

**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.

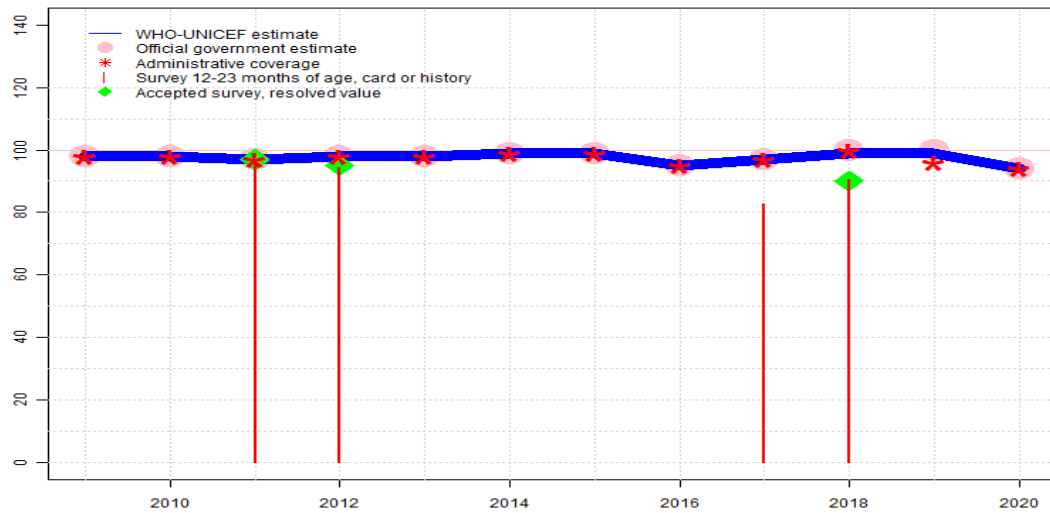
**PcV3:** percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect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

**Disclaimer:** All reasonable precautions have been taken by the World Health Organization and United Nations Children's Fund to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization or United Nations Children's Fund be liable for damages arising from its use.

# Guyana - BCG

GUY - BCG



## Description:

- 2020: Estimate based on coverage reported by national government. Programme reports a one-month vaccine stock-out affecting national and subnational levels. GoC=R+ S+ D+
- 2019: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2018: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). GoC=R+ S+ D+
- 2017: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates inconsistent for the 24-35 m age cohort. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government. Programme reports national level stock-out of less than one month. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 97 percent based on 1 survey(s). Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	98	98	97	98	98	99	99	95	97	99	99	94
Estimate GoC	●●●	●	●	●●●	●●●	●●●	●●	●●●	●●●	●●●	●●●	●●●
Official	98	98	97	98	98	99	99	95	97	100	100	94
Administrative	98	98	97	98	98	99	99	95	97	100	96	94
Survey	NA	NA	96.7	94.5	NA	NA	NA	NA	82.6	90.4	NA	NA

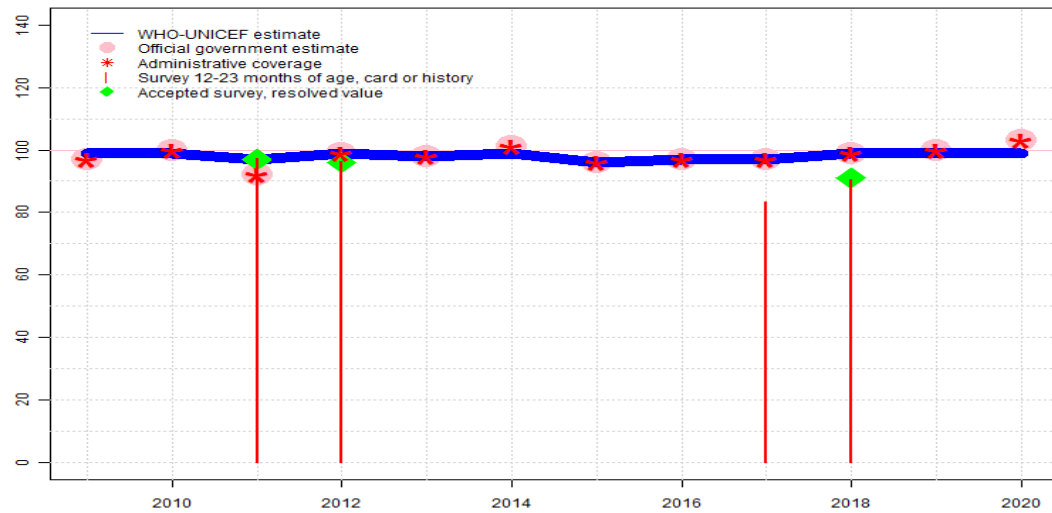
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2020 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.

# Guyana - DTP1

GUY - DTP1



## Description:

2020: Estimate based on extrapolation from data reported by national government. Reported data excluded because 103 percent greater than 100 percent. GoC=R+ S+ D+

2019: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2018: Estimate based on coverage reported by national government supported by survey. Survey evidence of 91 percent based on 1 survey(s). GoC=R+ S+ D+

2017: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates inconsistent for the 24-35 m age cohort. GoC=R+ S+ D+

2016: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2015: Estimate based on coverage reported by national government. GoC=R+ D+

2014: DTP1 coverage estimated based on DTP3 coverage of 98. Reported data excluded because 101 percent greater than 100 percent. Estimate challenged by: R-

2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). GoC=R+ S+ D+

2011: DTP1 coverage estimated based on DTP3 coverage of 93. Estimate challenged by: D-R-

2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2009: DTP1 coverage estimated based on DTP3 coverage of 98. Estimate challenged by: R-

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	99	99	97	99	98	99	96	97	97	99	99	99
Estimate GoC	•	•••	•	•••	•••	•	••	•••	•••	•••	•••	•••
Official	97	100	92	99	98	101	96	97	97	99	100	103
Administrative	97	100	92	99	98	101	96	97	97	99	100	103
Survey	NA	NA	97.4	96.2	NA	NA	NA	NA	83.2	90.6	NA	NA

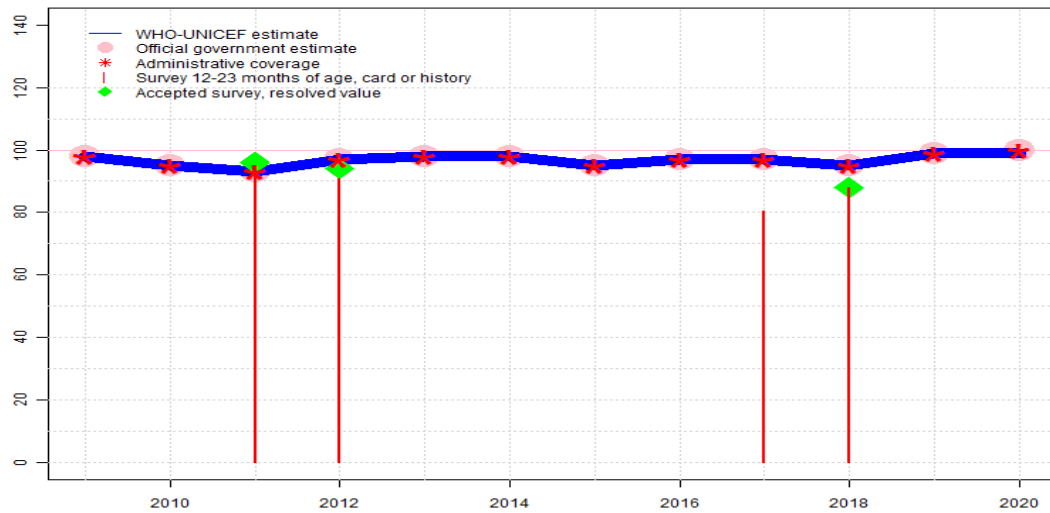
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2020 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.

# Guyana - DTP3

GUY - DTP3



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	98	95	93	97	98	98	95	97	97	95	99	99
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●●	●●	●●●	●●●	●●●	●	●
Official	98	95	93	97	98	98	95	97	97	95	99	100
Administrative	98	95	93	97	98	98	95	97	97	95	99	100
Survey	NA	NA	95	90.9	NA	NA	NA	NA	80.3	87.9	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: 2020 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.

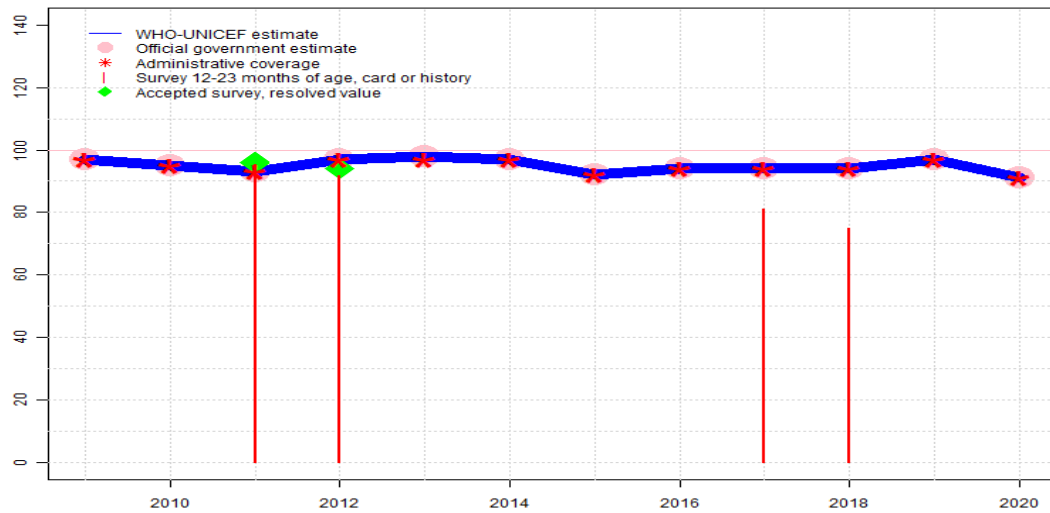
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2020: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2019: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2018: Estimate based on coverage reported by national government supported by survey. Survey evidence of 88 percent based on 1 survey(s). Guyana Multiple Indicator Cluster Survey 2019-2020 card or history results of 88 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 88 percent. GoC=R+ S+ D+
- 2017: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates inconsistent for the 24-35 m age cohort. Guyana Multiple Indicator Cluster Survey 2019-2020 card or history results of 80 percent modified for recall bias to 81 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 81 percent and 3rd dose card only coverage of 79 percent. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). Guyana Multiple Indicator Cluster Survey 2014 card or history results of 91 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 88 percent. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). Guyana Multiple Indicator Cluster Survey 2014 card or history results of 95 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 94 percent and 3rd dose card only coverage of 92 percent. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+

# Guyana - Pol3

GUY - Pol3



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	97	95	93	97	98	97	92	94	94	94	97	91
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●●	●●	●●	●●	●●	●●	●●
Official	97	95	93	97	98	97	92	94	94	94	97	91
Administrative	97	95	93	97	97	97	92	94	94	94	97	91
Survey	NA	NA	95.4	91.9	NA	NA	NA	NA	81.1	74.9	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: 2020 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.

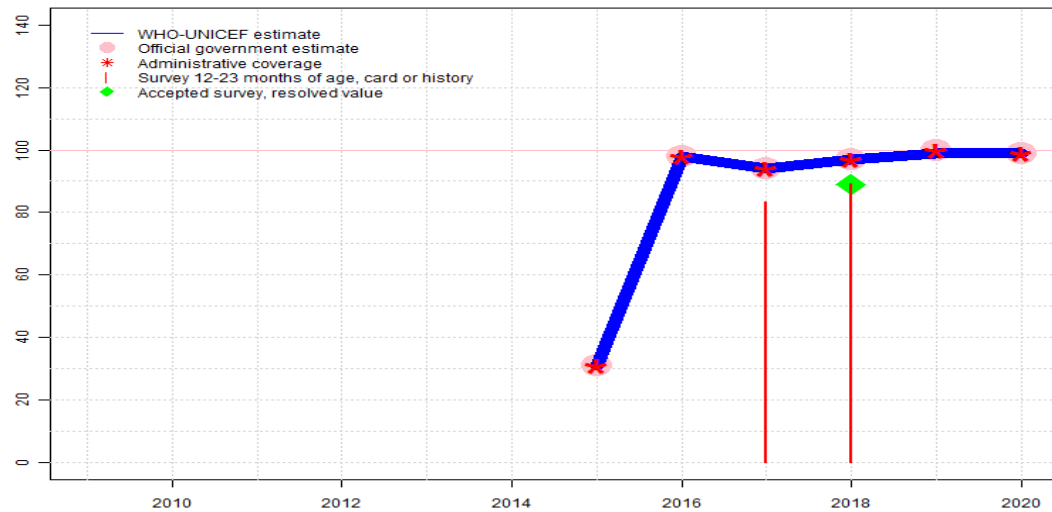
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2020: Estimate based on coverage reported by national government. GoC=R+ D+
- 2019: Estimate based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates for polio doses are inconsistent. Higher reported coverage reported for Polio2 than Polio1 and large drop for Polio3. Guyana Multiple Indicator Cluster Survey 2019-2020 card or history results of 75 percent modified for recall bias to 75 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 88 percent and 3rd dose card only coverage of 74 percent. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates inconsistent for the 24-35 m age cohort. Guyana Multiple Indicator Cluster Survey 2019-2020 card or history results of 81 percent modified for recall bias to 82 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 81 percent and 3rd dose card only coverage of 79 percent. Programme reports 2 weeks national level vaccine stock-out. GoC=R+ D+
- 2016: Estimate based on coverage reported by national government. Programme reports 1 month national level vaccine stock-out. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. Programme reports national level stock-out of less than one month. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). Guyana Multiple Indicator Cluster Survey 2014 card or history results of 92 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 87 percent. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). Guyana Multiple Indicator Cluster Survey 2014 card or history results of 95 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 93 percent and 3rd dose card only coverage of 92 percent. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+

# Guyana - IPV1

GUY - 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).

- 2020: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2019: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2018: Estimate based on coverage reported by national government supported by survey. Survey evidence of 89 percent based on 1 survey(s). GoC=R+ S+ D+
- 2017: Estimate based on reported data. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates inconsistent for the 24-35 m age cohort. Programme reports 6 weeks national level vaccine stock-out. GoC=R+ S+ D+
- 2016: Estimate based on reported data. Following introduction in 2015, estimate reflects coverage achieved in the national birth cohort. GoC=R+ S+ D+
- 2015: Estimate based on reported data. GoC=R+ D+

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	NA	NA	NA	NA	NA	NA	31	98	94	97	99	99
Estimate GoC	NA	NA	NA	NA	NA	NA	••	•••	•••	•••	•	•••
Official	NA	NA	NA	NA	NA	NA	31	98	94	97	100	99
Administrative	NA	NA	NA	NA	NA	NA	31	98	94	97	100	99
Survey	NA	NA	NA	NA	NA	NA	NA	NA	83.4	89.3	NA	NA

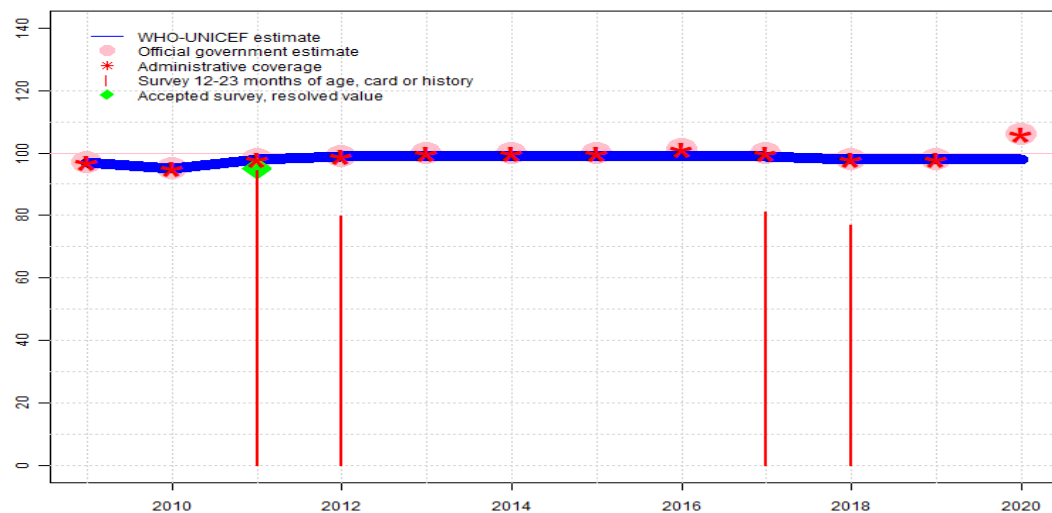
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2020 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.

# Guyana - MCV1

GUY - MCV1



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	97	95	98	99	99	100	100	101	100	98	98	98
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●	●●	●●	●●	●●	●●	●
Official	97	95	98	99	100	100	100	101	100	98	98	106
Administrative	97	95	98	99	100	100	100	101	100	98	98	106
Survey	NA	NA	94.5	79.8	NA	NA	NA	NA	81	77	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: 2020 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.

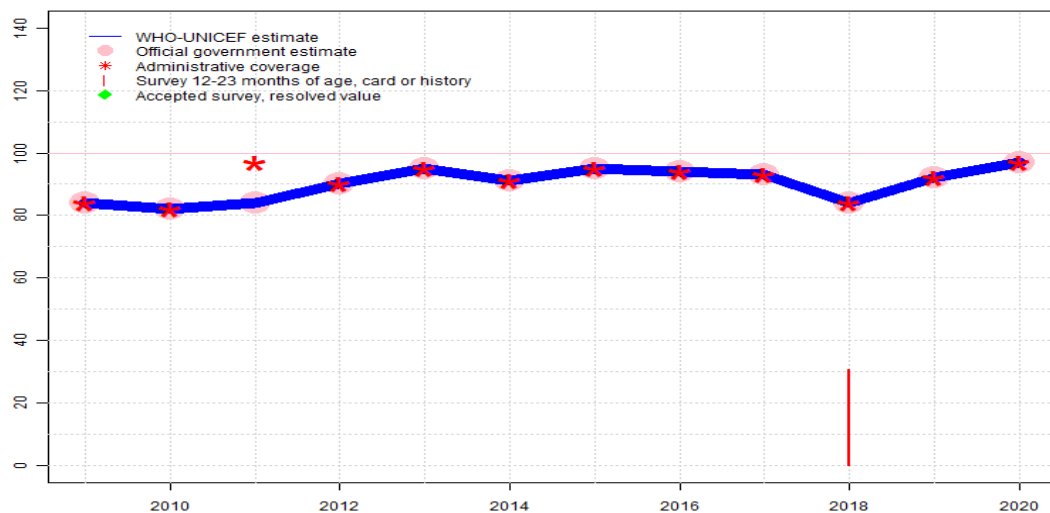
## Description:

- 2020: Estimate based on extrapolation from data reported by national government. Reported data excluded because 106 percent greater than 100 percent. Estimate challenged by: D-
- 2019: Estimate based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates for vaccines recommended in the second year of life are inconsistent. Survey estimates are close to 100 percent for most vaccines for those with cards seen (82 percent) but recall is negligible. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates inconsistent for the 24-35 m age cohort. Programme reports 2 weeks national level vaccine stock-out. GoC=R+ D+
- 2016: Estimate based on interpolation between data reported by national government. Reported data excluded because 101 percent greater than 100 percent. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2014 results ignored by working group. The first dose of MCV is recommended at 1 year of age or before the second birthday. Survey results for children aged 12-23 months at the time of survey therefore reflect only part of the period during which children may receive MCV1. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+



# Guyana - MCV2

GUY - MCV2



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	84	82	84	90	95	91	95	94	93	84	92	97
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	84	82	84	90	95	91	95	94	93	84	92	97
Administrative	84	82	97	90	95	91	95	94	93	84	92	97
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	30.7	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: 2020 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.

2020: Estimate based on coverage reported by national government. GoC=R+ D+

2019: Estimate based on coverage reported by national government. GoC=R+ D+

2018: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates for vaccines recommended in the second year of life are inconsistent. Survey estimates are close to 100 percent for most vaccines for those with cards seen (82 percent) but recall is negligible. GoC=R+ D+

2017: Estimate based on coverage reported by national government. Programme reports 2 weeks national level vaccine stock-out. GoC=R+ D+

2016: Estimate based on coverage reported by national government. GoC=R+ D+

2015: Estimate based on coverage reported by national government. GoC=R+ D+

2014: Estimate based on coverage reported by national government. GoC=R+ D+

2013: Estimate based on coverage reported by national government. GoC=R+ D+

2012: Estimate based on coverage reported by national government. GoC=R+ D+

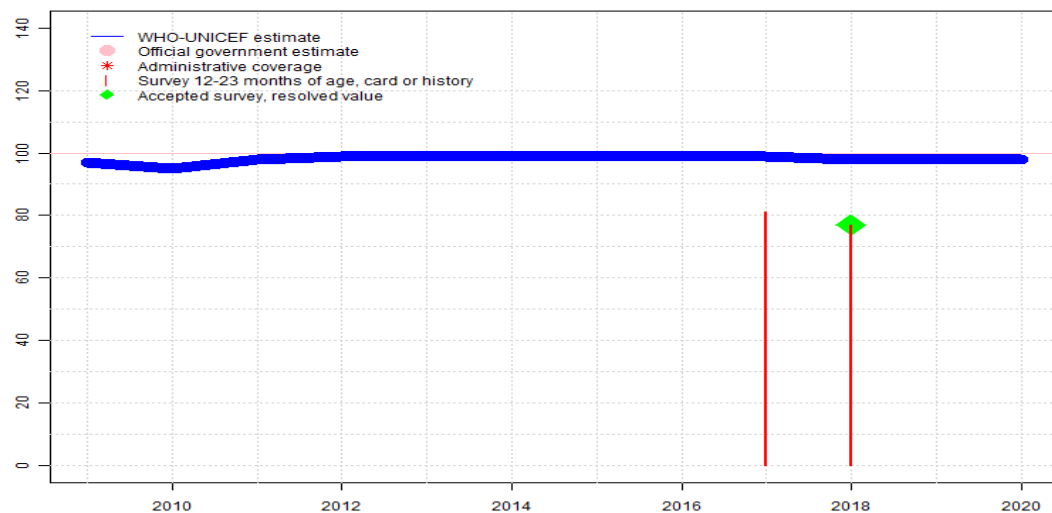
2011: Estimate based on coverage reported by national government. GoC=R+

2010: Estimate based on coverage reported by national government. GoC=R+ D+

2009: Estimate based on coverage reported by national government. GoC=R+ D+

# Guyana - RCV1

GUY - RCV1



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	97	95	98	99	99	99	99	99	99	98	98	98
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	NA	NA	NA	81	77	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: 2020 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.

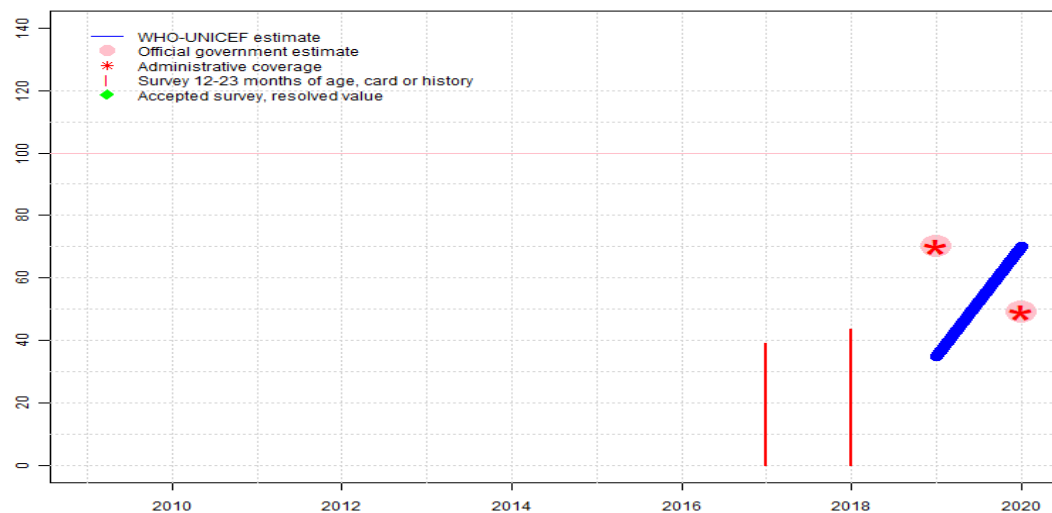
## Description:

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.

- 2020: Estimate based on estimated MCV1. Estimate challenged by: D-
- 2019: Estimate based on estimated MCV1. GoC=R+ D+
- 2018: Estimate based on estimated MCV1. GoC=R+ D+
- 2017: Estimate based on estimated MCV1. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates inconsistent for the 24-35 m age cohort. Programme reports two week vaccine stock-out at the national level. GoC=R+ D+
- 2016: Estimate based on estimated MCV1. GoC=R+ D+
- 2015: Estimate based on estimated MCV1. GoC=R+ D+
- 2014: Estimate based on estimated MCV1. GoC=R+ D+
- 2013: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2012: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2011: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2010: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2009: Estimate based on estimated MCV1. GoC=R+ S+ D+

# Guyana - HepBB

GUY - HepBB



## Description:

2020: Estimate based on extrapolation from data reported by national government. Reported data excluded due to sudden change in coverage from 70 level to 49 percent. Estimate challenged by: D-

2019: Vaccine dose introduced universally in June 2019. Programme reports 70 percent coverage achieved in 50 percent of the national target population. Estimate is based on annualized coverage achieved in the national target population. Estimate challenged by: R-

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35	70
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	70	49
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	70	49
Survey	NA	NA	NA	NA	NA	NA	NA	NA	39	43.5	NA	NA

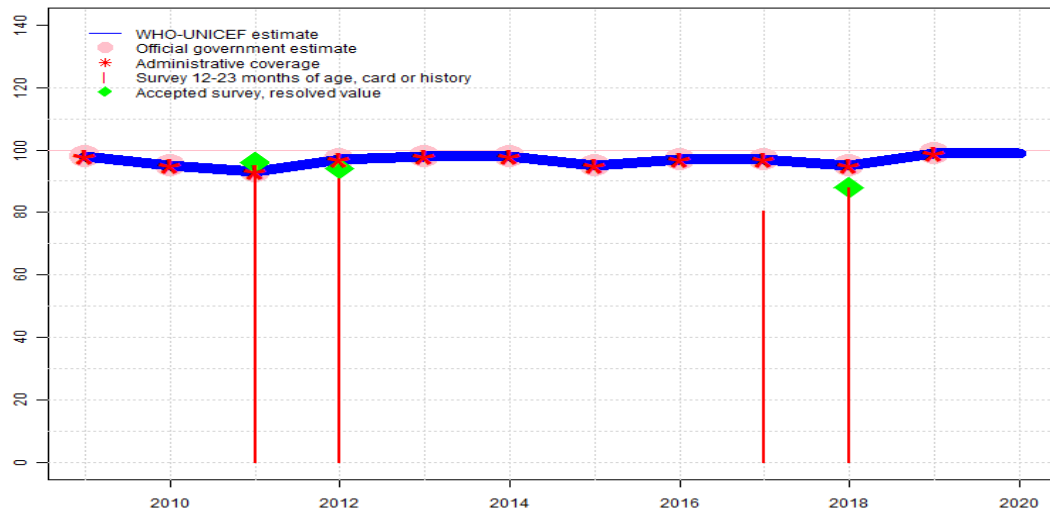
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2020 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.

# Guyana - HepB3

GUY - HepB3



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	98	95	93	97	98	98	95	97	97	95	99	99
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●●	●●	●●●	●●●	●●●	●	●
Official	98	95	93	97	98	98	95	97	97	95	99	NA
Administrative	98	95	93	97	98	98	95	97	97	95	99	NA
Survey	NA	NA	95	90.9	NA	NA	NA	NA	80.3	87.9	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: 2020 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.

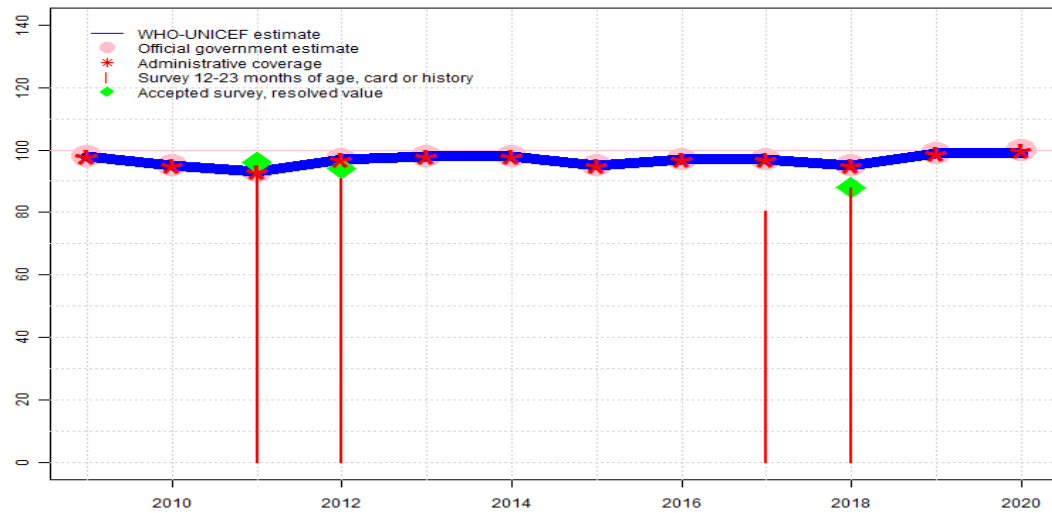
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2020: Estimate based on extrapolation from data reported by national government. Estimate challenged by: S-
- 2019: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2018: Estimate based on coverage reported by national government supported by survey. Survey evidence of 88 percent based on 1 survey(s). Guyana Multiple Indicator Cluster Survey 2019-2020 card or history results of 88 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 88 percent. GoC=R+ S+ D+
- 2017: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates inconsistent for the 24-35 m age cohort. Guyana Multiple Indicator Cluster Survey 2019-2020 card or history results of 80 percent modified for recall bias to 81 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 81 percent and 3rd dose card only coverage of 79 percent. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). Guyana Multiple Indicator Cluster Survey 2014 card or history results of 91 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 88 percent. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). Guyana Multiple Indicator Cluster Survey 2014 card or history results of 95 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 94 percent and 3rd dose card only coverage of 92 percent. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+

# Guyana - Hib3

GUY - Hib3



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	98	95	93	97	98	98	95	97	97	95	99	99
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●●	●●	●●●	●●●	●●●	●	●
Official	98	95	93	97	98	98	95	97	97	95	99	100
Administrative	98	95	93	97	98	98	95	97	97	95	99	100
Survey	NA	NA	95	90.9	NA	NA	NA	NA	80.3	87.9	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: 2020 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.

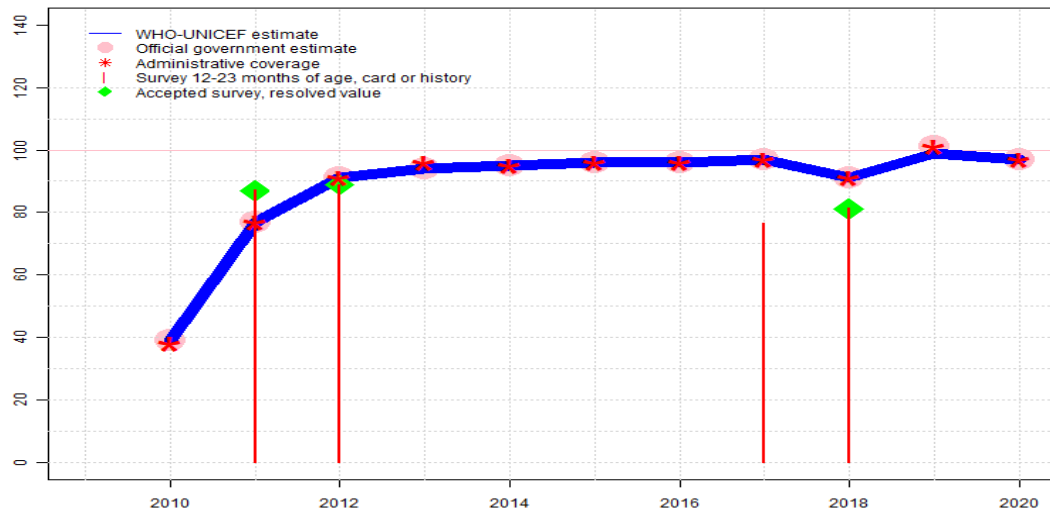
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2020: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2019: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2018: Estimate based on coverage reported by national government supported by survey. Survey evidence of 88 percent based on 1 survey(s). Guyana Multiple Indicator Cluster Survey 2019-2020 card or history results of 88 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 88 percent. GoC=R+ S+ D+
- 2017: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates inconsistent for the 24-35 m age cohort. Guyana Multiple Indicator Cluster Survey 2019-2020 card or history results of 80 percent modified for recall bias to 81 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 81 percent and 3rd dose card only coverage of 79 percent. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). Guyana Multiple Indicator Cluster Survey 2014 card or history results of 91 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 88 percent. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). Guyana Multiple Indicator Cluster Survey 2014 card or history results of 95 percent modified for recall bias to 96 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 94 percent and 3rd dose card only coverage of 92 percent. GoC=R+ S+ D+
- 2010: Estimate based on reported data. GoC=R+ S+ D+
- 2009: Estimate based on reported data. GoC=R+ S+ D+

# Guyana - RotaC

GUY - RotaC



## Description:

- 2020: Estimate based on coverage reported by national government. Programme reports a three-month vaccine stock-out affecting national and subnational levels. Estimate challenged by: S-
- 2019: Estimate based on coverage reported by national government. Reported data likely reflects recovery from prior year vaccine stock-out. Estimate challenged by: S-
- 2018: Estimate based on coverage reported by national government supported by survey. Survey evidence of 81 percent based on 1 survey(s). Programme reports a five-month national level vaccine stock-out. GoC=R+ S+ D+
- 2017: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates inconsistent for the 24-35 m age cohort. Estimate challenged by: S-
- 2016: Estimate based on coverage reported by national government. Programme reports 1.5 month national level vaccine stock-out. Estimate challenged by: S-
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 89 percent based on 1 survey(s). GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 87 percent based on 1 survey(s). Estimate challenged by: S-
- 2010: Estimate based on reported data. Rotavirus vaccine introduced in 2010. Estimate challenged by: D-S-

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	NA	39	77	91	94	95	96	96	97	91	99	97
Estimate GoC	NA	•	•••	•••	•••	•••	••	•	•	•••	•	•
Official	NA	39	77	91	94	95	96	96	97	91	101	97
Administrative	NA	38	77	91	96	95	96	96	97	91	101	97
Survey	NA	NA	87.2	88.9	NA	NA	NA	NA	76.6	81.3	NA	NA

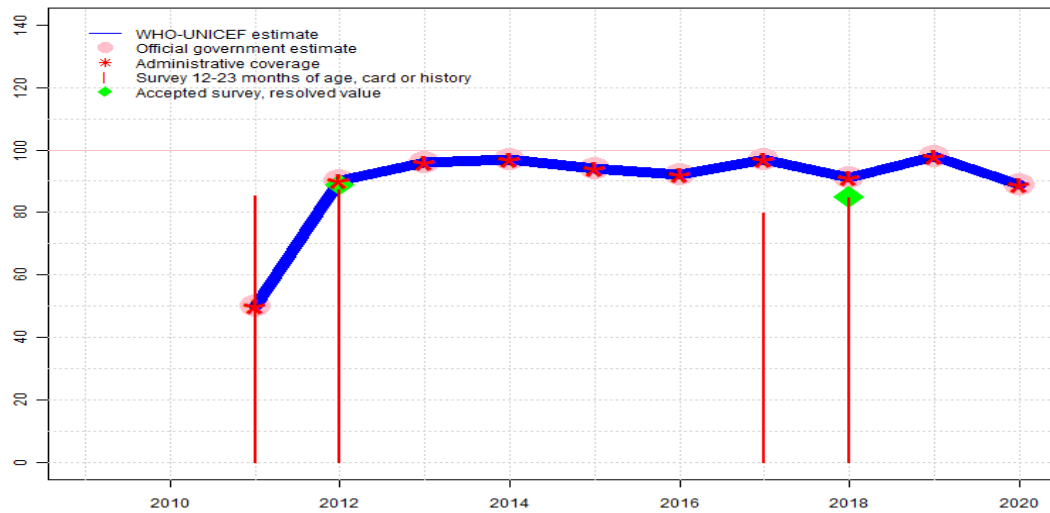
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2020 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.

# Guyana - PcV3

GUY - PcV3



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	NA	NA	50	90	96	97	94	92	97	91	98	89
Estimate GoC	NA	NA	•	•••	•••	•••	••	•••	•	•••	•	•••
Official	NA	NA	50	90	96	97	94	92	97	91	98	89
Administrative	NA	NA	50	90	96	97	94	92	97	91	98	89
Survey	NA	NA	85.4	87.3	NA	NA	NA	NA	79.7	84.6	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: 2020 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.

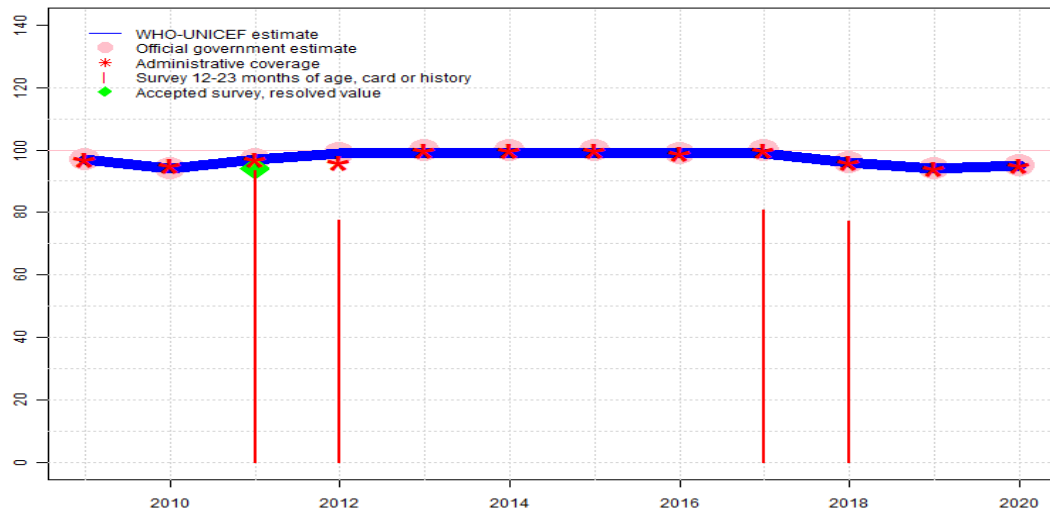
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2020: Estimate based on coverage reported by national government. Programme reports a three-month national level vaccine stock-out. GoC=R+ S+ D+
- 2019: Estimate based on coverage reported by national government. Reported data likely reflects recovery from prior year vaccine stock-out. Estimate challenged by: S-
- 2018: Estimate based on coverage reported by national government supported by survey. Survey evidence of 85 percent based on 1 survey(s). Guyana Multiple Indicator Cluster Survey 2019-2020 card or history results of 85 percent modified for recall bias to 85 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 84 percent. Programme reports a five-month national level vaccine stock-out. GoC=R+ S+ D+
- 2017: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates inconsistent for the 24-35 m age cohort. Guyana Multiple Indicator Cluster Survey 2019-2020 card or history results of 80 percent modified for recall bias to 80 percent based on 1st dose card or history coverage of 82 percent, 1st dose card only coverage of 80 percent and 3rd dose card only coverage of 78 percent. Estimate challenged by: S-
- 2016: Estimate based on coverage reported by national government. Programme reports 3 month national level vaccine stock-out. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 89 percent based on 1 survey(s). Guyana Multiple Indicator Cluster Survey 2014 card or history results of 87 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 87 percent and 3rd dose card only coverage of 84 percent. GoC=R+ S+ D+
- 2011: Estimate based on reported data. Guyana Multiple Indicator Cluster Survey 2014 results ignored by working group. Survey results ignored during introduction year. Guyana Multiple Indicator Cluster Survey 2014 card or history results of 85 percent modified for recall bias to 86 percent based on 1st dose card or history coverage of 90 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 82 percent. Pneumococcal conjugate vaccine was introduced in 2011. Estimate challenged by: S-

# Guyana - YFV

GUY - YFV



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	97	94	97	99	99	99	99	99	99	96	94	95
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●	●●	●●	●●	●●	●●	●●
Official	97	94	97	99	100	100	100	99	100	96	94	95
Administrative	97	95	97	96	100	100	100	99	100	96	94	95
Survey	NA	NA	93.5	77.6	NA	NA	NA	NA	80.7	77.1	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: 2020 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:

- 2020: Estimate based on coverage reported by national government. GoC=R+ D+
- 2019: Estimate based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates for vaccines recommended in the second year of life are inconsistent. Survey estimates are close to 100 percent for most vaccines for those with cards seen (82 percent) but recall is negligible. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2019-2020 results ignored by working group. Survey estimates inconsistent for the 24-35 m age cohort. Programme reports 4 weeks national level vaccine stock-out. GoC=R+ D+
- 2016: Estimate based on coverage reported by national government. Programme reports 1 month national level vaccine stock-out. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. Guyana Multiple Indicator Cluster Survey 2014 results ignored by working group. Yellow fever virus vaccine is recommended at 1 year of age or before the second birthday. Survey results for children aged 12-23 months at the time of survey therefore reflect only part of the period during which children may receive YFV. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+



# Guyana - survey details

## 2018 Guyana Multiple Indicator Cluster Survey 2019-2020

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	90	12-23 m	555	91
BCG	Card	89.3	12-23 m	555	91
BCG	Card or History	90.4	12-23 m	555	91
BCG	History	1.1	12-23 m	555	91
DTP1	C or H <12 months	90.5	12-23 m	555	91
DTP1	Card	89.8	12-23 m	555	91
DTP1	Card or History	90.6	12-23 m	555	91
DTP1	History	0.8	12-23 m	555	91
DTP3	C or H <12 months	85.9	12-23 m	555	91
DTP3	Card	87.7	12-23 m	555	91
DTP3	Card or History	87.9	12-23 m	555	91
DTP3	History	0.2	12-23 m	555	91
HepB1	C or H <12 months	90.5	12-23 m	555	91
HepB1	Card	89.8	12-23 m	555	91
HepB1	Card or History	90.6	12-23 m	555	91
HepB1	History	0.8	12-23 m	555	91
HepB3	C or H <12 months	85.9	12-23 m	555	91
HepB3	Card	87.7	12-23 m	555	91
HepB3	Card or History	87.9	12-23 m	555	91
HepB3	History	0.2	12-23 m	555	91
HepBB	C or H <12 months	42.9	12-23 m	555	91
HepBB	Card	43.5	12-23 m	555	91
HepBB	Card or History	43.5	12-23 m	555	91
HepBB	History	0	12-23 m	555	91
Hib1	C or H <12 months	90.5	12-23 m	555	91
Hib1	Card	89.8	12-23 m	555	91
Hib1	Card or History	90.6	12-23 m	555	91
Hib1	History	0.8	12-23 m	555	91
Hib3	C or H <12 months	85.9	12-23 m	555	91
Hib3	Card	87.7	12-23 m	555	91
Hib3	Card or History	87.9	12-23 m	555	91
Hib3	History	0.2	12-23 m	555	91
IPV1	C or H <12 months	89.1	12-23 m	555	91
IPV1	Card	88.4	12-23 m	555	91
IPV1	Card or History	89.3	12-23 m	555	91
IPV1	History	0.8	12-23 m	555	91
MCV1	C or H <12 months	51.8	12-23 m	555	91

MCV1	Card	76.3	12-23 m	555	91
MCV1	Card or History	77	12-23 m	555	91
MCV1	History	0.7	12-23 m	555	91
MCV2	C or H <12 months	2.4	12-23 m	555	91
MCV2	Card	30.3	12-23 m	555	91
MCV2	Card or History	30.7	12-23 m	555	91
MCV2	History	0.4	12-23 m	555	91
PCV1	C or H <12 months	90.7	12-23 m	555	91
PCV1	Card	90.2	12-23 m	555	91
PCV1	Card or History	90.8	12-23 m	555	91
PCV1	History	0.6	12-23 m	555	91
PCV3	C or H <12 months	80.9	12-23 m	555	91
PCV3	Card	84.3	12-23 m	555	91
PCV3	Card or History	84.6	12-23 m	555	91
PCV3	History	0.3	12-23 m	555	91
Pol1	C or H <12 months	89.1	12-23 m	555	91
Pol1	Card	88.4	12-23 m	555	91
Pol1	Card or History	89.3	12-23 m	555	91
Pol1	History	0.8	12-23 m	555	91
Pol3	C or H <12 months	71.1	12-23 m	555	91
Pol3	Card	74.3	12-23 m	555	91
Pol3	Card or History	74.9	12-23 m	555	91
Pol3	History	0.5	12-23 m	555	91
RotaC	C or H <12 months	80.7	12-23 m	555	91
RotaC	Card	80.8	12-23 m	555	91
RotaC	Card or History	81.3	12-23 m	555	91
RotaC	History	0.5	12-23 m	555	91
YFV	C or H <12 months	49.1	12-23 m	555	91
YFV	Card	76.3	12-23 m	555	91
YFV	Card or History	77.1	12-23 m	555	91
YFV	History	0.8	12-23 m	555	91

## 2017 Guyana Multiple Indicator Cluster Survey 2019-2020

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	81.9	24-35 m	490	91
BCG	Card	80	24-35 m	490	91
BCG	Card or History	82.6	24-35 m	490	91
BCG	History	2.6	24-35 m	490	91

# Guyana - survey details

DTP1	C or H <12 months	81.7	24-35 m	490	91
DTP1	Card	80.8	24-35 m	490	91
DTP1	Card or History	83.2	24-35 m	490	91
DTP1	History	2.5	24-35 m	490	91
DTP3	C or H <12 months	78.2	24-35 m	490	91
DTP3	Card	79	24-35 m	490	91
DTP3	Card or History	80.3	24-35 m	490	91
DTP3	History	1.3	24-35 m	490	91
HepB1	C or H <12 months	81.7	24-35 m	490	91
HepB1	Card	80.8	24-35 m	490	91
HepB1	Card or History	83.2	24-35 m	490	91
HepB1	History	2.5	24-35 m	490	91
HepB3	C or H <12 months	78.2	24-35 m	490	91
HepB3	Card	79	24-35 m	490	91
HepB3	Card or History	80.3	24-35 m	490	91
HepB3	History	1.3	24-35 m	490	91
HepBB	C or H <12 months	38	24-35 m	490	91
HepBB	Card	39	24-35 m	490	91
HepBB	Card or History	39	24-35 m	490	91
HepBB	History	0	24-35 m	490	91
Hib1	C or H <12 months	81.7	24-35 m	490	91
Hib1	Card	80.8	24-35 m	490	91
Hib1	Card or History	83.2	24-35 m	490	91
Hib1	History	2.5	24-35 m	490	91
Hib3	C or H <12 months	78.2	24-35 m	490	91
Hib3	Card	79	24-35 m	490	91
Hib3	Card or History	80.3	24-35 m	490	91
Hib3	History	1.3	24-35 m	490	91
IPV1	C or H <12 months	82.6	24-35 m	490	91
IPV1	Card	80.9	24-35 m	490	91
IPV1	Card or History	83.4	24-35 m	490	91
IPV1	History	2.6	24-35 m	490	91
MCV1	C or H <12 months	80.7	24-35 m	490	91
MCV1	Card	78.4	24-35 m	490	91
MCV1	Card or History	81	24-35 m	490	91
MCV1	History	2.6	24-35 m	490	91
PCV1	C or H <12 months	80.7	24-35 m	490	91
PCV1	Card	79.7	24-35 m	490	91
PCV1	Card or History	81.5	24-35 m	490	91
PCV1	History	1.7	24-35 m	490	91

PCV3	C or H <12 months	78.4	24-35 m	490	91
PCV3	Card	78.4	24-35 m	490	91
PCV3	Card or History	79.7	24-35 m	490	91
PCV3	History	1.3	24-35 m	490	91
Pol1	C or H <12 months	82.6	24-35 m	490	91
Pol1	Card	80.9	24-35 m	490	91
Pol1	Card or History	83.4	24-35 m	490	91
Pol1	History	2.6	24-35 m	490	91
Pol3	C or H <12 months	74.4	24-35 m	490	91
Pol3	Card	79.1	24-35 m	490	91
Pol3	Card or History	81.1	24-35 m	490	91
Pol3	History	1.9	24-35 m	490	91
RotaC	C or H <12 months	75.7	24-35 m	490	91
RotaC	Card	74.5	24-35 m	490	91
RotaC	Card or History	76.6	24-35 m	490	91
RotaC	History	2.1	24-35 m	490	91
YFV	C or H <12 months	80.1	24-35 m	490	91
YFV	Card	78.1	24-35 m	490	91
YFV	Card or History	80.7	24-35 m	490	91
YFV	History	2.5	24-35 m	490	91

## 2012 Guyana Multiple Indicator Cluster Survey 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94.5	12-23 m	686	87
BCG	Card	87.8	12-23 m	686	87
BCG	Card or History	94.5	12-23 m	686	87
DTP1	C or H <12 months	96.1	12-23 m	686	87
DTP1	Card	89.9	12-23 m	686	87
DTP1	Card or History	96.2	12-23 m	686	87
DTP3	C or H <12 months	89.4	12-23 m	686	87
DTP3	Card	87.5	12-23 m	686	87
DTP3	Card or History	90.9	12-23 m	686	87
HepB1	C or H <12 months	96.1	12-23 m	686	87
HepB1	Card	89.9	12-23 m	686	87
HepB1	Card or History	96.2	12-23 m	686	87
HepB3	C or H <12 months	89.4	12-23 m	686	87
HepB3	Card	87.5	12-23 m	686	87
HepB3	Card or History	90.9	12-23 m	686	87

# Guyana - survey details

Hib1	C or H <12 months	96.1	12-23 m	686	87	HepB1	Card	93.7	24-35 m	648	87
Hib1	Card	89.9	12-23 m	686	87	HepB1	Card or History	97.4	24-35 m	648	87
Hib1	Card or History	96.2	12-23 m	686	87	HepB3	C or H <12 months	90.7	24-35 m	648	87
Hib3	C or H <12 months	89.4	12-23 m	686	87	HepB3	Card	91.9	24-35 m	648	87
Hib3	Card	87.5	12-23 m	686	87	HepB3	Card or History	95	24-35 m	648	87
Hib3	Card or History	90.9	12-23 m	686	87	Hib1	C or H <12 months	96.6	24-35 m	648	87
MCV1	Card	74.1	12-23 m	686	87	Hib1	Card	93.7	24-35 m	648	87
MCV1	Card or History	79.8	12-23 m	686	87	Hib1	Card or History	97.4	24-35 m	648	87
PCV1	C or H <12 months	91.4	12-23 m	686	87	Hib3	C or H <12 months	90.7	24-35 m	648	87
PCV1	Card	87	12-23 m	686	87	Hib3	Card	91.9	24-35 m	648	87
PCV1	Card or History	91.6	12-23 m	686	87	Hib3	Card or History	95	24-35 m	648	87
PCV3	C or H <12 months	82.4	12-23 m	686	87	MCV1	C or H <12 months	93.4	24-35 m	648	87
PCV3	Card	84.3	12-23 m	686	87	MCV1	Card	90.4	24-35 m	648	87
PCV3	Card or History	87.3	12-23 m	686	87	MCV1	Card or History	94.5	24-35 m	648	87
Pol1	C or H <12 months	96.6	12-23 m	686	87	PCV1	C or H <12 months	89.4	24-35 m	648	87
Pol1	Card	89.9	12-23 m	686	87	PCV1	Card	86.4	24-35 m	648	87
Pol1	Card or History	96.7	12-23 m	686	87	PCV1	Card or History	89.9	24-35 m	648	87
Pol3	C or H <12 months	90.2	12-23 m	686	87	PCV3	C or H <12 months	81.9	24-35 m	648	87
Pol3	Card	87.4	12-23 m	686	87	PCV3	Card	82.4	24-35 m	648	87
Pol3	Card or History	91.9	12-23 m	686	87	PCV3	Card or History	85.4	24-35 m	648	87
RotaC	C or H <12 months	87.6	12-23 m	686	87	Pol1	C or H <12 months	97.1	24-35 m	648	87
RotaC	Card	86.2	12-23 m	686	87	Pol1	Card	93.4	24-35 m	648	87
RotaC	Card or History	88.9	12-23 m	686	87	Pol1	Card or History	98	24-35 m	648	87
YFV	Card	73.3	12-23 m	686	87	Pol3	C or H <12 months	91	24-35 m	648	87
YFV	Card or History	77.6	12-23 m	686	87	Pol3	Card	91.7	24-35 m	648	87
						Pol3	Card or History	95.4	24-35 m	648	87
						RotaC	C or H <12 months	83.8	24-35 m	648	87
						RotaC	Card	84.2	24-35 m	648	87
						RotaC	Card or History	87.2	24-35 m	648	87
						YFV	C or H <12 months	92.3	24-35 m	648	87
						YFV	Card	89.5	24-35 m	648	87
						YFV	Card or History	93.5	24-35 m	648	87

## 2011 Guyana Multiple Indicator Cluster Survey 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	95.6	24-35 m	648	87
BCG	Card	92.2	24-35 m	648	87
BCG	Card or History	96.7	24-35 m	648	87
DTP1	C or H <12 months	96.6	24-35 m	648	87
DTP1	Card	93.7	24-35 m	648	87
DTP1	Card or History	97.4	24-35 m	648	87
DTP3	C or H <12 months	90.7	24-35 m	648	87
DTP3	Card	91.9	24-35 m	648	87
DTP3	Card or History	95	24-35 m	648	87
HepB1	C or H <12 months	96.6	24-35 m	648	87

## 2007 Guyana Demographic and Health Survey 2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <18 months	94.1	18-29 m	384	88
BCG	Card	86.5	18-29 m	384	88
BCG	Card or History	94.1	18-29 m	384	88

# Guyana - survey details

BCG	History	7.7	18-29 m	384	88
DTP1	C or H <18 months	91.9	18-29 m	384	88
DTP1	Card	85.8	18-29 m	384	88
DTP1	Card or History	91.9	18-29 m	384	88
DTP1	History	6.1	18-29 m	384	88
DTP3	C or H <18 months	83	18-29 m	384	88
DTP3	Card	82.2	18-29 m	384	88
DTP3	Card or History	84.7	18-29 m	384	88
DTP3	History	2.5	18-29 m	384	88
HepB1	C or H <18 months	91.9	18-29 m	384	88
HepB1	Card	85.8	18-29 m	384	88
HepB1	Card or History	91.9	18-29 m	384	88
HepB1	History	6.1	18-29 m	384	88
HepB3	C or H <18 months	83	18-29 m	384	88
HepB3	Card	82.2	18-29 m	384	88
HepB3	Card or History	84.7	18-29 m	384	88
HepB3	History	2.5	18-29 m	384	88
Hib1	C or H <18 months	91.9	18-29 m	384	88
Hib1	Card	85.8	18-29 m	384	88
Hib1	Card or History	91.9	18-29 m	384	88
Hib1	History	6.1	18-29 m	384	88
Hib3	C or H <18 months	83	18-29 m	384	88
Hib3	Card	82.2	18-29 m	384	88
Hib3	Card or History	84.7	18-29 m	384	88
Hib3	History	2.5	18-29 m	384	88
MCV1	C or H <18 months	77.2	18-29 m	384	88
MCV1	Card	76.2	18-29 m	384	88
MCV1	Card or History	81.7	18-29 m	384	88
MCV1	History	5.5	18-29 m	384	88
Pol1	C or H <18 months	77.5	18-29 m	384	88
Pol1	Card	72	18-29 m	384	88
Pol1	Card or History	78.4	18-29 m	384	88
Pol1	History	6.4	18-29 m	384	88
Pol3	C or H <18 months	68.3	18-29 m	384	88
Pol3	Card	68.9	18-29 m	384	88
Pol3	Card or History	70	18-29 m	384	88
Pol3	History	1.2	18-29 m	384	88
YFV	C or H <18 months	75.1	18-29 m	384	88
YFV	Card	73.7	18-29 m	384	88
YFV	Card or History	79	18-29 m	384	88

YFV	History	5.3	18-29 m	384	88
-----	---------	-----	---------	-----	----

## 2005 Guyana Multiple Indicator Cluster Survey 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	96	18-29 m	488	75
BCG	Card	75.7	18-29 m	488	75
BCG	Card or History	98.1	18-29 m	488	75
BCG	History	22.4	18-29 m	488	75
DTP1	C or H <12 months	95	18-29 m	488	75
DTP3	C or H <12 months	74	18-29 m	488	75
MCV1	C or H <12 months	89.7	18-29 m	488	75
MCV1	Card	77.1	18-29 m	488	75
MCV1	Card or History	95.4	18-29 m	488	75
MCV1	History	18.3	18-29 m	488	75
Pol1	C or H <12 months	95.2	18-29 m	488	75
Pol1	Card	76.5	18-29 m	488	75
Pol1	Card or History	97.6	18-29 m	488	75
Pol1	History	21.1	18-29 m	488	75
Pol3	C or H <12 months	74.2	18-29 m	488	75
Pol3	Card	76.4	18-29 m	488	75
Pol3	Card or History	85	18-29 m	488	75
Pol3	History	8.6	18-29 m	488	75
YFV	C or H <12 months	88.4	18-29 m	488	75
YFV	Card	75	18-29 m	488	75
YFV	Card or History	92.1	18-29 m	488	75
YFV	History	17.2	18-29 m	488	75

## 1999 Multiple Indicator Cluster Survey Guyana 2000, 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	97.2	12-23 m	16442	89
BCG	Card	88.1	12-23 m	16442	89
BCG	Card or History	97.9	12-23 m	16442	89
BCG	History	9.8	12-23 m	16442	89
DTP1	C or H <12 months	94.8	12-23 m	16442	89
DTP1	Card	86.6	12-23 m	16442	89

# Guyana - survey details

DTP1	Card or History	95.5	12-23 m	16442	89	Pol1	C or H <12 months	93.7	12-23 m	16442	89
DTP1	History	8.9	12-23 m	16442	89	Pol1	Card	88.1	12-23 m	16442	89
DTP3	C or H <12 months	86	12-23 m	16442	89	Pol1	Card or History	94.5	12-23 m	16442	89
DTP3	Card	85.1	12-23 m	16442	89	Pol1	History	6.4	12-23 m	16442	89
DTP3	Card or History	88.8	12-23 m	16442	89	Pol3	C or H <12 months	85	12-23 m	16442	89
DTP3	History	3.7	12-23 m	16442	89	Pol3	Card	85.3	12-23 m	16442	89
MCV1	C or H <12 months	45.1	12-23 m	16442	89	Pol3	Card or History	87.6	12-23 m	16442	89
MCV1	Card	87.6	12-23 m	16442	89	Pol3	History	2.3	12-23 m	16442	89
MCV1	Card or History	91.7	12-23 m	16442	89						
MCV1	History	4.1	12-23 m	16442	89						

Further information and estimates for previous years are available at:

<http://www.data.unicef.org/child-health/immunization>

<https://www.who.int/teams/immunization-vaccines-and-biologicals/immunization-analysis-and-insights/global-monitoring/data-statistics-and-graphics>