

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. 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.

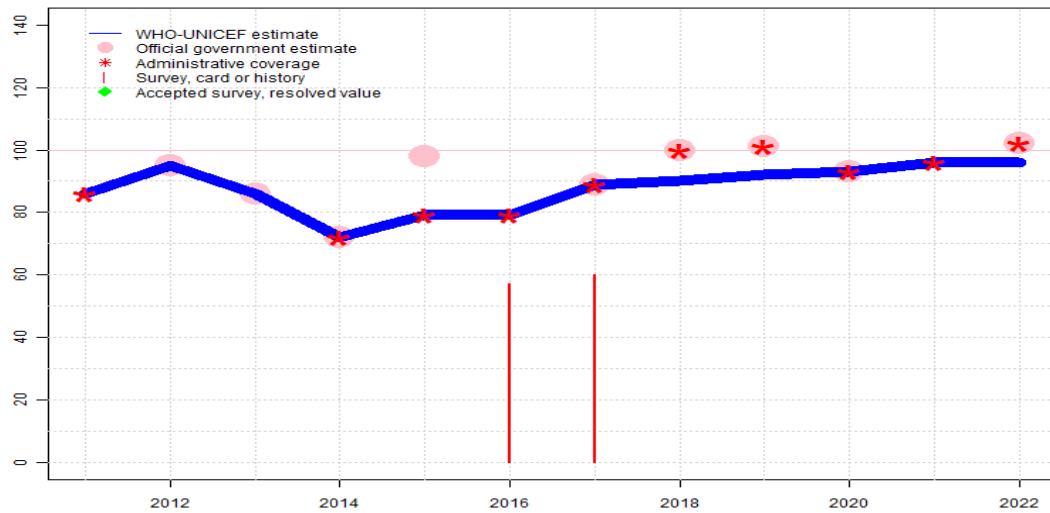
PcV3: percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect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

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Kiribati - BCG

KIR - BCG



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	86	95	86	72	79	79	89	90	92	93	96	96
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	NA	95	86	72	98	NA	89	100	101	93	NA	102
Administrative	86	NA	NA	72	79	79	89	100	101	93	96	102
Survey	NA	NA	NA	NA	NA	57	60	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:

- 2022: Estimate based on extrapolation from data reported by national government. Reported data excluded because 102 percent greater than 100 percent. Results from the 2018-19 Social Development Indicator Survey suggest coverage levels that are much lower than that reported by the country. Given the differences between survey results and reported data, estimates are likely overestimated. WHO and UNICEF recommend a high-quality independent empirical assessment of the administrative recording and reporting system to confirm reported levels of coverage. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2021: Estimate informed by reported administrative data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2020: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2019: Estimate informed by interpolation between reported data. Reported data excluded because 101 percent greater than 100 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Unexplained increase in the reported number of children vaccinated. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2017: Estimate informed by reported data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. . GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2016: Estimate informed by reported administrative data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. . Decline in reported target population for 2016 compared to 2015 is unexplained. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2015: Estimate informed by reported administrative data. Programme notes their official estimates are based on actual deliveries as the administrative coverage is based on projections from the 2010 census. Programme reports two months national level vaccine stockout. Adjustment of official estimate from administrative coverage is based on the number of actual deliveries rather than a projection from the 2010 census. However, the one-time use of actual deliveries as the target population rather than the projections from the census creates a slight discontinuity that is reflective of a data correction rather than a change in programme performance. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2014: Estimate informed by reported data. Programme reports a two months stockout at national level. Fluctuations attributed to small birth cohort and incomplete subnational reporting. GoC=Assigned by working group. Inconsistent information between reported

Kiribati - BCG

data and independent assessments across the time series.

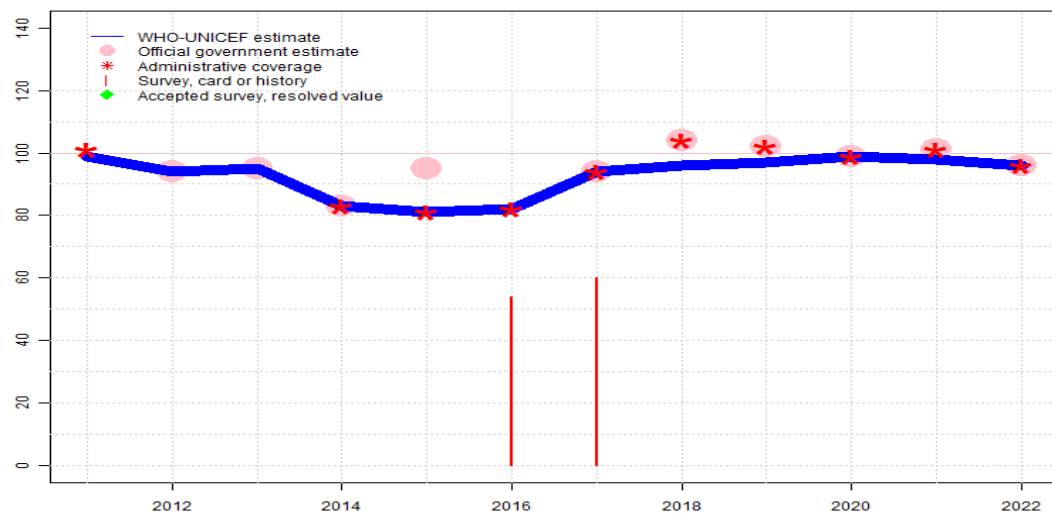
2013: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2012: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2011: Estimate informed by reported administrative data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - DTP1

KIR - DTP1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	94	95	83	81	82	94	96	97	99	98	96
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	NA	94	95	83	95	NA	94	104	102	99	101	96
Administrative	101	NA	NA	83	81	82	94	104	102	99	101	96
Survey	NA	NA	NA	NA	NA	54	60	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:

- 2022: Estimate informed by reported data. Results from the 2018-19 Social Development Indicator Survey suggest coverage levels that are much lower than that reported by the country. Given the differences between survey results and reported data, estimates are likely overestimated. WHO and UNICEF recommend a high-quality independent empirical assessment of the administrative recording and reporting system to confirm reported levels of coverage. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2021: Estimate informed by interpolation between reported data. Reported data excluded because 101 percent greater than 100 percent. Estimate of 98 percent changed from previous revision value of 99 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2020: Estimate informed by reported data. Programme reports one month vaccine stockout. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2019: Estimate informed by interpolation between reported data. Reported data excluded because 102 percent greater than 100 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2018: Estimate informed by interpolation between reported data. Reported data excluded because 104 percent greater than 100 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2017: Estimate informed by reported data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. . GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2016: Estimate informed by reported administrative data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. . Decline in reported target population for 2016 compared to 2015 is unexplained. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2015: Estimate informed by reported administrative data. Programme notes their official estimates are based on actual deliveries as the administrative coverage is based on projections from the 2010 census. Adjustment of official estimate from administrative coverage is based on the number of actual deliveries rather than a projection from the 2010 census. However, the one-time use of actual deliveries as the target population rather than the projections from the census creates a slight discontinuity that is reflective of a data correction rather than a change in programme performance. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2014: Estimate informed by reported data. Fluctuations attributed to small birth cohort and incomplete subnational reporting. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - DTP1

mation between reported data and independent assessments across the time series.

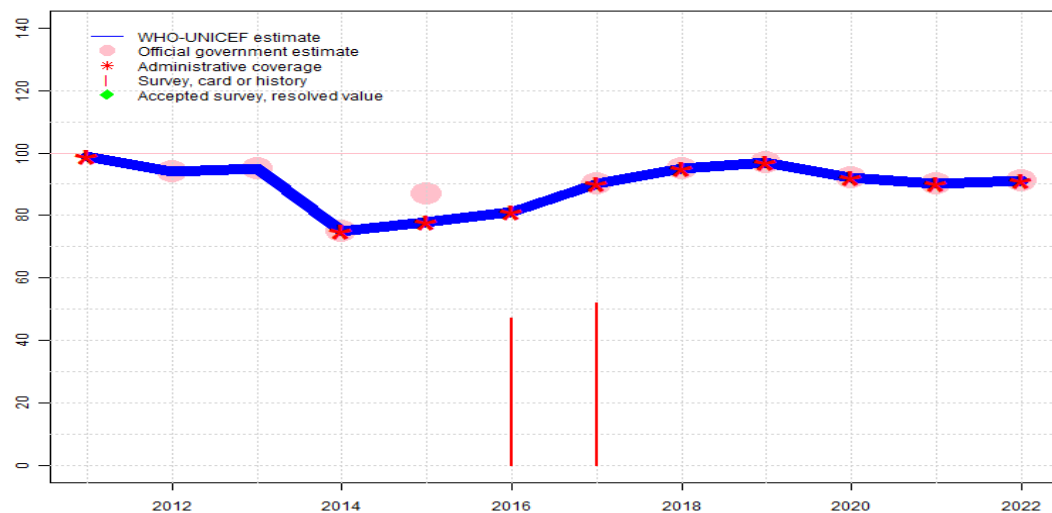
2013: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2012: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2011: DTP1 coverage estimated based on DTP3 coverage of 99. Reported data excluded because 101 percent greater than 100 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - DTP3

KIR - DTP3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	94	95	75	78	81	90	95	97	92	90	91
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	NA	94	95	75	87	NA	90	95	97	92	90	91
Administrative	99	NA	NA	75	78	81	90	95	97	92	90	91
Survey	NA	NA	NA	NA	NA	47	52	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:

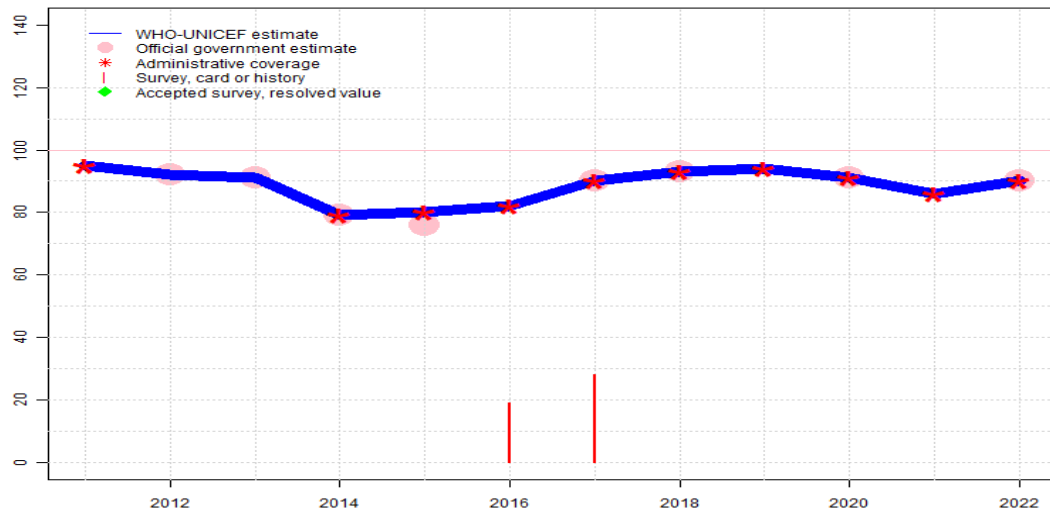
- 2022: Estimate informed by reported data. Results from the 2018-19 Social Development Indicator Survey suggest coverage levels that are much lower than that reported by the country. Given the differences between survey results and reported data, estimates are likely overestimated. WHO and UNICEF recommend a high-quality independent empirical assessment of the administrative recording and reporting system to confirm reported levels of coverage. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2021: Estimate informed by reported data. Estimate of 90 percent changed from previous revision value of 92 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2020: Estimate informed by reported data. Programme reports one month vaccine stockout. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2019: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2018: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2017: Estimate informed by reported data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. Kiribati Social Development Indicator Survey 2018-19 card or history results of 52 percent modified for recall bias to 57 percent based on 1st dose card or history coverage of 60 percent, 1st dose card only coverage of 21 percent and 3rd dose card only coverage of 20 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2016: Estimate informed by reported administrative data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. Kiribati Social Development Indicator Survey 2018-19 card or history results of 47 percent modified for recall bias to 49 percent based on 1st dose card or history coverage of 54 percent, 1st dose card only coverage of 10 percent and 3rd dose card only coverage of 9 percent. Decline in reported target population for 2016 compared to 2015 is unexplained. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2015: Estimate informed by reported administrative data. Programme notes their official estimates are based on actual deliveries as the administrative coverage is based on projections from the 2010 census. Adjustment of official estimate from administrative coverage is based on the number of actual deliveries rather than a projection from the 2010 census. However, the one-time use of actual deliveries as the target population rather than the projections from the census creates a slight discontinuity that is reflective of a data correction rather than a change in programme performance. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - DTP3

- 2014: Estimate informed by reported data. Fluctuations attributed to small birth cohort and incomplete subnational reporting. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2013: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2012: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2011: Estimate informed by reported administrative data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - Pol3

KIR - Pol3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	95	92	91	79	80	82	90	93	94	91	86	90
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	NA	92	91	79	76	NA	90	93	NA	91	NA	90
Administrative	95	NA	NA	79	80	82	90	93	94	91	86	90
Survey	NA	NA	NA	NA	NA	19	28	NA	NA	NA	NA	NA

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- 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:

2022: Estimate informed by reported data. Results from the 2018-19 Social Development Indicator Survey suggest coverage levels that are much lower than that reported by the country. Given the differences between survey results and reported data, estimates are likely overestimated. WHO and UNICEF recommend a high-quality independent empirical assessment of the administrative recording and reporting system to confirm reported levels of coverage. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2021: Estimate informed by reported administrative data. Estimate of 86 percent changed from previous revision value of 91 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2020: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2019: Estimate informed by reported administrative data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2018: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2017: Estimate informed by reported data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. Kiribati Social Development Indicator Survey 2018-19 card or history results of 28 percent modified for recall bias to 53 percent based on 1st dose card or history coverage of 56 percent, 1st dose card only coverage of 21 percent and 3rd dose card only coverage of 20 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2016: Estimate informed by reported administrative data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. Kiribati Social Development Indicator Survey 2018-19 card or history results of 19 percent modified for recall bias to 49 percent based on 1st dose card or history coverage of 54 percent, 1st dose card only coverage of 10 percent and 3rd dose card only coverage of 9 percent. Decline in reported target population for 2016 compared to 2015 is unexplained. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

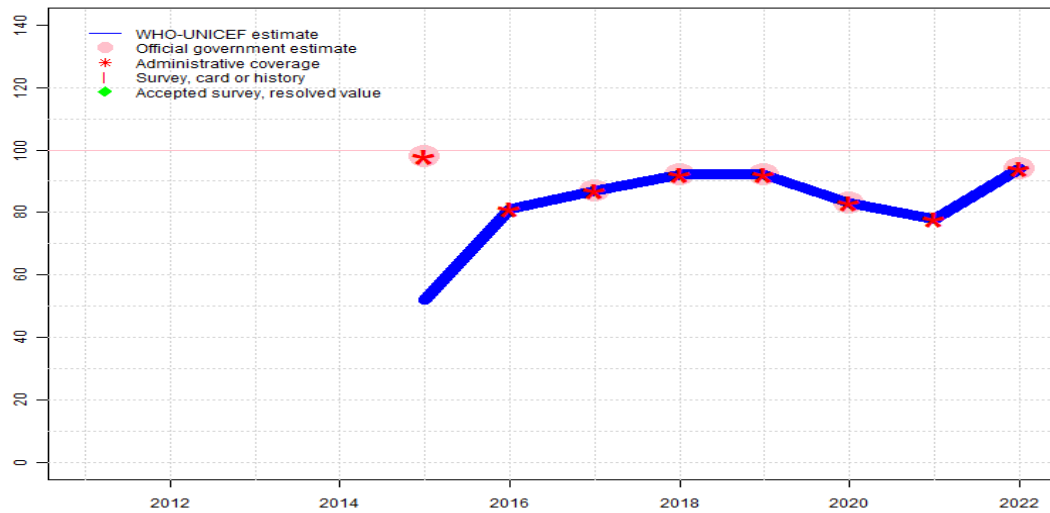
2015: Estimate informed by reported administrative data. Programme notes their official estimates are based on actual deliveries as the administrative coverage is based on projections from the 2010 census. Programme reports one month national level vaccine stockout. Adjustment of official estimate from administrative coverage is based on the number of actual deliveries rather than a projection from the 2010 census. However, the one-time use of actual deliveries as the target population rather than the projections from the census creates a slight discontinuity that is reflective of a data correction rather than a change in programme performance. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - Pol3

- 2014: Estimate informed by reported data. Fluctuations attributed to small birth cohort and incomplete subnational reporting. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2013: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2012: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2011: Estimate informed by reported administrative data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - IPV1

KIR - IPV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	52	81	87	92	92	83	78	94
Estimate GoC	NA	NA	NA	NA	•	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	98	NA	87	92	92	83	NA	94
Administrative	NA	NA	NA	NA	98	81	87	92	92	83	78	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: 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:

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).

2022: Estimate informed by reported data. Results from the 2018-19 Social Development Indicator Survey suggest coverage levels that are much lower than that reported by the country. Given the differences between survey results and reported data, estimates are likely overestimated. WHO and UNICEF recommend a high-quality independent empirical assessment of the administrative recording and reporting system to confirm reported levels of coverage. Reported data suggests recovery from prior supply disruption. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2021: Estimate informed by reported administrative data. Programme reports six month vaccine stockout at national level. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2020: Estimate informed by reported data. Programme reports three months vaccine stockout. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2019: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2018: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

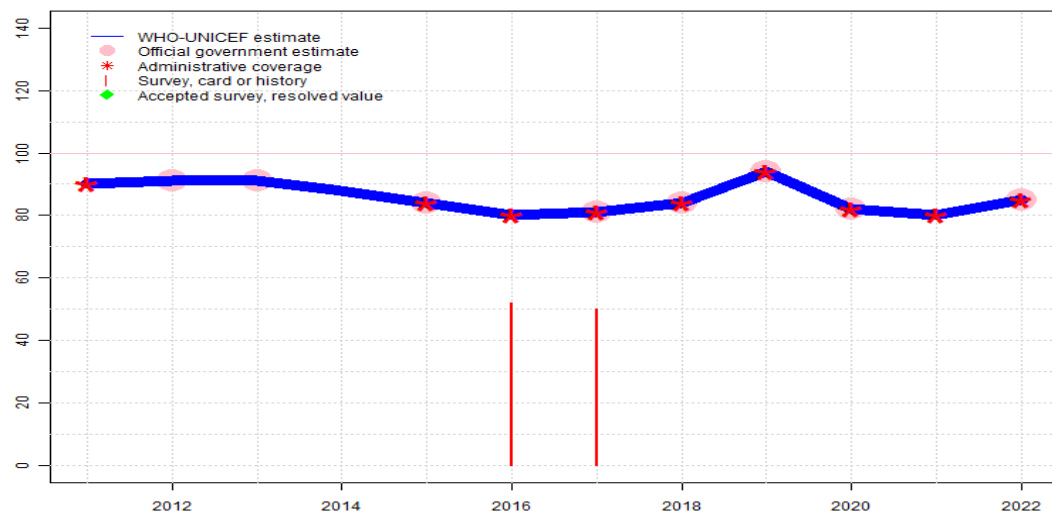
2017: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2016: Estimate informed by reported administrative data. Decline in reported target population for 2016 compared to 2015 is unexplained. Estimate is based on reported coverage following introduction period. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2015: Inactivated polio vaccine in June 2015. Programme reports 98 percent coverage in 53 percent of the national target population. Estimate is based on the total annual national target population. Programme notes their official estimates are based on actual deliveries as the administrative coverage is based on projections from the 2010 census. Adjustment of official estimate from administrative coverage is based on the number of actual deliveries rather than a projection from the 2010 census. However, the one-time use of actual deliveries as the target population rather than the projections from the census creates a slight discontinuity that is reflective of a data correction rather than a change in programme performance. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - MCV1

KIR - MCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	90	91	91	88	84	80	81	84	94	82	80	85
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	NA	91	91	NA	84	NA	81	84	94	82	NA	85
Administrative	90	NA	NA	NA	84	80	81	84	94	82	80	85
Survey	NA	NA	NA	NA	NA	52	50	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:

- 2022: Estimate informed by reported data. Results from the 2018-19 Social Development Indicator Survey suggest coverage levels that are much lower than that reported by the country. Given the differences between survey results and reported data, estimates are likely overestimated. WHO and UNICEF recommend a high-quality independent empirical assessment of the administrative recording and reporting system to confirm reported levels of coverage. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2021: Estimate informed by reported administrative data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2020: Estimate informed by reported data. Estimate based on reported data consistent with other antigens. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2019: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2018: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2017: Estimate informed by reported data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. . GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2016: Estimate informed by reported administrative data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. . Decline in reported target population for 2016 compared to 2015 is unexplained. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2015: Estimate informed by reported administrative data. Programme notes their official estimates are based on actual deliveries as the administrative coverage is based on projections from the 2010 census. Adjustment of official estimate from administrative coverage is based on the number of actual deliveries rather than a projection from the 2010 census. However, the one-time use of actual deliveries as the target population rather than the projections from the census creates a slight discontinuity that is reflective of a data correction rather than a change in programme performance. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2014: Estimate informed by interpolation between reported data. Fluctuations attributed to small birth cohort and incomplete subnational reporting. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2013: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2012: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent

Kiribati - MCV1

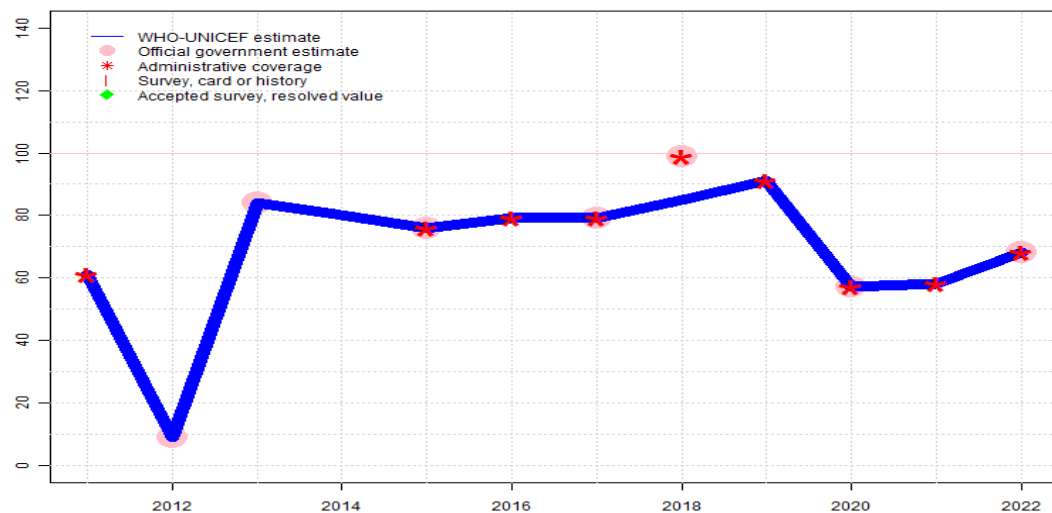
information between reported data and independent assessments across the time series.

2011: Estimate informed by reported administrative data. GoC=Assigned by working group.

Inconsistent information between reported data and independent assessments across the time series.

Kiribati - MCV2

KIR - MCV2



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	61	9	84	80	76	79	79	85	91	57	58	68
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	NA	9	84	NA	76	NA	79	99	NA	57	NA	68
Administrative	61	NA	NA	NA	76	79	79	99	91	57	58	68
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.

Description:

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

- 2022: Estimate informed by reported data. Results from the 2018-19 Social Development Indicator Survey suggest coverage levels that are much lower than that reported by the country. Given the differences between survey results and reported data, estimates are likely overestimated. WHO and UNICEF recommend a high-quality independent empirical assessment of the administrative recording and reporting system to confirm reported levels of coverage. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2021: Estimate informed by reported administrative data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2020: Estimate informed by reported data. Estimate based on reported data consistent with other antigens. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2019: Estimate informed by reported administrative data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Unexplained increase in the reported number of children vaccinated. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2017: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2016: Estimate informed by reported administrative data. Decline in reported target population for 2016 compared to 2015 is unexplained. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2015: Estimate informed by reported administrative data. Programme notes their official estimates are based on actual deliveries as the administrative coverage is based on projections from the 2010 census. Adjustment of official estimate from administrative coverage is based on the number of actual deliveries rather than a projection from the 2010 census. However, the one-time use of actual deliveries as the target population rather than the projections from the census creates a slight discontinuity that is reflective of a data correction rather than a change in programme performance. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2014: Estimate informed by interpolation between reported data. Fluctuations attributed to small birth cohort and incomplete subnational reporting. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments

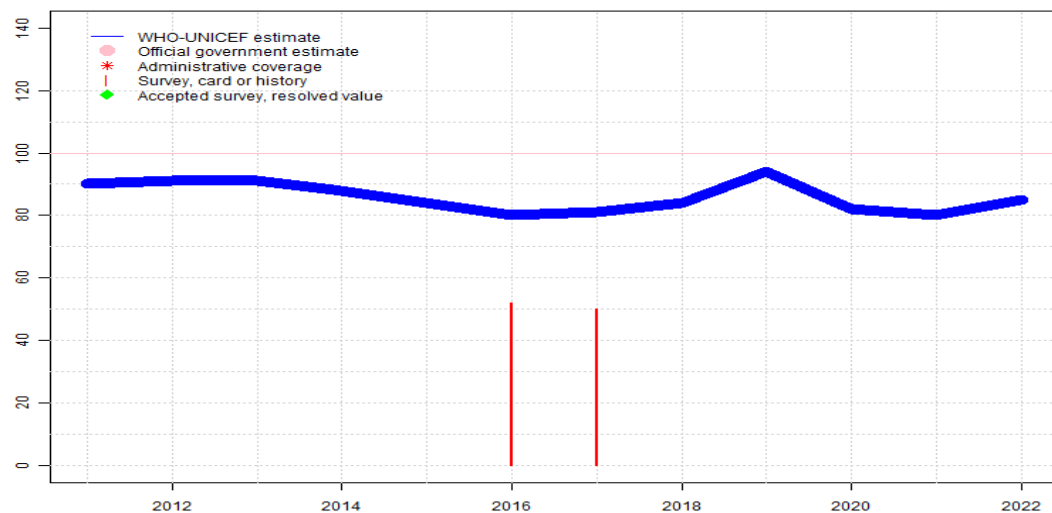
Kiribati - MCV2

across the time series.

- 2013: Estimate informed by reported data. Fluctuations attributed to small birth cohort. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2012: Estimate informed by reported data. Decline from 2011 to 2012 is unexplained. Fluctuations attributed to small birth cohort. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2011: Estimate informed by reported administrative data. Fluctuations attributed to small birth cohort. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - RCV1

KIR - RCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	90	91	91	88	84	80	81	84	94	82	80	85
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
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	52	50	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:

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.

- 2022: Estimate based on estimated MCV1. Results from the 2018-19 Social Development Indicator Survey suggest coverage levels that are much lower than that reported by the country. Given the differences between survey results and reported data, estimates are likely overestimated. WHO and UNICEF recommend a high-quality independent empirical assessment of the administrative recording and reporting system to confirm reported levels of coverage. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2021: Estimate based on estimated MCV1. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2020: Estimate based on estimated MCV1. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2019: Estimate based on estimated MCV1. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2018: Estimate based on estimated MCV1. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2017: Estimate based on estimated MCV1. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. . GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2016: Estimate based on estimated MCV1. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. . Decline in reported target population for 2016 compared to 2015 is unexplained. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2015: Estimate based on estimated MCV1. Programme notes their official estimates are based on actual deliveries as the administrative coverage is based on projections from the 2010 census. Adjustment of official estimate from administrative coverage is based on the number of actual deliveries rather than a projection from the 2010 census. However, the one-time use of actual deliveries as the target population rather than the projections from the census creates a slight discontinuity that is reflective of a data correction rather than a change in programme performance. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2014: Estimate based on estimated MCV1. Fluctuations attributed to small birth cohort and incomplete subnational reporting. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2013: Estimate based on estimated MCV1. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2012: Estimate based on estimated MCV1. GoC=Assigned by working group. Inconsistent

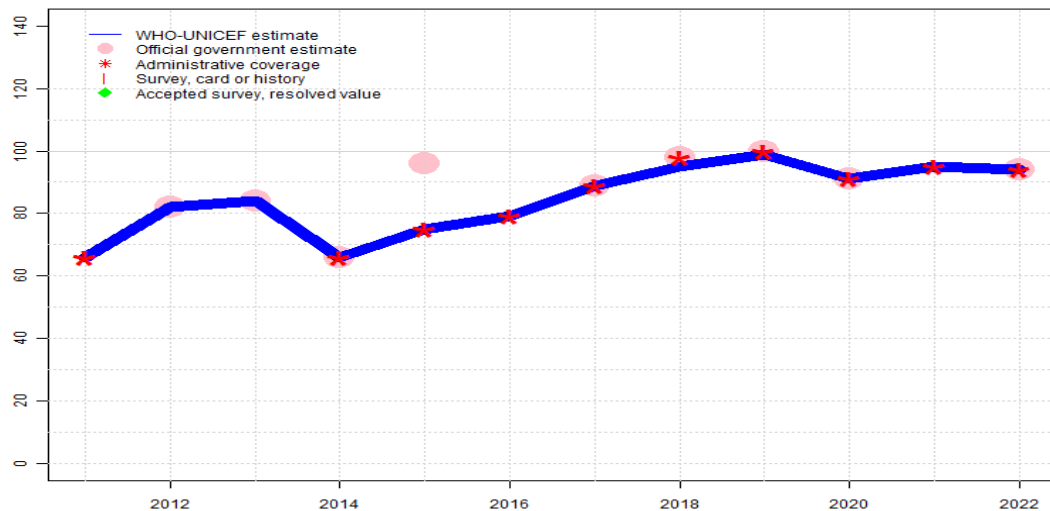
Kiribati - RCV1

information between reported data and independent assessments across the time series.

2011: Estimate based on estimated MCV1. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - HepBB

KIR - HepBB



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	66	82	84	66	75	79	89	95	99	91	95	94
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	NA	82	84	66	96	NA	89	98	100	91	NA	94
Administrative	66	NA	NA	66	75	79	89	98	100	91	95	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: 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:

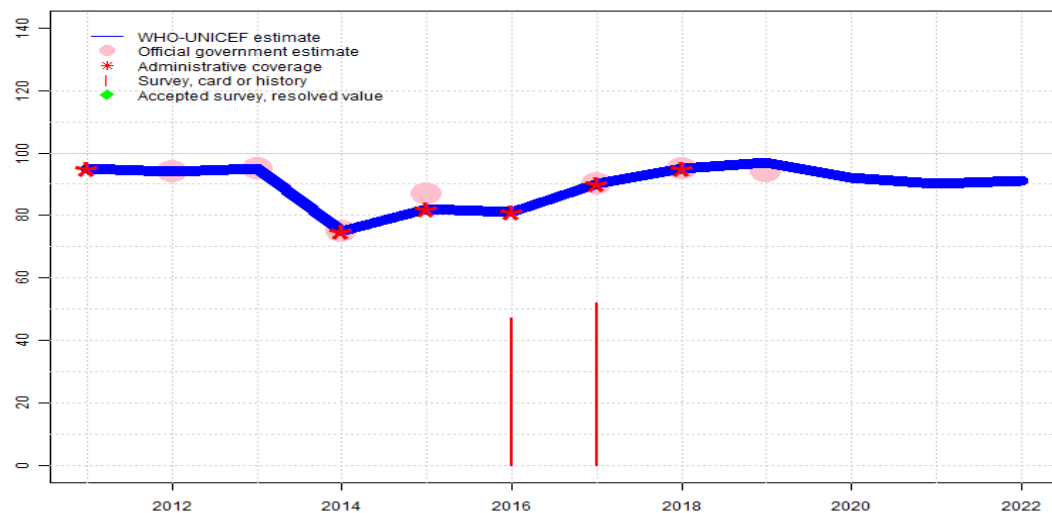
- 2022: Estimate informed by reported data. Results from the 2018-19 Social Development Indicator Survey suggest coverage levels that are much lower than that reported by the country. Given the differences between survey results and reported data, estimates are likely overestimated. WHO and UNICEF recommend a high-quality independent empirical assessment of the administrative recording and reporting system to confirm reported levels of coverage. Programme reports one month vaccine stockout at national level. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2021: Estimate informed by reported administrative data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2020: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2019: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Unexplained increase in the reported number of children vaccinated. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2017: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2016: Estimate informed by reported administrative data. Decline in reported target population for 2016 compared to 2015 is unexplained. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2015: Estimate informed by reported administrative data. Programme notes their official estimates are based on actual deliveries as the administrative coverage is based on projections from the 2010 census. Adjustment of official estimate from administrative coverage is based on the number of actual deliveries rather than a projection from the 2010 census. However, the one-time use of actual deliveries as the target population rather than the projections from the census creates a slight discontinuity that is reflective of a data correction rather than a change in programme performance. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2014: Estimate informed by reported data. Fluctuations attributed to small birth cohort and incomplete subnational reporting. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2013: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2012: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - HepBB

2011: Estimate informed by reported administrative data. GoC=Assigned by working group.
Inconsistent information between reported data and independent assessments across the time series.

Kiribati - HepB3

KIR - HepB3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	95	94	95	75	82	81	90	95	97	92	90	91
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	NA	94	95	75	87	NA	90	95	94	NA	NA	NA
Administrative	95	NA	NA	75	82	81	90	95	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	47	52	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:

- 2022: Estimate informed by estimated DTP3 coverage. Results from the 2018-19 Social Development Indicator Survey suggest coverage levels that are much lower than that reported by the country. Given the differences between survey results and reported data, estimates are likely overestimated. WHO and UNICEF recommend a high-quality independent empirical assessment of the administrative recording and reporting system to confirm reported levels of coverage. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2021: Estimate informed by estimated DTP3 coverage. Estimate of 90 percent changed from previous revision value of 94 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2020: Estimate is based on estimated DTP3 coverage. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2019: Estimate is based on estimated DTP3 coverage level. Estimate of 97 percent changed from previous revision value of 94 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2018: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2017: Estimate informed by reported data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. Kiribati Social Development Indicator Survey 2018-19 card or history results of 52 percent modified for recall bias to 57 percent based on 1st dose card or history coverage of 60 percent, 1st dose card only coverage of 21 percent and 3rd dose card only coverage of 20 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2016: Estimate informed by reported administrative data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. Kiribati Social Development Indicator Survey 2018-19 card or history results of 47 percent modified for recall bias to 49 percent based on 1st dose card or history coverage of 54 percent, 1st dose card only coverage of 10 percent and 3rd dose card only coverage of 9 percent. Decline in reported target population for 2016 compared to 2015 is unexplained. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2015: Estimate informed by reported administrative data. Programme notes their official estimates are based on actual deliveries as the administrative coverage is based on projections from the 2010 census. Adjustment of official estimate from administrative coverage is based on the number of actual deliveries rather than a projection from the 2010 census. However, the one-time use of actual deliveries as the target population rather than the projections from the census creates a slight discontinuity that is reflective of a data correction rather than a change in programme performance. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments

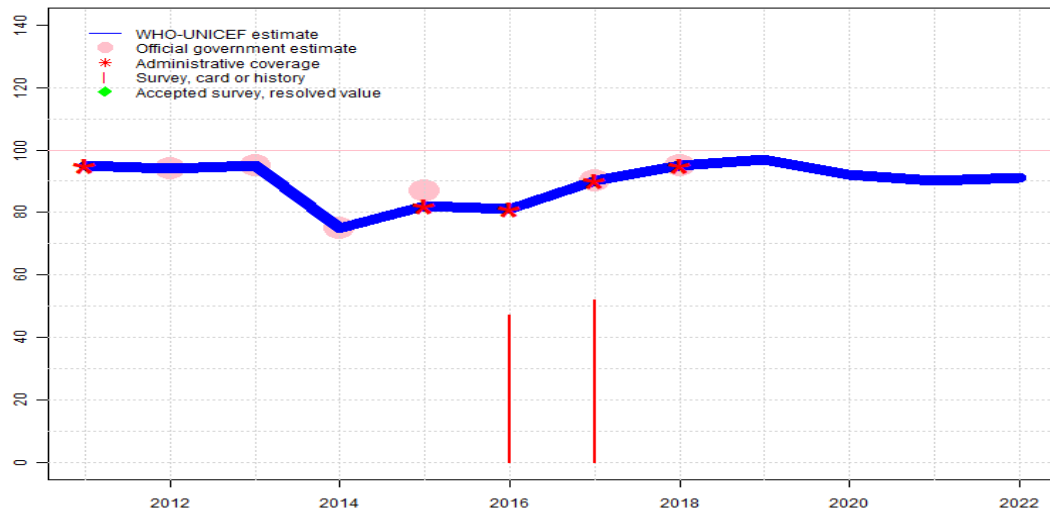
Kiribati - HepB3

across the time series.

- 2014: Estimate informed by reported data. Fluctuations attributed to small birth cohort and incomplete subnational reporting. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2013: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2012: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2011: Estimate informed by reported administrative data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - Hib3

KIR - Hib3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	95	94	95	75	82	81	90	95	97	92	90	91
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	NA	94	95	75	87	NA	90	95	NA	NA	NA	NA
Administrative	95	NA	NA	NA	82	81	90	95	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	47	52	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:

2022: Estimate informed by estimated DTP3 coverage. Results from the 2018-19 Social Development Indicator Survey suggest coverage levels that are much lower than that reported by the country. Given the differences between survey results and reported data, estimates are likely overestimated. WHO and UNICEF recommend a high-quality independent empirical assessment of the administrative recording and reporting system to confirm reported levels of coverage. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2021: Estimate informed by estimated DTP3 coverage. Estimate of 90 percent changed from previous revision value of 95 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2020: Estimate is based on estimated DTP3 coverage. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2019: Estimate is based on estimated DTP3 coverage level. Estimate of 97 percent changed from previous revision value of 95 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2018: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2017: Estimate informed by reported data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. Kiribati Social Development Indicator Survey 2018-19 card or history results of 52 percent modified for recall bias to 57 percent based on 1st dose card or history coverage of 60 percent, 1st dose card only coverage of 21 percent and 3rd dose card only coverage of 20 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2016: Estimate informed by reported administrative data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. Kiribati Social Development Indicator Survey 2018-19 card or history results of 47 percent modified for recall bias to 49 percent based on 1st dose card or history coverage of 54 percent, 1st dose card only coverage of 10 percent and 3rd dose card only coverage of 9 percent. Decline in reported target population for 2016 compared to 2015 is unexplained. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2015: Estimate informed by reported administrative data. Programme notes their official estimates are based on actual deliveries as the administrative coverage is based on projections from the 2010 census. Adjustment of official estimate from administrative coverage is based on the number of actual deliveries rather than a projection from the 2010 census. However, the one-time use of actual deliveries as the target population rather than the projections from the census creates a slight discontinuity that is reflective of a data correction rather than a change in programme performance. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments

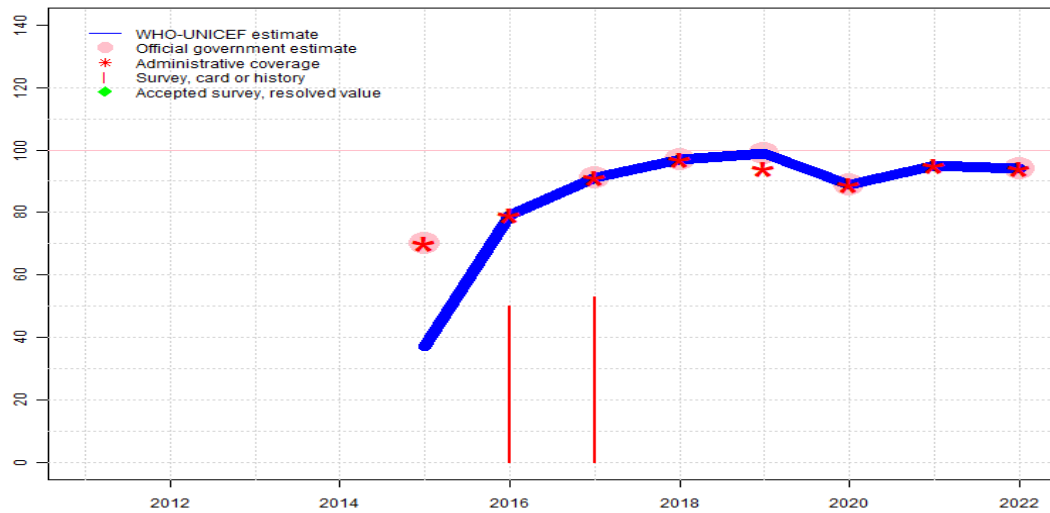
Kiribati - Hib3

across the time series.

- 2014: Estimate informed by reported data. Fluctuations attributed to small birth cohort and incomplete subnational reporting. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2013: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2012: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2011: Estimate informed by reported administrative data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - RotaC

KIR - RotaC



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	37	79	91	97	99	89	95	94
Estimate GoC	NA	NA	NA	NA	●	●	●	●	●	●	●	●
Official	NA	NA	NA	NA	70	NA	91	97	99	89	NA	94
Administrative	NA	NA	NA	NA	70	79	91	97	94	89	95	94
Survey	NA	NA	NA	NA	NA	50	53	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.

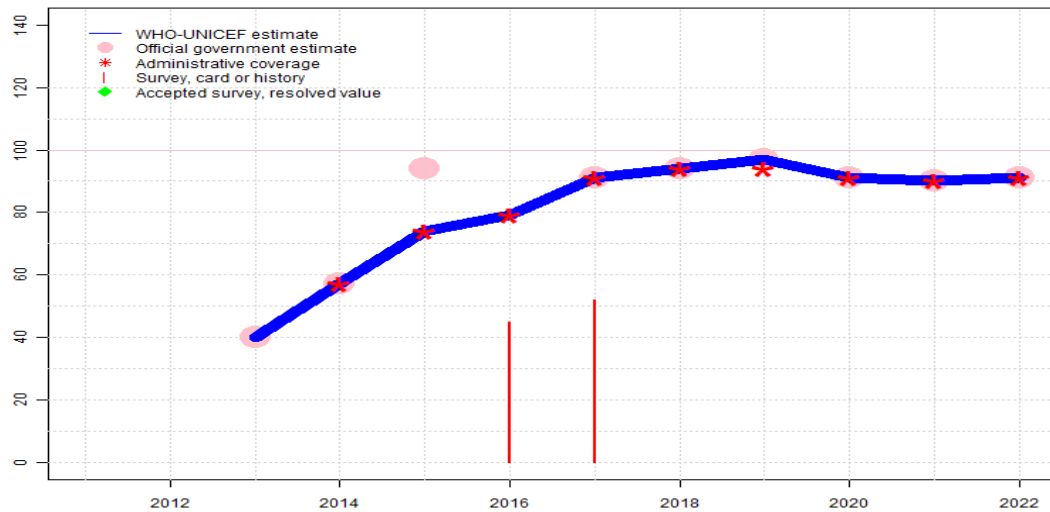
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2022: Estimate informed by reported data. Results from the 2018-19 Social Development Indicator Survey suggest coverage levels that are much lower than that reported by the country. Given the differences between survey results and reported data, estimates are likely overestimated. WHO and UNICEF recommend a high-quality independent empirical assessment of the administrative recording and reporting system to confirm reported levels of coverage. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2021: Estimate informed by reported administrative data. Estimate of 95 percent changed from previous revision value of 80 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2020: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2019: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2018: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2017: Estimate informed by reported data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. . GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2016: Estimate informed by reported administrative data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. . Decline in reported target population for 2016 compared to 2015 is unexplained. Estimate is based on reported coverage following introduction period. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2015: Rotavirus vaccine introduced in August 2015. Programme reports 71 percent coverage in 53 percent of the national target population. Estimate is based on the total annual national target population. Programme notes their official estimates are based on actual deliveries as the administrative coverage is based on projections from the 2010 census. Adjustment of official estimate from administrative coverage is based on the number of actual deliveries rather than a projection from the 2010 census. However, the one-time use of actual deliveries as the target population rather than the projections from the census creates a slight discontinuity that is reflective of a data correction rather than a change in programme performance. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - PcV3

KIR - PcV3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	40	57	74	79	91	94	97	91	90	91
Estimate GoC	NA	NA	●	●	●	●	●	●	●	●	●	●
Official	NA	NA	40	57	94	NA	91	94	97	91	90	91
Administrative	NA	NA	NA	57	74	79	91	94	94	91	90	91
Survey	NA	NA	NA	NA	NA	45	52	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:

- 2022: Estimate informed by reported data. Results from the 2018-19 Social Development Indicator Survey suggest coverage levels that are much lower than that reported by the country. Given the differences between survey results and reported data, estimates are likely overestimated. WHO and UNICEF recommend a high-quality independent empirical assessment of the administrative recording and reporting system to confirm reported levels of coverage. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2021: Estimate informed by reported data. Estimate of 90 percent changed from previous revision value of 99 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2020: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2019: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2018: Estimate informed by reported data. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2017: Estimate informed by reported data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. Kiribati Social Development Indicator Survey 2018-19 card or history results of 52 percent modified for recall bias to 56 percent based on 1st dose card or history coverage of 59 percent, 1st dose card only coverage of 21 percent and 3rd dose card only coverage of 20 percent. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2016: Estimate informed by reported administrative data. Kiribati Social Development Indicator Survey 2018-19 results ignored by working group. Kiribati Social Development Indicator Survey 2018-19 card or history results of 45 percent modified for recall bias to 43 percent based on 1st dose card or history coverage of 54 percent, 1st dose card only coverage of 10 percent and 3rd dose card only coverage of 8 percent. Decline in reported target population for 2016 compared to 2015 is unexplained. Programme reports vaccinating fewer children during 2016 compared to 2015. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2015: Estimate informed by reported administrative data. Programme notes their official estimates are based on actual deliveries as the administrative coverage is based on projections from the 2010 census. Programme reports one month national level vaccine stockout. Adjustment of official estimate from administrative coverage is based on the number of actual deliveries rather than a projection from the 2010 census. However, the one-time use of actual deliveries as the target population rather than the projections from the census creates a slight discontinuity that is reflective of a data correction rather than a change in programme performance. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.
- 2014: Estimate informed by reported data. Programme reports a three months stockout at na-

Kiribati - PcV3

tional level. Fluctuations attributed to small birth cohort and incomplete subnational reporting. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

2013: Estimate informed by reported data. Pneumococcal conjugate vaccine introduced during 2013. Programme reports a four months stockout at the national level. GoC=Assigned by working group. Inconsistent information between reported data and independent assessments across the time series.

Kiribati - survey details

NOTE: A survey to measure vaccination coverage for infants (i.e., children aged 0 to 11 months) will sample children aged 12 to 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 to 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 Kiribati Social Development Indicator Survey 2018-19

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	60.4	12-23 m	460	21
BCG	Card	20.7	12-23 m	460	21
BCG	Card or History	60.4	12-23 m	460	21
BCG	History	39.7	12-23 m	460	21
DTP1	C or H <12 months	59	12-23 m	460	21
DTP1	Card	21	12-23 m	460	21
DTP1	Card or History	59.9	12-23 m	460	21
DTP1	History	38.8	12-23 m	460	21
DTP3	C or H <12 months	52.2	12-23 m	460	21
DTP3	Card	19.8	12-23 m	460	21
DTP3	Card or History	52.5	12-23 m	460	21
DTP3	History	32.8	12-23 m	460	21
HepB1	C or H <12 months	59	12-23 m	460	21
HepB1	Card	21	12-23 m	460	21
HepB1	Card or History	59.9	12-23 m	460	21
HepB1	History	38.8	12-23 m	460	21
HepB3	C or H <12 months	52.2	12-23 m	460	21
HepB3	Card	19.8	12-23 m	460	21
HepB3	Card or History	52.5	12-23 m	460	21
HepB3	History	32.8	12-23 m	460	21
Hib1	C or H <12 months	59	12-23 m	460	21
Hib1	Card	21	12-23 m	460	21
Hib1	Card or History	59.9	12-23 m	460	21
Hib1	History	38.8	12-23 m	460	21

Hib3	C or H <12 months	52.2	12-23 m	460	21
Hib3	Card	19.8	12-23 m	460	21
Hib3	Card or History	52.5	12-23 m	460	21
Hib3	History	32.8	12-23 m	460	21
MCV1	Card	11.4	12-23 m	460	21
MCV1	Card or History	50.4	12-23 m	460	21
MCV1	History	39	12-23 m	460	21
PCV1	C or H <12 months	58	12-23 m	460	21
PCV1	Card	21	12-23 m	460	21
PCV1	Card or History	58.9	12-23 m	460	21
PCV1	History	37.8	12-23 m	460	21
PCV3	C or H <12 months	51.9	12-23 m	460	21
PCV3	Card	20.1	12-23 m	460	21
PCV3	Card or History	52.3	12-23 m	460	21
PCV3	History	32.2	12-23 m	460	21
Pol1	C or H <12 months	55.4	12-23 m	460	21
Pol1	Card	21	12-23 m	460	21
Pol1	Card or History	56.2	12-23 m	460	21
Pol1	History	35.2	12-23 m	460	21
Pol3	C or H <12 months	28.1	12-23 m	460	21
Pol3	Card	19.8	12-23 m	460	21
Pol3	Card or History	28.3	12-23 m	460	21
Pol3	History	8.5	12-23 m	460	21
RotaC	C or H <12 months	52.3	12-23 m	460	21
RotaC	Card	20.5	12-23 m	460	21
RotaC	Card or History	53.4	12-23 m	460	21
RotaC	History	32.9	12-23 m	460	21

2016 Kiribati Social Development Indicator Survey 2018-19

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	57.4	24-35 m	419	21
BCG	Card	9.8	24-35 m	419	21
BCG	Card or History	57.4	24-35 m	419	21
BCG	History	47.6	24-35 m	419	21
DTP1	Card	9.6	24-35 m	419	21
DTP1	Card or History	54.5	24-35 m	419	21
DTP1	History	44.9	24-35 m	419	21
DTP3	C or H <12 months	46.2	24-35 m	419	21

Kiribati - survey details

DTP3	Card	8.9	24-35 m	419	21
DTP3	Card or History	47.2	24-35 m	419	21
DTP3	History	38.3	24-35 m	419	21
HepB1	Card	9.6	24-35 m	419	21
HepB1	Card or History	54.5	24-35 m	419	21
HepB1	History	44.9	24-35 m	419	21
HepB3	C or H <12 months	46.2	24-35 m	419	21
HepB3	Card	8.9	24-35 m	419	21
HepB3	Card or History	47.2	24-35 m	419	21
HepB3	History	38.3	24-35 m	419	21
Hib1	Card	9.6	24-35 m	419	21
Hib1	Card or History	54.5	24-35 m	419	21
Hib1	History	44.9	24-35 m	419	21
Hib3	C or H <12 months	46.2	24-35 m	419	21
Hib3	Card	8.9	24-35 m	419	21
Hib3	Card or History	47.2	24-35 m	419	21
Hib3	History	38.3	24-35 m	419	21
MCV1	C or H <12 months	52.2	24-35 m	419	21
MCV1	Card	6.5	24-35 m	419	21
MCV1	Card or History	52.2	24-35 m	419	21
MCV1	History	45.7	24-35 m	419	21
PCV1	C or H <12 months	54.2	24-35 m	419	21
PCV1	Card	9.6	24-35 m	419	21
PCV1	Card or History	54.2	24-35 m	419	21
PCV1	History	44.5	24-35 m	419	21
PCV3	C or H <12 months	45.2	24-35 m	419	21
PCV3	Card	8.4	24-35 m	419	21
PCV3	Card or History	45.2	24-35 m	419	21
PCV3	History	36.8	24-35 m	419	21
Pol1	C or H <12 months	53.9	24-35 m	419	21
Pol1	Card	9.6	24-35 m	419	21
Pol1	Card or History	53.9	24-35 m	419	21
Pol1	History	44.2	24-35 m	419	21
Pol3	C or H <12 months	18.7	24-35 m	419	21
Pol3	Card	8.6	24-35 m	419	21
Pol3	Card or History	18.7	24-35 m	419	21
Pol3	History	10.1	24-35 m	419	21
RotaC	C or H <12 months	50.1	24-35 m	419	21
RotaC	Card	9.3	24-35 m	419	21
RotaC	Card or History	50.1	24-35 m	419	21

RotaC History 40.8 24-35 m 419 21

2008 Kiribati Demographic and Health Survey 2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	87.9	12-23 m	233	22
BCG	Card	20.5	12-23 m	52	22
BCG	Card or History	89.4	12-23 m	233	22
BCG	History	68.9	12-23 m	181	22
DTP1	C or H <12 months	80.5	12-23 m	233	22
DTP1	Card	16.6	12-23 m	52	22
DTP1	Card or History	82.2	12-23 m	233	22
DTP1	History	65.6	12-23 m	181	22
DTP3	C or H <12 months	58.3	12-23 m	233	22
DTP3	Card	13.8	12-23 m	52	22
DTP3	Card or History	61.4	12-23 m	233	22
DTP3	History	47.7	12-23 m	181	22
HepB1	C or H <12 months	80.5	12-23 m	233	22
HepB1	Card	16.6	12-23 m	52	22
HepB1	Card or History	82.2	12-23 m	233	22
HepB1	History	65.6	12-23 m	181	22
HepB3	C or H <12 months	58.3	12-23 m	233	22
HepB3	Card	13.8	12-23 m	52	22
HepB3	Card or History	61.4	12-23 m	233	22
HepB3	History	47.7	12-23 m	181	22
Hib1	C or H <12 months	80.5	12-23 m	233	22
Hib1	Card	16.6	12-23 m	52	22
Hib1	Card or History	82.2	12-23 m	233	22
Hib1	History	65.6	12-23 m	181	22
Hib3	C or H <12 months	58.3	12-23 m	233	22
Hib3	Card	13.8	12-23 m	52	22
Hib3	Card or History	61.4	12-23 m	233	22
Hib3	History	47.7	12-23 m	181	22
MCV1	C or H <12 months	10.7	12-23 m	233	22
MCV1	Card	8.8	12-23 m	52	22
MCV1	Card or History	69.1	12-23 m	233	22
MCV1	History	60.3	12-23 m	181	22
Pol1	C or H <12 months	80.2	12-23 m	233	22
Pol1	Card	20.8	12-23 m	52	22

Kiribati - survey details

Pol1	Card or History	81.6	12-23 m	233	22
Pol1	History	60.8	12-23 m	181	22
Pol3	C or H <12 months	42.8	12-23 m	233	22
Pol3	Card	16.6	12-23 m	52	22
Pol3	Card or History	48.1	12-23 m	233	22
Pol3	History	31.5	12-23 m	181	22

2007 Kiribati Demographic and Health Survey 2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	83.7	24-35 m	202	22
DTP1	C or H <12 months	81.9	24-35 m	202	22
DTP3	C or H <12 months	50.1	24-35 m	202	22
MCV1	C or H <12 months	7.2	24-35 m	202	22
Pol1	C or H <12 months	79	24-35 m	202	22
Pol3	C or H <12 months	37.3	24-35 m	202	22

2006 Kiribati Demographic and Health Survey 2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	82	36-47 m	200	22
DTP1	C or H <12 months	83.6	36-47 m	200	22
DTP3	C or H <12 months	42	36-47 m	200	22
MCV1	C or H <12 months	11.5	36-47 m	200	22
Pol1	C or H <12 months	79.9	36-47 m	200	22
Pol3	C or H <12 months	42.7	36-47 m	200	22

2005 Kiribati Demographic and Health Survey 2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	71.7	48-59 m	181	22
DTP1	C or H <12 months	66	48-59 m	181	22
DTP3	C or H <12 months	32	48-59 m	181	22
MCV1	C or H <12 months	14.6	48-59 m	181	22
Pol1	C or H <12 months	60.3	48-59 m	181	22
Pol3	C or H <12 months	22.8	48-59 m	181	22

Kiribati - survey details

Further information and estimates for previous years are available at:

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

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