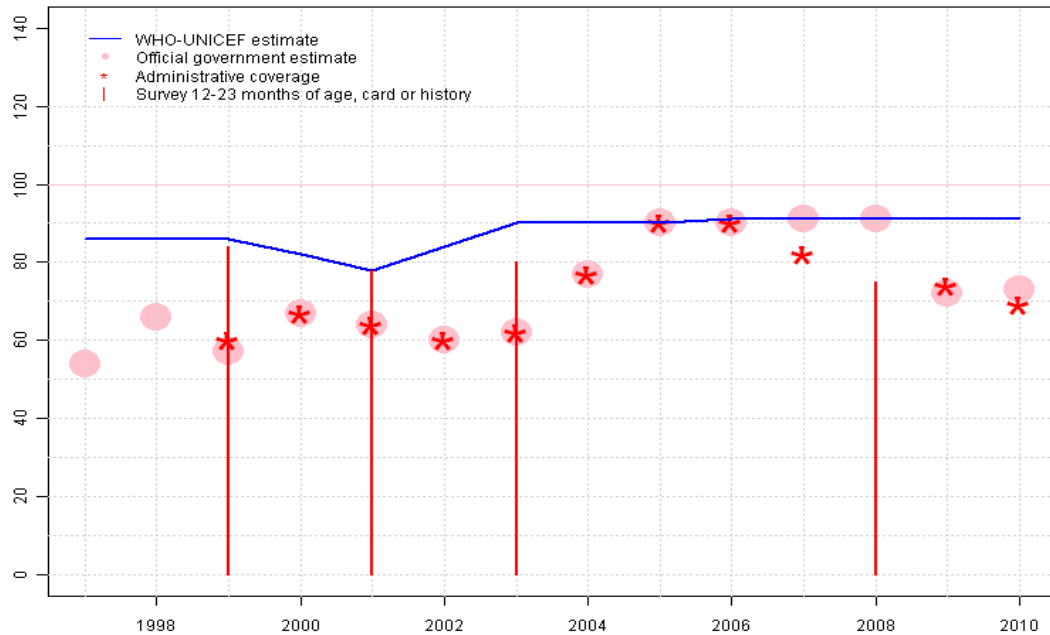
2008: Fluctuations in reported data suggest poor quality administrative recording and reporting. Survey results of 84 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 74 percent and 3d dose card only coverage of 68 percent.

2009: Estimate based on extrapolation from 2008 value of 83 percent. Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2010: Estimate based on extrapolation from 2008 value of 83 percent. Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

# Lesotho - Pol3

LSO - Pol3



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	86	86	86	82	78	84	90	90	90	91	91	91	91	91
Official	54	66	57	67	64	60	62	77	90	90	91	91	72	73
Administrative	NA	NA	60	67	64	60	62	77	90	90	82	NA	74	69
Survey	NA	NA	84	NA	78	NA	80	NA	NA	NA	NA	75	NA	NA

## Description:

1997: Legacy estimate.

1998: Estimate based on interpolation between 1997 and 1999. Fluctuations in reported data suggest poor quality administrative recording and reporting.

1999: Estimate based on survey results. 86 percent survey results does not support reported data of 57 percent. Survey results of 84 percent modified for recall bias to 86 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 82 percent and 3d dose card only coverage of 79 percent.

2000: Estimate based on interpolation between 1999 and 2001. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2001: No accepted reported data. Reported data of 64 percent estimated by interpolation between 2000 and 2002 does not support trend in reported data. 78 percent survey results Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2002: Estimate based on interpolation between 2001 and 2003. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2003: Estimate based on survey results. 90 percent survey results does not support reported data of 62 percent. Survey results of 80 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 76 percent and 3d dose card only coverage of 72 percent.

2004: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting. Current estimate of 90 percent changed from previous revision value of 88 percent.

2005: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting. Current estimate of 90 percent changed from previous revision value of 86 percent.

2006: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting. Current estimate of 91 percent changed from previous revision value of 84 percent.

2007: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting. Current estimate of 91 percent changed from previous revision value of 82 percent.

2008: Estimate based on reported data. 86 percent survey results supports reported data of 91 percent. Survey results of 75 percent modified for recall bias to 86 percent based on 1st dose card or history coverage of 94 percent,

# Lesotho - Pol3

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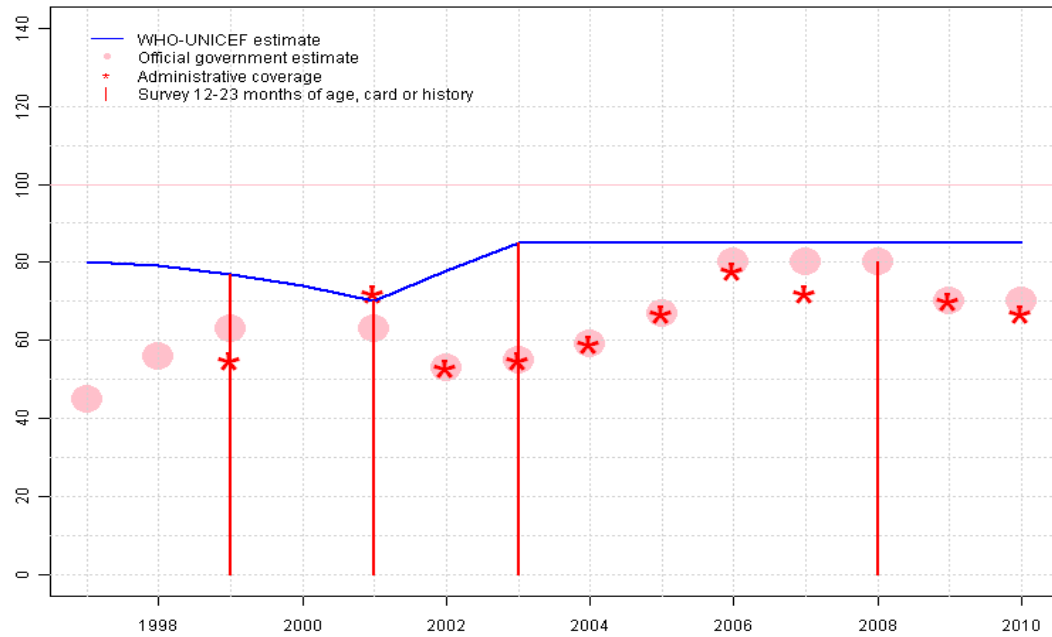
1st dose card only coverage of 73 percent and 3d dose card only coverage of 67 percent. Current estimate of 91 percent changed from previous revision value of 80 percent.

2009: Estimate based on extrapolation from 2008 value of 91 percent. Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting. Current estimate of 91 percent changed from previous revision value of 80 percent.

2010: Estimate based on extrapolation from 2008 value of 91 percent. Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

# Lesotho - MCV

LSO - MCV



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	80	79	77	74	70	78	85	85	85	85	85	85	85	85
Official	45	56	63	NA	63	53	55	59	67	80	80	80	70	70
Administrative	NA	NA	55	NA	72	53	55	59	67	78	72	NA	70	67
Survey	NA	NA	77	NA	70	NA	85	NA	NA	NA	NA	80	NA	NA

## Description:

1997: Legacy estimate.

1998: Estimate based on interpolation between 1997 and 1999. Fluctuations in reported data suggest poor quality administrative recording and reporting.

1999: Estimate based on survey results. 77 percent survey results does not support reported data of 63 percent.

2000: Estimate based on interpolation between 1999 and 2001. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2001: No accepted reported data. Reported data of 56 percent estimated by interpolation between 1999 and 2002 does not support trend in reported data. 70 percent survey results Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2002: Estimate based on interpolation between 2001 and 2003. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2003: Estimate based on survey results. 85 percent survey results does not support reported data of 55 percent.

2004: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2005: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2006: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2007: Estimate based on interpolation between 2003 and 2008. Fluctuations in reported data suggest poor quality administrative recording and reporting.

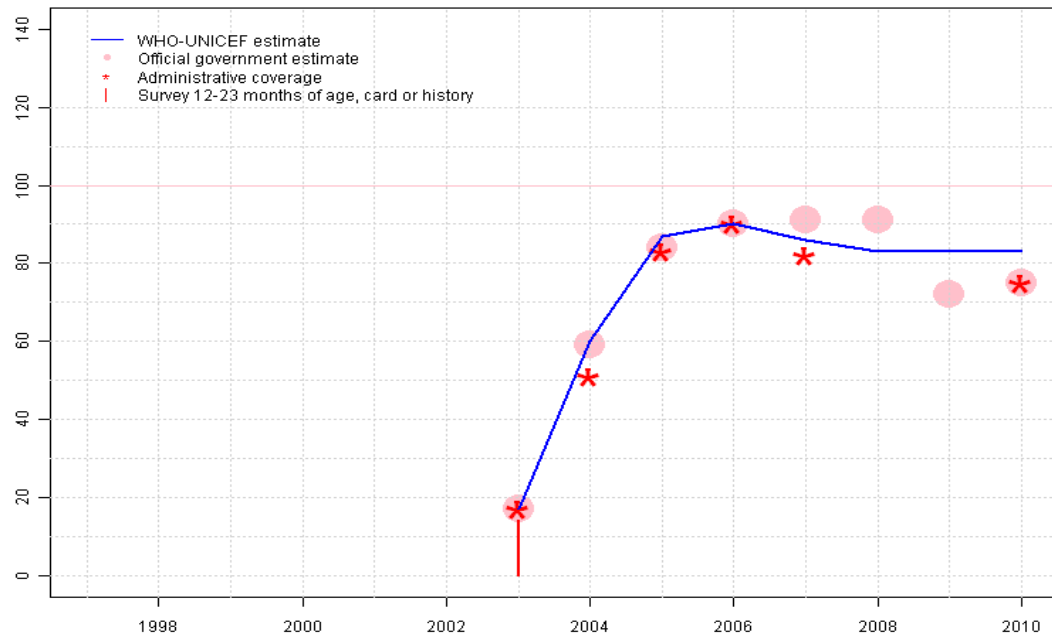
2008: Fluctuations in reported data suggest poor quality administrative recording and reporting.

2009: Estimate based on extrapolation from 2008 value of 85 percent. Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2010: Estimate based on extrapolation from 2008 value of 85 percent. Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

# Lesotho - HepB3

LSO - HepB3



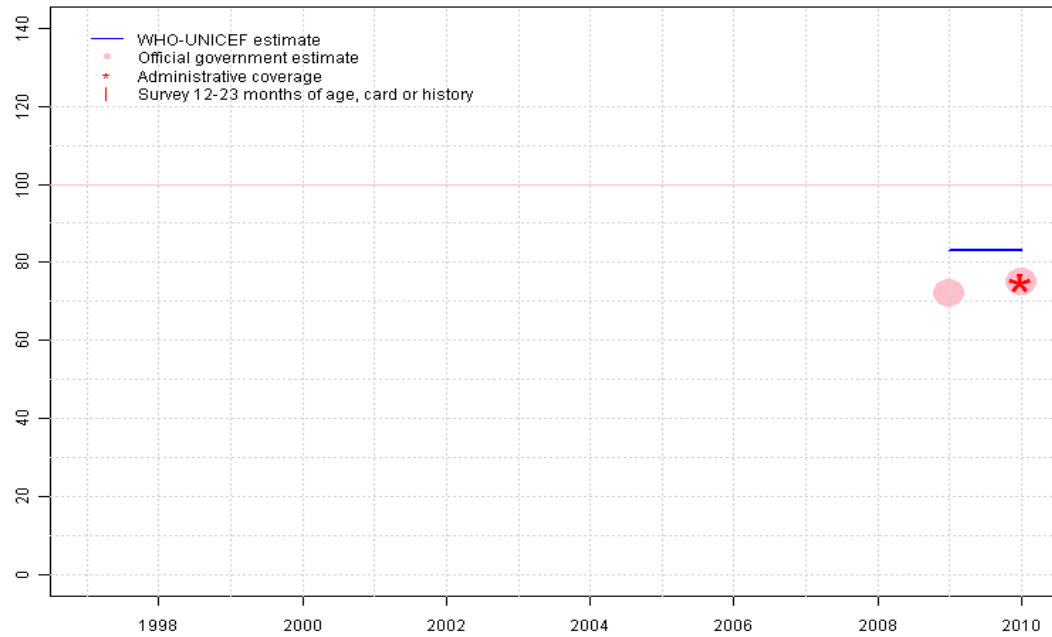
## Description:

- 2003: Estimate based on reported data. 13 percent survey results supports reported data of 17 percent. Survey results of 14 percent modified for recall bias to 13 percent based on 1st dose card or history coverage of 31 percent, 1st dose card only coverage of 23 percent and 3d dose card only coverage of 10 percent. HepB introduced in 2003
- 2004: Reported data calibrated to 2003 and 2005 levels.
- 2005: Estimate based on DTP3 coverage estimates.
- 2006: Reported data calibrated to 2005 and 2008 levels. Current estimate of 90 percent changed from previous revision value of 86 percent.
- 2007: Reported data calibrated to 2005 and 2008 levels. Current estimate of 86 percent changed from previous revision value of 84 percent.
- 2008: Estimate based on DTP3 coverage estimates.
- 2009: Estimate based on extrapolation from 2008 value of 83 percent. Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.
- 2010: Estimate based on extrapolation from 2008 value of 83 percent. Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Estimate	NA	NA	NA	NA	NA	NA	17	60	87	90	86	83	83	83
Official	NA	NA	NA	NA	NA	NA	17	59	84	90	91	91	72	75
Administrative	NA	NA	NA	NA	NA	NA	17	51	83	90	82	NA	NA	75
Survey	NA	NA	NA	NA	NA	NA	14	NA	NA	NA	NA	NA	NA	NA

# Lesotho - Hib3

LSO - Hib3



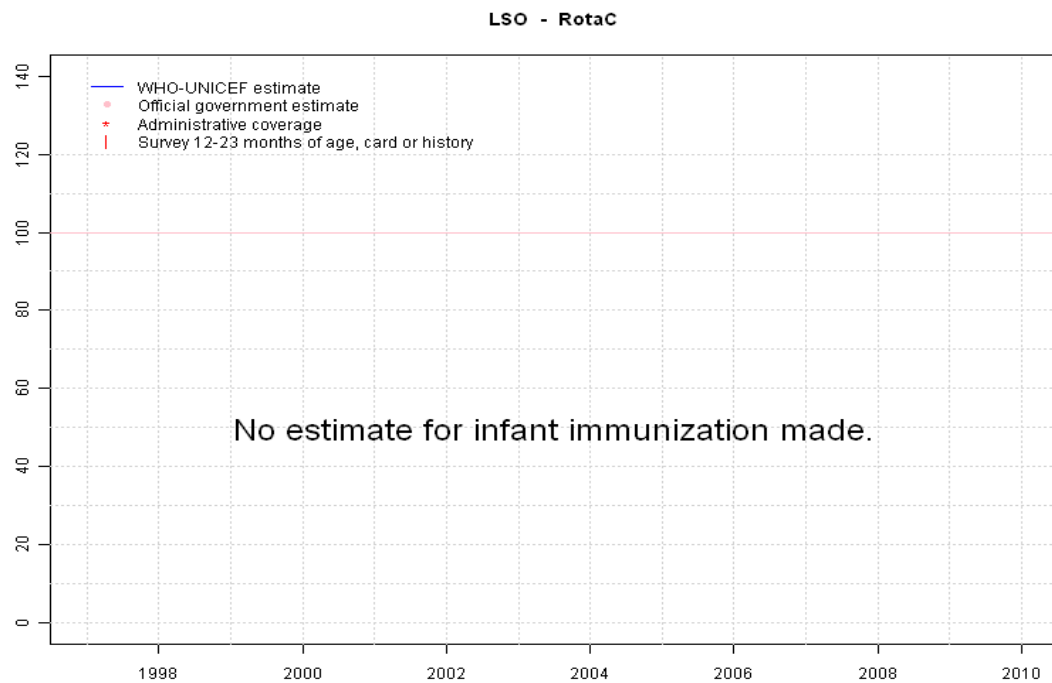
## Description:

2009: Hib introduced in 2008. Reporting began in 2009. Vaccine presentation is DTP-HepB-Hib. Estimate set to 2008 DTP3 level. Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

2010: Estimate based on extrapolation from 2009 value of 83 percent. Estimate not based on reported data. Fluctuations in reported data suggest poor quality administrative recording and reporting.

	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	83	83
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	72	75
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	75
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

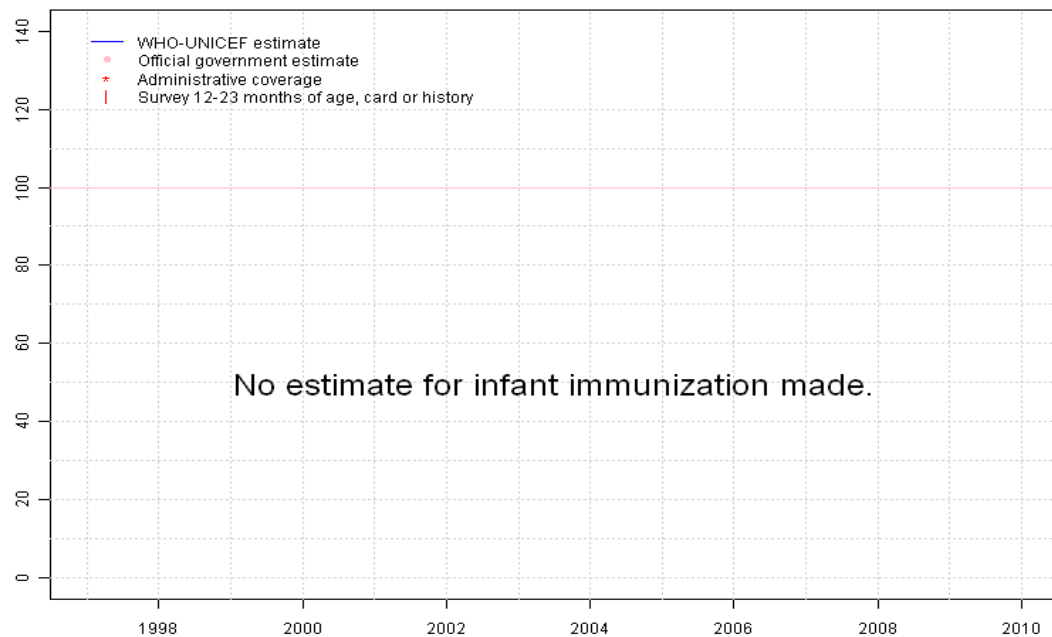
# Lesotho - RotaC



	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

# Lesotho - PcV3

LSO - 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

# Lesotho - survey details

## 2008 Lesotho Demographic and Health Survey 2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94	12-23 m	744	74
BCG	Card	73	12-23 m	744	74
BCG	History	22	12-23 m	744	74
BCG	Card or History	95	12-23 m	744	74
DTP1	History	22	12-23 m	744	74
DTP1	Card or History	96	12-23 m	744	74
DTP1	C or H <12 months	95	12-23 m	744	74
DTP1	Card	74	12-23 m	744	74
DTP3	C or H <12 months	82	12-23 m	744	74
DTP3	Card or History	84	12-23 m	744	74
DTP3	History	15	12-23 m	744	74
DTP3	Card	68	12-23 m	744	74
MCV	History	18	12-23 m	744	74
MCV	C or H <12 months	70	12-23 m	744	74
MCV	Card or History	80	12-23 m	744	74
MCV	Card	62	12-23 m	744	74
Pol1	C or H <12 months	94	12-23 m	744	74
Pol1	Card	73	12-23 m	744	74
Pol1	History	22	12-23 m	744	74
Pol1	Card or History	94	12-23 m	744	74
Pol3	Card or History	75	12-23 m	744	74
Pol3	C or H <12 months	73	12-23 m	744	74
Pol3	Card	67	12-23 m	744	74
Pol3	History	8	12-23 m	744	74

## 2003 Lesotho Demographic and Health Survey 2004

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	96	12-23 m	660	78
BCG	C or H <12 months	95	12-23 m	660	78
BCG	History	20	12-23 m	660	78
BCG	Card	76	12-23 m	660	78
DTP1	Card	76	12-23 m	660	78
DTP1	Card or History	95	12-23 m	660	78
DTP1	History	18	12-23 m	660	78

DTP1	C or H <12 months	94	12-23 m	660	78
DTP3	C or H <12 months	80	12-23 m	660	78
DTP3	Card	72	12-23 m	660	78
DTP3	Card or History	83	12-23 m	660	78
DTP3	History	11	12-23 m	660	78
HepB1	History	8	12-23 m	660	78
HepB1	Card	23	12-23 m	660	78
HepB1	Card or History	31	12-23 m	660	78
HepB1	C or H <12 months	29	12-23 m	660	78
HepB3	Card	10	12-23 m	660	78
HepB3	Card or History	14	12-23 m	660	78
HepB3	History	4	12-23 m	660	78
HepB3	C or H <12 months	12	12-23 m	660	78
MCV	History	16	12-23 m	660	78
MCV	C or H <12 months	75	12-23 m	660	78
MCV	Card	69	12-23 m	660	78
MCV	Card or History	85	12-23 m	660	78
Pol1	History	19	12-23 m	660	78
Pol1	Card or History	95	12-23 m	660	78
Pol1	C or H <12 months	94	12-23 m	660	78
Pol1	Card	76	12-23 m	660	78
Pol3	C or H <12 months	77	12-23 m	660	78
Pol3	Card	72	12-23 m	660	78
Pol3	Card or History	80	12-23 m	660	78
Pol3	History	7	12-23 m	660	78

## 2001 Lesotho, National Nutrition and EPI Cluster Survey 2002

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	83	12-23 m	2289	91
DTP1	Card or History	83	12-23 m	2289	91
DTP3	Card or History	78	12-23 m	2289	91
MCV	Card or History	70	12-23 m	2289	91
Pol1	Card or History	83	12-23 m	2289	91
Pol3	Card or History	78	12-23 m	2289	91

## 1999 Lesotho 2000 End Decade Multiple Indicator Cluster Survey (EMICS), Draft Preliminary Report, 2001

## Lesotho - survey details

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Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen	MCV	History				
BCG	History	8	12-23 m	762	85	MCV	C or H <12 months	71	12-23 m	762	85
BCG	Card	83	12-23 m	762	85	MCV	Card	70	12-23 m	762	85
BCG	C or H <12 months	90	12-23 m	762	85	MCV	Card or History	77	12-23 m	762	85
BCG	Card or History	92	12-23 m	762	85	Pol1	Card	82	12-23 m	762	85
DTP1	History	8	12-23 m	762	85	Pol1	Card or History	89	12-23 m	762	85
DTP1	Card	82	12-23 m	762	85	Pol1	History	7	12-23 m	762	85
DTP1	C or H <12 months	88	12-23 m	762	85	Pol1	C or H <12 months	88	12-23 m	762	85
DTP1	Card or History	90	12-23 m	762	85	Pol3	C or H <12 months	82	12-23 m	762	85
DTP3	History	6	12-23 m	762	85	Pol3	Card	79	12-23 m	762	85
DTP3	C or H <12 months	84	12-23 m	762	85	Pol3	History	4	12-23 m	762	85
DTP3	Card	80	12-23 m	762	85	Pol3	Card or History	84	12-23 m	762	85
DTP3	Card or History	85	12-23 m	762	85						

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)

## Lesotho

### 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	85
1998	82
1999	77
2000	73
2001	74
2002	76
2003	77
2004	78
2005	79
2006	80
2007	82
2008	83
2009	83
2010	83

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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.