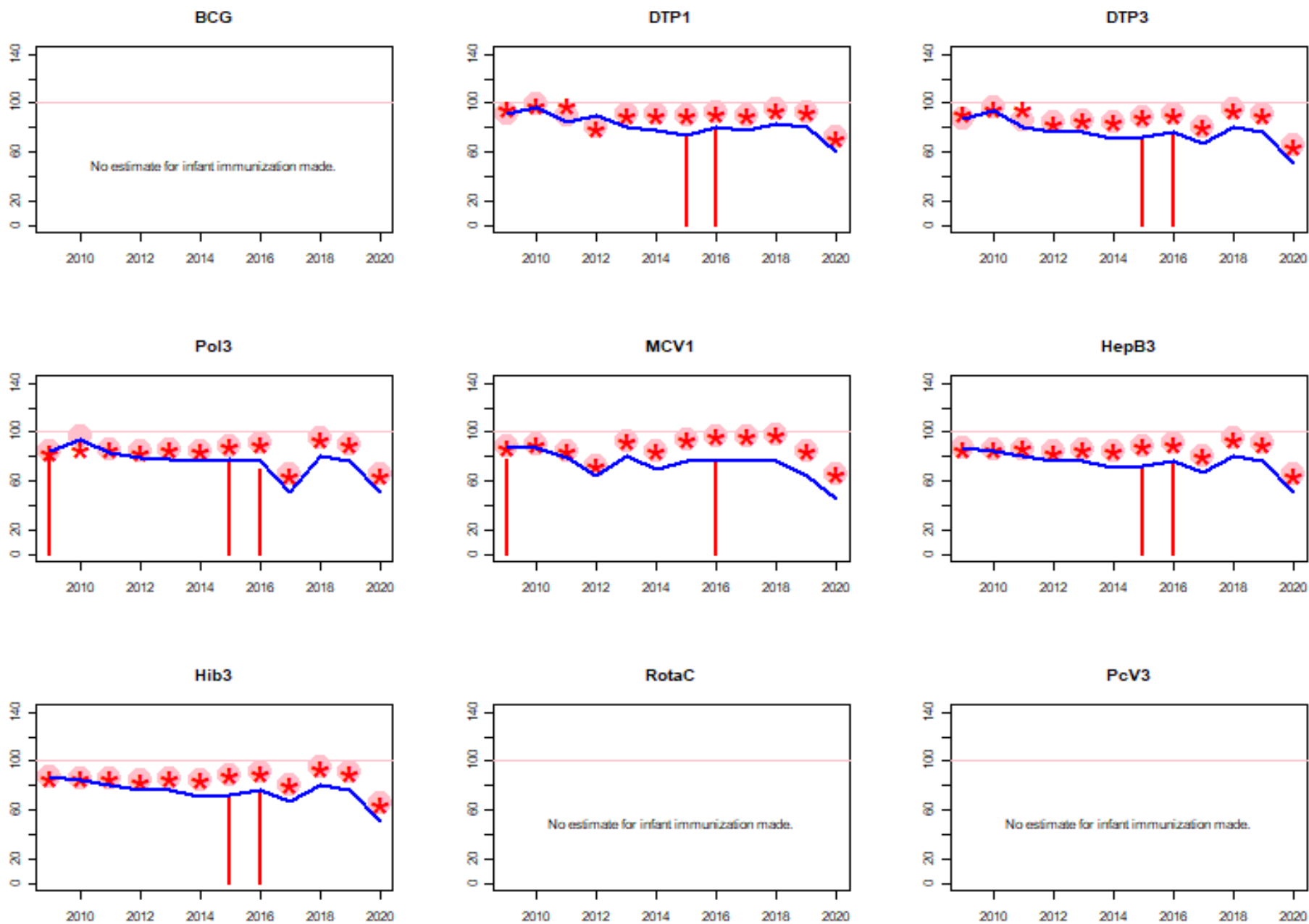


Suriname: WHO and UNICEF estimates of immunization coverage: 2020 revision



Suriname: WHO and UNICEF estimates of immunization coverage: 2020 revision

BACKGROUND NOTE: Each year WHO and UNICEF jointly review reports submitted by Member States regarding national immunization coverage, finalized survey reports as well as data from 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.

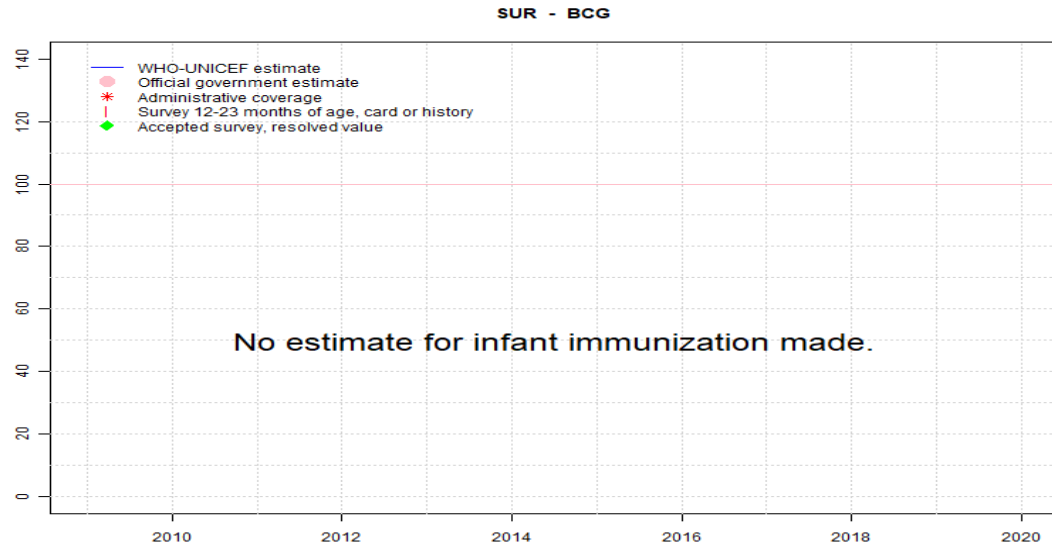
RotaC: percentage of surviving infants who received the final recommended dose of rotavirus vaccine, which can be either the 2nd or the 3rd dose depending on the vaccine.

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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Suriname - BCG



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

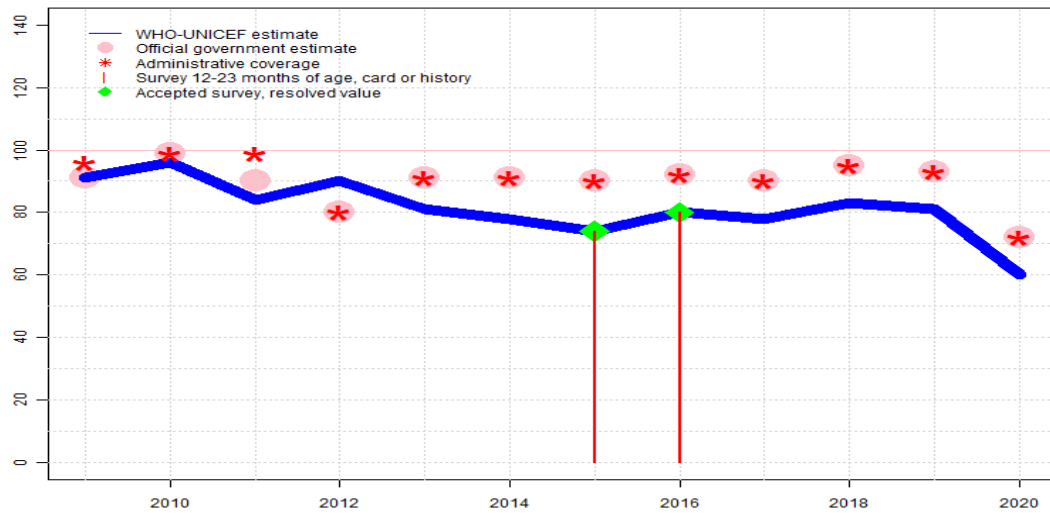
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 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.

Suriname - DTP1

SUR - DTP1



Description:

- 2020: Reported data calibrated to 2016 levels. WHO and UNICEF observe that recent survey results suggest lower levels of coverage than that reported by the programme during the past 10 years. Further investigation to understand underlying differences is warranted, and WHO and UNICEF recommend a high-quality independent empirical assessment to confirm reported levels of coverage. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: R-
- 2019: Reported data calibrated to 2016 levels. Programme reports one month vaccine stock-out. Estimate challenged by: R-
- 2018: Reported data calibrated to 2016 levels. Programme reports four month stock-out of AD syringes. Estimate challenged by: R-
- 2017: Reported data calibrated to 2016 levels. Programme reports 1-month vaccine stock-out. Estimate challenged by: R-
- 2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 80 percent based on 1 survey(s). Estimate challenged by: R-
- 2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 74 percent based on 1 survey(s). Estimate challenged by: D-R-
- 2014: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2013: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2012: DTP1 coverage estimated based on DTP3 coverage of 76. Estimate challenged by: D-R-
- 2011: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2010: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2009: Survey results for DTP1 are not presented due to transitions to DTP-HepB-Hib vaccine during period covered by survey. Estimate is based on reported data based on the observation that the survey supported reported data for Pol3 and MCV1. GoC=R+ D+

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	91	96	84	90	81	78	74	80	78	83	81	60
Estimate GoC	●●	●	●	●	●	●	●	●	●	●	●	●
Official	91	99	90	80	91	91	90	92	90	95	93	72
Administrative	96	99	99	80	91	91	90	92	90	95	93	72
Survey	NA	NA	NA	NA	NA	NA	74	80	NA	NA	NA	NA

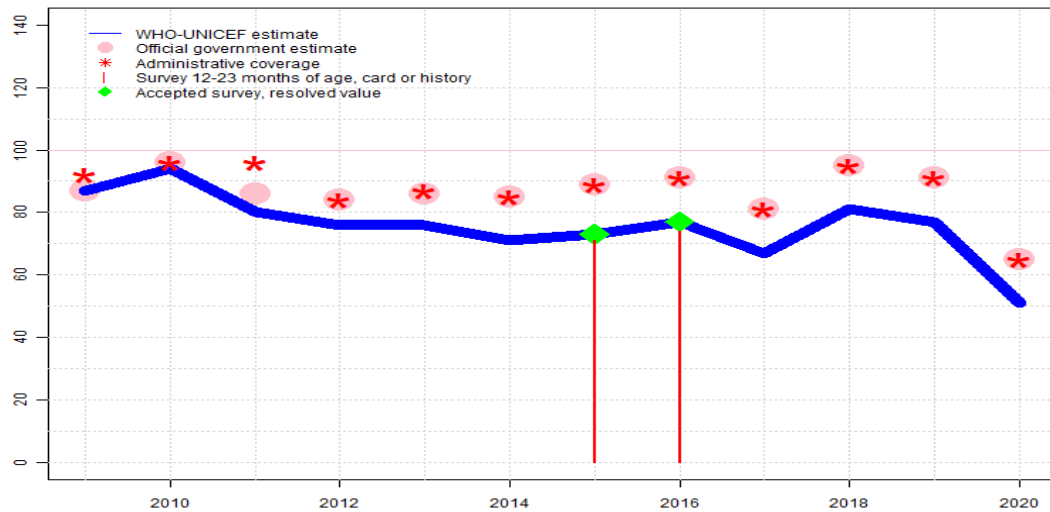
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Suriname - DTP3

SUR - DTP3



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	87	94	80	76	76	71	73	77	67	81	77	51
Estimate GoC	••	•	•	•	•	•	•	•	•	•	•	•
Official	87	96	86	84	86	85	89	91	81	95	91	65
Administrative	92	96	96	84	87	85	89	91	81	95	91	65
Survey	NA	NA	NA	NA	NA	NA	71	74	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: 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.

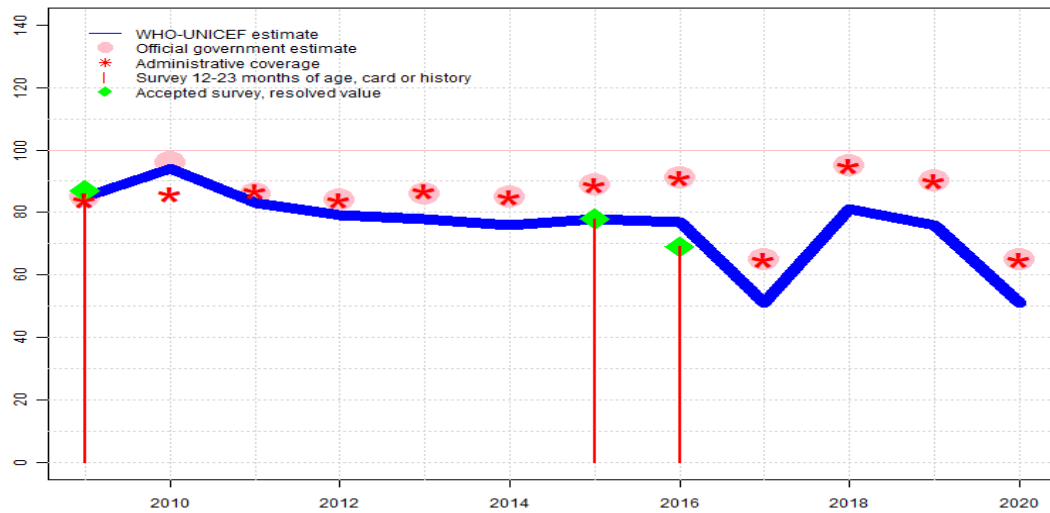
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2020: Reported data calibrated to 2016 levels. WHO and UNICEF observe that recent survey results suggest lower levels of coverage than that reported by the programme during the past 10 years. Further investigation to understand underlying differences is warranted, and WHO and UNICEF recommend a high-quality independent empirical assessment to confirm reported levels of coverage. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: R-
- 2019: Reported data calibrated to 2016 levels. Programme reports one month vaccine stock-out. Estimate challenged by: R-
- 2018: Reported data calibrated to 2016 levels. Programme reports four month stock-out of AD syringes. Programme reports large increase in third doses of DTP-Hib-HepB following recovery from 1-month vaccine stock-out in 2017. Increase in reported first dose is of lesser magnitude resulting in no dropout. Estimate challenged by: R-
- 2017: Reported data calibrated to 2016 levels. Programme reports 1-month vaccine stock-out. Estimate challenged by: R-
- 2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 77 percent based on 1 survey(s). Suriname Multiple Indicator Cluster Survey 2018 card or history results of 74 percent modified for recall bias to 77 percent based on 1st dose card or history coverage of 80 percent, 1st dose card only coverage of 70 percent and 3rd dose card only coverage of 67 percent. Estimate challenged by: R-
- 2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 73 percent based on 1 survey(s). Suriname Multiple Indicator Cluster Survey 2018 card or history results of 71 percent modified for recall bias to 73 percent based on 1st dose card or history coverage of 74 percent, 1st dose card only coverage of 66 percent and 3rd dose card only coverage of 65 percent. Estimate challenged by: D-R-
- 2014: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2013: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2012: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2011: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2010: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2009: Survey results for DTP3 are not presented due to transitions to DTP-HepB-Hib vaccine during period covered by survey. Estimate is based on reported data based on the observation that the survey supported reported data for Pol3 and MCV1. GoC=R+ D+

Suriname - Pol3

SUR - Pol3



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	85	94	83	79	78	76	78	77	51	81	76	51
Estimate GoC	●●●	●	●	●	●	●	●	●	●	●	●	●
Official	85	96	86	84	86	85	89	91	65	95	90	65
Administrative	84	86	87	84	87	85	89	91	65	95	90	65
Survey	83	NA	NA	NA	NA	NA	78	69	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: 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.

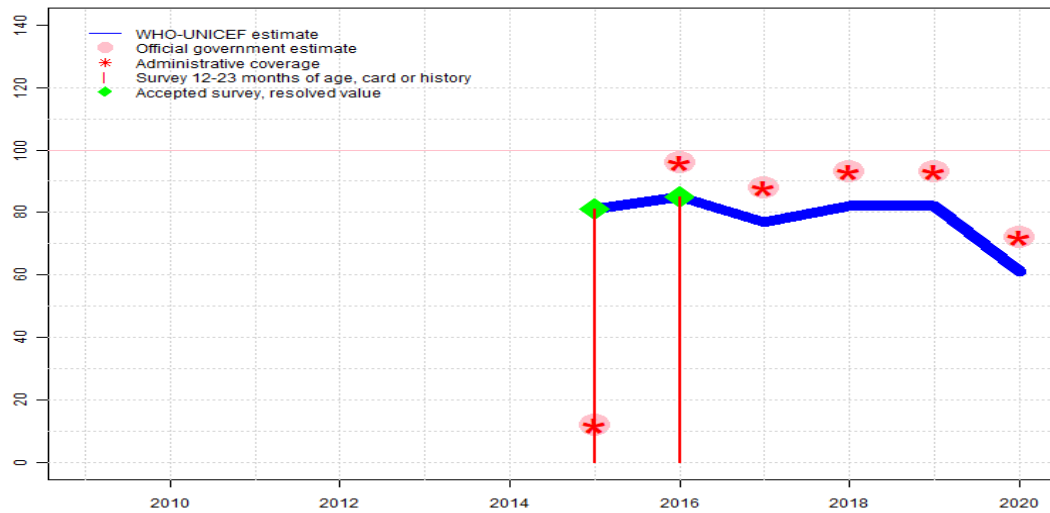
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2020: Reported data calibrated to 2016 levels. WHO and UNICEF observe that recent survey results suggest lower levels of coverage than that reported by the programme during the past 10 years. Further investigation to understand underlying differences is warranted, and WHO and UNICEF recommend a high-quality independent empirical assessment to confirm reported levels of coverage. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: R-
- 2019: Reported data calibrated to 2016 levels. Estimate challenged by: R-
- 2018: Reported data calibrated to 2016 levels. Programme appears to have recovered from prior years vaccine stockout. Estimate challenged by: R-S-
- 2017: Reported data calibrated to 2016 levels. Programme reports OPV 3-month stock-out. Estimate challenged by: R-S-
- 2016: Estimate of 77 percent assigned by working group. Estimate is based on survey result for DTP3. Estimate challenged by: R-
- 2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 78 percent based on 1 survey(s). Estimate challenged by: R-
- 2014: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2013: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2012: Reported data calibrated to 2009 and 2015 levels. One month vaccine shortage. Estimate challenged by: R-
- 2011: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2010: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: D-R-
- 2009: Estimate based on coverage reported by national government supported by survey. Survey evidence of 87 percent based on 1 survey(s). Suriname Multiple Indicator Cluster Survey 2010 card or history results of 83 percent modified for recall bias to 87 percent based on 1st dose card or history coverage of 90 percent, 1st dose card only coverage of 80 percent and 3rd dose card only coverage of 77 percent. GoC=R+ S+ D+

Suriname - IPV1

SUR - 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: Reported data calibrated to 2016 levels. WHO and UNICEF observe that recent survey results suggest lower levels of coverage than that reported by the programme during the past 10 years. Further investigation to understand underlying differences is warranted, and WHO and UNICEF recommend a high-quality independent empirical assessment to confirm reported levels of coverage. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: R-

2019: Reported data calibrated to 2016 levels. Programme reports one month vaccine stock-out. Estimate challenged by: R-

2018: Reported data calibrated to 2016 levels. Programme reports four month stock-out of AD syringes. Estimate challenged by: R-

2017: Reported data calibrated to 2016 levels. Programme reports IPV 1-month stock-out. Estimate challenged by: R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 85 percent based on 1 survey(s). Estimate is based on reported data following introduction. Estimate challenged by: R-

2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 81 percent based on 1 survey(s). Inactivated polio vaccine during 2015. Estimate challenged by: D-R-

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	NA	NA	NA	NA	NA	NA	81	85	77	82	82	61
Estimate GoC	NA	NA	NA	NA	NA	NA	•	•	•	•	•	•
Official	NA	NA	NA	NA	NA	NA	12	96	88	93	93	72
Administrative	NA	NA	NA	NA	NA	NA	12	96	88	93	93	72
Survey	NA	NA	NA	NA	NA	NA	81	85	NA	NA	NA	NA

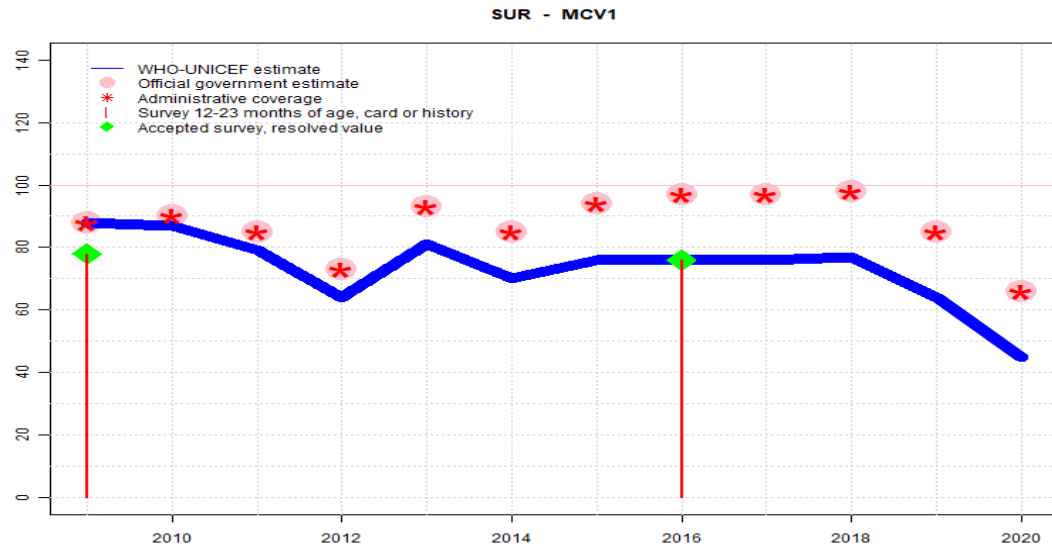
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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Suriname - MCV1

Description:



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	88	87	79	64	81	70	76	76	76	77	64	45
Estimate GoC	●●●	●	●	●	●	●	●	●	●	●	●	●
Official	88	90	85	73	93	85	94	97	97	98	85	66
Administrative	88	90	85	73	93	85	94	97	97	98	85	66
Survey	78	NA	NA	NA	NA	NA	NA	76	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.

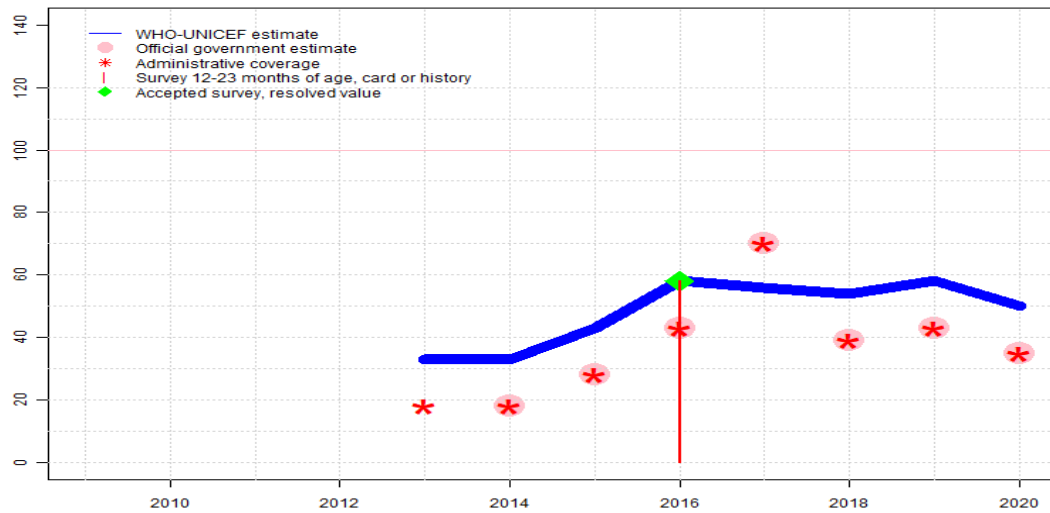
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2020 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk 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.

- 2020: Reported data calibrated to 2016 levels. WHO and UNICEF observe that recent survey results suggest lower levels of coverage than that reported by the programme during the past 10 years. Further investigation to understand underlying differences is warranted, and WHO and UNICEF recommend a high-quality independent empirical assessment to confirm reported levels of coverage. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-R-
- 2019: Reported data calibrated to 2016 levels. Programme reports three month vaccine stock-out. Estimate challenged by: D-R-
- 2018: Reported data calibrated to 2016 levels. Programme reports four month stock-out of AD syringes. Estimate challenged by: D-R-
- 2017: Reported data calibrated to 2016 levels. Estimate challenged by: D-R-
- 2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 76 percent based on 1 survey(s). Estimate challenged by: D-R-
- 2015: Reported data calibrated to 2009 and 2016 levels. Estimate challenged by: R-
- 2014: Reported data calibrated to 2009 and 2016 levels. Programme reports a three month stock-out at national level. Estimate challenged by: D-R-
- 2013: Reported data calibrated to 2009 and 2016 levels. Increase in coverage reflects recovery from prior years stock-out in spite of 2 month stock-out during 2013 at national level and in 2 districts. Estimate challenged by: R-
- 2012: Reported data calibrated to 2009 and 2016 levels. One month vaccine shortage. Estimate challenged by: R-
- 2011: Reported data calibrated to 2009 and 2016 levels. Estimate challenged by: R-
- 2010: Reported data calibrated to 2009 and 2016 levels. Estimate challenged by: R-
- 2009: Estimate based on coverage reported by national government supported by survey. Survey evidence of 78 percent based on 1 survey(s). GoC=R+ S+ D+

Suriname - MCV2

SUR - MCV2



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	NA	NA	NA	NA	33	33	43	58	56	54	58	50
Estimate GoC	NA	NA	NA	NA	•	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	NA	18	28	43	70	39	43	35
Administrative	NA	NA	NA	NA	18	18	28	43	70	39	43	35
Survey	NA	NA	NA	NA	NA	NA	NA	58	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: 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.

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Description:

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

2020: Reported data calibrated to 2016 levels. WHO and UNICEF observe that recent survey results suggest lower levels of coverage than that reported by the programme during the past 10 years. Further investigation to understand underlying differences is warranted, and WHO and UNICEF recommend a high-quality independent empirical assessment to confirm reported levels of coverage. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-R-

2019: Reported data calibrated to 2016 levels. Programme reports three month vaccine stock-out. Estimate challenged by: D-R-

2018: Reported data calibrated to 2016 levels. Programme reports measles-mumps-rubella doses administered to children beyond their second year of life. These doses are not included in the reported coverage. Estimate challenged by: D-R-

2017: Reported data calibrated to 2016 levels. Reported data excluded. Reported data seems to include doses given outside the target age of 18 months. Reported data excluded due to an increase from 43 percent to 70 percent with decrease 39 percent. Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 58 percent based on 1 survey(s). Programme reports several measles-mumps-rubella doses given administered to children beyond their second year of life. These doses are not included in the reported coverage. Recommended age for MCV2 changed from four years to 18 months during 2016. Estimate based on reported data following a change in recommended age for vaccination. Estimate challenged by: D-R-

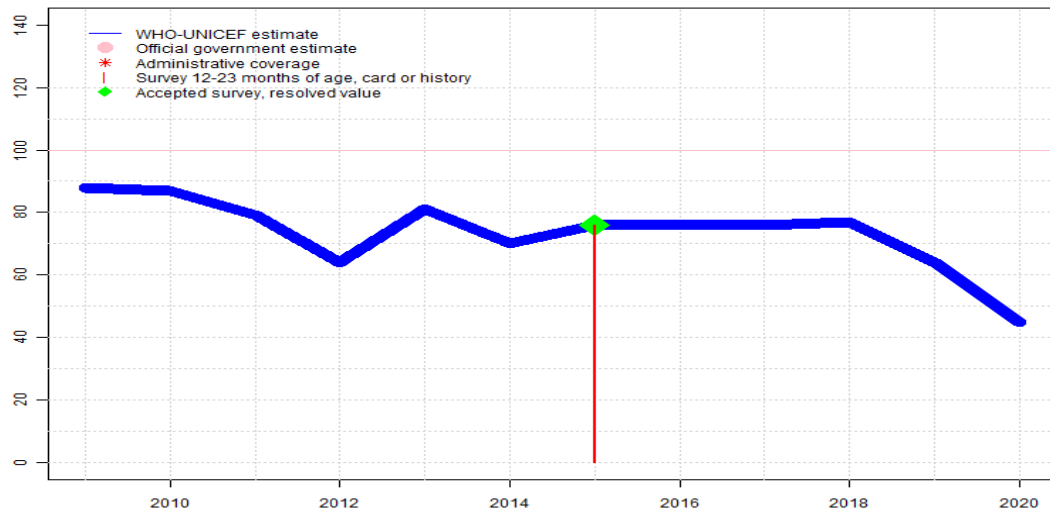
2015: Reported data calibrated to 2016 levels. Estimate challenged by: D-R-S-

2014: Reported data calibrated to 2016 levels. Estimate challenged by: D-R-S-

2013: Reported data calibrated to 2016 levels. Second dose of MCV introduced during 2005 but not systematically provided until 2013. Reporting started in 2013. Presentation is MMR and is recommended at 4 years of age. Estimate challenged by: D-R-

Suriname - RCV1

SUR - RCV1



Description:

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

2020: Estimate based on estimated MCV1. WHO and UNICEF observe that recent survey results suggest lower levels of coverage than that reported by the programme during the past 10 years. Further investigation to understand underlying differences is warranted, and WHO and UNICEF recommend a high-quality independent empirical assessment to confirm reported levels of coverage. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-R-

2019: Estimate based on estimated MCV1. Estimate challenged by: D-R-

2018: Estimate based on estimated MCV1. Programme reports four month stock-out of AD syringes. Estimate challenged by: D-R-

2017: Estimate based on estimated MCV1. Estimate challenged by: D-R-

2016: Estimate based on estimated MCV1. Estimate challenged by: D-R-

2015: Estimate based on estimated MCV1. Estimate challenged by: R-

2014: Estimate based on estimated MCV1. Estimate challenged by: D-R-

2013: Estimate based on estimated MCV1. Estimate challenged by: R-

2012: Estimate based on estimated MCV1. Estimate challenged by: R-

2011: Estimate based on estimated MCV1. Estimate challenged by: R-

2010: Estimate based on estimated MCV1. Estimate challenged by: R-

2009: Estimate based on estimated MCV1. GoC=R+ S+ D+

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	88	87	79	64	81	70	76	76	76	77	64	45
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	76	NA	NA	NA	NA	NA

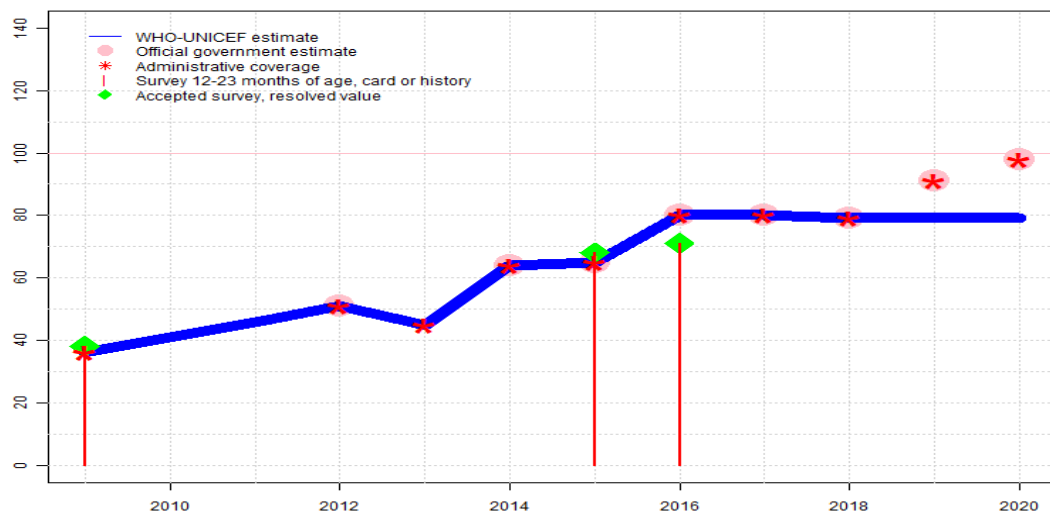
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Suriname - HepBB

SUR - HepBB



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	36	41	46	51	45	64	65	80	80	79	79	79
Estimate GoC	●●●	●●	●●	●●	●	●●	●●●	●	●	●●●	●●	●
Official	NA	NA	NA	51	NA	64	65	80	80	79	91	98
Administrative	36	NA	NA	51	45	64	65	80	80	79	91	98
Survey	38	NA	NA	NA	NA	NA	68	71	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: 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.

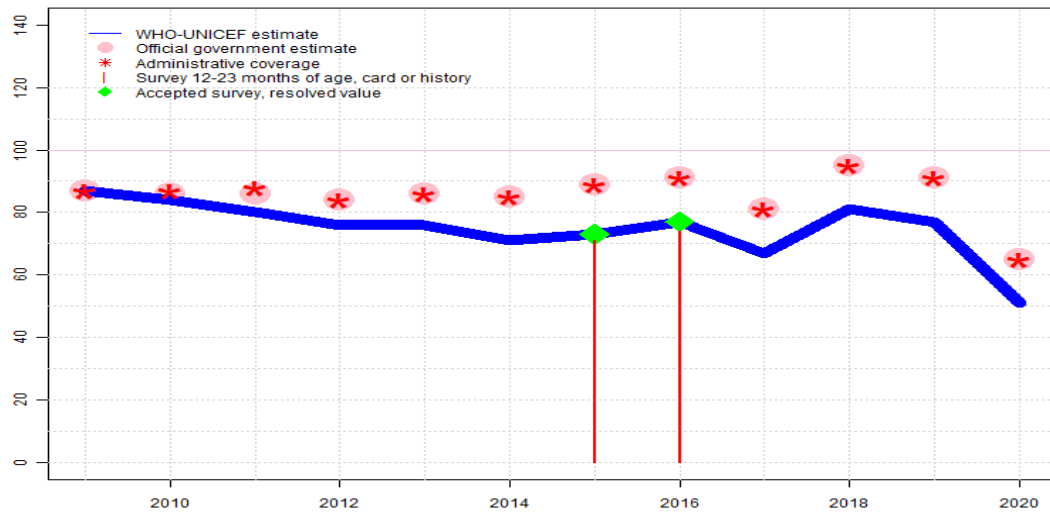
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2020: Estimate based on extrapolation from data reported by national government. Reported data excluded. Reported coverage shows an unexplained increased trend and change 2019 to 2020 inconsistent with other vaccine-doses. WHO and UNICEF observe that recent survey results suggest lower levels of coverage than that reported by the programme during the past 10 years. Further investigation to understand underlying differences is warranted, and WHO and UNICEF recommend a high-quality independent empirical assessment to confirm reported levels of coverage. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-
- 2019: Estimate based on extrapolation from data reported by national government. Reported data excluded. Reported coverage shows an unexplained increased trend and change 2019 to 2020 inconsistent with other vaccine-doses. Programme reports 1.5 month vaccine stock-out. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. Programme reports four month stock-out of AD syringes. GoC=R+ S+ D+
- 2017: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2016: Estimate based on coverage reported by national government supported by survey. Survey evidence of 71 percent based on 1 survey(s). Estimate challenged by: S-
- 2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 68 percent based on 1 survey(s). GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government. . GoC=R+ S+
- 2013: Estimate based on reported administrative data. Estimate challenged by: S-
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2011: Estimate based on interpolation between coverage reported by national government. GoC=S+
- 2010: Estimate based on interpolation between coverage reported by national government. GoC=S+
- 2009: Estimate based on administrative data reported by national government supported by survey. Survey evidence of 38 percent based on 1 survey(s). GoC=R+ S+ D+

Suriname - HepB3

SUR - HepB3



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	87	84	80	76	76	71	73	77	67	81	77	51
Estimate GoC	••	•	•	•	•	•	•	•	•	•	•	•
Official	87	86	86	84	86	85	89	91	81	95	91	65
Administrative	87	87	88	84	86	85	89	91	81	95	91	65
Survey	NA	NA	NA	NA	NA	NA	71	74	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: 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.

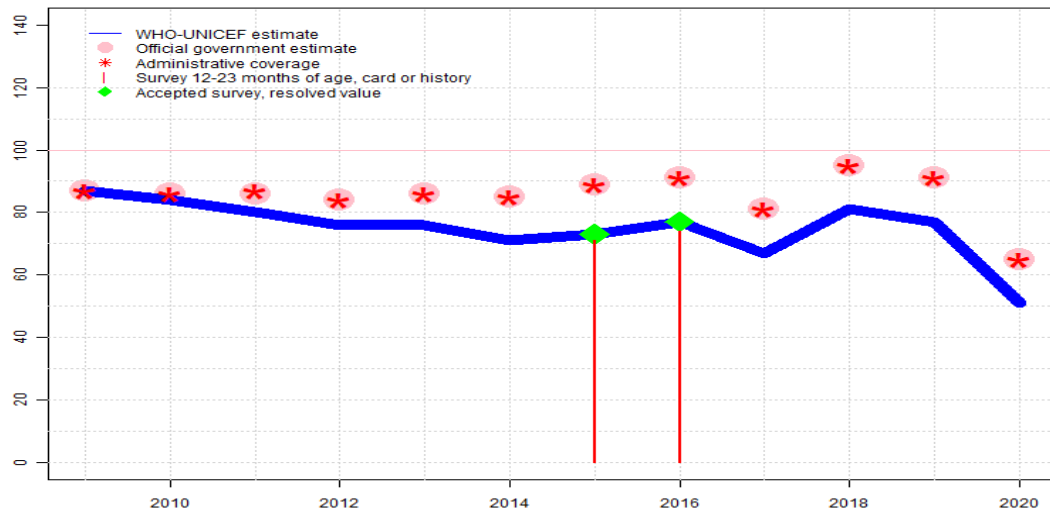
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2020: Reported data calibrated to 2016 levels. WHO and UNICEF observe that recent survey results suggest lower levels of coverage than that reported by the programme during the past 10 years. Further investigation to understand underlying differences is warranted, and WHO and UNICEF recommend a high-quality independent empirical assessment to confirm reported levels of coverage. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: R-
- 2019: Reported data calibrated to 2016 levels. Estimate challenged by: R-
- 2018: Reported data calibrated to 2016 levels. Programme reports four month stock-out of AD syringes. Programme reports large increase in third doses of DTP-Hib-HepB following recovery from 1-month vaccine stock-out in 2017. Increase in reported first dose is of lesser magnitude resulting in no dropout. Estimate challenged by: R-
- 2017: Reported data calibrated to 2016 levels. Programme reports 1-month vaccine stock-out. Estimate challenged by: R-
- 2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 77 percent based on 1 survey(s). Suriname Multiple Indicator Cluster Survey 2018 card or history results of 74 percent modified for recall bias to 77 percent based on 1st dose card or history coverage of 80 percent, 1st dose card only coverage of 70 percent and 3rd dose card only coverage of 67 percent. Estimate challenged by: R-
- 2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 73 percent based on 1 survey(s). Suriname Multiple Indicator Cluster Survey 2018 card or history results of 71 percent modified for recall bias to 73 percent based on 1st dose card or history coverage of 74 percent, 1st dose card only coverage of 66 percent and 3rd dose card only coverage of 65 percent. Estimate challenged by: D-R-
- 2014: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: D-R-
- 2013: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2012: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2011: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2010: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2009: Survey results for HepB3 are not presented due to transitions to DTP-HepB-Hib vaccine during period covered by survey. Estimate is based on reported data based on the observation that the survey supported reported data for Pol3 and MCV1. GoC=R+ D+

Suriname - Hib3

SUR - Hib3



Description:

- 2020: Reported data calibrated to 2016 levels. WHO and UNICEF observe that recent survey results suggest lower levels of coverage than that reported by the programme during the past 10 years. Further investigation to understand underlying differences is warranted, and WHO and UNICEF recommend a high-quality independent empirical assessment to confirm reported levels of coverage. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: R-
- 2019: Reported data calibrated to 2016 levels. Estimate challenged by: R-
- 2018: Reported data calibrated to 2016 levels. Programme reports four month stock-out of AD syringes. Programme reports large increase in third doses of DTP-Hib-HepB following recovery from 1-month vaccine stock-out in 2017. Increase in reported first dose is of lesser magnitude resulting in no dropout. Estimate challenged by: R-
- 2017: Reported data calibrated to 2016 levels. Programme reports 1-month vaccine stock-out. Estimate challenged by: R-
- 2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 77 percent based on 1 survey(s). Suriname Multiple Indicator Cluster Survey 2018 card or history results of 74 percent modified for recall bias to 77 percent based on 1st dose card or history coverage of 80 percent, 1st dose card only coverage of 70 percent and 3rd dose card only coverage of 67 percent. Estimate challenged by: R-
- 2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 73 percent based on 1 survey(s). Suriname Multiple Indicator Cluster Survey 2018 card or history results of 71 percent modified for recall bias to 73 percent based on 1st dose card or history coverage of 74 percent, 1st dose card only coverage of 66 percent and 3rd dose card only coverage of 65 percent. Estimate challenged by: D-R-
- 2014: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2013: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2012: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2011: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2010: Reported data calibrated to 2009 and 2015 levels. Estimate challenged by: R-
- 2009: Survey results for Hib3 are not presented due to transitions to DTP-HepB-Hib vaccine during period covered by survey. Estimate is based on reported data based on the observation that the survey supported reported data for Pol3 and MCV1. GoC=R+ D+

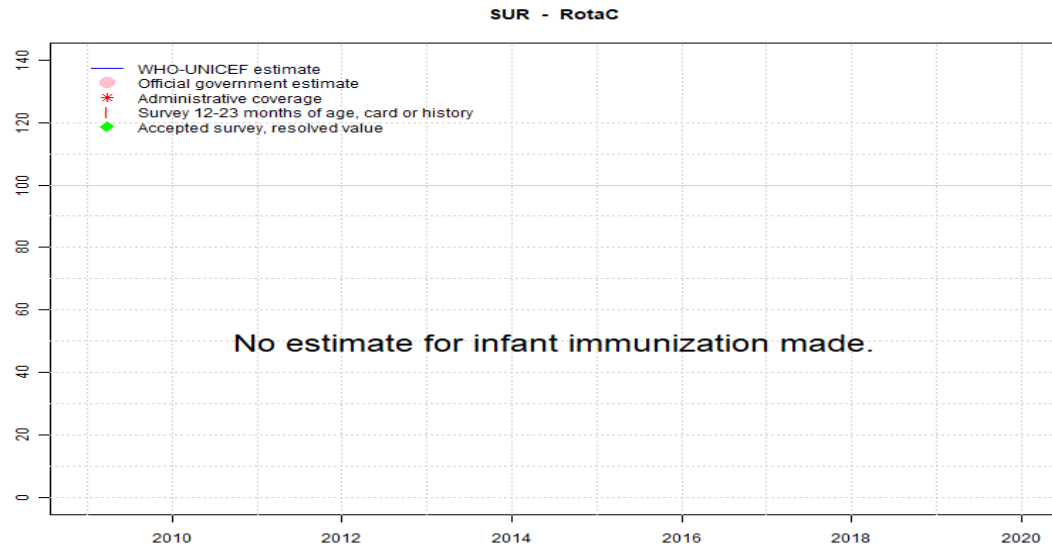
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	87	84	80	76	76	71	73	77	67	81	77	51
Estimate GoC	••	•	•	•	•	•	•	•	•	•	•	•
Official	87	86	86	84	86	85	89	91	81	95	91	65
Administrative	87	86	87	84	86	85	89	91	81	95	91	65
Survey	NA	NA	NA	NA	NA	NA	71	74	NA	NA	NA	NA

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: 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.

Suriname - RotaC



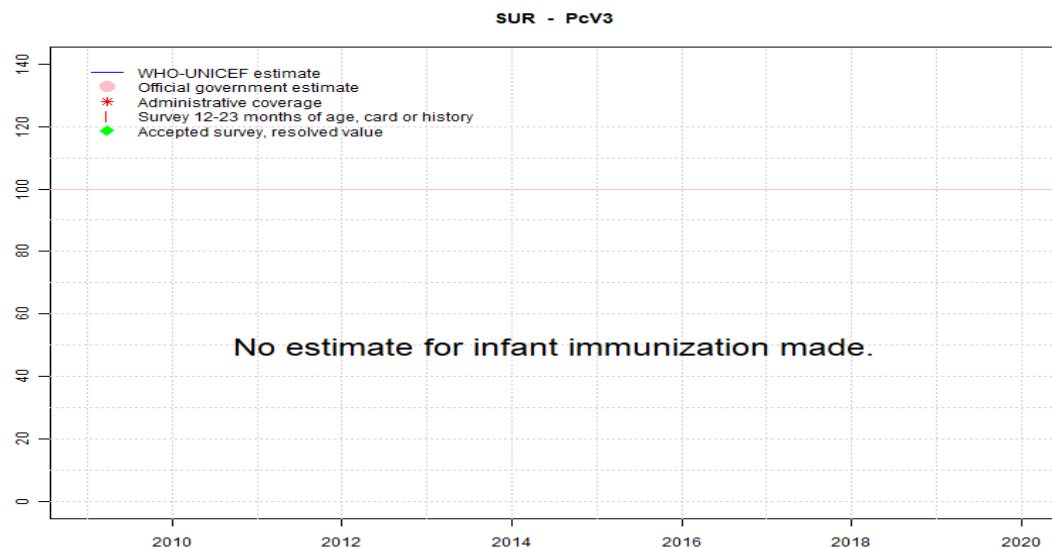
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 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.

Suriname - PcV3



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

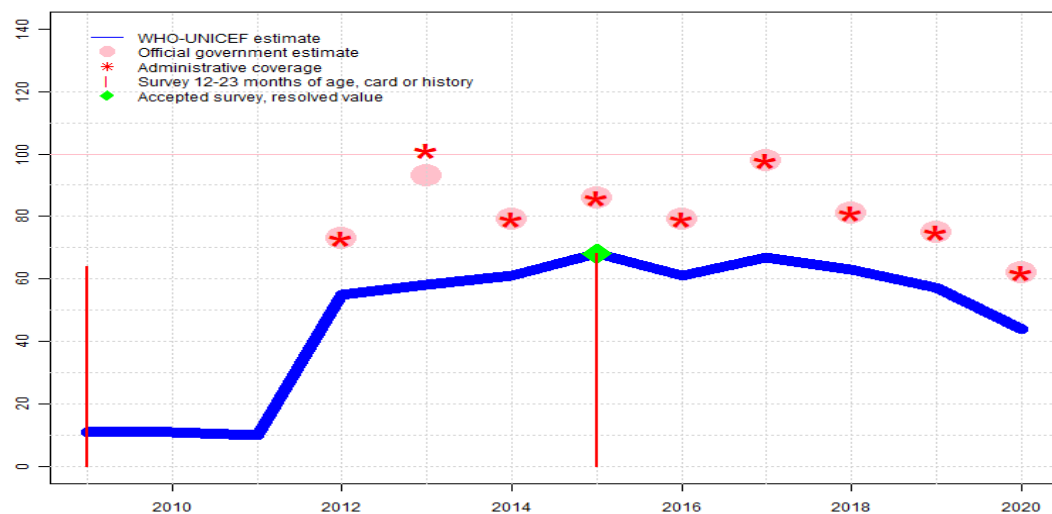
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 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.

Suriname - YFV

SUR - YFV



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimate	11	11	10	55	58	61	68	61	67	63	57	44
Estimate GoC	•	••	••	•	•	•	•	•	•	•	•	•
Official	NA	NA	NA	73	93	79	86	79	98	81	75	62
Administrative	NA	NA	NA	73	101	79	86	79	98	81	75	62
Survey	64	NA	NA	NA	NA	NA	68	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: 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: Reported data calibrated to 2015 levels. WHO and UNICEF observe that recent survey results suggest lower levels of coverage than that reported by the programme during the past 10 years. Further investigation to understand underlying differences is warranted, and WHO and UNICEF recommend a high-quality independent empirical assessment to confirm reported levels of coverage. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-R-
- 2019: Reported data calibrated to 2015 levels. Estimate challenged by: R-
- 2018: Reported data calibrated to 2015 levels. Programme reports four month stock-out of AD syringes. Estimate challenged by: R-
- 2017: Programme reports 98 percent coverage achieved in 87 percent of the national target population. Estimate reflects annualized coverage in the national target population and calibrated to the level of coverage established by the survey for the 2015 cohort. Reported data excluded due to an increase from 79 percent to 98 percent with decrease 81 percent. Estimate challenged by: R-
- 2016: Reported data calibrated to 2015 levels. Programme reports a three week vaccine stock-out. Estimate challenged by: D-R-
- 2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 68 percent based on 1 survey(s). Estimate challenged by: R-
- 2014: Reported data calibrated to 2015 levels. Estimate is based on reported data. Decline in reported number of doses administered is unexplained. Estimate challenged by: D-R-
- 2013: Reported data calibrated to 2015 levels. Reported data excluded. Increase reflects expansion of service delivery following introduction to national birth cohort in 2012 and suboptimal recording practices. Reported data excluded due to an increase from 73 percent to 93 percent with decrease 79 percent. Estimate challenged by: D-R-
- 2012: Reported data calibrated to 2015 levels. Yellow fever vaccine is now offered to the entire national target population. Estimate challenged by: D-R-
- 2011: YFV introduced in 2005 for high-risk areas only. Seventy-seven percent coverage was achieved in 13 percent of the total annual national target population. GoC=D+
- 2010: YFV introduced in 2005 for high-risk areas only. Eighty percent coverage was achieved in 14 percent of the total annual national target population. GoC=D+
- 2009: Estimate extrapolated from 2008 estimate. No reported data provided. Survey results ignored. Sample size 154 less than 300. GoC=No accepted empirical data

Suriname - survey details

2016 Suriname Multiple Indicator Cluster Survey 2018

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
DTP1	C or H <12 months	79.6	12-23 m	753	77
DTP1	Card	70.3	12-23 m	753	77
DTP1	Card or History	80	12-23 m	753	77
DTP1	History	9.7	12-23 m	753	77
DTP3	C or H <12 months	70	12-23 m	753	77
DTP3	Card	66.6	12-23 m	753	77
DTP3	Card or History	73.9	12-23 m	753	77
DTP3	History	7.3	12-23 m	753	77
HepB1	C or H <12 months	79.6	12-23 m	753	77
HepB1	Card	70.3	12-23 m	753	77
HepB1	Card or History	80	12-23 m	753	77
HepB1	History	9.7	12-23 m	753	77
HepB3	C or H <12 months	70	12-23 m	753	77
HepB3	Card	66.6	12-23 m	753	77
HepB3	Card or History	73.9	12-23 m	753	77
HepB3	History	7.3	12-23 m	753	77
HepBB	C or H <12 months	71.3	12-23 m	753	77
HepBB	Card	59.9	12-23 m	753	77
HepBB	Card or History	71.3	12-23 m	753	77
HepBB	History	11.4	12-23 m	753	77
Hib1	C or H <12 months	79.6	12-23 m	753	77
Hib1	Card	70.3	12-23 m	753	77
Hib1	Card or History	80	12-23 m	753	77
Hib1	History	9.7	12-23 m	753	77
Hib3	C or H <12 months	70	12-23 m	753	77
Hib3	Card	66.6	12-23 m	753	77
Hib3	Card or History	73.9	12-23 m	753	77
Hib3	History	7.3	12-23 m	753	77
IPV1	C or H <12 months	84.9	12-23 m	753	77
IPV1	Card	75.8	12-23 m	753	77
IPV1	Card or History	85.3	12-23 m	753	77
IPV1	History	9.5	12-23 m	753	77
MCV1	C or H <12 months	73.8	24-35 m	942	77
MCV1	Card	68.1	24-35 m	942	77
MCV1	Card or History	75.7	24-35 m	942	77
MCV1	History	7.5	24-35 m	942	77
MCV2	C or H <24 months	54.2	24-35 m	942	77

MCV2	Card	51.8	24-35 m	942	77
MCV2	Card or History	58.3	24-35 m	942	77
MCV2	History	6.4	24-35 m	942	77
Pol3	C or H <12 months	65	12-23 m	753	77
Pol3	Card	62.7	12-23 m	753	77
Pol3	Card or History	69.4	12-23 m	753	77
Pol3	History	6.7	12-23 m	753	77

2015 Suriname Multiple Indicator Cluster Survey 2018

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
DTP1	C or H <12 months	73.7	24-35 m	942	77
DTP1	Card	66.1	24-35 m	942	77
DTP1	Card or History	74.4	24-35 m	942	77
DTP1	History	8.3	24-35 m	942	77
DTP3	C or H <12 months	66.9	24-35 m	942	77
DTP3	Card	65.2	24-35 m	942	77
DTP3	Card or History	71.2	24-35 m	942	77
DTP3	History	6	24-35 m	942	77
HepB1	C or H <12 months	73.7	24-35 m	942	77
HepB1	Card	66.1	24-35 m	942	77
HepB1	Card or History	74.4	24-35 m	942	77
HepB1	History	8.3	24-35 m	942	77
HepB3	C or H <12 months	66.9	24-35 m	942	77
HepB3	Card	65.2	24-35 m	942	77
HepB3	Card or History	71.2	24-35 m	942	77
HepB3	History	6	24-35 m	942	77
HepBB	C or H <12 months	68.1	24-35 m	942	77
HepBB	Card	55.9	24-35 m	942	77
HepBB	Card or History	68.4	24-35 m	942	77
HepBB	History	12.5	24-35 m	942	77
Hib1	C or H <12 months	73.7	24-35 m	942	77
Hib1	Card	66.1	24-35 m	942	77
Hib1	Card or History	74.4	24-35 m	942	77
Hib1	History	8.3	24-35 m	942	77
Hib3	C or H <12 months	66.9	24-35 m	942	77
Hib3	Card	65.2	24-35 m	942	77
Hib3	Card or History	71.2	24-35 m	942	77
Hib3	History	6	24-35 m	942	77

Suriname - survey details

IPV1	C or H <12 months	80.9	24-35 m	942	77
IPV1	Card	70.5	24-35 m	942	77
IPV1	Card or History	81.2	24-35 m	942	77
IPV1	History	10.7	24-35 m	942	77
Pol3	C or H <12 months	74.1	24-35 m	942	77
Pol3	Card	69.3	24-35 m	942	77
Pol3	Card or History	78.4	24-35 m	942	77
Pol3	History	9.1	24-35 m	942	77
YFV	C or H <12 months	66.3	24-35 m	942	77
YFV	Card	61	24-35 m	942	77
YFV	Card or History	68.2	24-35 m	942	77
YFV	History	7.2	24-35 m	942	77

2009 Suriname Multiple Indicator Cluster Survey 2010

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
HepBB	C or H <12 months	38	18-29 m	-	82
HepBB	Card	32.8	18-29 m	-	82
HepBB	Card or History	38.5	18-29 m	746	82
HepBB	History	5.7	18-29 m	-	82
MCV1	C or H <18 months	73.9	18-29 m	-	82
MCV1	Card	70.5	18-29 m	-	82
MCV1	Card or History	77.9	18-29 m	746	82
MCV1	History	7.4	18-29 m	-	82
Pol1	C or H <12 months	89.9	18-29 m	-	82
Pol1	Card	80.1	18-29 m	-	82
Pol1	Card or History	90.5	18-29 m	746	82
Pol1	History	10.3	18-29 m	-	82
Pol3	C or H <12 months	79	18-29 m	-	82
Pol3	Card	77.1	18-29 m	-	82
Pol3	Card or History	83.2	18-29 m	746	82
Pol3	History	6.1	18-29 m	-	82
YFV	C or H <12 months	15.1	18-29 m	-	82
YFV	Card	59.3	18-29 m	-	82
YFV	Card or History	64	18-29 m	154	82
YFV	History	4.7	18-29 m	-	82

2005 Suriname Multiple Indicator Cluster Survey 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
DTP1	C or H <12 months	94.8	12-23 m	412	81
DTP1	Card	83.7	12-23 m	412	81
DTP1	Card or History	95.6	12-23 m	412	81
DTP1	History	12	12-23 m	412	81
DTP3	C or H <12 months	86.1	12-23 m	412	81
DTP3	Card	83.7	12-23 m	412	81
DTP3	Card or History	90.8	12-23 m	412	81
DTP3	History	7.1	12-23 m	412	81
HepB1	C or H <12 months	8.6	12-23 m	412	81
HepB1	Card	9.3	12-23 m	412	81
HepB1	Card or History	9.3	12-23 m	412	81
HepB1	History	0	12-23 m	412	81
HepB3	C or H <12 months	3.2	12-23 m	412	81
HepB3	Card	6	12-23 m	412	81
HepB3	Card or History	6	12-23 m	412	81
HepB3	History	0	12-23 m	412	81
Hib1	C or H <12 months	4.3	12-23 m	412	81
Hib1	Card	4.5	12-23 m	412	81
Hib1	Card or History	4.5	12-23 m	412	81
Hib1	History	0	12-23 m	412	81
Hib3	C or H <12 months	2.7	12-23 m	412	81
Hib3	Card	3.1	12-23 m	412	81
Hib3	Card or History	3.1	12-23 m	412	81
Hib3	History	0	12-23 m	412	81
MCV1	C or H <12 months	79.5	12-23 m	412	81
MCV1	Card	65.7	12-23 m	412	81
MCV1	Card or History	81	12-23 m	412	81
MCV1	History	15.4	12-23 m	412	81
Pol1	C or H <12 months	97.1	12-23 m	412	81
Pol1	Card	83.5	12-23 m	412	81
Pol1	Card or History	97.7	12-23 m	412	81
Pol1	History	14.2	12-23 m	412	81
Pol3	C or H <12 months	87.6	12-23 m	412	81
Pol3	Card	83.3	12-23 m	412	81
Pol3	Card or History	92.4	12-23 m	412	81
Pol3	History	9.1	12-23 m	412	81
YFV	C or H <12 months	18.1	12-23 m	412	81
YFV	Card	11.9	12-23 m	412	81

Suriname - survey details

YFV	Card or History	19.3	12-23 m	412	81
YFV	History	7.4	12-23 m	412	81

DTP3	Card or History	79.1	12-23 m	376	85
DTP3	History	3.3	12-23 m	376	85
MCV1	Card	55.5	12-23 m	376	85
MCV1	Card or History	60.2	12-23 m	376	85
MCV1	History	4.6	12-23 m	376	85
Pol1	Card	84	12-23 m	376	85
Pol1	Card or History	87.8	12-23 m	376	85
Pol1	History	3.8	12-23 m	376	85
Pol3	Card	75.8	12-23 m	376	85
Pol3	Card or History	78.5	12-23 m	376	85
Pol3	History	2.7	12-23 m	376	85

1999 Suriname Multiple Indicator Cluster Survey 2000, 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
DTP1	Card	83.7	12-23 m	376	85
DTP1	Card or History	88.8	12-23 m	376	85
DTP1	History	5.1	12-23 m	376	85
DTP3	Card	75.8	12-23 m	376	85

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>