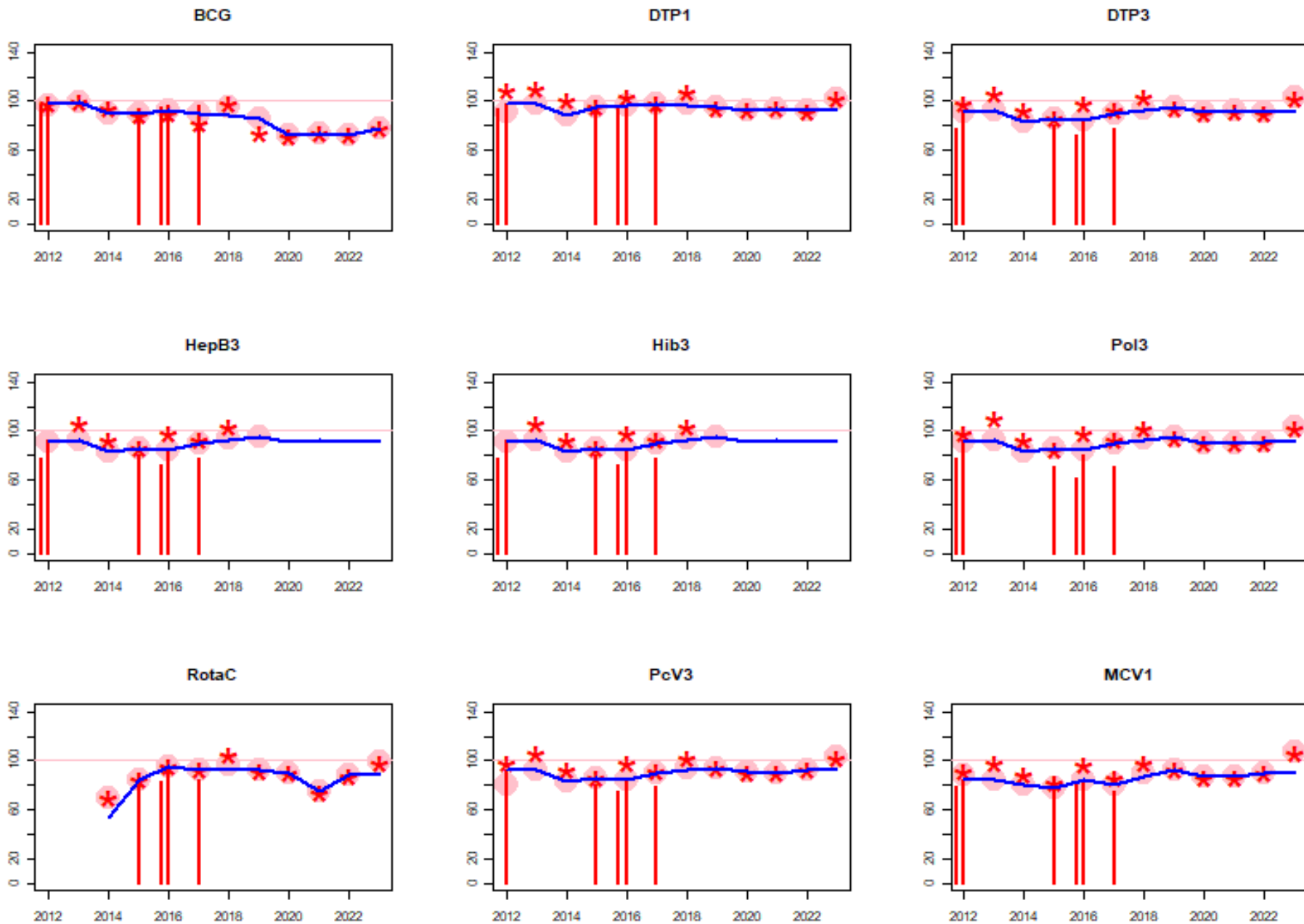


Sierra Leone: WHO and UNICEF estimates of immunization coverage: 2023 revision



**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 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 available empirical data accurately reflect immunization system performance and those where the data are likely compromised and present a misleading view of coverage.

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. Bull World Health Organ.

\*Burton et al. 2012. PLoS One.

\*Danovaro-Holliday et al. 2021. Gates Open Res.

## 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 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 data collection period.

## 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. For countries utilizing IPV containing vaccine only, i.e., no recommended dose of OPV, 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.

**IPV2:** percentage of surviving infants who received a 2nd dose of inactivated polio vaccine. IPV2 coverage estimates produced for OPV using countries.

**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. Coverage 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.

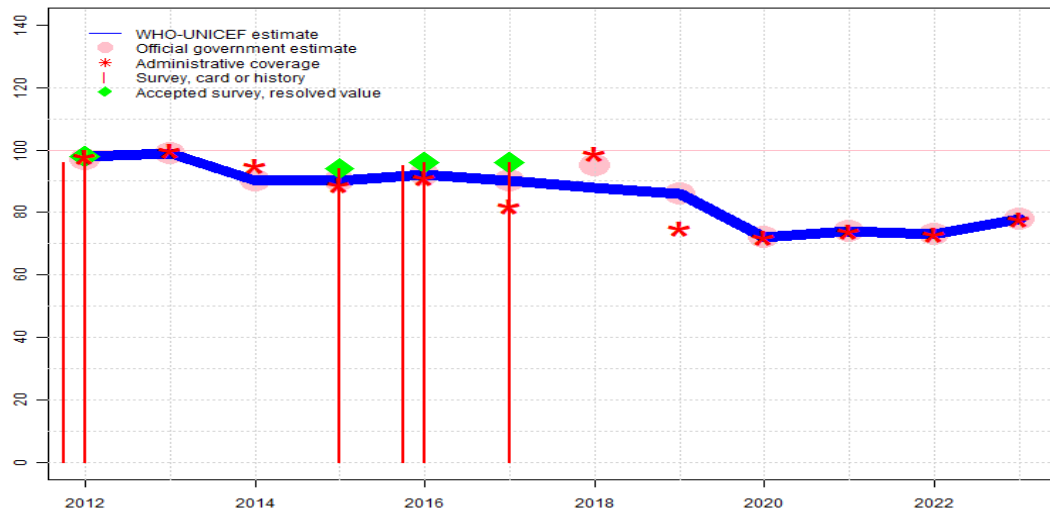
**YFV:** percentage of surviving infants who received one dose of yellow fever vaccine in countries where YFV is part of the national immunization schedule for children or is recommended in at risk areas; coverage estimates are annualized for the entire cohort of surviving infants.

**MengA:** percentage of children who received one dose of meningococcal A conjugate vaccine. MengA coverage estimates produced for countries in the meningitis belt of sub-Saharan Africa.

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# Sierra Leone - BCG

SLE - BCG



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	98	99	90	90	92	90	88	86	72	74	73	78
Estimate GoC	●●●	●●●	●●●	●	●	●	●	●	●	●	●	●
Official	97	99	90	90	92	90	95	86	72	74	73	78
Administrative	98	100	95	89	91	82	99	75	72	74	73	78
Survey	*	NA	NA	94	*	96	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: 2022 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.

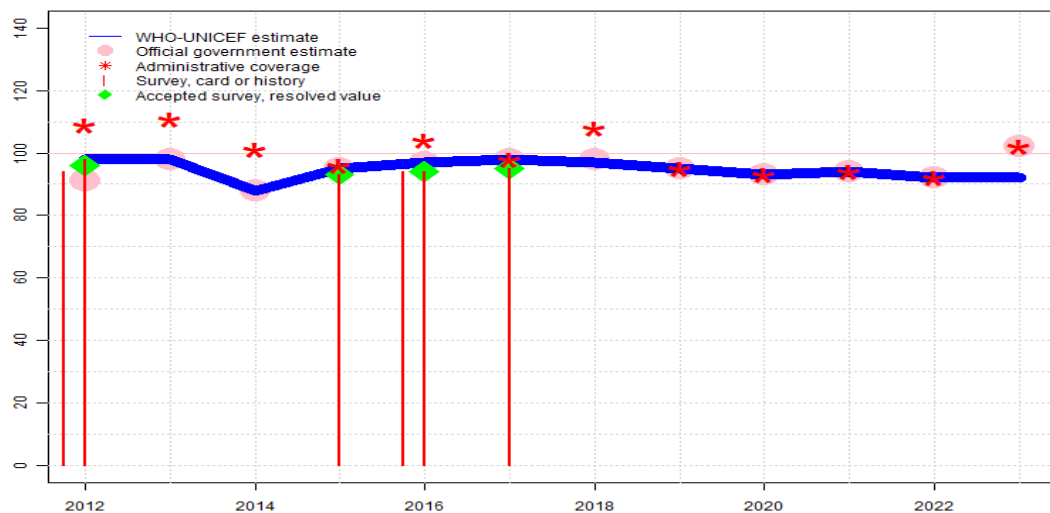
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2023: Estimate informed by reported data. Estimated coverage may underestimate actual coverage for some antigens where increases in reported coverage are unexplained. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF are aware of a 2024 Vaccination Coverage Survey and await final results. Estimate challenged by: D-
- 2022: Estimate informed by reported data. Consistent lower coverage for BCG than for other vaccines in recent years is unexplained. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Country indicates that the decline in coverage is related to the COVID-19 pandemic. Estimate challenged by: D-
- 2019: Estimate informed by reported data. GoC=Assigned by working group. Consistency across antigens.
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported coverage inconsistent with unexplained decrease of 15 percent in the reported target population accompanied by a decrease in the reported number of administered doses. GoC=Assigned by working group. Consistency across antigens.
- 2017: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 1 survey(s). GoC=Assigned by working group. Consistency across antigens.
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 2 survey(s). Estimate challenged by: D-
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). Estimate challenged by: D-
- 2014: Estimate informed by reported data. Reported declines in reported coverage due in part to Ebola virus disease outbreak during 2014. Inconsistent and unexplained adjustment made to official coverage from administrative data. GoC=R+ S+ D+
- 2013: Estimate informed by reported data. Official estimate based on 2013 survey results. GoC=R+ S+ D+
- 2012: Estimate informed by interpolation between reported data supported by survey. Survey evidence of 98 percent based on 2 survey(s). Reported data excluded. Nationally reported data ignore most recent survey in the downward adjustment of administrative coverage levels. Official estimates were based on targets from cMYP. GoC=R+ S+ D+

# Sierra Leone - DTP1

SLE - DTP1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	98	98	88	95	97	98	97	95	93	94	92	92
Estimate GoC	●●●	●	●	●	●	●	●	●	●	●	●	●
Official	91	98	88	95	97	98	98	95	93	94	92	102
Administrative	109	111	101	96	104	98	108	95	93	94	92	102
Survey	*	NA	NA	93	*	95	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: 2022 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.

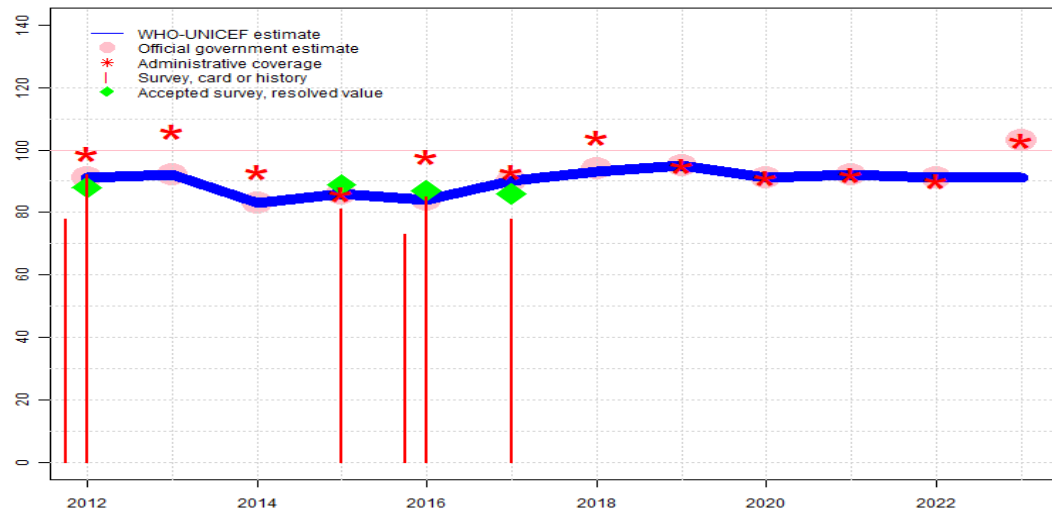
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2023: Estimate based on extrapolation from data reported by national government. Reported data excluded because 102 percent greater than 100 percent. Estimated coverage may underestimate actual coverage for some antigens where increases in reported coverage are unexplained. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF are aware of a 2024 Vaccination Coverage Survey and await final results. Estimate challenged by: D-
- 2022: Estimate informed by reported data. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported coverage inconsistent with unexplained decrease of 15 percent in the reported target population accompanied by a decrease in the reported number of administered doses. GoC=Assigned by working group. Consistency of available information across antigens.
- 2017: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 1 survey(s). Estimate challenged by: D-
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 2 survey(s). Estimate challenged by: D-
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Estimate challenged by: D-
- 2014: Estimate informed by reported data. Reported declines in reported coverage due in part to Ebola virus disease outbreak during 2014. Inconsistent and unexplained adjustment made to official coverage from administrative data. Estimate challenged by: D-
- 2013: Estimate informed by reported data. Official estimate based on 2013 survey results. Estimate challenged by: D-
- 2012: Estimate informed by interpolation between reported data supported by survey. Survey evidence of 96 percent based on 2 survey(s). Reported data excluded. Nationally reported data ignore most recent survey in the downward adjustment of administrative coverage levels. Official estimates were based on targets from cMYP. GoC=R+ S+ D+

# Sierra Leone - DTP3

SLE - DTP3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	91	92	83	86	84	90	93	95	91	92	91	91
Estimate GoC	●●●	●	●	●	●	●	●	●	●	●	●	●
Official	91	92	83	86	84	90	94	95	91	92	91	103
Administrative	99	106	93	86	98	93	104	95	91	92	90	103
Survey	*	NA	NA	81	*	78	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: 2022 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:

2023: Estimate based on extrapolation from data reported by national government. Reported data excluded because 103 percent greater than 100 percent. Reported data excluded due to sudden change in coverage from 91 level to 103 percent. Estimated coverage may underestimate actual coverage for some antigens where increases in reported coverage are unexplained. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF are aware of a 2024 Vaccination Coverage Survey and await final results. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate challenged by: D-

2020: Estimate informed by reported data. Estimate challenged by: D-

2019: Estimate informed by reported data. Estimate challenged by: D-

2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported coverage inconsistent with unexplained decrease of 15 percent in the reported target population accompanied by a decrease in the reported number of administered doses. GoC=Assigned by working group. Consistency of available information across antigens.

2017: Estimate informed by reported data supported by survey. Survey evidence of 86 percent based on 1 survey(s). Sierra Leone Demographic and Health Survey 2019 card or history results of 78 percent modified for recall bias to 86 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 74 percent and 3rd dose card only coverage of 67 percent. Estimate challenged by: D-

2016: Estimate informed by reported data supported by survey. Survey evidence of 87 percent based on 2 survey(s). Sierra Leone Multiple Indicator Cluster Survey 2017 card or history results of 85 percent modified for recall bias to 88 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 75 percent. Sierra Leone Demographic and Health Survey 2019 card or history results of 73 percent modified for recall bias to 86 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 61 percent and 3rd dose card only coverage of 56 percent. Estimate challenged by: D-

2015: Estimate informed by reported data supported by survey. Survey evidence of 89 percent based on 1 survey(s). Sierra Leone Multiple Indicator Cluster Survey 2017 card or history results of 81 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 67 percent and 3rd dose card only coverage of 64 percent. Estimate challenged by: D-

2014: Estimate informed by reported data. Reported declines in reported coverage due in part to Ebola virus disease outbreak during 2014. Inconsistent and unexplained adjustment made to official coverage from administrative data. Estimate challenged by: D-

2013: Estimate informed by reported data. Official estimate based on 2013 survey results. Estimate challenged by: D-

2012: Estimate informed by interpolation between reported data supported by survey. Survey evidence of 88 percent based on 2 survey(s). Sierra Leone Demographic and Health Sur-

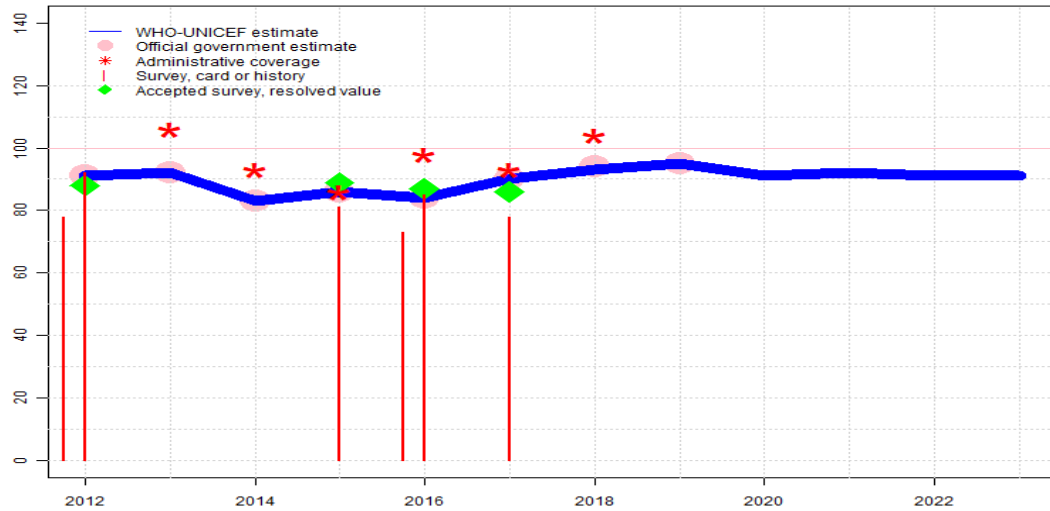
# Sierra Leone - DTP3

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vey 2013 card or history results of 78 percent modified for recall bias to 85 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 72 percent and 3rd dose card only coverage of 65 percent. Report on Sierra Leone Routine Immunization Coverage Survey - 2013 card or history results of 92 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 91 percent and 3rd dose card only coverage of 84 percent. Reported data excluded. Nationally reported data ignore most recent survey in the downward adjustment of administrative coverage levels. Official estimates were based on targets from cMYP. GoC=R+ S+ D+

# Sierra Leone - HepB3

SLE - HepB3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	91	92	83	86	84	90	93	95	91	92	91	91
Estimate GoC	●●	●	●	●	●	●	●	●	●	●	●	●
Official	91	92	83	86	84	90	94	95	NA	NA	NA	NA
Administrative	NA	106	93	86	98	93	104	NA	NA	NA	NA	NA
Survey	*	NA	NA	81	*	78	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: 2022 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:

2023: Based on DTP3 coverage estimate. Estimated coverage may underestimate actual coverage for some antigens where increases in reported coverage are unexplained. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF are aware of a 2024 Vaccination Coverage Survey and await final results. GoC=No accepted empirical data

2022: Estimate informed by estimate for DTP3. GoC=No accepted empirical data

2021: Estimate based on estimate for DTP3. GoC=No accepted empirical data

2020: Estimate based on estimate for DTP3. GoC=No accepted empirical data

2019: Estimate informed by reported data. GoC=Assigned by working group. Consistency across antigens.

2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported coverage inconsistent with unexplained decrease of 15 percent in the reported target population accompanied by a decrease in the reported number of administered doses. GoC=Assigned by working group. Consistency of available information across antigens.

2017: Estimate informed by reported data supported by survey. Survey evidence of 86 percent based on 1 survey(s). Sierra Leone Demographic and Health Survey 2019 card or history results of 78 percent modified for recall bias to 86 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 74 percent and 3rd dose card only coverage of 67 percent. Estimate challenged by: D-

2016: Estimate informed by reported data supported by survey. Survey evidence of 87 percent based on 2 survey(s). Sierra Leone Multiple Indicator Cluster Survey 2017 card or history results of 85 percent modified for recall bias to 88 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 75 percent. Sierra Leone Demographic and Health Survey 2019 card or history results of 73 percent modified for recall bias to 86 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 61 percent and 3rd dose card only coverage of 56 percent. Estimate challenged by: D-

2015: Estimate informed by reported data supported by survey. Survey evidence of 89 percent based on 1 survey(s). Sierra Leone Multiple Indicator Cluster Survey 2017 card or history results of 81 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 67 percent and 3rd dose card only coverage of 64 percent. Estimate challenged by: D-

2014: Estimate informed by reported data. Reported declines in reported coverage due in part to Ebola virus disease outbreak during 2014. Inconsistent and unexplained adjustment made to official coverage from administrative data. Estimate challenged by: D-

2013: Estimate informed by reported data. Official estimate based on 2013 survey results. Estimate challenged by: D-

2012: Estimate informed by interpolation between reported data supported by survey. Survey evidence of 88 percent based on 2 survey(s). Sierra Leone Demographic and Health Survey 2013 card or history results of 78 percent modified for recall bias to 85 percent based

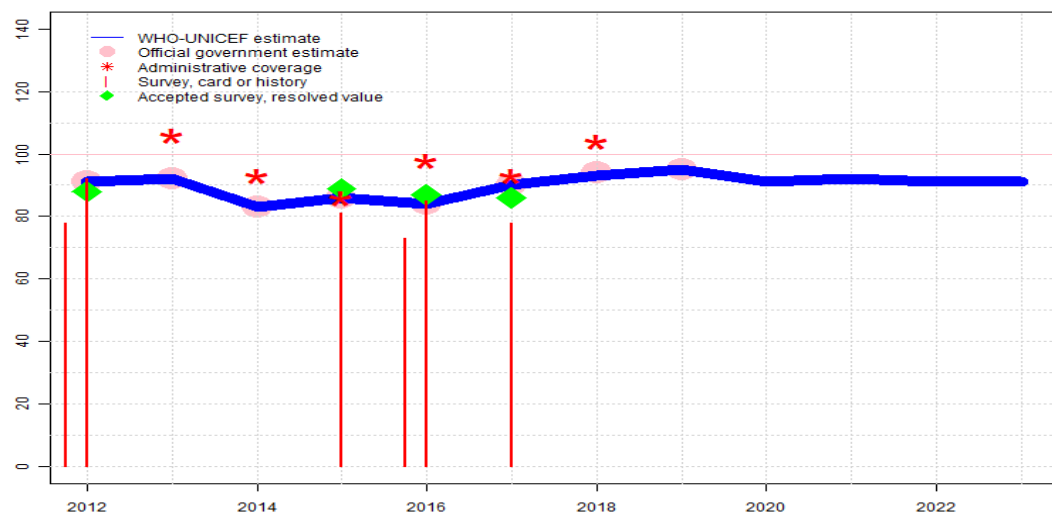
# Sierra Leone - HepB3

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on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 72 percent and 3rd dose card only coverage of 65 percent. Report on Sierra Leone Routine Immunization Coverage Survey - 2013 card or history results of 92 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 91 percent and 3rd dose card only coverage of 84 percent. Reported data excluded. Nationally reported data ignore most recent survey in the downward adjustment of administrative coverage levels. Official estimates were based on targets from cMYP. GoC=R+ S+

# Sierra Leone - Hib3

SLE - Hib3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	91	92	83	86	84	90	93	95	91	92	91	91
Estimate GoC	●●	●	●	●	●	●	●	●	●	●	●	●
Official	91	92	83	86	84	90	94	95	NA	NA	NA	NA
Administrative	NA	106	93	86	98	93	104	NA	NA	NA	NA	NA
Survey	*	NA	NA	81	*	78	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: 2022 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:

- 2023: Based on DTP3 coverage estimate. Estimated coverage may underestimate actual coverage for some antigens where increases in reported coverage are unexplained. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF are aware of a 2024 Vaccination Coverage Survey and await final results. GoC=No accepted empirical data
- 2022: Estimate informed by estimate for DTP3. GoC=No accepted empirical data
- 2021: Estimate based on estimate for DTP3. GoC=No accepted empirical data
- 2020: Estimate based on estimate for DTP3. GoC=No accepted empirical data
- 2019: Estimate informed by reported data. GoC=Assigned by working group. Consistency across antigens.
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported coverage inconsistent with unexplained decrease of 15 percent in the reported target population accompanied by a decrease in the reported number of administered doses. GoC=Assigned by working group. Consistency of available information across antigens.
- 2017: Estimate informed by reported data supported by survey. Survey evidence of 86 percent based on 1 survey(s). Sierra Leone Demographic and Health Survey 2019 card or history results of 78 percent modified for recall bias to 86 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 74 percent and 3rd dose card only coverage of 67 percent. Estimate challenged by: D-
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 87 percent based on 2 survey(s). Sierra Leone Multiple Indicator Cluster Survey 2017 card or history results of 85 percent modified for recall bias to 88 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 75 percent. Sierra Leone Demographic and Health Survey 2019 card or history results of 73 percent modified for recall bias to 86 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 61 percent and 3rd dose card only coverage of 56 percent. Estimate challenged by: D-
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 89 percent based on 1 survey(s). Sierra Leone Multiple Indicator Cluster Survey 2017 card or history results of 81 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 67 percent and 3rd dose card only coverage of 64 percent. Estimate challenged by: D-
- 2014: Estimate informed by reported data. Reported declines in reported coverage due in part to Ebola virus disease outbreak during 2014. Inconsistent and unexplained adjustment made to official coverage from administrative data. Estimate challenged by: D-
- 2013: Estimate informed by reported data. Official estimate based on 2013 survey results. Estimate challenged by: D-
- 2012: Estimate informed by interpolation between reported data supported by survey. Survey evidence of 88 percent based on 2 survey(s). Sierra Leone Demographic and Health Survey 2013 card or history results of 78 percent modified for recall bias to 85 percent based

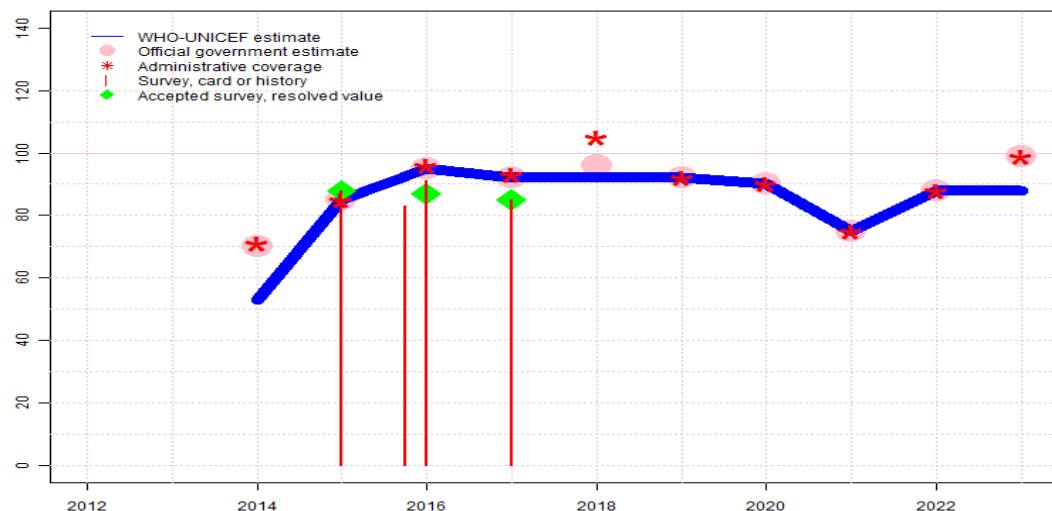
# Sierra Leone - Hib3

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on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 72 percent and 3rd dose card only coverage of 65 percent. Report on Sierra Leone Routine Immunization Coverage Survey - 2013 card or history results of 92 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 91 percent and 3rd dose card only coverage of 84 percent. Reported data excluded. Nationally reported data ignore most recent survey in the downward adjustment of administrative coverage levels. Official estimates were based on targets from cMYP. GoC=R+ S+

# Sierra Leone - RotaC

SLE - RotaC



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	53	85	95	92	92	92	90	75	88	88
Estimate GoC	NA	NA	•	•	•	•	•	•	•	•	•	•
Official	NA	NA	70	85	95	92	96	92	90	75	88	99
Administrative	NA	NA	71	85	96	93	105	92	90	75	88	99
Survey	NA	NA	NA	88	*	85	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: 2022 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.

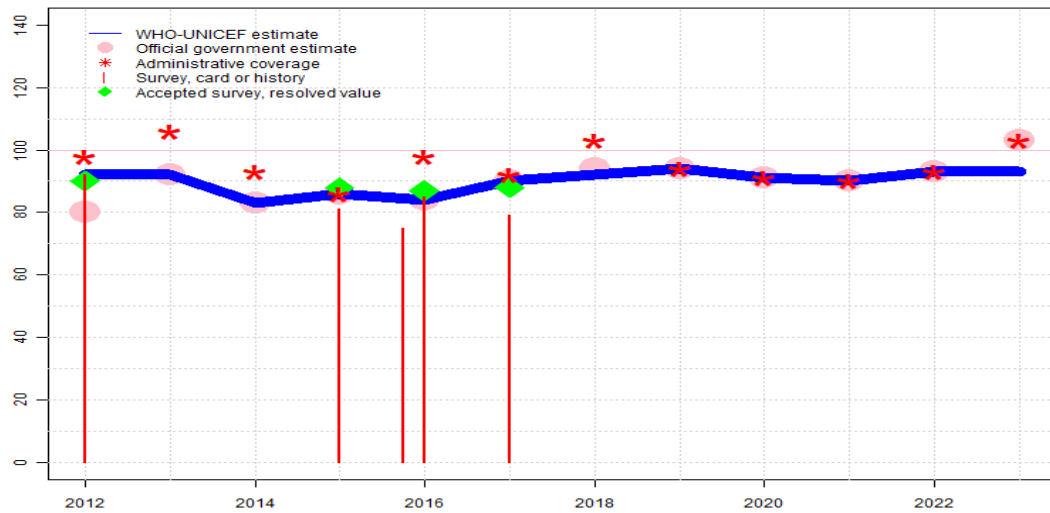
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2023: Estimate based on extrapolation from data reported by national government. Reported data excluded. . Estimated coverage may underestimate actual coverage for some antigens where increases in reported coverage are unexplained. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF are aware of a 2024 Vaccination Coverage Survey and await final results. Estimate challenged by: D-
- 2022: Estimate informed by reported data. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Programme reports a subnational level vaccine stockout of unspecified duration. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Programme reports a subnational level vaccine stockout of unspecified duration. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported coverage inconsistent with unexplained decrease of 15 percent in the reported target population accompanied by a decrease in the reported number of administered doses. GoC=Assigned by working group. Consistency in GoC between vaccine doses.
- 2017: Estimate informed by reported data supported by survey. Survey evidence of 85 percent based on 1 survey(s). Estimate challenged by: D-
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 87 percent based on 2 survey(s). Estimate challenged by: D-
- 2015: Following introduction, programme reports delivery to national target population. Estimate challenged by: D-
- 2014: Estimate of 53 percent assigned by working group. Rotavirus vaccine introduced during 2014. Programme achieved 71 percent coverage among 75 percent of the target population. Estimate is based on national target population. Reported declines in reported coverage due in part to Ebola virus disease outbreak during 2014. Inconsistent and unexplained adjustment made to official coverage from administrative data. Estimate challenged by: R-S-

# Sierra Leone - PcV3

SLE - PcV3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	92	92	83	86	84	90	92	94	91	90	93	93
Estimate GoC	●●●	●	●	●	●	●	●	●	●	●	●	●
Official	80	92	83	86	84	90	94	94	91	90	93	103
Administrative	98	106	93	86	98	92	103	94	91	90	93	103
Survey	92	NA	NA	81	*	79	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: 2022 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:

2023: Estimate based on extrapolation from data reported by national government. Reported data excluded because 103 percent greater than 100 percent. Estimated coverage may underestimate actual coverage for some antigens where increases in reported coverage are unexplained. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF are aware of a 2024 Vaccination Coverage Survey and await final results. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate challenged by: D-

2020: Estimate informed by reported data. Estimate challenged by: D-

2019: Estimate informed by reported data. Estimate challenged by: D-

2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported coverage inconsistent with unexplained decrease of 15 percent in the reported target population accompanied by a decrease in the reported number of administered doses. GoC=Assigned by working group. Consistency of available information across antigens.

2017: Estimate informed by reported data supported by survey. Survey evidence of 88 percent based on 1 survey(s). Sierra Leone Demographic and Health Survey 2019 card or history results of 79 percent modified for recall bias to 88 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 68 percent. Estimate challenged by: D-

2016: Estimate informed by reported data supported by survey. Survey evidence of 87 percent based on 2 survey(s). Sierra Leone Multiple Indicator Cluster Survey 2017 card or history results of 85 percent modified for recall bias to 88 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 75 percent. Sierra Leone Demographic and Health Survey 2019 card or history results of 75 percent modified for recall bias to 86 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 61 percent and 3rd dose card only coverage of 56 percent. Estimate challenged by: D-

2015: Estimate informed by reported data supported by survey. Survey evidence of 88 percent based on 1 survey(s). Sierra Leone Multiple Indicator Cluster Survey 2017 card or history results of 81 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 67 percent and 3rd dose card only coverage of 64 percent. Estimate challenged by: D-

2014: Estimate informed by reported data. Reported declines in reported coverage due in part to Ebola virus disease outbreak during 2014. Inconsistent and unexplained adjustment made to official coverage from administrative data. Estimate challenged by: D-

2013: Estimate informed by reported data. Official estimate based on 2013 survey results. Estimate challenged by: D-

2012: Estimate based on extrapolation from data reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). Report on Sierra Leone Routine Immunization Coverage Survey - 2013 card or history results of 92 percent mod-

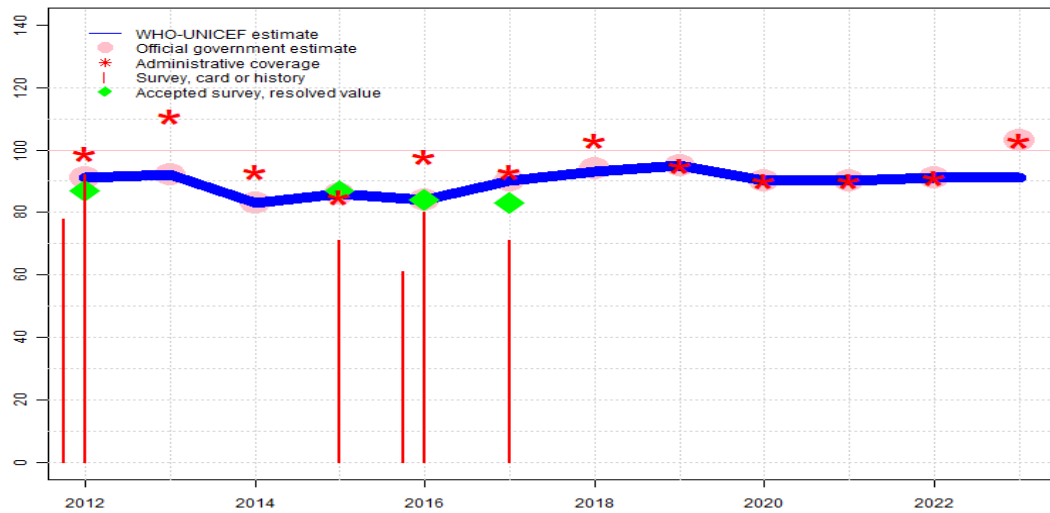
# Sierra Leone - PcV3

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ified for recall bias to 90 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 89 percent and 3rd dose card only coverage of 83 percent. Reported data excluded. Nationally reported data ignore most recent survey in the downward adjustment of administrative coverage levels. Official estimates were based on targets from cMYP. GoC=R+ S+ D+

# Sierra Leone - Pol3

SLE - Pol3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	91	92	83	86	84	90	93	95	90	90	91	91
Estimate GoC	●●●	●	●	●	●	●	●	●	●	●	●	●
Official	91	92	83	86	84	90	94	95	90	90	91	103
Administrative	99	111	93	85	98	93	103	95	90	90	91	103
Survey	*	NA	NA	71	*	71	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: 2022 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:

2023: Estimate based on extrapolation from data reported by national government. Reported data excluded because 103 percent greater than 100 percent. Reported data excluded due to sudden change in coverage from 91 level to 103 percent. Estimated coverage may underestimate actual coverage for some antigens where increases in reported coverage are unexplained. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF are aware of a 2024 Vaccination Coverage Survey and await final results. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate challenged by: D-

2020: Estimate informed by reported data. Estimate challenged by: D-

2019: Estimate informed by reported data. Estimate challenged by: D-S-

2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported coverage inconsistent with unexplained decrease of 15 percent in the reported target population accompanied by a decrease in the reported number of administered doses. GoC=Assigned by working group. Consistency of available information across antigens.

2017: Estimate informed by reported data supported by survey. Survey evidence of 83 percent based on 1 survey(s). Sierra Leone Demographic and Health Survey 2019 card or history results of 71 percent modified for recall bias to 83 percent based on 1st dose card or history coverage of 90 percent, 1st dose card only coverage of 74 percent and 3rd dose card only coverage of 68 percent. Estimate challenged by: D-

2016: Estimate informed by reported data supported by survey. Survey evidence of 84 percent based on 2 survey(s). Sierra Leone Multiple Indicator Cluster Survey 2017 card or history results of 80 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 79 percent and 3rd dose card only coverage of 74 percent. Sierra Leone Demographic and Health Survey 2019 card or history results of 61 percent modified for recall bias to 79 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 62 percent and 3rd dose card only coverage of 57 percent. Estimate challenged by: D-

2015: Estimate informed by reported data supported by survey. Survey evidence of 87 percent based on 1 survey(s). Sierra Leone Multiple Indicator Cluster Survey 2017 card or history results of 71 percent modified for recall bias to 87 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 67 percent and 3rd dose card only coverage of 63 percent. Estimate challenged by: D-

2014: Estimate informed by reported data. Reported declines in reported coverage due in part to Ebola virus disease outbreak during 2014. Inconsistent and unexplained adjustment made to official coverage from administrative data. Estimate challenged by: D-

2013: Estimate informed by reported data. Official estimate based on 2013 survey results. Estimate challenged by: D-

2012: Estimate informed by interpolation between reported data supported by survey. Survey evidence of 87 percent based on 2 survey(s). Sierra Leone Demographic and Health Sur-

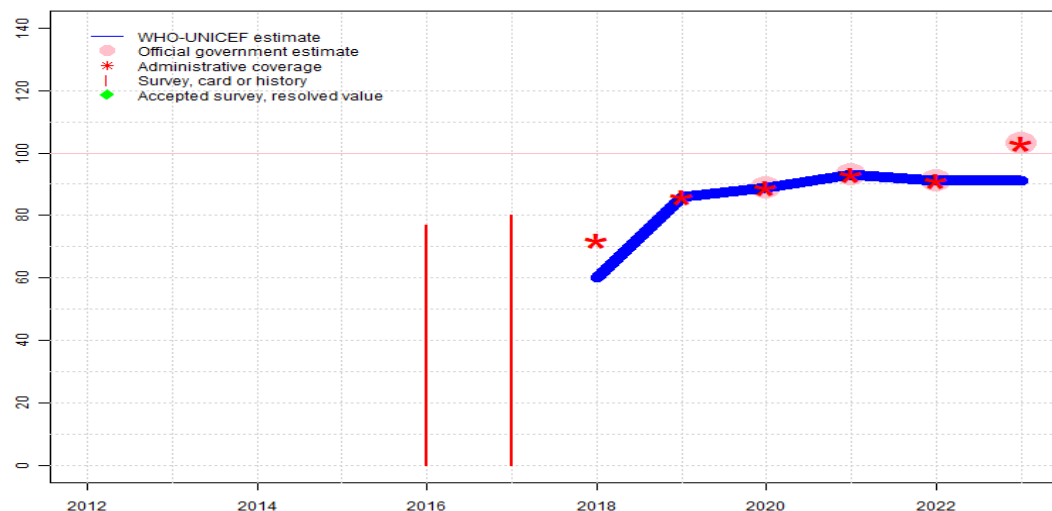
# Sierra Leone - Pol3

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vey 2013 card or history results of 78 percent modified for recall bias to 84 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 65 percent. Report on Sierra Leone Routine Immunization Coverage Survey - 2013 card or history results of 92 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 89 percent and 3rd dose card only coverage of 83 percent. Reported data excluded. Nationally reported data ignore most recent survey in the downward adjustment of administrative coverage levels. Official estimates were based on targets from cMYP. GoC=R+ S+ D+

# Sierra Leone - IPV1

SLE - IPV1



## 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).

2023: Estimate informed by extrapolation from reported data. Reported data excluded because 103 percent greater than 100 percent. Reported data excluded due to sudden change in coverage from 91 level to 103 percent. Estimated coverage may underestimate actual coverage for some antigens where increases in reported coverage are unexplained. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF are aware of a 2024 Vaccination Coverage Survey and await final results. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate challenged by: D-

2020: Estimate informed by reported data. Estimate challenged by: D-

2019: Estimate informed by reported administrative data. Estimate challenged by: D-

2018: Inactivated polio vaccine introduced in February 2018. Estimate based on estimated DTP3 adjusted for the difference between reported administered doses for DTP3 and IPV1. Programme reports vaccine stockout of less than two months duration. Reported data excluded. Reported coverage inconsistent with unexplained decrease of 15 percent in the reported target population accompanied by a decrease in the reported number of administered doses. It is unclear how DHS collected IPV vaccine data for children born three years before the survey given the reported timing of vaccine introduction. Estimate challenged by: R-

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	NA	NA	NA	60	86	89	93	91	91
Estimate GoC	NA	NA	NA	NA	NA	NA	•	•	•	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	89	93	91	103
Administrative	NA	NA	NA	NA	NA	NA	72	86	89	93	91	103
Survey	NA	NA	NA	NA	77	80	NA	NA	NA	NA	NA	NA

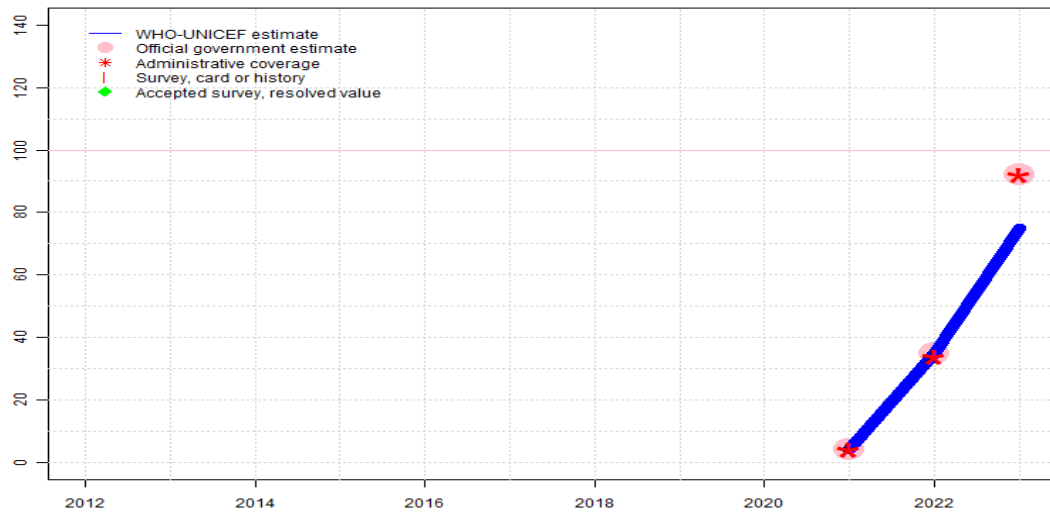
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2022 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.

# Sierra Leone - IPV2

SLE - IPV2



## Description:

Estimates for a second dose of inactivated polio vaccine (IPV) begin in 2021 following a Strategic Advisory Group of Experts on Immunization (SAGE) recommendation in October 2020 that a second IPV dose increases protection against all polioviruses, including protection against paralysis caused by vaccine derived polio virus (type 2) (VDPV2). The addition of IPV2 is the next step towards complete OPV withdrawal. IPV2 coverage estimates produced for OPV using countries.

2023: Estimated coverage based on reported coverage for MCV1 and IPV2 applied to the estimated MCV1 coverage. Estimated coverage may underestimate actual coverage for some antigens where increases in reported coverage are unexplained. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF are aware of a 2024 Vaccination Coverage Survey and await final results. Estimate challenged by: D-R-

2022: Estimate informed by reported data. GoC=R+ D+

2021: Estimate informed by reported data. Second dose of inactivated polio vaccine introduced during 2021. GoC=R+ D+

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	4	35	75
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	••	••	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	4	35	92
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	4	34	92
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

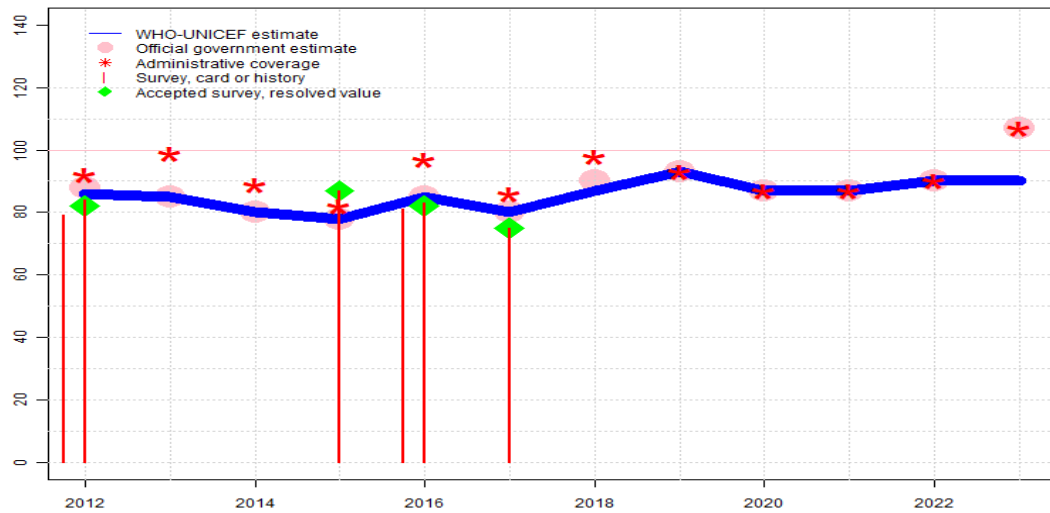
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2022 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.

# Sierra Leone - MCV1

SLE - MCV1



## Description:

2023: Estimate based on extrapolation from data reported by national government. Reported data excluded because 107 percent greater than 100 percent. Reported data excluded due to sudden change in coverage from 90 level to 107 percent. Estimated coverage may underestimate actual coverage for some antigens where increases in reported coverage are unexplained. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF are aware of a 2024 Vaccination Coverage Survey and await final results. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Although not reflected in reported coverage, the number of doses administered increased five percent from 2020 to 2021. Estimate challenged by: D-

2020: Estimate informed by reported data. Estimate challenged by: D-

2019: Estimate informed by reported data. Estimate challenged by: D-S-

2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported coverage inconsistent with unexplained decrease of 15 percent in the reported target population accompanied by a decrease in the reported number of administered doses. GoC=Assigned by working group. Consistency of available information across antigens.

2017: Estimate informed by reported data supported by survey. Survey evidence of 75 percent based on 1 survey(s). Estimate challenged by: D-

2016: Estimate informed by reported data supported by survey. Survey evidence of 82 percent based on 2 survey(s). Estimate challenged by: D-

2015: Estimate informed by reported data supported by survey. Survey evidence of 87 percent based on 1 survey(s). Estimate challenged by: D-

2014: Estimate informed by reported data. Reported declines in reported coverage due in part to Ebola virus disease outbreak during 2014. Inconsistent and unexplained adjustment made to official coverage from administrative data. Estimate challenged by: D-

2013: Estimate informed by reported data. Official estimate based on 2013 survey results. Estimate challenged by: D-

2012: Estimate informed by interpolation between reported data supported by survey. Survey evidence of 82 percent based on 2 survey(s). Reported data excluded. Nationally reported data ignore most recent survey in the downward adjustment of administrative coverage levels. Official estimates were based on targets from cMYP. GoC=R+ S+ D+

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	86	85	80	78	85	80	87	93	87	87	90	90
Estimate GoC	●●●	●	●	●	●	●	●	●	●	●	●	●
Official	88	85	80	78	85	80	90	93	87	87	90	107
Administrative	92	99	89	82	97	86	98	93	87	87	90	107
Survey	*	NA	NA	87	*	75	NA	NA	NA	NA	NA	NA

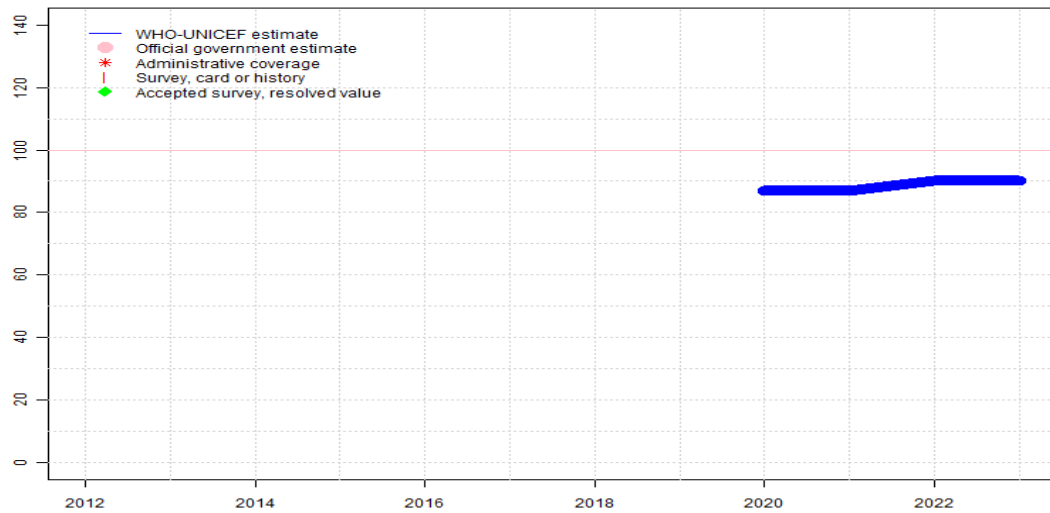
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2022 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.

# Sierra Leone - RCV1

SLE - RCV1



## 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.

2023: Estimate based on estimated MCV1. Estimated coverage may underestimate actual coverage for some antigens where increases in reported coverage are unexplained. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF are aware of a 2024 Vaccination Coverage Survey and await final results. Estimate challenged by: D-

2022: Estimate based on estimated MCV1. Estimate challenged by: D-

2021: Estimate based on estimated MCV1. Estimate challenged by: D-

2020: Estimate based on estimated MCV1. MR vaccine introduced in April 2019. Report started in 2020. Estimate challenged by: D-

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	87	87	90	90
Estimate GoC	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

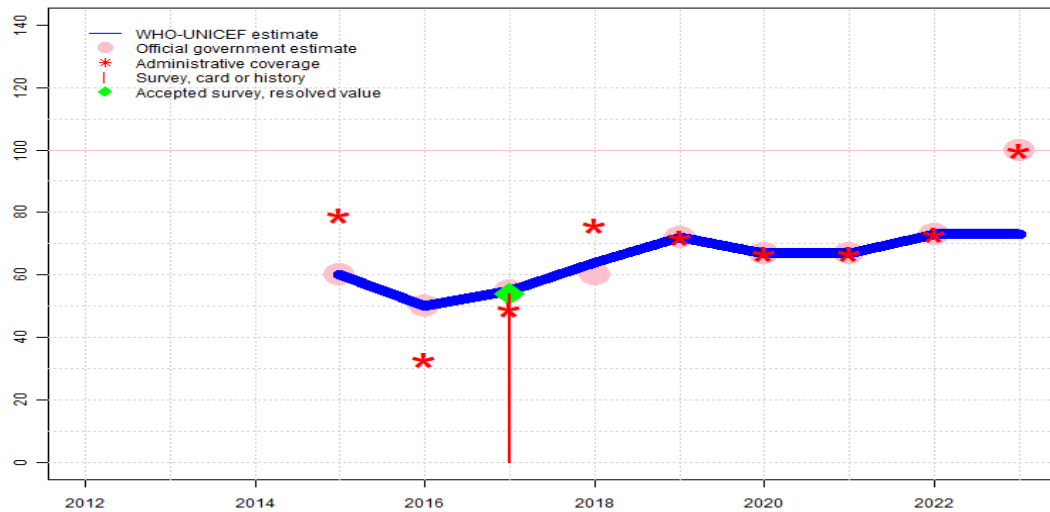
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2022 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.

# Sierra Leone - MCV2

SLE - MCV2



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	60	50	55	64	72	67	67	73	73
Estimate GoC	NA	NA	NA	•	•	•••	•	•	•	•	•	•
Official	NA	NA	NA	60	50	55	60	72	67	67	73	100
Administrative	NA	NA	NA	79	33	49	76	72	67	67	73	100
Survey	NA	NA	NA	NA	NA	54	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: 2022 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.

2023: Estimate based on extrapolation from data reported by national government. Reported data excluded due to sudden change in coverage from 73 level to 100 percent. Estimated coverage may underestimate actual coverage for some antigens where increases in reported coverage are unexplained. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF are aware of a 2024 Vaccination Coverage Survey and await final results. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate challenged by: D-

2020: Estimate informed by reported data. Estimate challenged by: D-

2019: Estimate informed by reported data. Estimate challenged by: D-S-

2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported coverage inconsistent with unexplained decrease of 15 percent in the reported target population accompanied by a decrease in the reported number of administered doses. Estimate challenged by: D-

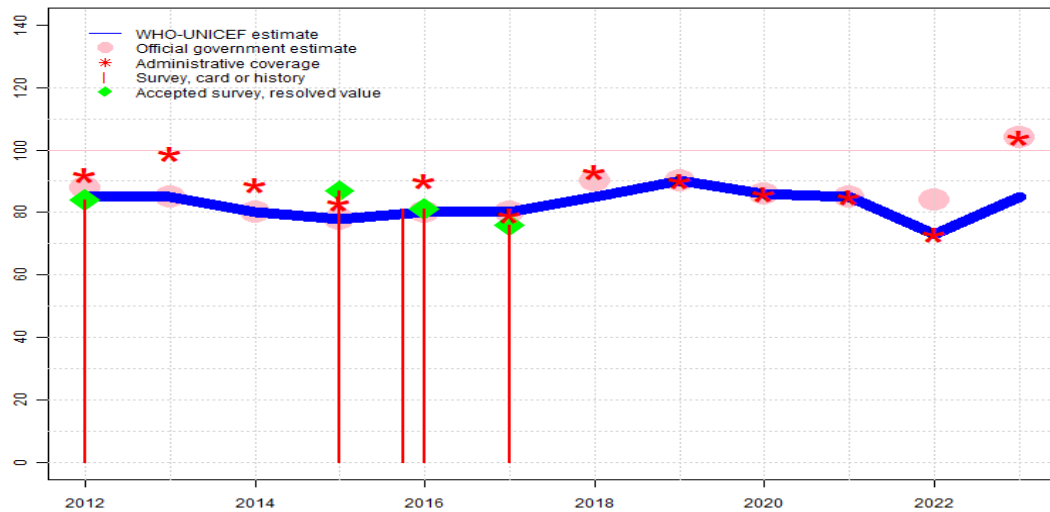
2017: Estimate informed by reported data supported by survey. Survey evidence of 54 percent based on 1 survey(s). GoC=R+ S+ D+

2016: Estimate informed by reported data. Estimate challenged by: D-

2015: Estimate informed by reported data. Measles second dose introduced during November 2015. Estimate challenged by: D-

# Sierra Leone - YFV

SLE - YFV



## Description:

- 2023: Estimates are based on 2021 coverage levels reflecting recovery from vaccine stockout. Reported data excluded because 104 percent greater than 100 percent. Reported data excluded due to sudden change in coverage from 73 level to 104 percent. Estimated coverage may underestimate actual coverage for some antigens where increases in reported coverage are unexplained. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF are aware of a 2024 Vaccination Coverage Survey and await final results. Estimate challenged by: D-R-
- 2022: Estimate informed by reported administrative data. . Programme reports two months vaccine stockout at national and subnational levels. Explanation unavailable for adjustment from administrative coverage to derive official coverage. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-S-
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported coverage inconsistent with unexplained decrease of 15 percent in the reported target population accompanied by a decrease in the reported number of administered doses. Programme reports vaccine stockout of less than one month duration. GoC=Assigned by working group. Consistency of available information across antigens.
- 2017: Estimate informed by reported data supported by survey. Survey evidence of 76 percent based on 1 survey(s). Programme reports less than one month stockout. GoC=Assigned by working group. Consistency in GoC between vaccine doses.
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 81 percent based on 2 survey(s). Programme reports two months national stockout. Estimate challenged by: D-
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 87 percent based on 1 survey(s). Estimate challenged by: D-
- 2014: Estimate informed by reported data. Reported declines in reported coverage due in part to Ebola virus disease outbreak during 2014. Inconsistent and unexplained adjustment made to official coverage from administrative data. GoC=R+ S+ D+
- 2013: Estimate informed by reported data. Official estimate based on 2013 survey results. Estimate challenged by: D-
- 2012: Estimate informed by interpolation between reported data supported by survey. Survey evidence of 84 percent based on 1 survey(s). Reported data excluded. Nationally reported data ignore most recent survey in the downward adjustment of administrative coverage levels. Official estimates were based on targets from cMYP. GoC=R+ S+ D+

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	85	85	80	78	80	80	85	90	86	85	73	85
Estimate GoC	●●●	●	●●●	●	●	●	●	●	●	●	●	●
Official	88	85	80	78	80	80	90	90	86	85	84	104
Administrative	92	99	89	83	90	79	93	90	86	85	73	104
Survey	84	NA	NA	87	*	76	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: 2022 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.

# Sierra Leone - survey details

NOTE: A survey to measure vaccination coverage for infants (i.e., children aged 0-11 months) will sample children aged 12-23 months at the time of survey to capture the youngest annual cohort of children who should have completed the vaccination schedule. Because WUENIC are for infant vaccinations, survey data in this report are presented to reflect the birth year of the youngest survey cohort. For example, results for a survey conducted during December 2020 among children aged 12-23 months at the time of the survey reflect the immunization experience of children born in 2019. Depending on the timing of survey field work, results may reflect the immunization experience of children born and vaccinated 1 or 2 years prior to the survey field work.

## 2017 Sierra Leone Demographic and Health Survey 2019

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	95.7	12-23 m	1838	75
BCG	Card	74.4	12-23 m	1382	75
BCG	Card or History	96.4	12-23 m	1838	75
BCG	History	22	12-23 m	456	75
DTP1	C or H <12 months	94.1	12-23 m	1838	75
DTP1	Card	73.6	12-23 m	1382	75
DTP1	Card or History	94.6	12-23 m	1838	75
DTP1	History	21.1	12-23 m	456	75
DTP3	C or H <12 months	76.2	12-23 m	1838	75
DTP3	Card	67.4	12-23 m	1382	75
DTP3	Card or History	78.1	12-23 m	1838	75
DTP3	History	10.7	12-23 m	456	75
HepB1	C or H <12 months	94.1	12-23 m	1838	75
HepB1	Card	73.6	12-23 m	1382	75
HepB1	Card or History	94.6	12-23 m	1838	75
HepB1	History	21.1	12-23 m	456	75
HepB3	C or H <12 months	76.2	12-23 m	1838	75
HepB3	Card	67.4	12-23 m	1382	75
HepB3	Card or History	78.1	12-23 m	1838	75
HepB3	History	10.7	12-23 m	456	75
Hib1	C or H <12 months	94.1	12-23 m	1838	75
Hib1	Card	73.6	12-23 m	1382	75
Hib1	Card or History	94.6	12-23 m	1838	75
Hib1	History	21.1	12-23 m	456	75
Hib3	C or H <12 months	76.2	12-23 m	1838	75
Hib3	Card	67.4	12-23 m	1382	75
Hib3	Card or History	78.1	12-23 m	1838	75
Hib3	History	10.7	12-23 m	456	75
IPV1	C or H <12 months	77.8	12-23 m	1838	75
IPV1	Card	61.5	12-23 m	1382	75
IPV1	Card or History	79.7	12-23 m	1838	75
IPV1	History	18.2	12-23 m	456	75
MCV1	C or H <12 months	65.6	12-23 m	1838	75
MCV1	Card	55.6	12-23 m	1382	75
MCV1	Card or History	74.7	12-23 m	1838	75
MCV1	History	19.1	12-23 m	456	75
MCV2	C or H <12 months	50.1	24-35 m	1666	-
MCV2	Card	33.6	24-35 m	1036	-
MCV2	Card or History	54.4	24-35 m	1666	-
MCV2	History	20.8	24-35 m	630	-
PcV1	C or H <12 months	93.5	12-23 m	1838	75
PcV1	Card	73.4	12-23 m	1382	75
PcV1	Card or History	94.1	12-23 m	1838	75
PcV1	History	20.7	12-23 m	456	75
PcV3	C or H <12 months	77.5	12-23 m	1838	75
PcV3	Card	67.5	12-23 m	1382	75
PcV3	Card or History	79.4	12-23 m	1838	75
PcV3	History	11.9	12-23 m	456	75
Pol1	C or H <12 months	89.1	12-23 m	1838	75
Pol1	Card	73.7	12-23 m	1382	75
Pol1	Card or History	89.6	12-23 m	1838	75
Pol1	History	15.9	12-23 m	456	75
Pol3	C or H <12 months	69.5	12-23 m	1838	75
Pol3	Card	68.3	12-23 m	1382	75
Pol3	Card or History	70.9	12-23 m	1838	75
Pol3	History	2.7	12-23 m	456	75
RotaC	C or H <12 months	84.1	12-23 m	1838	75
RotaC	Card	70.1	12-23 m	1382	75
RotaC	Card or History	85.2	12-23 m	1838	75
RotaC	History	15.1	12-23 m	456	75
YFV	C or H <12 months	69.8	12-23 m	1838	75
YFV	Card	58.2	12-23 m	1382	75
YFV	Card or History	76	12-23 m	1838	75
YFV	History	17.8	12-23 m	456	75

# Sierra Leone - survey details

## 2016 Sierra Leone Demographic and Health Survey 2019

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93.4	24-35 m	1666	-
BCG	Card	60.9	24-35 m	1036	-
BCG	Card or History	94.9	24-35 m	1666	-
BCG	History	34	24-35 m	630	-
DTP1	C or H <12 months	91.6	24-35 m	1666	-
DTP1	Card	61.3	24-35 m	1036	-
DTP1	Card or History	93.6	24-35 m	1666	-
DTP1	History	32.4	24-35 m	630	-
DTP3	C or H <12 months	70.2	24-35 m	1666	-
DTP3	Card	56.3	24-35 m	1036	-
DTP3	Card or History	73.4	24-35 m	1666	-
DTP3	History	17.1	24-35 m	630	-
HepB1	C or H <12 months	91.6	24-35 m	1666	-
HepB1	Card	61.3	24-35 m	1036	-
HepB1	Card or History	93.6	24-35 m	1666	-
HepB1	History	32.4	24-35 m	630	-
HepB3	C or H <12 months	70.2	24-35 m	1666	-
HepB3	Card	56.3	24-35 m	1036	-
HepB3	Card or History	73.4	24-35 m	1666	-
HepB3	History	17.1	24-35 m	630	-
Hib1	C or H <12 months	91.6	24-35 m	1666	-
Hib1	Card	61.3	24-35 m	1036	-
Hib1	Card or History	93.6	24-35 m	1666	-
Hib1	History	32.4	24-35 m	630	-
Hib3	C or H <12 months	70.2	24-35 m	1666	-
Hib3	Card	56.3	24-35 m	1036	-
Hib3	Card or History	73.4	24-35 m	1666	-
Hib3	History	17.1	24-35 m	630	-
IPV1	C or H <12 months	72.6	24-35 m	1666	-
IPV1	Card	46.8	24-35 m	1036	-
IPV1	Card or History	76.6	24-35 m	1666	-
IPV1	History	29.9	24-35 m	630	-
MCV1	C or H <12 months	64.9	24-35 m	1666	-
MCV1	Card	49.8	24-35 m	1036	-
MCV1	Card or History	82.9	24-35 m	1666	-

MCV1	History	33	24-35 m	630	-
PcV1	C or H <12 months	92.1	24-35 m	1666	-
PcV1	Card	61.1	24-35 m	1036	-
PcV1	Card or History	94.1	24-35 m	1666	-
PcV1	History	32.9	24-35 m	630	-
PcV3	C or H <12 months	71.7	24-35 m	1666	-
PcV3	Card	56.1	24-35 m	1036	-
PcV3	Card or History	74.9	24-35 m	1666	-
PcV3	History	18.8	24-35 m	630	-
Pol1	C or H <12 months	84.2	24-35 m	1666	-
Pol1	Card	61.5	24-35 m	1036	-
Pol1	Card or History	86.1	24-35 m	1666	-
Pol1	History	24.6	24-35 m	630	-
Pol3	C or H <12 months	58.3	24-35 m	1666	-
Pol3	Card	57.3	24-35 m	1036	-
Pol3	Card or History	60.9	24-35 m	1666	-
Pol3	History	3.6	24-35 m	630	-
RotaC	C or H <12 months	80.5	24-35 m	1666	-
RotaC	Card	57.9	24-35 m	1036	-
RotaC	Card or History	83	24-35 m	1666	-
RotaC	History	25	24-35 m	630	-
YFV	C or H <12 months	66.4	24-35 m	1666	-
YFV	Card	51.6	24-35 m	1036	-
YFV	Card or History	80.9	24-35 m	1666	-
YFV	History	29.3	24-35 m	630	-

## 2016 Sierra Leone Multiple Indicator Cluster Survey 2017

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	96.4	12-23 m	2256	81
BCG	Card	80.6	12-23 m	2256	81
BCG	Card or History	96.5	12-23 m	2256	81
BCG	History	16	12-23 m	2256	81
DTP1	C or H <12 months	93.7	12-23 m	2256	81
DTP1	Card	79.6	12-23 m	2256	81
DTP1	Card or History	94.3	12-23 m	2256	81
DTP1	History	14.7	12-23 m	2256	81
DTP3	C or H <12 months	82.5	12-23 m	2256	81
DTP3	Card	74.6	12-23 m	2256	81

# Sierra Leone - survey details

DTP3	Card or History	84.9	12-23 m	2256	81
DTP3	History	10.3	12-23 m	2256	81
HepB1	C or H <12 months	93.7	12-23 m	2256	81
HepB1	Card	79.6	12-23 m	2256	81
HepB1	Card or History	94.3	12-23 m	2256	81
HepB1	History	14.7	12-23 m	2256	81
HepB3	C or H <12 months	82.5	12-23 m	2256	81
HepB3	Card	74.6	12-23 m	2256	81
HepB3	Card or History	84.9	12-23 m	2256	81
HepB3	History	10.3	12-23 m	2256	81
Hib1	C or H <12 months	93.7	12-23 m	2256	81
Hib1	Card	79.6	12-23 m	2256	81
Hib1	Card or History	94.3	12-23 m	2256	81
Hib1	History	14.7	12-23 m	2256	81
Hib3	C or H <12 months	82.5	12-23 m	2256	81
Hib3	Card	74.6	12-23 m	2256	81
Hib3	Card or History	84.9	12-23 m	2256	81
Hib3	History	10.3	12-23 m	2256	81
MCV1	C or H <12 months	74.5	12-23 m	2256	81
MCV1	Card	66.1	12-23 m	2256	81
MCV1	Card or History	80.9	12-23 m	2256	81
MCV1	History	14.8	12-23 m	2256	81
PcV1	C or H <12 months	93.1	12-23 m	2256	81
PcV1	Card	79.9	12-23 m	2256	81
PcV1	Card or History	93.7	12-23 m	2256	81
PcV1	History	13.8	12-23 m	2256	81
PcV3	C or H <12 months	82.4	12-23 m	2256	81
PcV3	Card	74.7	12-23 m	2256	81
PcV3	Card or History	84.7	12-23 m	2256	81
PcV3	History	10	12-23 m	2256	81
Pol1	C or H <12 months	93.5	12-23 m	2256	81
Pol1	Card	79.3	12-23 m	2256	81
Pol1	Card or History	94	12-23 m	2256	81
Pol1	History	14.7	12-23 m	2256	81
Pol3	C or H <12 months	77.8	12-23 m	2256	81
Pol3	Card	74.4	12-23 m	2256	81
Pol3	Card or History	79.8	12-23 m	2256	81
Pol3	History	5.4	12-23 m	2256	81
RotaC	C or H <12 months	89.9	12-23 m	2256	81
RotaC	Card	77.7	12-23 m	2256	81

RotaC	Card or History	90.9	12-23 m	2256	81
RotaC	History	13.1	12-23 m	2256	81
YFV	C or H <12 months	74.2	12-23 m	2256	81
YFV	Card	66.2	12-23 m	2256	81
YFV	Card or History	80.7	12-23 m	2256	81
YFV	History	14.5	12-23 m	2256	81

## 2015 Sierra Leone Multiple Indicator Cluster Survey 2017

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93.9	24-35 m	2388	-
BCG	Card	67.6	24-35 m	2388	-
BCG	Card or History	94.4	24-35 m	2388	-
BCG	History	26.8	24-35 m	2388	-
DTP1	C or H <12 months	91.7	24-35 m	2388	-
DTP1	Card	67.4	24-35 m	2388	-
DTP1	Card or History	92.8	24-35 m	2388	-
DTP1	History	25.4	24-35 m	2388	-
DTP3	C or H <12 months	77.8	24-35 m	2388	-
DTP3	Card	63.6	24-35 m	2388	-
DTP3	Card or History	81.3	24-35 m	2388	-
DTP3	History	17.7	24-35 m	2388	-
HepB1	C or H <12 months	91.7	24-35 m	2388	-
HepB1	Card	67.4	24-35 m	2388	-
HepB1	Card or History	92.8	24-35 m	2388	-
HepB1	History	25.4	24-35 m	2388	-
HepB3	C or H <12 months	77.8	24-35 m	2388	-
HepB3	Card	63.6	24-35 m	2388	-
HepB3	Card or History	81.3	24-35 m	2388	-
HepB3	History	17.7	24-35 m	2388	-
Hib1	C or H <12 months	91.7	24-35 m	2388	-
Hib1	Card	67.4	24-35 m	2388	-
Hib1	Card or History	92.8	24-35 m	2388	-
Hib1	History	25.4	24-35 m	2388	-
Hib3	C or H <12 months	77.8	24-35 m	2388	-
Hib3	Card	63.6	24-35 m	2388	-
Hib3	Card or History	81.3	24-35 m	2388	-
Hib3	History	17.7	24-35 m	2388	-
MCV1	C or H <12 months	73.6	24-35 m	2388	-

# Sierra Leone - survey details

MCV1	Card	61.1	24-35 m	2388	-	HepB3	Card	83.6	12-23 m	-	93
MCV1	Card or History	87.4	24-35 m	2388	-	HepB3	Card or History	92.4	12-23 m	4282	93
MCV1	History	26.4	24-35 m	2388	-	Hib1	Card	90.6	12-23 m	-	93
PcV1	C or H <12 months	90.9	24-35 m	2388	-	Hib1	Card or History	98	12-23 m	4282	93
PcV1	Card	67.4	24-35 m	2388	-	Hib3	Card	83.6	12-23 m	-	93
PcV1	Card or History	92	24-35 m	2388	-	Hib3	Card or History	92.4	12-23 m	4282	93
PcV1	History	24.6	24-35 m	2388	-	MCV1	Card	74.5	12-23 m	-	93
PcV3	C or H <12 months	77.1	24-35 m	2388	-	MCV1	Card or History	84.4	12-23 m	4282	93
PcV3	Card	63.5	24-35 m	2388	-	PcV1	Card	88.9	12-23 m	-	93
PcV3	Card or History	81	24-35 m	2388	-	PcV1	Card or History	97.2	12-23 m	4282	93
PcV3	History	17.5	24-35 m	2388	-	PcV3	Card	83.2	12-23 m	-	93
Pol1	C or H <12 months	91.7	24-35 m	2388	-	PcV3	Card or History	92	12-23 m	4282	93
Pol1	Card	67.2	24-35 m	2388	-	Pol1	Card	89.3	12-23 m	-	93
Pol1	Card or History	92.7	24-35 m	2388	-	Pol1	Card or History	97.4	12-23 m	4282	93
Pol1	History	25.5	24-35 m	2388	-	Pol3	Card	83.4	12-23 m	-	93
Pol3	C or H <12 months	67.9	24-35 m	2388	-	Pol3	Card or History	92	12-23 m	4282	93
Pol3	Card	63.4	24-35 m	2388	-	YFV	Card	74.3	12-23 m	-	93
Pol3	Card or History	70.9	24-35 m	2388	-	YFV	Card or History	84.1	12-23 m	4282	93
Pol3	History	7.5	24-35 m	2388	-						
RotaC	C or H <12 months	85.2	24-35 m	2388	-						
RotaC	Card	65.6	24-35 m	2388	-						
RotaC	Card or History	88.2	24-35 m	2388	-						
RotaC	History	22.7	24-35 m	2388	-						
YFV	C or H <12 months	72.4	24-35 m	2388	-						
YFV	Card	61.1	24-35 m	2388	-						
YFV	Card or History	86.7	24-35 m	2388	-						
YFV	History	25.7	24-35 m	2388	-						

## 2012 Sierra Leone Demographic and Health Survey 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94.7	12-23 m	2169	73
BCG	Card	72.9	12-23 m	1590	73
BCG	Card or History	95.6	12-23 m	2169	73
BCG	History	22.7	12-23 m	578	73
DTP1	C or H <12 months	93	12-23 m	2169	73
DTP1	Card	72.5	12-23 m	1590	73
DTP1	Card or History	93.5	12-23 m	2169	73
DTP1	History	21	12-23 m	578	73
DTP3	C or H <12 months	74.6	12-23 m	2169	73
DTP3	Card	65	12-23 m	1590	73
DTP3	Card or History	77.9	12-23 m	2169	73
DTP3	History	12.9	12-23 m	578	73
HepB1	C or H <12 months	93	12-23 m	2169	73
HepB1	Card	72.5	12-23 m	1590	73
HepB1	Card or History	93.5	12-23 m	2169	73
HepB1	History	21	12-23 m	578	73
HepB3	C or H <12 months	74.6	12-23 m	2169	73

## 2012 Report on Sierra Leone Routine Immunization Coverage Survey - 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	99.4	12-23 m	4282	93
BCG	Card or Scar	91.9	12-23 m	-	93
DTP1	Card	90.6	12-23 m	-	93
DTP1	Card or History	98	12-23 m	4282	93
DTP3	Card	83.6	12-23 m	-	93
DTP3	Card or History	92.4	12-23 m	4282	93
HepB1	Card	90.6	12-23 m	-	93
HepB1	Card or History	98	12-23 m	4282	93

# Sierra Leone - survey details

HepB3	Card	65	12-23 m	1590	73
HepB3	Card or History	77.9	12-23 m	2169	73
HepB3	History	12.9	12-23 m	578	73
Hib1	C or H <12 months	93	12-23 m	2169	73
Hib1	Card	72.5	12-23 m	1590	73
Hib1	Card or History	93.5	12-23 m	2169	73
Hib1	History	21	12-23 m	578	73
Hib3	C or H <12 months	74.6	12-23 m	2169	73
Hib3	Card	65	12-23 m	1590	73
Hib3	Card or History	77.9	12-23 m	2169	73
Hib3	History	12.9	12-23 m	578	73
MCV1	C or H <12 months	67.5	12-23 m	2169	73
MCV1	Card	58.2	12-23 m	1590	73
MCV1	Card or History	78.6	12-23 m	2169	73
MCV1	History	20.4	12-23 m	578	73
Pol1	C or H <12 months	93.4	12-23 m	2169	73
Pol1	Card	72.6	12-23 m	1590	73
Pol1	Card or History	94	12-23 m	2169	73
Pol1	History	21.4	12-23 m	578	73
Pol3	C or H <12 months	74.5	12-23 m	2169	73
Pol3	Card	65	12-23 m	1590	73
Pol3	Card or History	77.8	12-23 m	2169	73
Pol3	History	12.8	12-23 m	578	73

## 2009 Sierra Leone Immunization Cluster Coverage Survey 2010

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	78.2	12-23 m	-	78
BCG	Card or History	96.5	12-23 m	4011	78
DTP1	Card	74.2	12-23 m	-	78
DTP1	Card or History	96.5	12-23 m	4011	78
DTP3	Card	64.8	12-23 m	-	78
DTP3	Card or History	86	12-23 m	4011	78
HepB1	Card	74.2	12-23 m	-	78
HepB1	Card or History	96.5	12-23 m	4011	78
HepB3	Card	64.8	12-23 m	-	78
HepB3	Card or History	86	12-23 m	4011	78
Hib1	Card	74.2	12-23 m	-	78
Hib1	Card or History	96.5	12-23 m	4011	78

Hib3	Card	64.8	12-23 m	-	78
Hib3	Card or History	86	12-23 m	4011	78
MCV1	Card	57.2	12-23 m	-	78
MCV1	Card or History	78	12-23 m	4011	78
Pol1	Card	73.4	12-23 m	-	78
Pol1	Card or History	96	12-23 m	4011	78
Pol3	Card	64.1	12-23 m	-	78
Pol3	Card or History	85.1	12-23 m	4011	78
YFV	Card	57.1	12-23 m	-	78
YFV	Card or History	77.8	12-23 m	4011	78

## 2009 Sierra Leone Multiple Indicator Cluster Survey 2010

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94.8	12-23 m	1502	68
BCG	Card	66.9	12-23 m	1502	68
BCG	Card or History	95.5	12-23 m	1502	68
BCG	History	28.6	12-23 m	1502	68
DTP1	C or H <12 months	88.8	12-23 m	1502	68
DTP1	Card	63.9	12-23 m	1502	68
DTP1	Card or History	91.9	12-23 m	1502	68
DTP1	History	28	12-23 m	1502	68
DTP3	C or H <12 months	66.6	12-23 m	1502	68
DTP3	Card	58.4	12-23 m	1502	68
DTP3	Card or History	71.8	12-23 m	1502	68
DTP3	History	13.4	12-23 m	1502	68
HepB1	C or H <12 months	83.2	12-23 m	1502	68
HepB1	Card	60.5	12-23 m	1502	68
HepB1	Card or History	86.1	12-23 m	1502	68
HepB1	History	25.5	12-23 m	1502	68
HepB3	C or H <12 months	63.7	12-23 m	1502	68
HepB3	Card	55.9	12-23 m	1502	68
HepB3	Card or History	69.1	12-23 m	1502	68
HepB3	History	13.2	12-23 m	1502	68
Hib1	C or H <12 months	83.2	12-23 m	1502	68
Hib1	Card	60.5	12-23 m	1502	68
Hib1	Card or History	86.1	12-23 m	1502	68
Hib1	History	25.5	12-23 m	1502	68
Hib3	C or H <12 months	63.7	12-23 m	1502	68

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Hib3	Card	55.9	12-23 m	1502	68
Hib3	Card or History	69.1	12-23 m	1502	68
Hib3	History	13.2	12-23 m	1502	68
MCV1	C or H <12 months	67.9	12-23 m	1502	68
MCV1	Card	52.5	12-23 m	1502	68
MCV1	Card or History	81.8	12-23 m	1502	68
MCV1	History	29.3	12-23 m	1502	68
Pol1	C or H <12 months	85.8	12-23 m	1502	68
Pol1	Card	60.6	12-23 m	1502	68
Pol1	Card or History	87.8	12-23 m	1502	68
Pol1	History	27.2	12-23 m	1502	68
Pol3	C or H <12 months	58.3	12-23 m	1502	68
Pol3	Card	54	12-23 m	1502	68
Pol3	Card or History	62.9	12-23 m	1502	68
Pol3	History	8.9	12-23 m	1502	68
YFV	C or H <12 months	67.5	12-23 m	1502	68
YFV	Card	52.3	12-23 m	1502	68
YFV	Card or History	81.7	12-23 m	1502	68
YFV	History	29.3	12-23 m	1502	68

## 2007 Sierra Leone Demographic and Health Survey 2008

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	80.4	12-23 m	1060	60
BCG	Card	58.9	12-23 m	1060	60
BCG	Card or History	82	12-23 m	1060	60
BCG	History	23.2	12-23 m	1060	60
DTP1	C or H <12 months	75.4	12-23 m	1060	60
DTP1	Card	55.4	12-23 m	1060	60
DTP1	Card or History	76.8	12-23 m	1060	60
DTP1	History	21.4	12-23 m	1060	60
DTP3	C or H <12 months	54.6	12-23 m	1060	60
DTP3	Card	45.5	12-23 m	1060	60
DTP3	Card or History	60.3	12-23 m	1060	60
DTP3	History	14.8	12-23 m	1060	60
MCV1	C or H <12 months	45.8	12-23 m	1060	60
MCV1	Card	40.2	12-23 m	1060	60
MCV1	Card or History	59.7	12-23 m	1060	60
MCV1	History	19.6	12-23 m	1060	60

Pol1	C or H <12 months	74.1	12-23 m	1060	60
Pol1	Card	53.4	12-23 m	1060	60
Pol1	Card or History	75.6	12-23 m	1060	60
Pol1	History	22.2	12-23 m	1060	60
Pol3	C or H <12 months	44.8	12-23 m	1060	60
Pol3	Card	43.5	12-23 m	1060	60
Pol3	Card or History	49.6	12-23 m	1060	60
Pol3	History	6.2	12-23 m	1060	60

## 2004 Sierra Leone Multiple Indicator Cluster Survey 2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	84	12-23 m	1074	53
BCG	Card	49.6	12-23 m	1074	53
BCG	Card or History	85.9	12-23 m	1074	53
BCG	History	36.3	12-23 m	1074	53
DTP1	C or H <12 months	78.3	12-23 m	1074	53
DTP1	Card	47.1	12-23 m	1074	53
DTP1	Card or History	82	12-23 m	1074	53
DTP1	History	34.9	12-23 m	1074	53
DTP3	C or H <12 months	55.5	12-23 m	1074	53
DTP3	Card	37.2	12-23 m	1074	53
DTP3	Card or History	62.6	12-23 m	1074	53
DTP3	History	25.4	12-23 m	1074	53
MCV1	C or H <12 months	62.4	12-23 m	1074	53
MCV1	Card	33.2	12-23 m	1074	53
MCV1	Card or History	75.9	12-23 m	1074	53
MCV1	History	42.7	12-23 m	1074	53
Pol1	C or H <12 months	84.1	12-23 m	1074	53
Pol1	Card	48.5	12-23 m	1074	53
Pol1	Card or History	87	12-23 m	1074	53
Pol1	History	38.5	12-23 m	1074	53
Pol3	C or H <12 months	57	12-23 m	1074	53
Pol3	Card	38.3	12-23 m	1074	53
Pol3	Card or History	64	12-23 m	1074	53
Pol3	History	25.8	12-23 m	1074	53
YFV	C or H <12 months	59.9	12-23 m	1074	53
YFV	Card	30.7	12-23 m	1074	53
YFV	Card or History	74.5	12-23 m	1074	53

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YFV History 43.9 12-23 m 1074 53

1999 Sierra Leone, Multi-Indicator Cluster Survey-MICS2, Final Report, 2000

2000 Sierra Leone, EPI National Coverage Evaluation Survey 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	74.1	12-23 m	3385	74
DTP1	Card or History	64.4	12-23 m	3385	74
DTP3	Card or History	43.8	12-23 m	3385	74
MCV1	Card or History	36.7	12-23 m	3385	74
Pol1	Card or History	66.4	12-23 m	3385	74
Pol3	Card or History	45.5	12-23 m	3385	74

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	72.8	12-23 m	547	35
DTP1	Card or History	68.3	12-23 m	547	35
DTP3	Card or History	45.5	12-23 m	547	35
MCV1	Card or History	61.7	12-23 m	547	35
Pol1	Card or History	81.9	12-23 m	547	35
Pol3	Card or History	61.2	12-23 m	547	35

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Further information and estimates for previous years are available at:

<https://data.unicef.org/topic/child-health/immunization/>

<https://immunizationdata.who.int/listing.html>