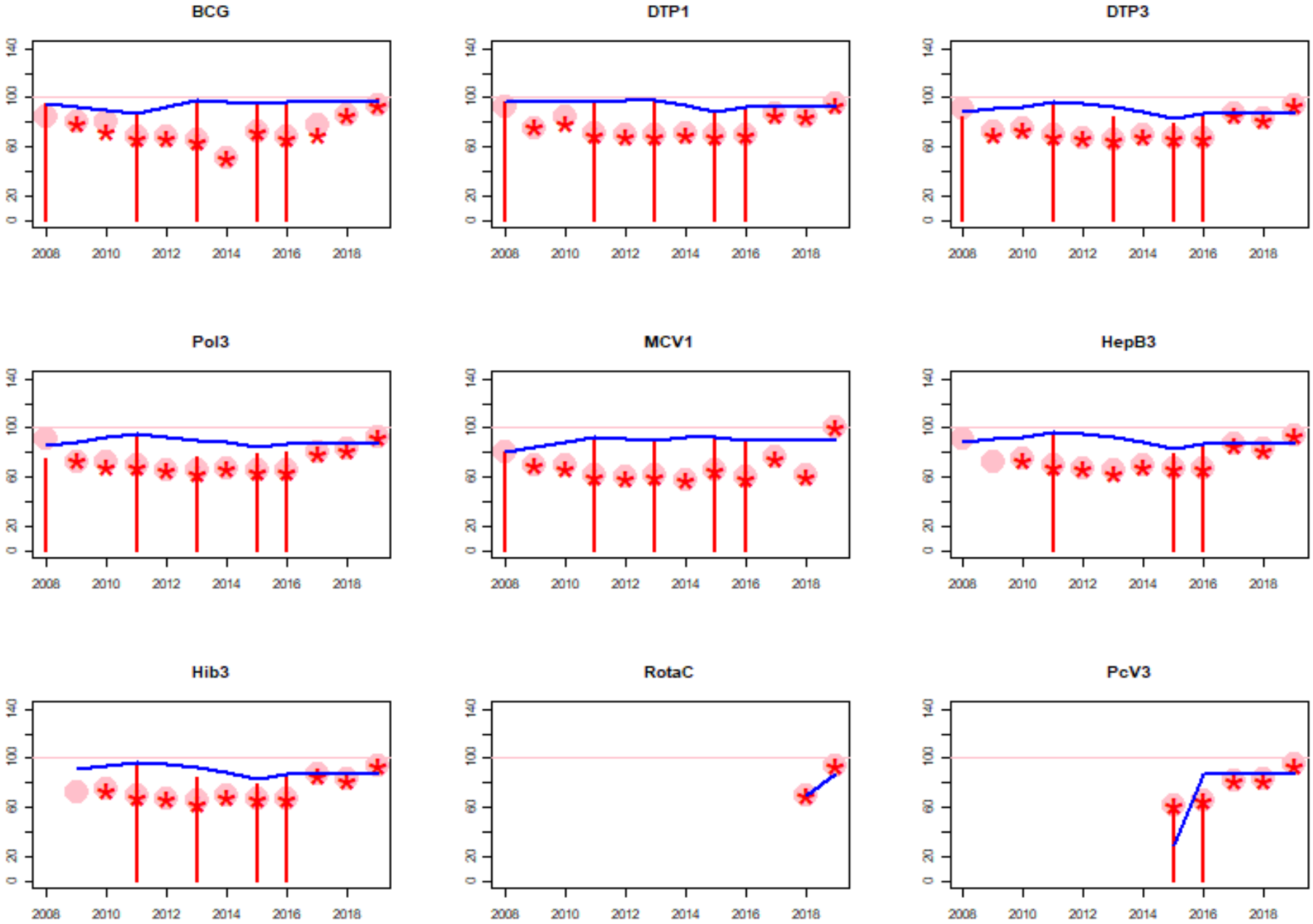
BCG
DTP1
DTP3
Pol3
MCV1
HepB3
Hib3
RotaC
PcV3
0
20
60
100
140
2008
2010
2012
2014
2016
2018

BACKGROUND NOTE: Each year WHO and UNICEF jointly review reports submitted by Member States regarding national immunization coverage, finalized survey reports as well as data from the published and grey literature. Based on these data, with due consideration to potential biases and the views of local experts, WHO and UNICEF attempt to distinguish between situations where the available empirical data accurately reflect immunization system performance and those where the data are likely to be compromised and present a misleading view of immunization coverage while jointly estimating the most likely coverage levels for each country.

WHO and UNICEF estimates are country-specific; that is to say, each country's data are reviewed individually, and data are not borrowed from other countries in the absence of data. Estimates are not based on ad hoc adjustments to reported data; in some instances empirical data are available from a single source, usually the nationally reported coverage data. In cases where no data are available for a given country/vaccine/year combination, data are considered from earlier and later years and interpolated to estimate coverage for the missing year(s). In cases where data sources are mixed and show large variation, an attempt is made to identify the most likely estimate with consideration of the possible biases in available data. For methods see:

*Burton et al. 2009. WHO and UNICEF estimates of national infant immunization coverage: methods and processes.
*Burton et al. 2012. A formal representation of the WHO and UNICEF estimates of national immunization coverage: a computational logic approach.
*Brown et al. 2013. An introduction to the grade of confidence used to characterize uncertainty around the WHO and UNICEF estimates of national immunization coverage.

DATA SOURCES.

ADMINISTRATIVE coverage: Reported by national authorities and based on aggregated administrative reports from health service providers on the number of vaccinations administered during a given period (numerator data) and reported target population data (denominator data). May be biased by inaccurate numerator and/or denominator data.

OFFICIAL coverage: Estimated coverage reported by national authorities that reflects their assessment of the most likely coverage based on any combination of administrative coverage, survey-based estimates or other data sources or adjustments. Approaches to determine OFFICIAL coverage may differ across countries.

SURVEY coverage: Based on estimated coverage from population-based household surveys among children aged 12-23 months or 24-35 months following a review of survey methods and results. Information is based on the combination of vaccination history from documented evidence or caregiver recall. Survey results are considered for the appropriate birth cohort based on the period of data collection.

ABBREVIATIONS

BCG: percentage of births who received one dose of Bacillus Calmette Guerin vaccine.

DTP1 / DTP3: percentage of surviving infants who received the 1st / 3rd dose, respectively, of diphtheria and tetanus toxoid with pertussis containing vaccine.

Pol3: percentage of surviving infants who received the 3rd dose of polio containing vaccine. May be either oral or inactivated polio vaccine.

IPV1: percentage of surviving infants who received at least one dose of inactivated polio vaccine. In countries utilizing an immunization schedule recommending either (i) a primary series of three doses of oral polio vaccine (OPV) plus at least one dose of IPV where OPV is included in routine immunization and/or campaign or (ii) a sequential schedule of IPV followed by OPV, WHO and UNICEF estimates for IPV1 reflect coverage with at least one routine dose of IPV among infants <1 year of age among countries. For countries utilizing IPV containing vaccine use only, i.e., no recommended dose of OPV, the WHO and UNICEF estimate for IPV1 corresponds to coverage for the 1st dose of IPV.

Production of IPV coverage estimates, which begins in 2015, results in no change of the estimated coverage levels for the 3rd dose of polio (Pol3). For countries recommending routine immunization with a primary series of three doses of IPV alone, WHO and UNICEF estimated Pol3 coverage is equivalent to estimated coverage with three doses of IPV. For countries with a sequential schedule, estimated Pol3 coverage is based on that for the 3rd dose of polio vaccine regardless of vaccine type.

MCV1: percentage of surviving infants who received the 1st dose of measles containing vaccine. In countries where the national schedule recommends the 1st dose of MCV at 12 months or later based on the epidemiology of disease in the country, coverage estimates reflect the percentage of children who received the 1st dose of MCV as recommended.

MCV2: percentage of children who received the 2nd dose of measles containing vaccine according to the nationally recommended schedule.

RCV1: percentage of surviving infants who received the 1st dose of rubella containing vaccine. Co verage estimates are based on WHO and UNICEF estimates of coverage for the dose of measles containing vaccine that corresponds to the first measles-rubella combination vaccine. Nationally reported coverage of RCV is not taken into consideration nor are the data represented in the accompanying graph and data table.

HepBB: percentage of births which received a dose of hepatitis B vaccine within 24 hours of delivery. Estimates of hepatitis B birth dose coverage are produced only for countries with a universal birth dose policy. Estimates are not produced for countries that recommend a birth dose to infants born to HepB virus-infected mothers only or where there is insufficient information to determine whether vaccination is within 24 hours of birth.

HepB3: percentage of surviving infants who received the 3rd dose of hepatitis B containing vaccine following the birth dose.

Hib3: percentage of surviving infants who received the 3rd dose of Haemophilus influenzae type b containing vaccine.

RotaC: percentage of surviving infants who received the final recommended dose of rotavirus vaccine, which can be either the 2nd or the 3rd dose depending on the vaccine.

PcV3: percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect the percentage of surviving infants who received two doses of PcV prior to the 1st birthday.

YFV: percentage of surviving infants who received one dose of yellow fever vaccine in countries where YFV is part of the national immunization schedule for children or is recommended in at risk areas; coverage estimates are annualized for the entire cohort of surviving infants.

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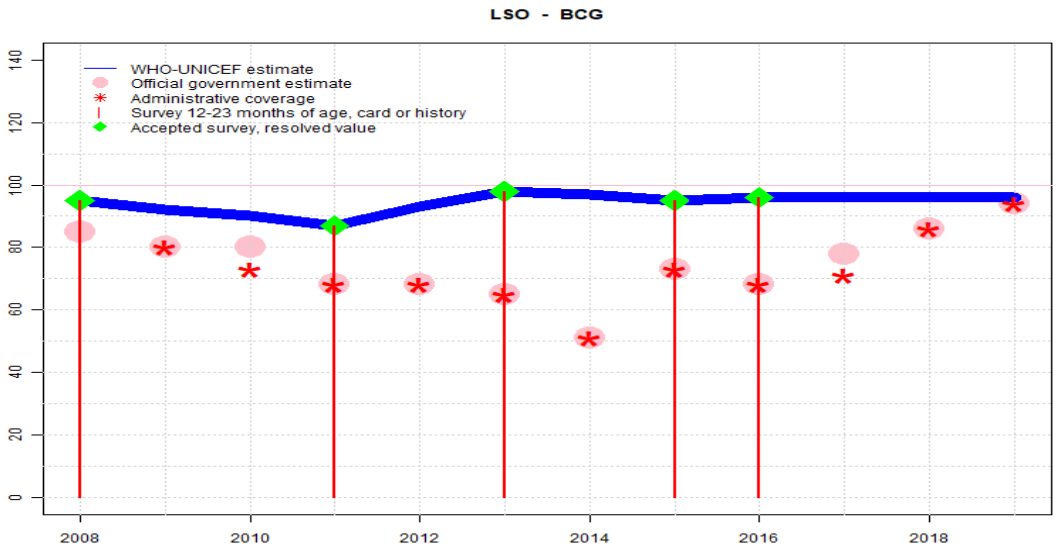
Lesotho - BCG



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	95	92	90	87	93	98	97	95	96	96	96	96
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	85	80	80	68	68	65	51	73	68	78	86	94
Administrative	NA	80	73	68	68	65	51	73	68	71	86	94
Survey	95	NA	NA	87	NA	98	NA	95	96	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2019 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2019: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2018: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Programme reports one month vaccine stock-out at national level. Estimate of 96 percent changed from previous revision value of 98 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Programme reports 2 months stock-out. Estimate of 96 percent changed from previous revision value of 98 percent. Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 96 percent based on 1 survey(s). Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Programme reports challenges with recording and reporting based on the findings from a 2012 Data Quality Assessment (DQS). Estimate of 96 percent changed from previous revision value of 98 percent. Estimate challenged by: D-R-

2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 95 percent based on 1 survey(s). Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 95 percent changed from previous revision value of 98 percent. Estimate challenged by: D-R-

2014: Reported data calibrated to 2013 and 2015 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting.Reported data excluded due to decline in reported coverage from 65 percent to 51 percent with increase to 73 percent. Programme reports three month stock-out at national level. Estimate of 97 percent changed from previous revision value of 98 percent. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 98 percent based on 1 survey(s). Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-S-

2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 87 percent based on 1 survey(s). Estimate challenged by: D-R-S-

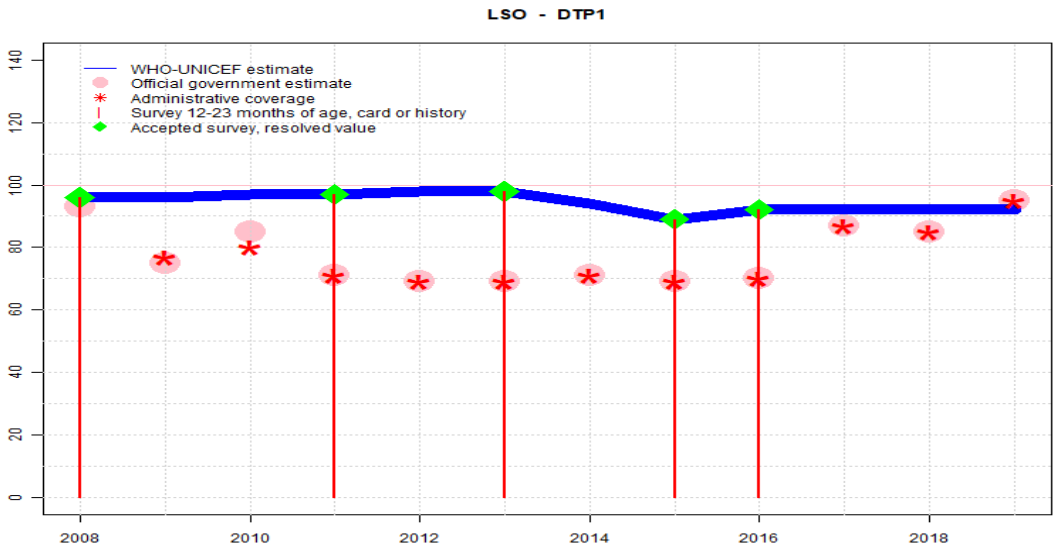
2010: Estimate based on interpolation between 2008 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2009: Estimate based on interpolation between 2008 and 2011 levels. Fluctuations in reported

data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2008: Estimate of 95 percent assigned by working group. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: R-

Lesotho - DTP1



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	96	96	97	97	98	98	94	89	92	92	92	92
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	93	75	85	71	69	69	71	69	70	87	85	95
Administrative	NA	77	80	71	69	69	71	69	70	87	85	95
Survey	96	NA	NA	97	NA	98	NA	89	92	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2019 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2019: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2018: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 92 percent changed from previous revision value of 98 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 92 percent changed from previous revision value of 98 percent. Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 92 percent based on 1 survey(s). Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Programme reports challenges with recording and reporting based on the findings from a 2012 Data Quality Assessment (DQS). Estimate of 92 percent changed from previous revision value of 98 percent. Estimate challenged by: D-R-

2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 89 percent based on 1 survey(s). Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 89 percent changed from previous revision value of 98 percent. Estimate challenged by: D-R-

2014: Reported data calibrated to 2013 and 2015 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 94 percent changed from previous revision value of 98 percent. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 98 percent based on 1 survey(s). Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

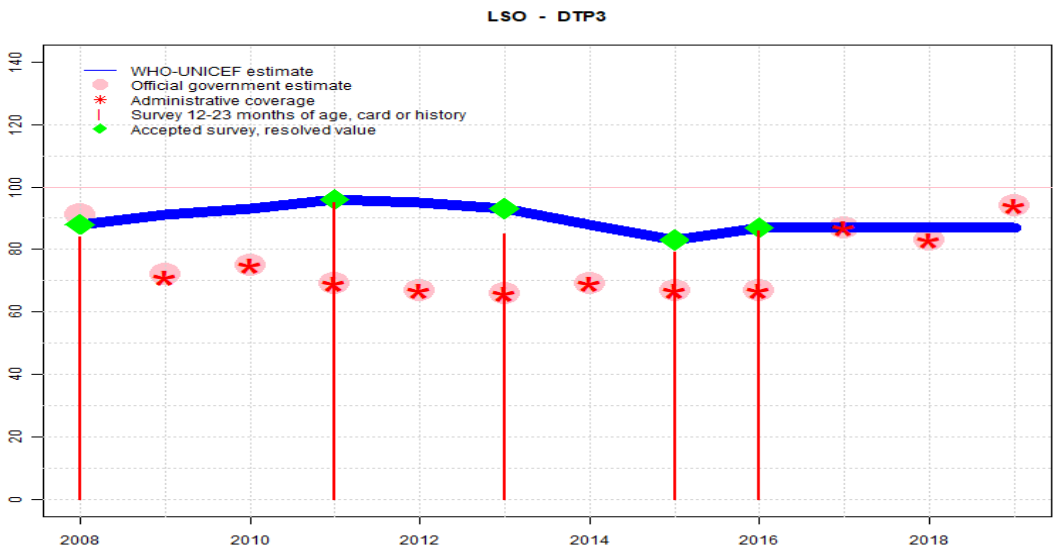
2011: Estimate of 97 percent assigned by working group. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2010: Estimate based on interpolation between 2008 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2009: Estimate based on interpolation between 2008 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2008: Estimate of 96 percent assigned by working group. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

Lesotho - DTP3



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	88	91	93	96	95	93	88	83	87	87	87	87
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	91	72	75	69	67	66	69	67	67	87	83	94
Administrative	NA	71	75	69	67	66	69	67	67	87	83	94
Survey	84	NA	NA	95	NA	85	NA	79	86	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2019 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2019: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting.Reported data excluded due to sudden change in coverage from 83 level to 94 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 87 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 87 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 87 percent based on 1 survey(s). Lesotho Multiple Indicator Cluster Survey 2018 card or history results of 86 percent modifed for recall bias to 87 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 81 percent and 3rd dose card only coverage of 77 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Programme reports challenges with recording and reporting based on the findings from a 2012 Data Quality Assessment (DQS). Estimate of 87 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 83 percent based on 1 survey(s). Lesotho Multiple Indicator Cluster Survey 2018 card or history results of 79 percent modifed for recall bias to 83 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 76 percent and 3rd dose card only coverage of 71 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 83 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2014: Reported data calibrated to 2013 and 2015 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 88 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 93 percent based on 1 survey(s). Lesotho Demographic and Health Survey 2014 card or history results of 85 percent modifed for recall bias to 93 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 77 percent and 3rd dose card only coverage of 73 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

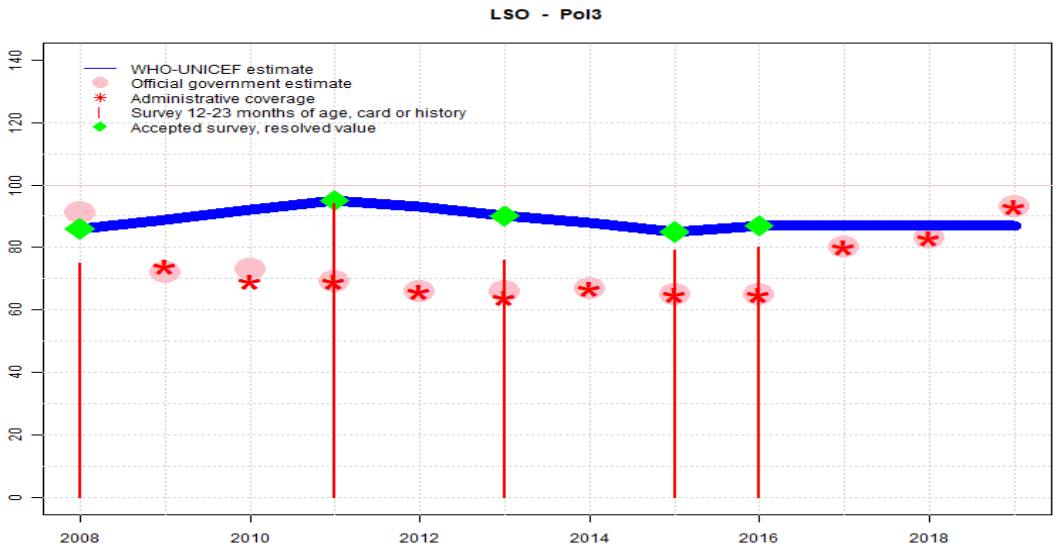
2011: Estimate of 96 percent assigned by working group. Fluctuations in reported data suggest poor quality administrative recording and reporting. Lesotho Post SIAs and Routine Immunization Coverage Survey 2013 card or history results of 95 percent modifed for recall bias to 96 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 83 percent and 3rd dose card only coverage of 82 percent. Estimate challenged by: D-R-

2010: Estimate based on interpolation between 2008 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2009: Estimate based on interpolation between 2008 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2008: Estimate of 88 percent assigned by working group. Fluctuations in reported data suggest poor quality administrative recording and reporting. Lesotho Demographic and Health Survey 2009 card or history results of 84 percent modifed 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 3rd dose card only coverage of 68 percent. Estimate challenged by: D-R-

Lesotho - Pol3



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	86	89	92	95	93	90	88	85	87	87	87	87
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	91	72	73	69	66	66	67	65	65	80	83	93
Administrative	NA	74	69	69	66	64	67	65	65	80	83	93
Survey	75	NA	NA	94	NA	76	NA	79	80	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2019 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2019: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2018: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 87 percent changed from previous revision value of 90 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 87 percent changed from previous revision value of 90 percent. Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 87 percent based on 1 survey(s). Lesotho Multiple Indicator Cluster Survey 2018 card or history results of 80 percent modifed for recall bias to 87 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 83 percent and 3rd dose card only coverage of 77 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Programme reports challenges with recording and reporting based on the findings from a 2012 Data Quality Assessment (DQS). Estimate of 87 percent changed from previous revision value of 90 percent. Estimate challenged by: D-R-

2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 85 percent based on 1 survey(s). Lesotho Multiple Indicator Cluster Survey 2018 card or history results of 79 percent modifed for recall bias to 85 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 80 percent and 3rd dose card only coverage of 72 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 85 percent changed from previous revision value of 90 percent. Estimate challenged by: D-R-

2014: Reported data calibrated to 2013 and 2015 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 88 percent changed from previous revision value of 90 percent. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 90 percent based on 1 survey(s). Lesotho Demographic and Health Survey 2014 card or history results of 76 percent modifed for recall bias to 90 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 76 percent and 3rd dose card only coverage of 71 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2011: Estimate of 95 percent assigned by working group. Fluctuations in reported data suggest

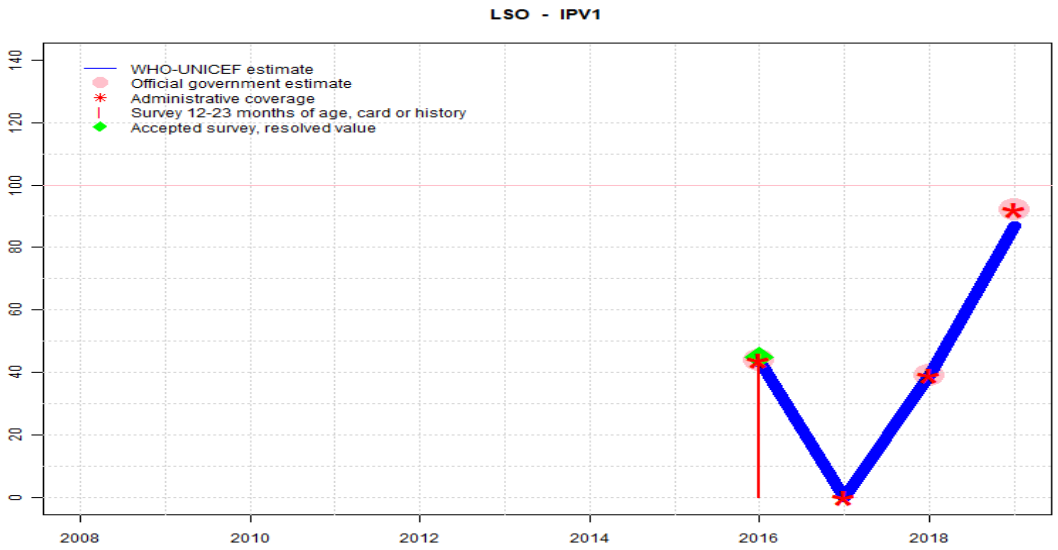
poor quality administrative recording and reporting. Lesotho Post SIAs and Routine Immunization Coverage Survey 2013 card or history results of 94 percent modifed for recall bias to 95 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 82 percent and 3rd dose card only coverage of 80 percent. Estimate challenged by: D-R-

2010: Estimate based on interpolation between 2008 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2009: Estimate based on interpolation between 2008 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2008: Estimate of 86 percent assigned by working group. Fluctuations in reported data suggest poor quality administrative recording and reporting. Lesotho Demographic and Health Survey 2009 card or history results of 75 percent modifed for recall bias to 86 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 73 percent and 3rd dose card only coverage of 67 percent. Estimate challenged by: D-R-

Lesotho - IPV1



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	44	0	39	87
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	•	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	44	NA	39	92
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	44	0	39	92
Survey	NA	NA	NA	NA	NA	NA	NA	NA	45	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2019 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

Estimates for a dose of inactivated polio vaccine (IPV) begin in 2015 following the Global Polio Eradication Initiative's Polio Eradication and Endgame Strategic Plan: 2013-2018 which recommended at least one full dose or two fractional doses of IPV into routine immunization schedules as a strategy to mitigate the potential consequences should any re-emergence of type 2 poliovirus occur following the planned withdrawal of Sabin type 2 strains from oral polio vaccine (OPV).

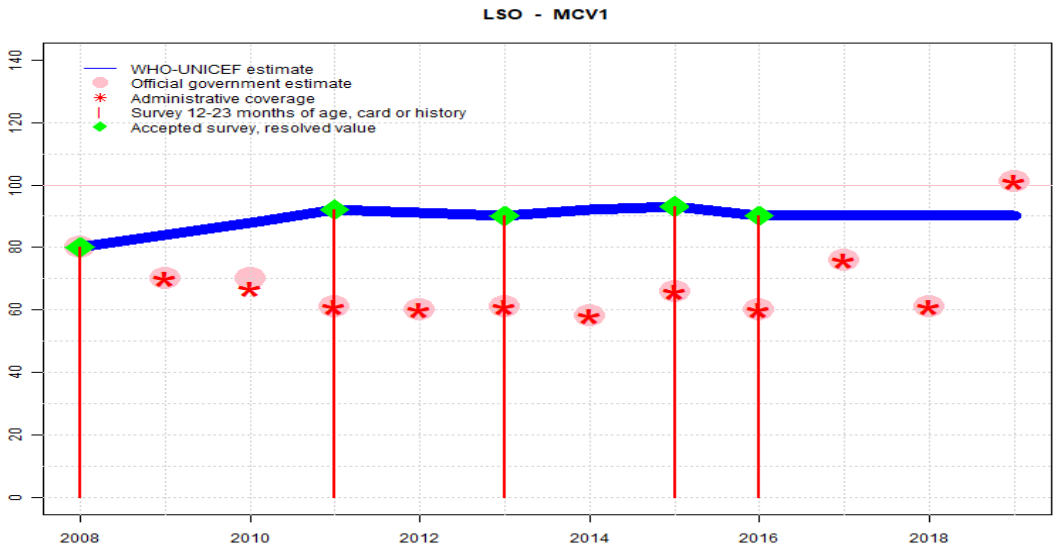
2019: Estimate is based on estimated DTP3 level. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting.Reported data excluded due to sudden change in coverage from 39 level to 92 percent. Estimate challenged by: D-R-

2018: Estimate is exceptionally based on reported data following vaccine introduction. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2017: Programme reports stock out of unspecified duration. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting.Reported data excluded due to decline in reported coverage from 44 percent to 0 percent with increase to 39 percent. Estimate challenged by: R-S-

2016: IPV vaccine introduced in April 2016. Estimates exceptionally based on reporting data during introduction year. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Programme reports challenges with recording and reporting based on the findings from a 2012 Data Quality Assessment (DQS). Estimate challenged by: R-

Lesotho - MCV1



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	80	84	88	92	91	90	92	93	90	90	90	90
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	80	70	70	61	60	61	58	66	60	76	61	101
Administrative	NA	70	67	61	60	61	58	66	60	76	61	101
Survey	80	NA	NA	92	NA	90	NA	93	90	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2019 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2019: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting.Reported data excluded because 101 percent greater than 100 percent. Reported data excluded due to sudden change in coverage from 61 level to 101 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting.Reported data excluded due to decline in reported coverage from 76 percent to 61 percent with increase to 101 percent. Programme reports three month vaccine stock-out at the national level. Estimate challenged by: D-R-

2017: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting.Reported data excluded due to an increase from 60 percent to 76 percent with decrease 61 percent. Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 90 percent based on 1 survey(s). Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Programme reports challenges with recording and reporting based on the findings from a 2012 Data Quality Assessment (DQS).Programme reports one month stock out for measles vaccine. Estimate challenged by: D-R-

2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 93 percent based on 1 survey(s). Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 93 percent changed from previous revision value of 90 percent. Estimate challenged by: D-R-

2014: Reported data calibrated to 2013 and 2015 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Programme reports two month stock-out at national level. Estimate of 92 percent changed from previous revision value of 90 percent. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 90 percent based on 1 survey(s). Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2011: Estimate of 92 percent assigned by working group. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

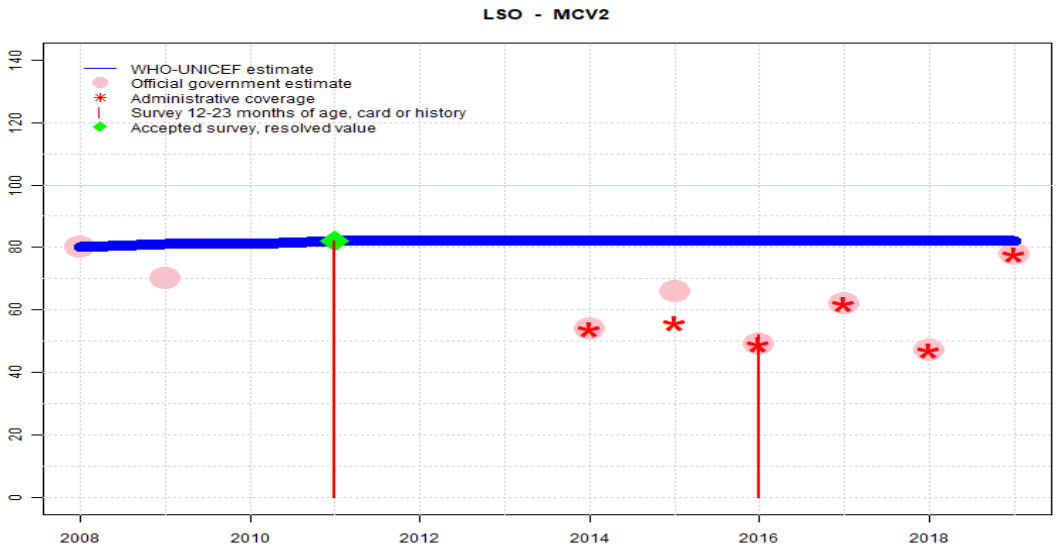
2010: Estimate based on interpolation between 2008 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2009: Estimate based on interpolation between 2008 and 2011 levels. Fluctuations in reported

data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2008: Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-

Lesotho - MCV2



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	80	81	81	82	82	82	82	82	82	82	82	82
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	80	70	NA	NA	NA	NA	54	66	49	62	47	78
Administrative	NA	NA	NA	NA	NA	NA	54	56	49	62	47	78
Survey	NA	NA	NA	82	NA	NA	NA	NA	52	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2019 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

Coverage estimates for the second dose of measles containing vaccine are for children by the nationally recommended age.

2019: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting.Reported data excluded due to sudden change in coverage from 47 level to 78 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting.Reported data excluded due to decline in reported coverage from 62 percent to 47 percent with increase to 78 percent. Programme reports three month vaccine stock-out at national level. Estimate challenged by: D-R-

2017: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting.Reported data excluded due to an increase from 49 percent to 62 percent with decrease 47 percent. Estimate challenged by: D-R-

2016: Reported data calibrated to 2012 levels. Lesotho Multiple Indicator Cluster Survey 2018 results ignored by working group. Survey results may not capture second dose measles coverage appropriately.Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting.Reported data excluded due to decline in reported coverage from 66 percent to 49 percent with increase to 62 percent. Programme reports one month stock out for measles vaccine. Programme reports challenges with recording and reporting based on the findings from a 2012 Data Quality Assessment (DQS). Estimate challenged by: D-R-

2015: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting.Reported data excluded due to an increase from 54 percent to 66 percent with decrease 49 percent. Estimate challenged by: D-R-

2014: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. .

2013: Reported data calibrated to 2012 levels. GoC=Assigned by working group. .

2012: Estimate of 82 percent assigned by working group. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. .

2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 82 percent based on 1 survey(s). GoC=Assigned by working group. .

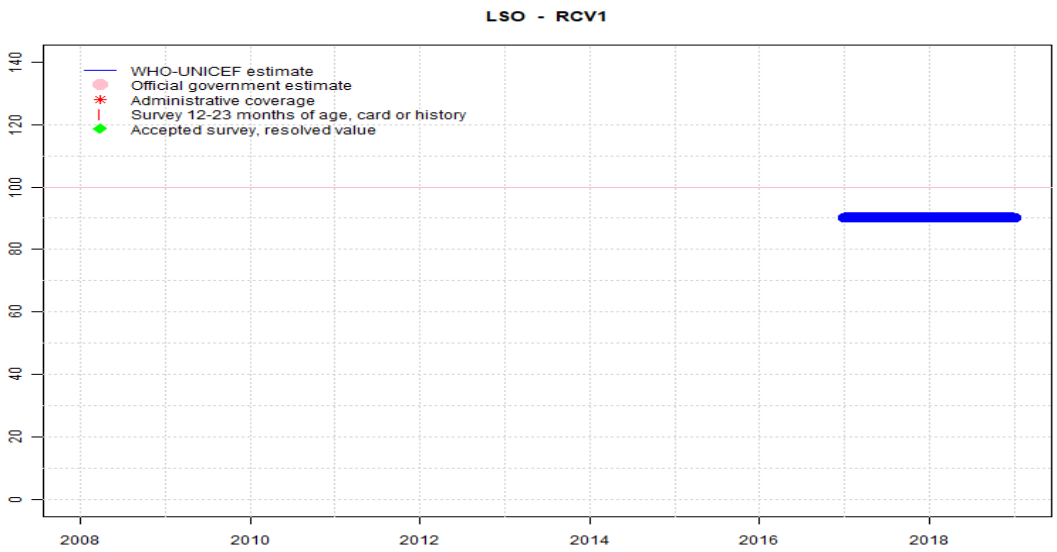
2010: Estimate based on interpolation between 2008 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. .

2009: Estimate based on interpolation between 2008 and 2011 levels. Fluctuations in reported

data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. .

2008: Estimate based on government official estimate GoC=Assigned by working group. .

Lesotho - RCV1



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	90	90	90
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	•	•	•
Official	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
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2019 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

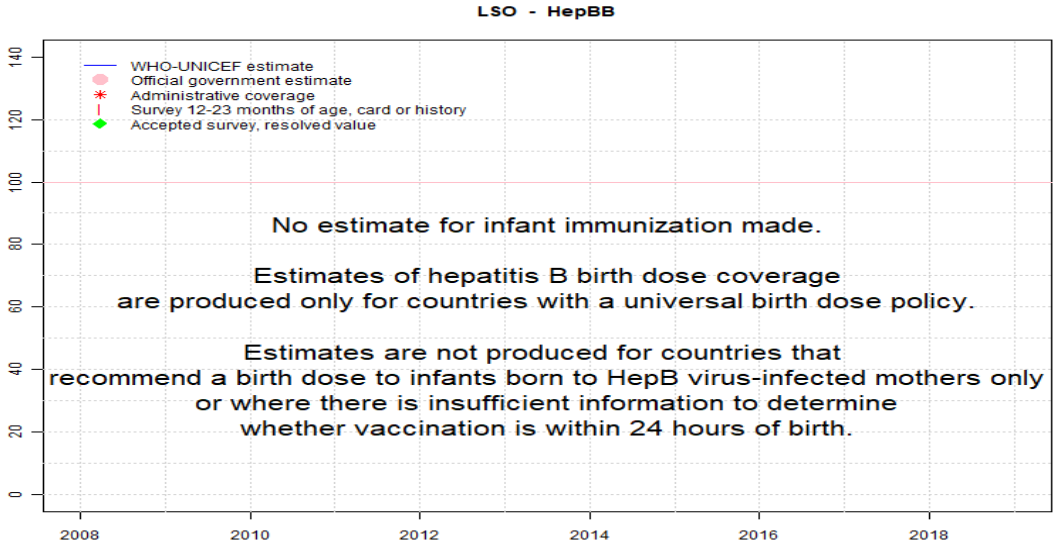
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

For this revision, coverage estimates for the first dose of rubella containing vaccine are based on WHO and UNICEF estimates of coverage of measles containing vaccine. Nationally reported coverage of rubella containing vaccine is not taken into consideration nor are they represented in the the accompanying graph and data table.

2019: Estimate based on estimated MCV1. Estimate challenged by: D-R-
2018: Estimate based on estimated MCV1. Estimate challenged by: D-R-
2017: Estimate based on estimated MCV1. Measles and rubella combination vaccine introduced in 2017 and recommended at 9 and 18 months. Estimate challenged by: D-R-

Lesotho - HepBB



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	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
Administrative	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

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

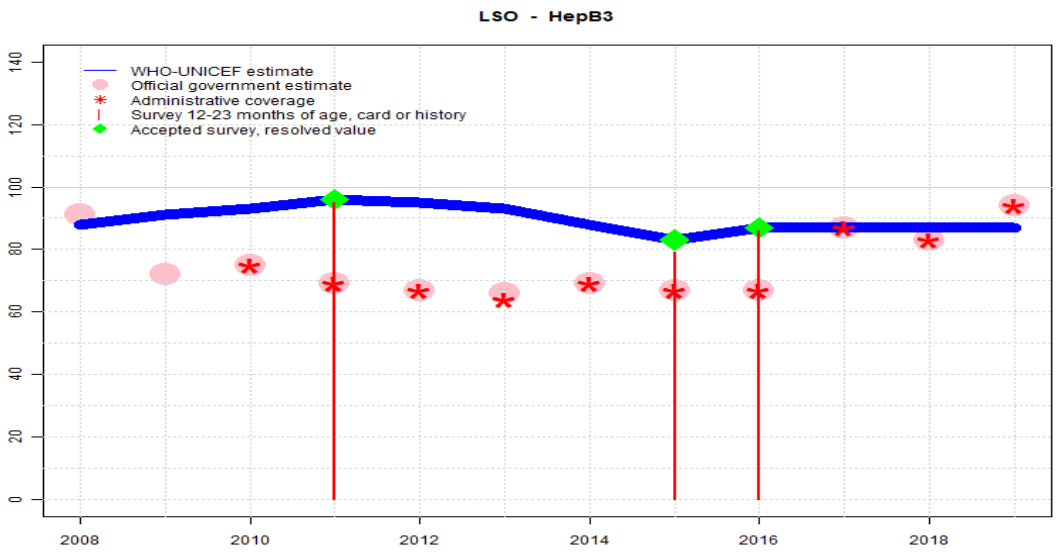
●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2019 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Lesotho - HepB3



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	88	91	93	96	95	93	88	83	87	87	87	87
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	91	72	75	69	67	66	69	67	67	87	83	94
Administrative	NA	NA	75	69	67	64	69	67	67	87	83	94
Survey	NA	NA	NA	95	NA	NA	NA	79	86	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2019 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2019: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting.Reported data excluded due to sudden change in coverage from 83 level to 94 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 87 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 87 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 87 percent based on 1 survey(s). Lesotho Multiple Indicator Cluster Survey 2018 card or history results of 86 percent modifed for recall bias to 87 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 81 percent and 3rd dose card only coverage of 77 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Programme reports challenges with recording and reporting based on the findings from a 2012 Data Quality Assessment (DQS). Estimate of 87 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 83 percent based on 1 survey(s). Lesotho Multiple Indicator Cluster Survey 2018 card or history results of 79 percent modifed for recall bias to 83 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 76 percent and 3rd dose card only coverage of 71 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 83 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2014: Reported data calibrated to 2013 and 2015 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 88 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2013: Estimate of 93 percent assigned by working group. Estimate based on survey result for DTP3 and HiB3. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2011: Estimate of 96 percent assigned by working group. Estimate based on DTP3 coverage estimates. Lesotho Post SIAs and Routine Immunization Coverage Survey 2013 card or history results of 95 percent modifed for recall bias to 96 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 83 percent and 3rd dose

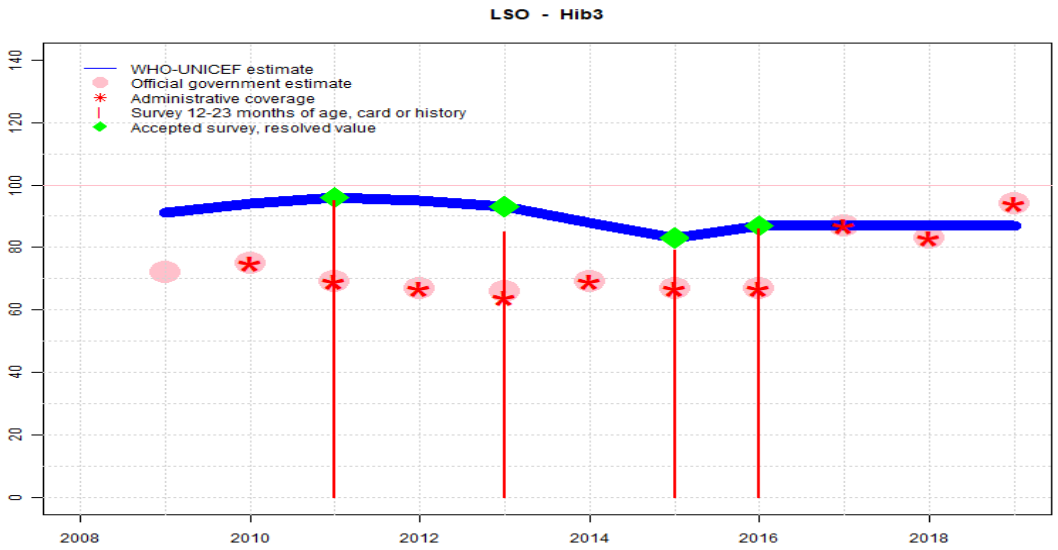
card only coverage of 82 percent. Estimate challenged by: D-R-

2010: Estimate based on interpolation between 2008 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2009: Estimate based on interpolation between 2008 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: R-

2008: Estimate of 88 percent assigned by working group. Estimate based on DTP3 coverage estimates. Estimate challenged by: D-R-

Lesotho - Hib3



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	NA	91	94	96	95	93	88	83	87	87	87	87
Estimate GoC	NA	•	•	•	•	•	•	•	•	•	•	•
Official	NA	72	75	69	67	66	69	67	67	87	83	94
Administrative	NA	NA	75	69	67	64	69	67	67	87	83	94
Survey	NA	NA	NA	95	NA	85	NA	79	86	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2019 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2019: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting.Reported data excluded due to sudden change in coverage from 83 level to 94 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 87 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2016 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 87 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 87 percent based on 1 survey(s). Lesotho Multiple Indicator Cluster Survey 2018 card or history results of 86 percent modifed for recall bias to 87 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 81 percent and 3rd dose card only coverage of 77 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Programme reports challenges with recording and reporting based on the findings from a 2012 Data Quality Assessment (DQS). Estimate of 87 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 83 percent based on 1 survey(s). Lesotho Multiple Indicator Cluster Survey 2018 card or history results of 79 percent modifed for recall bias to 83 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 76 percent and 3rd dose card only coverage of 71 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 83 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2014: Reported data calibrated to 2013 and 2015 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 88 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 93 percent based on 1 survey(s). Lesotho Demographic and Health Survey 2014 card or history results of 85 percent modifed for recall bias to 93 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 77 percent and 3rd dose card only coverage of 73 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

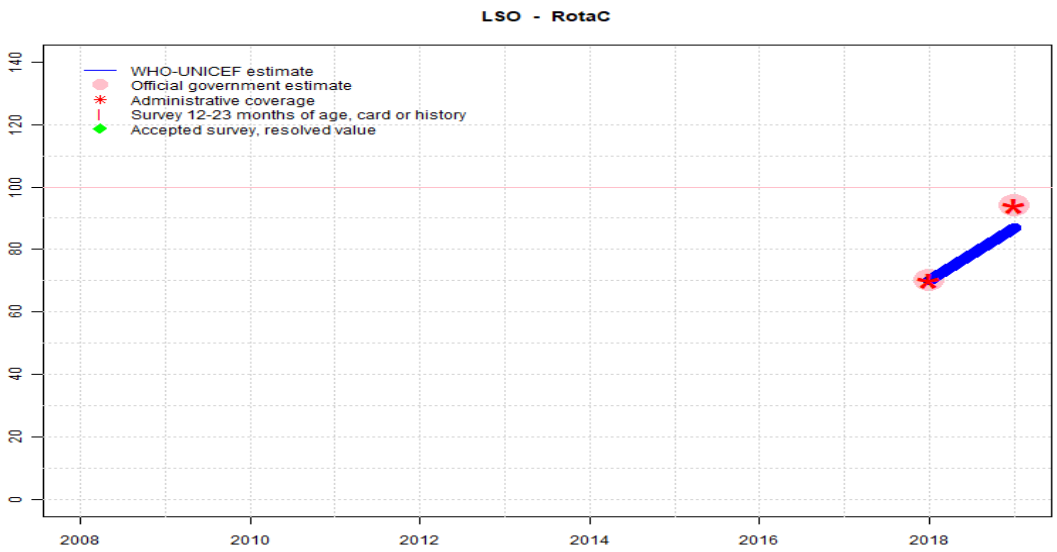
Lesotho - Hib3

2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 96 percent based on 1 survey(s). Lesotho Post SIAs and Routine Immunization Coverage Survey 2013 card or history results of 95 percent modifed for recall bias to 96 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 83 percent and 3rd dose card only coverage of 82 percent. Estimate challenged by: D-R-

2010: Estimate based on interpolation between 2009 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2009: Estimate of 91 percent assigned by working group. Hib vaccine introduced in 2008. Reporting began in 2009. Vaccine presentation is DTP-HepB-Hib. Estimate set to 2008 DTP3 level. Estimate challenged by: R-

Lesotho - RotaC



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	70	87
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	70	94
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	70	94
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2019 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

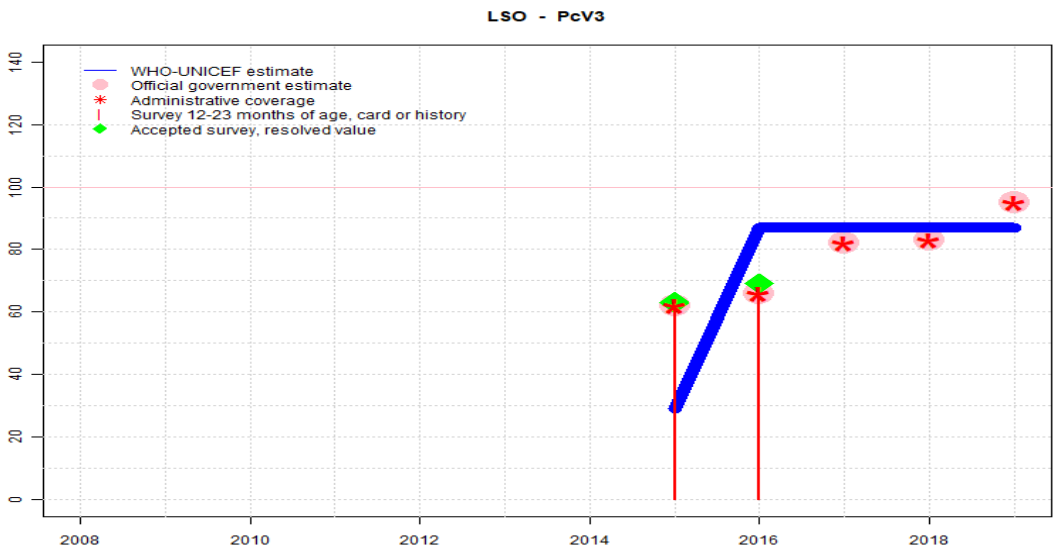
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2019: Estimate is based on estimated DTP3 level. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2018: Rotavirus vaccine introduced during 2017. Reporting started in 2018. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate is exceptionally based on reported data during introduction year. Estimate challenged by: D-R-

Lesotho - PcV3



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Estimate	NA	NA	NA	NA	NA	NA	NA	29	87	87	87	87
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	•	•	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	62	66	82	83	95
Administrative	NA	NA	NA	NA	NA	NA	NA	62	66	82	83	95
Survey	NA	NA	NA	NA	NA	NA	NA	62	67	NA	NA	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is not a judgment of the quality of data reported by national authorities.

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2019 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2019: Estimate based on estimated DTP3 coverage as PcV is recommended for administration at the same age. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: D-R-

2018: Estimate based on estimated DTP3 coverage as PcV is recommended for administration at the same age. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 87 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-S-

2017: Estimate based on estimated DTP3 coverage as PcV is recommended for administration at the same age. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate of 87 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-S-

2016: Estimate based on estimated DTP3 coverage as PcV is recommended for administration at the same age. Lesotho Multiple Indicator Cluster Survey 2018 card or history results of 67 percent modifed for recall bias to 69 percent based on 1st dose card or history coverage of 76 percent, 1st dose card only coverage of 67 percent and 3rd dose card only coverage of 61 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Programme reports challenges with recording and reporting based on the findings from a 2012 Data Quality Assessment (DQS). Estimate of 87 percent changed from previous revision value of 93 percent. Estimate challenged by: D-R-S-

2015: Pneumococcal conjugate vaccine introduced during July 2015. Programme reports 62 percent coverage in 46 percent of the national target population. Estimate is based on coverage achieved in total annual national target population. Lesotho Multiple Indicator Cluster Survey 2018 card or history results of 62 percent modifed for recall bias to 63 percent based on 1st dose card or history coverage of 74 percent, 1st dose card only coverage of 63 percent and 3rd dose card only coverage of 54 percent. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Estimate challenged by: R-S-

Lesotho - survey details

2016 Lesotho Multiple Indicator Cluster Survey 2018

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	95.1	12-23 m	665	84
BCG	Card	82.7	12-23 m	665	84
BCG	Card or History	95.7	12-23 m	665	84
BCG	History	13	12-23 m	665	84
DTP1	C or H <12 months	91.5	12-23 m	665	84
DTP1	Card	80.6	12-23 m	665	84
DTP1	Card or History	91.5	12-23 m	665	84
DTP1	History	10.9	12-23 m	665	84
DTP3	C or H <12 months	84.6	12-23 m	665	84
DTP3	Card	76.8	12-23 m	665	84
DTP3	Card or History	85.6	12-23 m	665	84
DTP3	History	8.8	12-23 m	665	84
HepB1	C or H <12 months	91.5	12-23 m	665	84
HepB1	Card	80.6	12-23 m	665	84
HepB1	Card or History	91.5	12-23 m	665	84
HepB1	History	10.9	12-23 m	665	84
HepB3	C or H <12 months	84.6	12-23 m	665	84
HepB3	Card	76.8	12-23 m	665	84
HepB3	Card or History	85.6	12-23 m	665	84
HepB3	History	8.8	12-23 m	665	84
Hib1	C or H <12 months	91.5	12-23 m	665	84
Hib1	Card	80.6	12-23 m	665	84
Hib1	Card or History	91.5	12-23 m	665	84
Hib1	History	10.9	12-23 m	665	84
Hib3	C or H <12 months	84.6	12-23 m	665	84
Hib3	Card	76.8	12-23 m	665	84
Hib3	Card or History	85.6	12-23 m	665	84
Hib3	History	8.8	12-23 m	665	84
IPV1	C or H <12 months	44.4	12-23 m	665	84
IPV1	Card	36	12-23 m	665	84
IPV1	Card or History	45.4	12-23 m	665	84
IPV1	History	9.3	12-23 m	665	84
MCV1	C or H <12 months	76.7	12-23 m	665	84
MCV1	Card	78.1	12-23 m	665	84
MCV1	Card or History	89.9	12-23 m	665	84
MCV1	History	11.8	12-23 m	665	84
MCV2	C or H <12 months	24.5	24-35 m	719	84
MCV2	Card	41.1	24-35 m	719	84
MCV2	Card or History	52.2	24-35 m	719	84
MCV2	History	11.2	24-35 m	719	84
PCV1	C or H <12 months	76.2	12-23 m	665	84
PCV1	Card	67.3	12-23 m	665	84
PCV1	Card or History	76.2	12-23 m	665	84
PCV1	History	8.9	12-23 m	665	84
PCV3	C or H <12 months	65.5	12-23 m	665	84
PCV3	Card	60.6	12-23 m	665	84
PCV3	Card or History	66.8	12-23 m	665	84
PCV3	History	6.2	12-23 m	665	84
Pol1	C or H <12 months	94.1	12-23 m	665	84
Pol1	Card	83.3	12-23 m	665	84
Pol1	Card or History	94.1	12-23 m	665	84
Pol1	History	10.9	12-23 m	665	84
Pol3	C or H <12 months	79	12-23 m	665	84
Pol3	Card	76.6	12-23 m	665	84
Pol3	Card or History	79.8	12-23 m	665	84
Pol3	History	3.2	12-23 m	665	84

2015 Lesotho Multiple Indicator Cluster Survey 2018

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94.7	24-35 m	719	84
BCG	Card	79.1	24-35 m	719	84
BCG	Card or History	95.2	24-35 m	719	84
BCG	History	16.1	24-35 m	719	84
DTP1	C or H <12 months	88.9	24-35 m	719	84
DTP1	Card	76.2	24-35 m	719	84
DTP1	Card or History	89.4	24-35 m	719	84
DTP1	History	13.2	24-35 m	719	84
DTP3	C or H <12 months	78.5	24-35 m	719	84
DTP3	Card	70.9	24-35 m	719	84
DTP3	Card or History	79.3	24-35 m	719	84
DTP3	History	8.5	24-35 m	719	84
HepB1	C or H <12 months	88.9	24-35 m	719	84
HepB1	Card	76.2	24-35 m	719	84
HepB1	Card or History	89.4	24-35 m	719	84
HepB1	History	13.2	24-35 m	719	84

HepB3	C or H <12 months	78.5	24-35 m	719	84
HepB3	Card	70.9	24-35 m	719	84
HepB3	Card or History	79.3	24-35 m	719	84
HepB3	History	8.5	24-35 m	719	84
Hib1	C or H <12 months	88.9	24-35 m	719	84
Hib1	Card	76.2	24-35 m	719	84
Hib1	Card or History	89.4	24-35 m	719	84
Hib1	History	13.2	24-35 m	719	84
Hib3	C or H <12 months	78.5	24-35 m	719	84
Hib3	Card	70.9	24-35 m	719	84
Hib3	Card or History	79.3	24-35 m	719	84
Hib3	History	8.5	24-35 m	719	84
MCV1	C or H <12 months	71.2	24-35 m	719	84
MCV1	Card	76.2	24-35 m	719	84
MCV1	Card or History	92.7	24-35 m	719	84
MCV1	History	16.5	24-35 m	719	84
PCV1	C or H <12 months	73.9	24-35 m	719	84
PCV1	Card	62.7	24-35 m	719	84
PCV1	Card or History	74.5	24-35 m	719	84
PCV1	History	11.8	24-35 m	719	84
PCV3	C or H <12 months	60.3	24-35 m	719	84
PCV3	Card	54.4	24-35 m	719	84
PCV3	Card or History	61.6	24-35 m	719	84
PCV3	History	7.2	24-35 m	719	84
Pol1	C or H <12 months	93.9	24-35 m	719	84
Pol1	Card	79.5	24-35 m	719	84
Pol1	Card or History	94.4	24-35 m	719	84
Pol1	History	14.9	24-35 m	719	84
Pol3	C or H <12 months	78.5	24-35 m	719	84
Pol3	Card	72.5	24-35 m	719	84
Pol3	Card or History	79.3	24-35 m	719	84
Pol3	History	6.7	24-35 m	719	84

2013 Lesotho Demographic and Health Survey 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	97.6	12-23 m	655	77
BCG	Card	76.2	12-23 m	655	77
BCG	Card or History	98	12-23 m	655	77
BCG	History	21.8	12-23 m	655	77
DTP1	C or H <12 months	98.3	12-23 m	655	77
DTP1	Card	77.1	12-23 m	655	77
DTP1	Card or History	98.3	12-23 m	655	77
DTP1	History	21.1	12-23 m	655	77
DTP3	C or H <12 months	83.9	12-23 m	655	77
DTP3	Card	73.2	12-23 m	655	77
DTP3	Card or History	85.4	12-23 m	655	77
DTP3	History	12.2	12-23 m	655	77
Hib1	C or H <12 months	98.3	12-23 m	655	77
Hib1	Card	77.1	12-23 m	655	77
Hib1	Card or History	98.3	12-23 m	655	77
Hib1	History	21.1	12-23 m	655	77
Hib3	C or H <12 months	83.9	12-23 m	655	77
Hib3	Card	73.2	12-23 m	655	77
Hib3	Card or History	85.4	12-23 m	655	77
Hib3	History	12.2	12-23 m	655	77
MCV1	C or H <12 months	79.6	12-23 m	655	77
MCV1	Card	71.2	12-23 m	655	77
MCV1	Card or History	90.1	12-23 m	655	77
MCV1	History	18.9	12-23 m	655	77
Pol1	C or H <12 months	96	12-23 m	655	77
Pol1	Card	75.7	12-23 m	655	77
Pol1	Card or History	96	12-23 m	655	77
Pol1	History	20.3	12-23 m	655	77
Pol3	C or H <12 months	74.9	12-23 m	655	77
Pol3	Card	71.2	12-23 m	655	77
Pol3	Card or History	75.7	12-23 m	655	77
Pol3	History	4.5	12-23 m	655	77

2012 Lesotho Demographic and Health Survey 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	95.8	24-35 m	572	77
DTP1	C or H <12 months	96.9	24-35 m	572	77
DTP3	C or H <12 months	85.5	24-35 m	572	77
Hib1	C or H <12 months	96.9	24-35 m	572	77
Hib3	C or H <12 months	85.5	24-35 m	572	77
MCV1	C or H <12 months	75.4	24-35 m	572	77

Pol1	C or H <12 months	95.4	24-35 m	572	77
Pol3	C or H <12 months	72	24-35 m	572	77

2011 Lesotho Post SIAs and Routine Immunization Coverage Survey 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	85	24-35 m	-	92
BCG	Card or History	87	24-35 m	3614	92
DTP1	Card	83.3	24-35 m	-	92
DTP1	Card or History	96.6	24-35 m	3614	92
DTP3	Card	81.5	24-35 m	-	92
DTP3	Card or History	95	24-35 m	3614	92
HepB1	Card	83.3	24-35 m	-	92
HepB1	Card or History	96.6	24-35 m	3614	92
HepB3	Card	81.5	24-35 m	-	92
HepB3	Card or History	95	24-35 m	3614	92
Hib1	Card	83.3	24-35 m	-	92
Hib1	Card or History	96.6	24-35 m	3614	92
Hib3	Card	81.5	24-35 m	-	92
Hib3	Card or History	95	24-35 m	3614	92
MCV1	Card	78.8	24-35 m	-	92
MCV1	Card or History	92	24-35 m	3614	92
MCV2	Card	69.3	24-35 m	-	92
MCV2	Card or History	81.7	24-35 m	3614	92
Pol1	Card	82.2	24-35 m	-	92
Pol1	Card or History	97.3	24-35 m	3614	92
Pol3	Card	80.1	24-35 m	-	92
Pol3	Card or History	93.5	24-35 m	3614	92

2008 Lesotho Demographic and Health Survey 2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94.4	12-23 m	744	74
BCG	Card	72.7	12-23 m	744	74
BCG	Card or History	95.1	12-23 m	744	74
BCG	History	22.4	12-23 m	744	74
DTP1	C or H <12 months	95.4	12-23 m	744	74
DTP1	Card	73.7	12-23 m	744	74
DTP1	Card or History	95.7	12-23 m	744	74
DTP1	History	22	12-23 m	744	74
DTP3	C or H <12 months	81.6	12-23 m	744	74
DTP3	Card	68.2	12-23 m	744	74
DTP3	Card or History	83.5	12-23 m	744	74
DTP3	History	15.3	12-23 m	744	74
MCV1	C or H <12 months	69.6	12-23 m	744	74
MCV1	Card	61.8	12-23 m	744	74
MCV1	Card or History	80.3	12-23 m	744	74
MCV1	History	18.5	12-23 m	744	74
Pol1	C or H <12 months	94.1	12-23 m	744	74
Pol1	Card	72.6	12-23 m	744	74
Pol1	Card or History	94.2	12-23 m	744	74
Pol1	History	21.6	12-23 m	744	74
Pol3	C or H <12 months	73.4	12-23 m	744	74
Pol3	Card	67.4	12-23 m	744	74
Pol3	Card or History	74.9	12-23 m	744	74
Pol3	History	7.5	12-23 m	744	74

2003 Lesotho Demographic and Health Survey 2004

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	95.3	12-23 m	660	78
BCG	Card	76.5	12-23 m	660	78
BCG	Card or History	96.4	12-23 m	660	78
BCG	History	19.9	12-23 m	660	78
DTP1	C or H <12 months	93.9	12-23 m	660	78
DTP1	Card	76.3	12-23 m	660	78
DTP1	Card or History	94.6	12-23 m	660	78
DTP1	History	18.3	12-23 m	660	78
DTP3	C or H <12 months	80.4	12-23 m	660	78
DTP3	Card	71.7	12-23 m	660	78
DTP3	Card or History	82.8	12-23 m	660	78
DTP3	History	11.1	12-23 m	660	78
HepB1	C or H <12 months	28.9	12-23 m	660	78
HepB1	Card	23	12-23 m	660	78
HepB1	Card or History	31.4	12-23 m	660	78
HepB1	History	8.3	12-23 m	660	78

HepB3	C or H <12 months	12.5	12-23 m	660	78
HepB3	Card	10.1	12-23 m	660	78
HepB3	Card or History	13.6	12-23 m	660	78
HepB3	History	3.5	12-23 m	660	78
MCV1	C or H <12 months	74.7	12-23 m	660	78
MCV1	Card	68.9	12-23 m	660	78
MCV1	Card or History	84.9	12-23 m	660	78
MCV1	History	16	12-23 m	660	78
Pol1	C or H <12 months	94.5	12-23 m	660	78
Pol1	Card	76.1	12-23 m	660	78
Pol1	Card or History	95.4	12-23 m	660	78
Pol1	History	19.3	12-23 m	660	78
Pol3	C or H <12 months	76.7	12-23 m	660	78
Pol3	Card	72.3	12-23 m	660	78
Pol3	Card or History	79.7	12-23 m	660	78
Pol3	History	7.4	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	82.9	12-23 m	2289	91
DTP1	Card or History	82.9	12-23 m	2289	91
DTP3	Card or History	78.5	12-23 m	2289	91
MCV1	Card or History	69.8	12-23 m	2289	91
Pol1	Card or History	82.6	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

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	90.5	12-23 m	762	85
BCG	Card	83.1	12-23 m	762	85
BCG	Card or History	91.5	12-23 m	762	85
BCG	History	8.4	12-23 m	762	85
DTP1	C or H <12 months	88.5	12-23 m	762	85
DTP1	Card	81.9	12-23 m	762	85
DTP1	Card or History	90.4	12-23 m	762	85
DTP1	History	8.5	12-23 m	762	85
DTP3	C or H <12 months	83.9	12-23 m	762	85
DTP3	Card	79.9	12-23 m	762	85
DTP3	Card or History	85.4	12-23 m	762	85
DTP3	History	5.5	12-23 m	762	85
MCV1	C or H <12 months	71.3	12-23 m	762	85
MCV1	Card	69.6	12-23 m	762	85
MCV1	Card or History	77.2	12-23 m	762	85
MCV1	History	7.6	12-23 m	762	85
Pol1	C or H <12 months	87.8	12-23 m	762	85
Pol1	Card	82.2	12-23 m	762	85
Pol1	Card or History	89.2	12-23 m	762	85
Pol1	History	7	12-23 m	762	85
Pol3	C or H <12 months	82.4	12-23 m	762	85
Pol3	Card	79.4	12-23 m	762	85
Pol3	Card or History	83.5	12-23 m	762	85
Pol3	History	4.1	12-23 m	762	85

Further information and estimates for previous years are available at:
http://www.data.unicef.org/child-health/immunization
http://www.who.int/immunization/monitoring_surveillance/routine/coverage/en/index4.html