

**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.

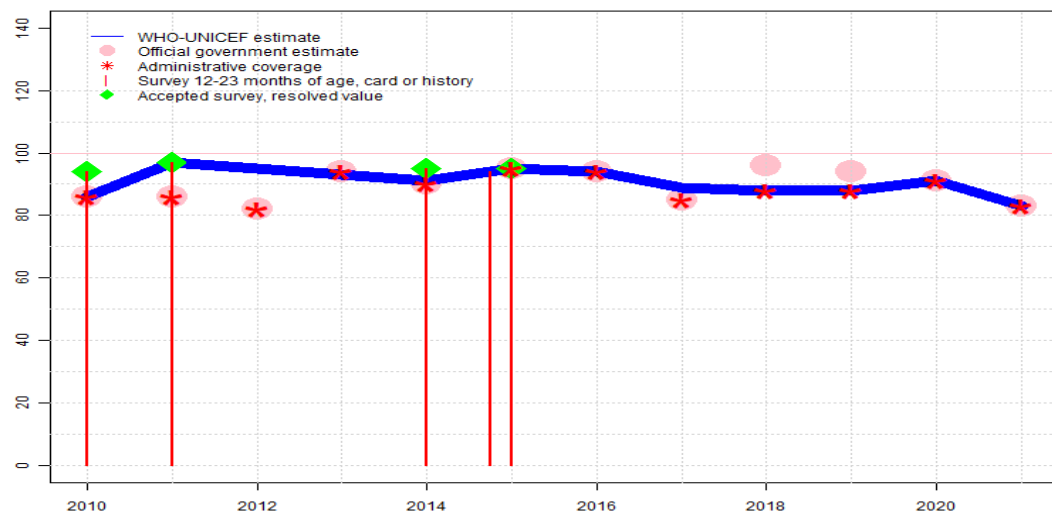
**PcV3:** percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect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

UGA - BCG



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	86	97	95	93	91	95	94	89	88	88	91	83
Estimate GoC	•	•	•	•	•	•	•	••	•	•	•	•
Official	86	86	82	94	90	95	94	85	96	94	91	83
Administrative	86	86	82	94	90	95	94	85	88	88	91	83
Survey	94	97	NA	NA	95	*	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

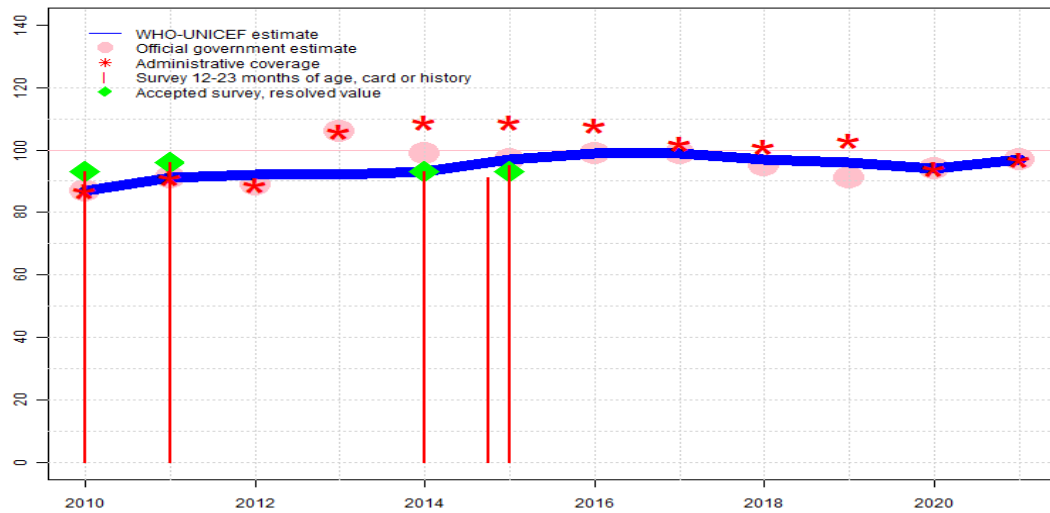
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2021: Estimate based on coverage reported by national government. Programme reports one month vaccine stock-out at national and subnational levels. Estimate challenged by: D-
- 2020: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2019: Estimate based on reported administrative data. Reported official estimates are derived from the 2017 Uganda National Immunization Survey. For vaccines not included in the survey, administrative data are used. Reported adjustments from administrative data are inconsistent across antigens. WHO and UNICEF encourage a comprehensive review and revision of the historical time-series of reported coverage data. Estimate challenged by: D-
- 2018: Estimate based on reported administrative data. Reported official estimates are based on 2016 DHS survey results. Estimate challenged by: D-
- 2017: Programme reports a 2-month vaccine stock-out. GoC=Assigned by working group. Consistency with information available in neighboring years.
- 2016: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 2 survey(s). Estimate challenged by: D-
- 2014: Estimate based on interpolation between data reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). Reported data excluded. Implementation of the Uganda 2012-14 EPI revitalization plan resulted in marked increase in administrative coverage and the number of children vaccinated between 2012 and 2014. It is, however, unclear whether these rapid increases represent true gains or are an artifact of reported activity around improved data recording and monitoring. Estimate challenged by: D-
- 2013: Estimate based on interpolation between 2011 and 2014 levels. Estimate based on interpolation survey to survey. Reported data excluded. A national web based health management information system was implemented in all districts. A DQS conducted in 2013 suggests problems in reporting and monitoring and shows that data were being over reported. The programme plans to address this and other monitoring issues during 2014. Estimate challenged by: D-R-
- 2012: Estimate based on interpolation between 2011 and 2014 levels. Estimate based on interpolation survey to survey. Estimate challenged by: R-
- 2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 97 percent based on 1 survey(s). Estimate challenged by: R-
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). Estimate challenged by: S-

# Uganda - DTP1

UGA - DTP1



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	87	91	92	92	93	97	99	99	97	96	94	97
Estimate GoC	●●●	●●●	●	●	●	●	●	●●	●	●	●	●
Official	87	91	89	106	99	97	99	99	95	91	94	97
Administrative	87	91	89	106	109	109	108	102	101	103	94	97
Survey	93	96	NA	NA	93	*	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

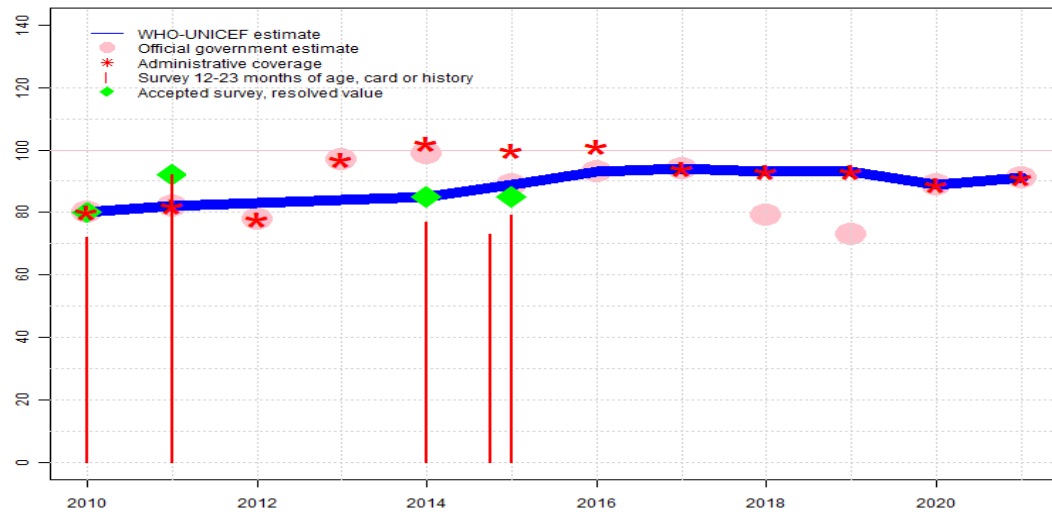
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2021: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2020: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2019: Estimate based on interpolation between data reported by national government. Reported data excluded because 103 percent greater than 100 percent. Reported official estimates are derived from the 2017 Uganda National Immunization Survey. For vaccines not included in the survey, administrative data are used. Reported adjustments from administrative data are inconsistent across antigens. WHO and UNICEF encourage a comprehensive review and revision of the historical time-series of reported coverage data. Estimate challenged by: D-
- 2018: Estimate based on interpolation between data reported by national government. Reported data excluded because 101 percent greater than 100 percent. Reported official estimates are based on 2016 DHS survey results. Estimate challenged by: D-
- 2017: Estimate based on coverage reported by national government. GoC=Assigned by working group. Consistency with information available in neighboring years.
- 2016: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 2 survey(s). Estimate challenged by: D-
- 2014: Estimate of 93 percent assigned by working group. Estimate based on survey results. Reported data excluded. Implementation of the Uganda 2012-14 EPI revitalization plan resulted in marked increase in administrative coverage and the number of children vaccinated between 2012 and 2014. It is, however, unclear whether these rapid increases represent true gains or are an artifact of reported activity around improved data recording and monitoring. Estimate challenged by: D-R-
- 2013: Estimate based on interpolation between 2011 and 2014 levels. Estimate based on interpolation survey to survey. Reported data excluded. A national web based health management information system was implemented in all districts. A DQS conducted in 2013 suggests problems in reporting and monitoring and shows that data were being over reported. The programme plans to address this and other monitoring issues during 2014. Reported data excluded because 106 percent greater than 100 percent. Estimate challenged by: D-R-
- 2012: Estimate based on interpolation between 2011 and 2014 levels. Estimate based on interpolation survey to survey. 1 month vaccine shortage. Estimate challenged by: R-
- 2011: 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+
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+ S+ D+

# Uganda - DTP3

UGA - DTP3



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	80	82	83	84	85	89	93	94	93	93	89	91
Estimate GoC	•	•••	•	•	•	•	•	••	••	••	••	•
Official	80	82	78	97	99	89	93	94	79	73	89	91
Administrative	80	82	78	97	102	100	101	94	93	93	89	91
Survey	72	92	NA	NA	77	*	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

## Description:

- 2021: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2020: Estimate based on coverage reported by national government. GoC=R+ D+
- 2019: Estimate based on reported administrative data. Reported official estimates are derived from the 2017 Uganda National Immunization Survey. For vaccines not included in the survey, administrative data are used. Reported adjustments from administrative data are inconsistent across antigens. WHO and UNICEF encourage a comprehensive review and revision of the historical time-series of reported coverage data. GoC=R+ D+
- 2018: Estimate based on reported administrative data. Reported official estimates are based on 2016 DHS survey results. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. GoC=Assigned by working group. Consistency with information available in neighboring years.
- 2016: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 85 percent based on 2 survey(s). Uganda Demographic and Health Survey 2016 card or history results of 79 percent modified for recall bias to 85 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 69 percent and 3rd dose card only coverage of 62 percent. Uganda National Immunization Coverage Survey 2017 (UNICS 2017) card or history results of 73 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 57 percent and 3rd dose card only coverage of 53 percent. Estimate challenged by: D-
- 2014: Estimate based on survey results. Uganda Demographic and Health Survey 2016 card or history results of 77 percent modified for recall bias to 85 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 58 percent and 3rd dose card only coverage of 53 percent. Reported data excluded. Implementation of the Uganda 2012-14 EPI revitalization plan resulted in marked increase in administrative coverage and the number of children vaccinated between 2012 and 2014. It is, however, unclear whether these rapid increases represent true gains or are an artifact of reported activity around improved data recording and monitoring. Estimate challenged by: D-
- 2013: Estimate based on interpolation between 2011 and 2014 levels. Estimate based on interpolation survey to survey. Reported data excluded. A national web based health management information system was implemented in all districts. A DQS conducted in 2013 suggests problems in reporting and monitoring and shows that data were being over reported. The programme plans to address this and other monitoring issues during 2014. Estimate challenged by: D-R-
- 2012: Estimate based on interpolation between 2011 and 2014 levels. Estimate based on interpolation survey to survey. 1 month vaccine shortage. Estimate challenged by: R-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 92 percent based on 1 survey(s). GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 80 percent based on 1 survey(s). Uganda Demographic and Health Survey

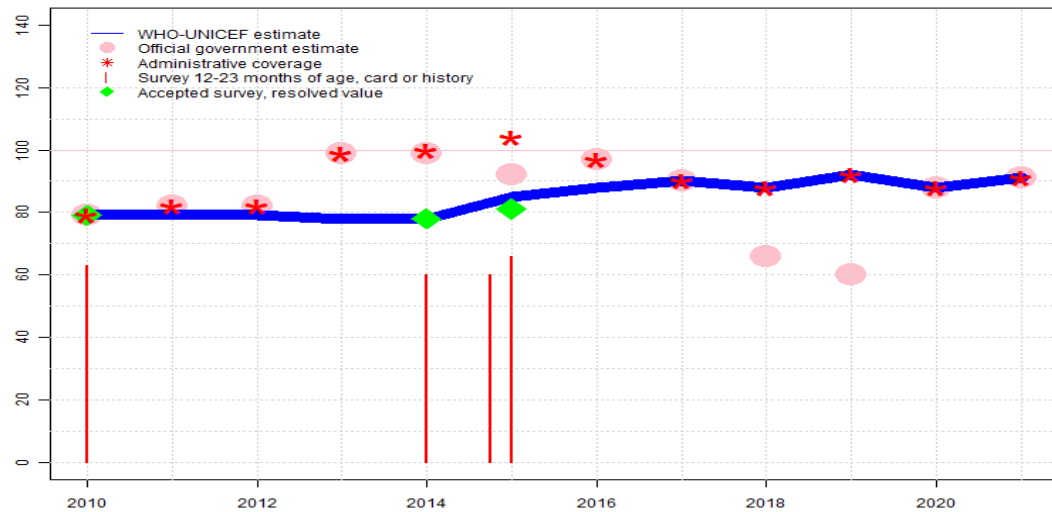
# Uganda - DTP3

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2011 card or history results of 72 percent modified for recall bias to 80 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 58 percent and 3rd dose card only coverage of 50 percent. Estimate challenged by: S-

# Uganda - Pol3

UGA - Pol3



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	79	79	79	78	78	85	88	90	88	92	88	91
Estimate GoC	●●●	●	●	●	●	●	●	●●	●●	●●	●●	●
Official	79	82	82	99	99	92	97	90	66	60	88	91
Administrative	79	82	82	99	100	104	97	90	88	92	88	91
Survey	63	NA	NA	NA	60	*	NA	NA	NA	NA	NA	NA

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- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

## Description:

- 2021: Estimate based on coverage reported by national government. Estimate challenged by: D-  
2020: Estimate based on coverage reported by national government. GoC=R+ D+  
2019: Estimate based on reported administrative data. Reported official estimates are derived from the 2017 Uganda National Immunization Survey. For vaccines not included in the survey, administrative data are used. Reported adjustments from administrative data are inconsistent across antigens. WHO and UNICEF encourage a comprehensive review and revision of the historical time-series of reported coverage data. GoC=R+ D+  
2018: Estimate based on reported administrative data. Reported official estimates are based on 2016 DHS survey results. GoC=R+ D+  
2017: Estimate is based on reported data. GoC=Assigned by working group. Consistency with information available in neighboring years.  
2016: Estimate based on interpolation between 2015 and 2017 levels. . Estimate challenged by: D-R-  
2015: Estimate of 85 percent assigned by working group. Estimate is based on survey result adjusted for recall bias. Uganda Demographic and Health Survey 2016 card or history results of 66 percent modified for recall bias to 80 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 69 percent and 3rd dose card only coverage of 59 percent. Uganda National Immunization Coverage Survey 2017 (UNICS 2017) card or history results of 60 percent modified for recall bias to 82 percent based on 1st dose card or history coverage of 90 percent, 1st dose card only coverage of 57 percent and 3rd dose card only coverage of 52 percent. Estimate challenged by: D-R-  
2014: Estimate of 78 percent assigned by working group. Estimate based on survey results. Uganda Demographic and Health Survey 2016 card or history results of 60 percent modified for recall bias to 78 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 58 percent and 3rd dose card only coverage of 50 percent. Reported data excluded. Implementation of the Uganda 2012-14 EPI revitalization plan resulted in marked increase in administrative coverage and the number of children vaccinated between 2012 and 2014. It is, however, unclear whether these rapid increases represent true gains or are an artifact of reported activity around improved data recording and monitoring. Estimate challenged by: D-R-  
2013: Estimate based on interpolation between 2010 and 2014 levels. Estimate based on interpolation survey to survey. Reported data excluded. A national web based health management information system was implemented in all districts. A DQS conducted in 2013 suggests problems in reporting and monitoring and shows that data were being over reported. The programme plans to address this and other monitoring issues during 2014. Estimate challenged by: D-R-  
2012: Estimate based on interpolation between 2010 and 2014 levels. Estimate based on interpolation survey to survey. 1 month vaccine shortage. Estimate challenged by: R-  
2011: Estimate based on interpolation between 2010 and 2014 levels. Estimate based on interpolation survey to survey. Estimate challenged by: R-  
2010: Estimate is based on reported data to maintain consistency with other vaccines. Uganda

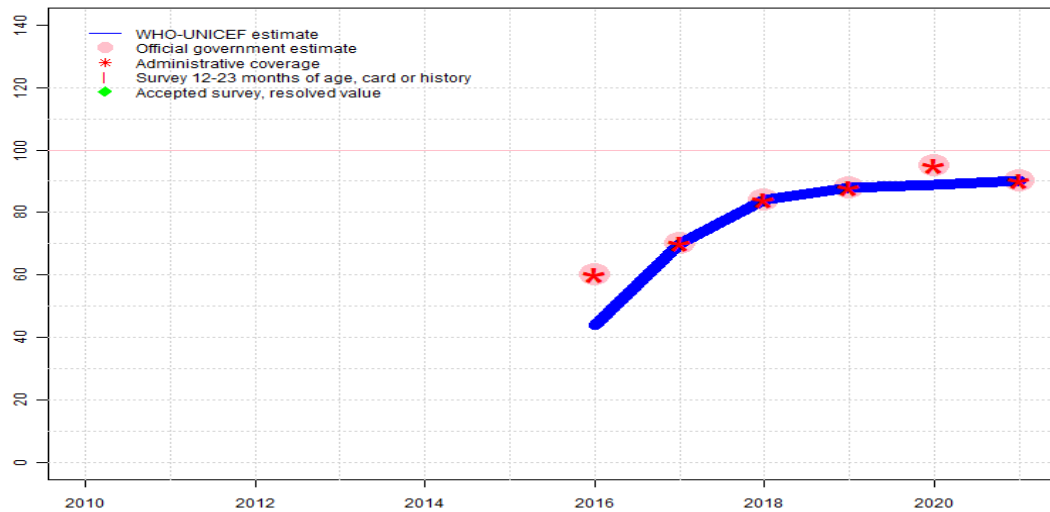
# Uganda - Pol3

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Demographic and Health Survey 2011 card or history results of 63 percent modified for recall bias to 79 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 58 percent and 3rd dose card only coverage of 49 percent.  
GoC=R+ S+ D+

# Uganda - IPV1

UGA - IPV1



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	NA	NA	NA	NA	NA	NA	44	70	84	88	89	90
Estimate GoC	NA	NA	NA	NA	NA	NA	•	••	••	••	•	•
Official	NA	NA	NA	NA	NA	NA	60	70	84	88	95	90
Administrative	NA	NA	NA	NA	NA	NA	60	70	84	88	95	90
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

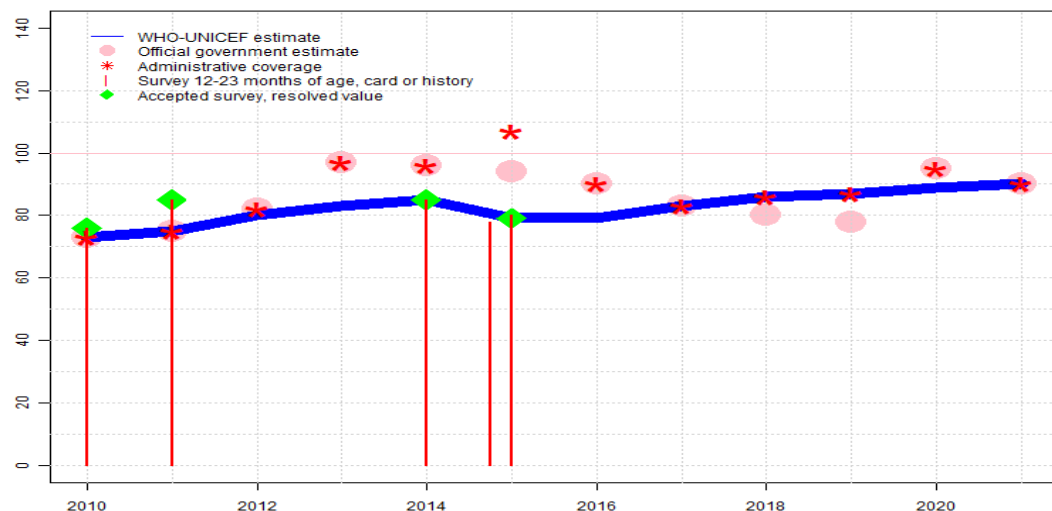
## Description:

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

- 2021: Estimate based on coverage reported by national government. Programme reports one month vaccine stock-out at national and subnational levels. Estimate challenged by: D-
- 2020: Estimate based on interpolation between reported values. Reported data excluded. Increase in reported coverage is unexplained and inconsistent with other vaccine-doses. Estimate of 89 percent changed from previous revision value of 88 percent. Estimate challenged by: D-
- 2019: Estimate based on reported administrative estimate. Reported official estimates are derived from the 2017 Uganda National Immunization Survey. For vaccines not included in the survey, administrative data are used. Reported adjustments from administrative data are inconsistent across antigens. WHO and UNICEF encourage a comprehensive review and revision of the historical time-series of reported coverage data. GoC=R+ D+
- 2018: Estimate based on reported administrative estimate. . Reported official estimates are based on 2016 DHS survey results. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. . GoC=Assigned by working group. Consistency with information available in neighboring years.
- 2016: Inactivated polio vaccine introduced during 2016. Estimate based on relationship between reported coverage and estimate for DTP3 for consistency. Estimate challenged by: R-

# Uganda - MCV1

UGA - MCV1



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	73	75	80	83	85	79	79	83	86	87	89	90
Estimate GoC	•	•••	•	•	•	•	•	••	•	•	•	•
Official	73	75	82	97	96	94	90	83	80	78	95	90
Administrative	73	75	82	97	96	107	90	83	86	87	95	90
Survey	76	85	NA	NA	85	*	NA	NA	NA	NA	NA	NA

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

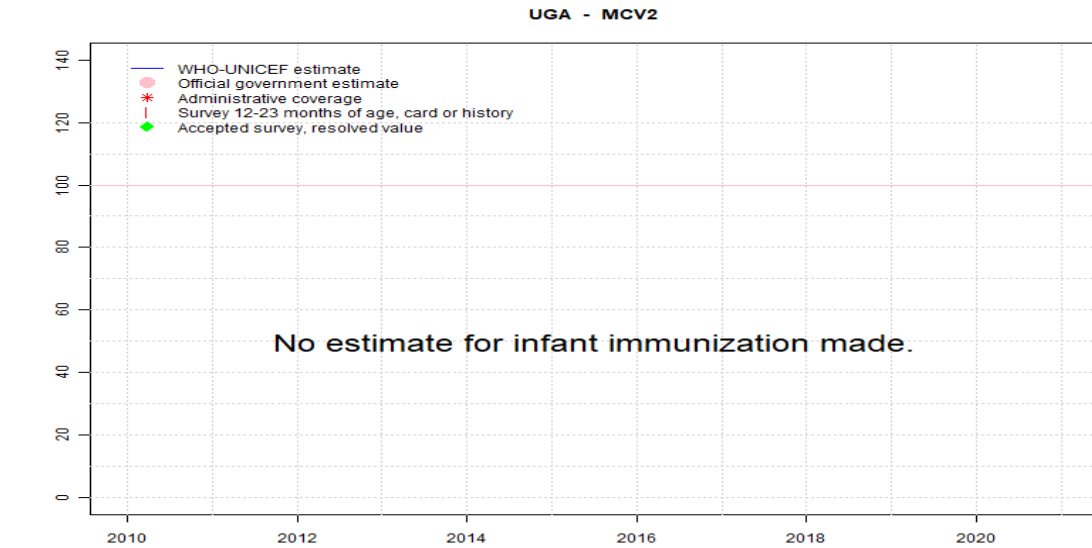
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

## Description:

- 2021: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2020: Estimate based on interpolation between data reported by national government. Reported data excluded. Increase in reported coverage is unexplained and inconsistent with other vaccine-doses. Estimate of 89 percent changed from previous revision value of 87 percent. Estimate challenged by: D-
- 2019: Estimate is based on reported administrative coverage. Reported official estimates are derived from the 2017 Uganda National Immunization Survey. For vaccines not included in the survey, administrative data are used. Reported adjustments from administrative data are inconsistent across antigens. WHO and UNICEF encourage a comprehensive review and revision of the historical time-series of reported coverage data. Estimate challenged by: R-
- 2018: Estimate is based on reported administrative coverage. Reported official estimates are based on 2016 DHS survey results. Estimate challenged by: R-
- 2017: Estimate is based on reported data. GoC=Assigned by working group. Consistency with information available in neighboring years.
- 2016: Estimate of 79 percent assigned by working group. Based on survey result for 2015 birth cohort. Estimate challenged by: D-R-
- 2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 79 percent based on 2 survey(s). Quality of data on number of children vaccinated possibly due to some districts including campaign doses within routine reporting. Estimate challenged by: D-R-
- 2014: Estimate of 85 percent assigned by working group. Estimate based on survey results. Reported data excluded. Implementation of the Uganda 2012-14 EPI revitalization plan resulted in marked increase in administrative coverage and the number of children vaccinated between 2012 and 2014. It is, however, unclear whether these rapid increases represent true gains or are an artifact of reported activity around improved data recording and monitoring. Programme reports two month stock-out at national level. Estimate challenged by: D-R-
- 2013: Reported data calibrated to 2011 and 2014 levels. Reported data excluded. A national web based health management information system was implemented in all districts. A DQS conducted in 2013 suggests problems in reporting and monitoring and shows that data were being over reported. The programme plans to address this and other monitoring issues during 2014. Estimate challenged by: D-R-
- 2012: Reported data calibrated to 2011 and 2014 levels. Estimate challenged by: R-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 85 percent based on 1 survey(s). GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 76 percent based on 1 survey(s). Estimate challenged by: S-

# Uganda - MCV2



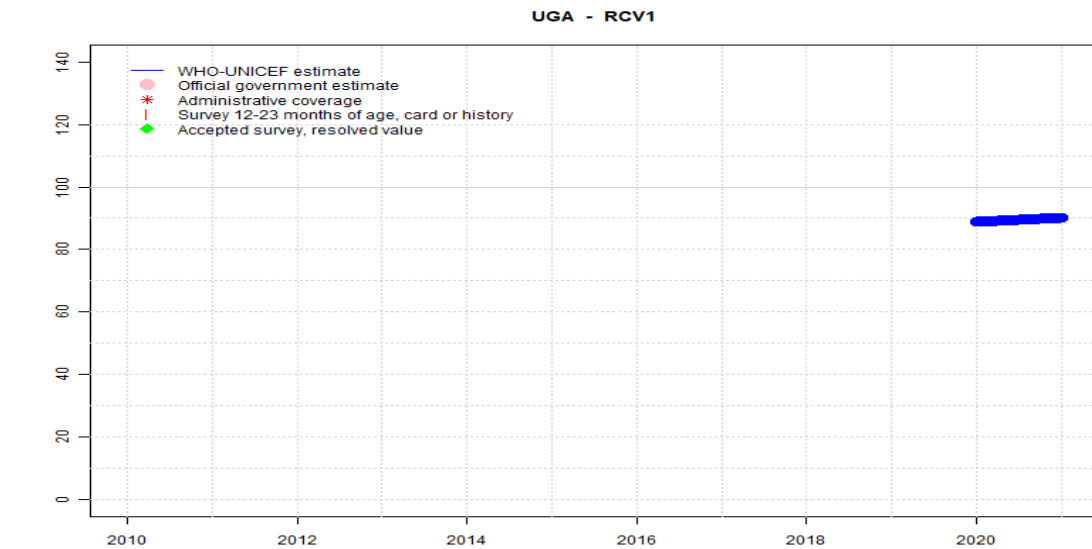
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

# Uganda - 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.

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

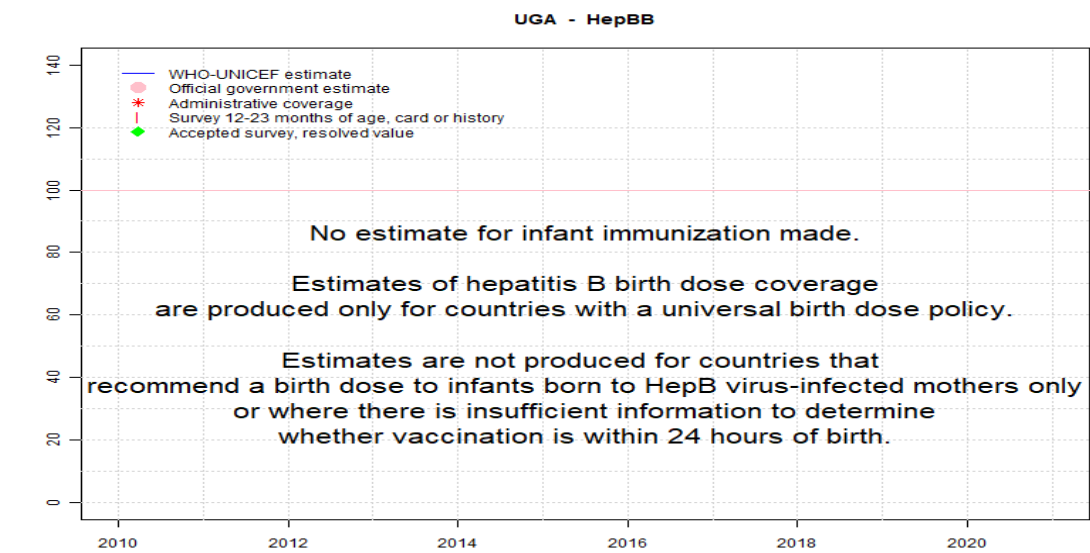
2020: Estimate based on estimated MCV1. MR vaccine introduced in 2019, reporting started for 2020. Estimate of 89 percent changed from previous revision value of 87 percent. Estimate challenged by: D-

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	89	90
Estimate GoC	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: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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



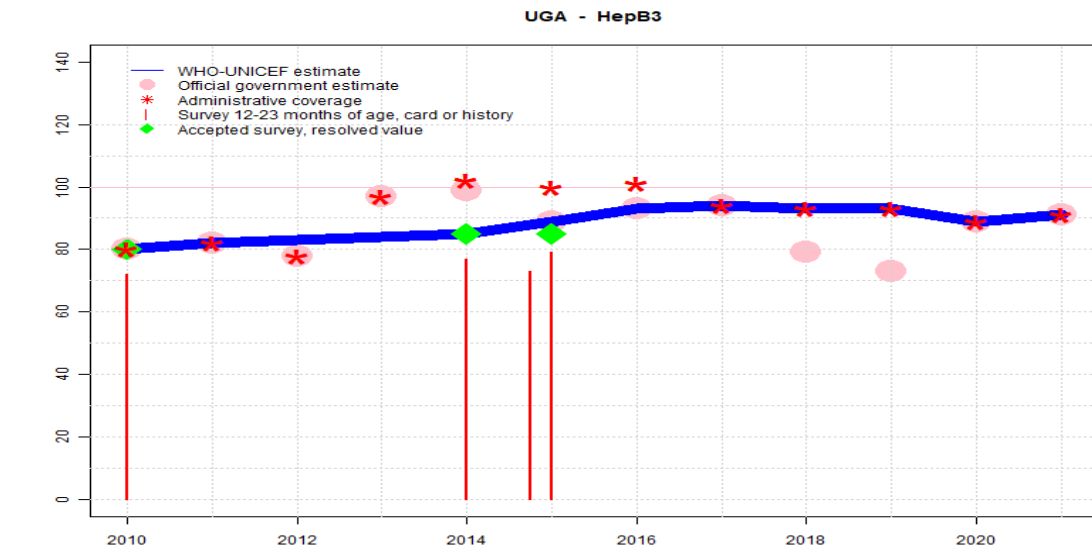
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

# Uganda - HepB3



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	80	82	83	84	85	89	93	94	93	93	89	91
Estimate GoC	●●●	●●●	●	●	●	●	●	●●	●●	●●	●●	●
Official	80	82	78	97	99	89	93	94	79	73	89	91
Administrative	80	82	78	97	102	100	101	94	93	93	89	91
Survey	72	NA	NA	NA	77	*	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

## Description:

- 2021: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2020: Estimate based on coverage reported by national government. GoC=R+ D+
- 2019: Estimate based on reported administrative data. Reported official estimates are derived from the 2017 Uganda National Immunization Survey. For vaccines not included in the survey, administrative data are used. Reported adjustments from administrative data are inconsistent across antigens. WHO and UNICEF encourage a comprehensive review and revision of the historical time-series of reported coverage data. GoC=R+ D+
- 2018: Estimate based on reported administrative data. Reported official estimates are based on 2016 DHS survey results. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. GoC=Assigned by working group. Consistency with information available in neighboring years.
- 2016: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 85 percent based on 2 survey(s). Uganda Demographic and Health Survey 2016 card or history results of 79 percent modified for recall bias to 85 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 69 percent and 3rd dose card only coverage of 62 percent. Uganda National Immunization Coverage Survey 2017 (UNICS 2017) card or history results of 73 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 57 percent and 3rd dose card only coverage of 53 percent. Estimate challenged by: D-
- 2014: Estimate based on survey results. Uganda Demographic and Health Survey 2016 card or history results of 77 percent modified for recall bias to 85 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 58 percent and 3rd dose card only coverage of 53 percent. Reported data excluded. Implementation of the Uganda 2012-14 EPI revitalization plan resulted in marked increase in administrative coverage and the number of children vaccinated between 2012 and 2014. It is, however, unclear whether these rapid increases represent true gains or are an artifact of reported activity around improved data recording and monitoring. Estimate challenged by: D-
- 2013: Estimate based on interpolation between 2011 and 2014 levels. Estimate based on interpolation survey to survey. Reported data excluded. A national web based health management information system was implemented in all districts. A DQS conducted in 2013 suggests problems in reporting and monitoring and shows that data were being over reported. The programme plans to address this and other monitoring issues during 2014. Estimate challenged by: D-R-
- 2012: Estimate based on interpolation between 2011 and 2014 levels. Estimate based on interpolation survey to survey. 1 month vaccine shortage. Estimate challenged by: R-
- 2011: Estimate based on DTP3 coverage. GoC=R+ S+ D+
- 2010: DTP-HepB-Hib combination vaccine used; estimates set to level of DTP3 estimate. Uganda Demographic and Health Survey 2011 card or history results of 72 percent modified for recall bias to 80 percent based on 1st dose card or history coverage of 93 percent,

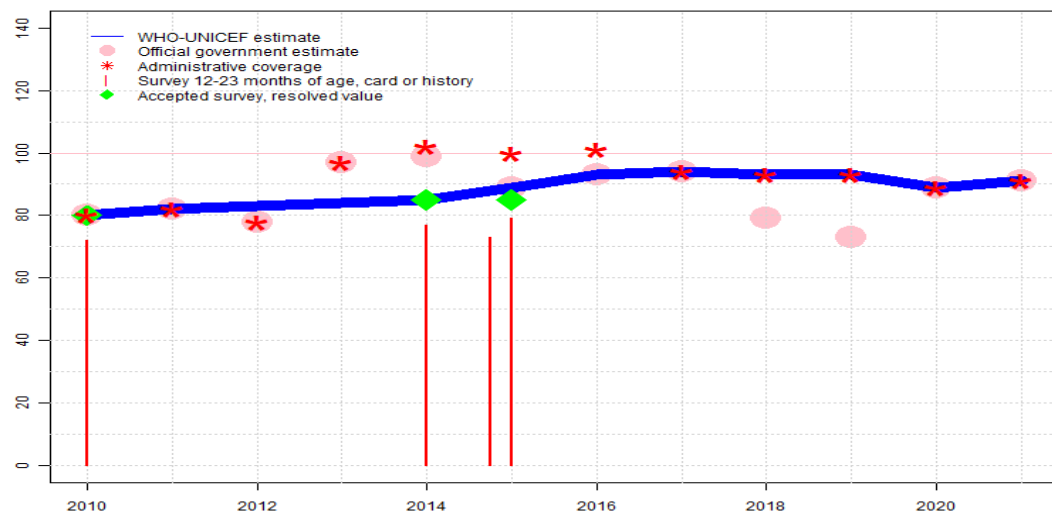
# Uganda - HepB3

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1st dose card only coverage of 58 percent and 3rd dose card only coverage of 50 percent.  
GoC=R+ S+ D+

# Uganda - Hib3

UGA - Hib3



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	80	82	83	84	85	89	93	94	93	93	89	91
Estimate GoC	•••	•••	•	•	•	•	•	••	••	••	••	•
Official	80	82	78	97	99	89	93	94	79	73	89	91
Administrative	80	82	78	97	102	100	101	94	93	93	89	91
Survey	72	NA	NA	NA	77	*	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

## Description:

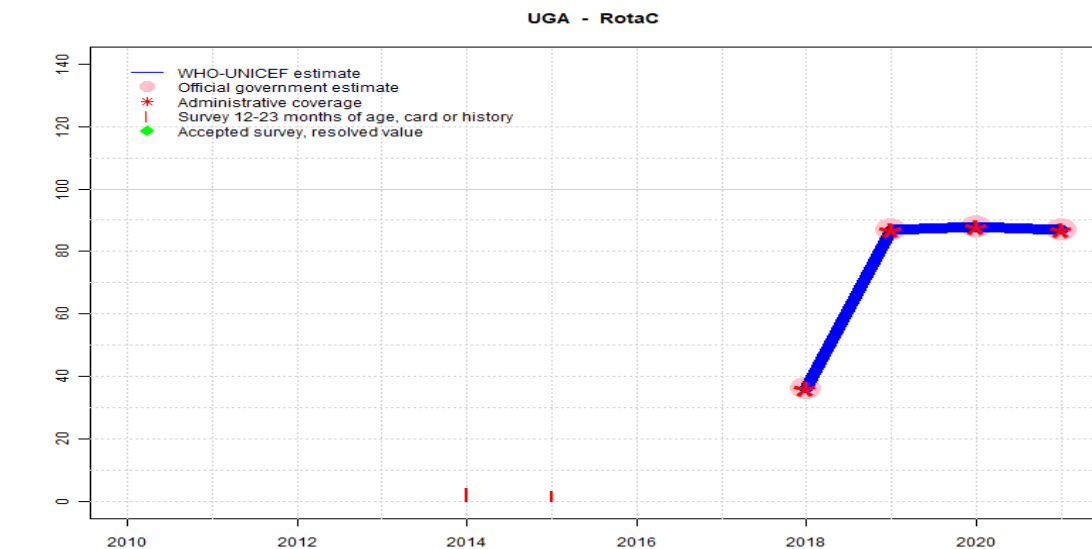
- 2021: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2020: Estimate based on coverage reported by national government. GoC=R+ D+
- 2019: Estimate based on reported administrative data. Reported official estimates are derived from the 2017 Uganda National Immunization Survey. For vaccines not included in the survey, administrative data are used. Reported adjustments from administrative data are inconsistent across antigens. WHO and UNICEF encourage a comprehensive review and revision of the historical time-series of reported coverage data. GoC=R+ D+
- 2018: Estimate based on reported administrative data. Reported official estimates are based on 2016 DHS survey results. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. GoC=Assigned by working group. Consistency with information available in neighboring years.
- 2016: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 85 percent based on 2 survey(s). Uganda Demographic and Health Survey 2016 card or history results of 79 percent modified for recall bias to 85 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 69 percent and 3rd dose card only coverage of 62 percent. Uganda National Immunization Coverage Survey 2017 (UNICS 2017) card or history results of 73 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 57 percent and 3rd dose card only coverage of 53 percent. Estimate challenged by: D-
- 2014: Estimate based on survey results. Uganda Demographic and Health Survey 2016 card or history results of 77 percent modified for recall bias to 85 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 58 percent and 3rd dose card only coverage of 53 percent. Reported data excluded. Implementation of the Uganda 2012-14 EPI revitalization plan resulted in marked increase in administrative coverage and the number of children vaccinated between 2012 and 2014. It is, however, unclear whether these rapid increases represent true gains or are an artifact of reported activity around improved data recording and monitoring. Estimate challenged by: D-
- 2013: Estimate based on interpolation between 2011 and 2014 levels. Estimate based on interpolation survey to survey. Reported data excluded. A national web based health management information system was implemented in all districts. A DQS conducted in 2013 suggests problems in reporting and monitoring and shows that data were being over reported. The programme plans to address this and other monitoring issues during 2014. Estimate challenged by: D-R-
- 2012: Estimate based on interpolation between 2011 and 2014 levels. Estimate based on interpolation survey to survey. 1 month vaccine shortage. Estimate challenged by: R-
- 2011: Estimate based on DTP3 coverage. GoC=R+ S+ D+
- 2010: DTP-HepB-Hib combination vaccine used; estimates set to level of DTP3 estimate. Uganda Demographic and Health Survey 2011 card or history results of 72 percent modified for recall bias to 80 percent based on 1st dose card or history coverage of 93 percent,

# Uganda - Hib3

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1st dose card only coverage of 58 percent and 3rd dose card only coverage of 50 percent.  
GoC=R+ S+ D+

# Uganda - RotaC



## Description:

2021: Estimate based on coverage reported by national government. Programme reports one month vaccine stock-out at national and subnational levels. Estimate challenged by: D-

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

2019: Estimate based on reported administrative estimate. Reported official estimates are derived from the 2017 Uganda National Immunization Survey. For vaccines not included in the survey, administrative data are used. Reported adjustments from administrative data are inconsistent across antigens. WHO and UNICEF encourage a comprehensive review and revision of the historical time-series of reported coverage data. GoC=R+ D+

2018: Rotavirus vaccine introduced in June 2018. Reported official estimates are based on 2016 DHS survey results. Estimate challenged by: R-

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	36	87	88	87
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	•	••	••	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	36	87	88	87
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	36	87	88	87
Survey	NA	NA	NA	NA	4	3	NA	NA	NA	NA	NA	NA

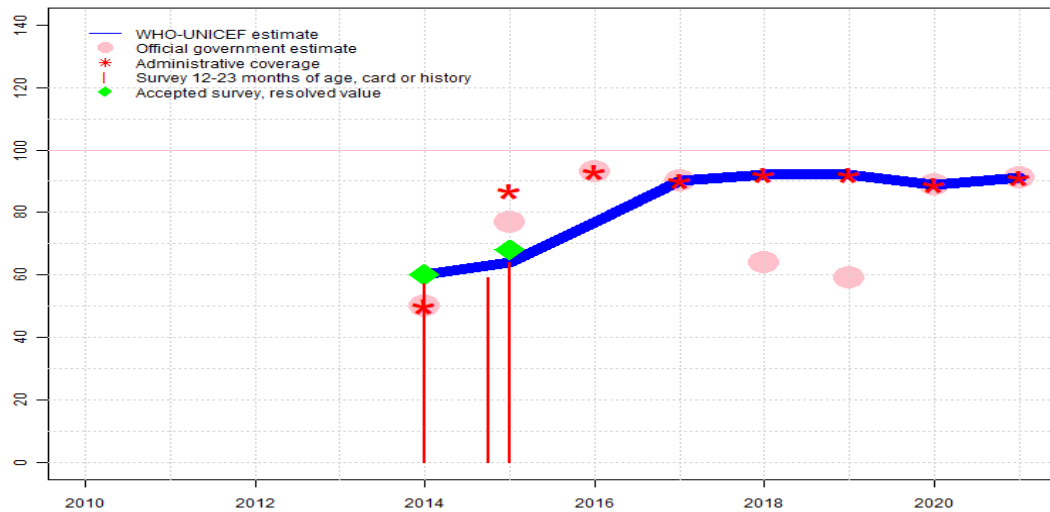
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

# Uganda - PcV3

UGA - PcV3



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	NA	NA	NA	NA	60	64	77	90	92	92	89	91
Estimate GoC	NA	NA	NA	NA	•	•	••	••	••	••	••	•
Official	NA	NA	NA	NA	50	77	93	90	64	59	89	91
Administrative	NA	NA	NA	NA	50	87	93	90	92	92	89	91
Survey	NA	NA	NA	NA	57	*	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

## Description:

- 2021: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2020: Estimate based on coverage reported by national government. GoC=R+ D+
- 2019: Estimate based on reported administrative data. Reported official estimates are derived from the 2017 Uganda National Immunization Survey. For vaccines not included in the survey, administrative data are used. Reported adjustments from administrative data are inconsistent across antigens. WHO and UNICEF encourage a comprehensive review and revision of the historical time-series of reported coverage data. GoC=R+ D+
- 2018: Estimate based on reported administrative data. Reported official estimates are based on 2016 DHS survey results. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. . GoC=Assigned by working group. Consistency with information available in neighboring years.
- 2016: Estimate based on adjustment from DTP3 level for consistency. Estimate challenged by: D-R-S-
- 2015: Estimate based on survey results. Uganda Demographic and Health Survey 2016 card or history results of 64 percent modified for recall bias to 69 percent based on 1st dose card or history coverage of 87 percent, 1st dose card only coverage of 64 percent and 3rd dose card only coverage of 51 percent. Uganda National Immunization Coverage Survey 2017 (UNICS 2017) card or history results of 59 percent modified for recall bias to 67 percent based on 1st dose card or history coverage of 79 percent, 1st dose card only coverage of 48 percent and 3rd dose card only coverage of 41 percent. Estimate challenged by: D-R-
- 2014: Pneumococcal conjugate vaccine introduced during 2014. Uganda Demographic and Health Survey 2016 card or history results of 57 percent modified for recall bias to 60 percent based on 1st dose card or history coverage of 82 percent, 1st dose card only coverage of 52 percent and 3rd dose card only coverage of 38 percent. Reported data excluded. Implementation of the Uganda 2012-14 EPI revitalization plan resulted in marked increase in administrative coverage and the number of children vaccinated between 2012 and 2014. It is, however, unclear whether these rapid increases represent true gains or are an artifact of reported activity around improved data recording and monitoring. Estimate challenged by: R-

# Uganda - survey details

## 2015 Uganda Demographic and Health Survey 2016

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	96	12-23 m	2859	70
BCG	Card	68.2	12-23 m	1993	70
BCG	Card or History	96.3	12-23 m	2859	70
BCG	History	28.1	12-23 m	866	70
DTP1	C or H <12 months	94.5	12-23 m	2859	70
DTP1	Card	68.8	12-23 m	1993	70
DTP1	Card or History	94.9	12-23 m	2859	70
DTP1	History	26.1	12-23 m	866	70
DTP3	C or H <12 months	76.8	12-23 m	2859	70
DTP3	Card	62	12-23 m	1993	70
DTP3	Card or History	78.6	12-23 m	2859	70
DTP3	History	16.5	12-23 m	866	70
HepB1	C or H <12 months	94.5	12-23 m	2859	70
HepB1	Card	68.8	12-23 m	1993	70
HepB1	Card or History	94.9	12-23 m	2859	70
HepB1	History	26.1	12-23 m	866	70
HepB3	C or H <12 months	76.8	12-23 m	2859	70
HepB3	Card	62	12-23 m	1993	70
HepB3	Card or History	78.6	12-23 m	2859	70
HepB3	History	16.5	12-23 m	866	70
Hib1	C or H <12 months	94.5	12-23 m	2859	70
Hib1	Card	68.8	12-23 m	1993	70
Hib1	Card or History	94.9	12-23 m	2859	70
Hib1	History	26.1	12-23 m	866	70
Hib3	C or H <12 months	76.8	12-23 m	2859	70
Hib3	Card	62	12-23 m	1993	70
Hib3	Card or History	78.6	12-23 m	2859	70
Hib3	History	16.5	12-23 m	866	70
MCV1	C or H <12 months	71.8	12-23 m	2859	70
MCV1	Card	56.6	12-23 m	1993	70
MCV1	Card or History	80	12-23 m	2859	70
MCV1	History	23.4	12-23 m	866	70
PCV1	C or H <12 months	87	12-23 m	2859	70
PCV1	Card	64.5	12-23 m	1993	70
PCV1	Card or History	87.4	12-23 m	2859	70
PCV1	History	23	12-23 m	866	70
PCV3	C or H <12 months	62	12-23 m	2859	70

PCV3	Card	50.7	12-23 m	1993	70
PCV3	Card or History	64.3	12-23 m	2859	70
PCV3	History	13.7	12-23 m	866	70
Pol1	C or H <12 months	94.1	12-23 m	2859	70
Pol1	Card	68.6	12-23 m	1993	70
Pol1	Card or History	94.5	12-23 m	2859	70
Pol1	History	25.9	12-23 m	866	70
Pol3	C or H <12 months	64.4	12-23 m	2859	70
Pol3	Card	58.8	12-23 m	1993	70
Pol3	Card or History	65.8	12-23 m	2859	70
Pol3	History	7	12-23 m	866	70
RotaC	C or H <12 months	3.1	12-23 m	2859	70
RotaC	Card	1.9	12-23 m	1993	70
RotaC	Card or History	3.1	12-23 m	2859	70
RotaC	History	1.2	12-23 m	866	70

## 2015 Uganda National Immunization Coverage Survey 2017 (UNICS 2017)

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	57.4	12-23 m	10114	57
BCG	Card or History	93.7	12-23 m	10114	57
BCG	History	36.2	12-23 m	10114	57
DTP1	Card	57.3	12-23 m	10114	57
DTP1	Card or History	91.4	12-23 m	10114	57
DTP1	History	34.1	12-23 m	10114	57
DTP3	Card	52.8	12-23 m	10114	57
DTP3	Card or History	72.7	12-23 m	10114	57
DTP3	History	19.9	12-23 m	10114	57
HepB1	Card	57.3	12-23 m	10114	57
HepB1	Card or History	91.4	12-23 m	10114	57
HepB1	History	34.1	12-23 m	10114	57
HepB3	Card	52.8	12-23 m	10114	57
HepB3	Card or History	72.7	12-23 m	10114	57
HepB3	History	19.9	12-23 m	10114	57
Hib1	Card	57.3	12-23 m	10114	57
Hib1	Card or History	91.4	12-23 m	10114	57
Hib1	History	34.1	12-23 m	10114	57
Hib3	Card	52.8	12-23 m	10114	57
Hib3	Card or History	72.7	12-23 m	10114	57

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Hib3	History	19.9	12-23 m	10114	57
MCV1	Card	56.8	12-23 m	10114	57
MCV1	Card or History	77.9	12-23 m	10114	57
MCV1	History	29.6	12-23 m	10114	57
PcV1	Card or History	79.2	12-23 m	10114	57
PCV1	Card	48	12-23 m	10114	57
PCV1	History	31.2	12-23 m	10114	57
PcV3	Card or History	59.2	12-23 m	10114	57
PCV3	Card	41.3	12-23 m	10114	57
PCV3	History	17.9	12-23 m	10114	57
Pol1	Card	56.8	12-23 m	10114	57
Pol1	Card or History	90.1	12-23 m	10114	57
Pol1	History	33.3	12-23 m	10114	57
Pol3	Card	51.5	12-23 m	10114	57
Pol3	Card or History	59.7	12-23 m	10114	57
Pol3	History	8.2	12-23 m	10114	57

## 2014 Uganda Demographic and Health Survey 2016

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93.5	24-35 m	2890	70
BCG	Card	57.9	24-35 m	1703	70
BCG	Card or History	95.3	24-35 m	2890	70
BCG	History	37.4	24-35 m	1187	70
DTP1	C or H <12 months	90.7	24-35 m	2890	70
DTP1	Card	58.1	24-35 m	1703	70
DTP1	Card or History	93	24-35 m	2890	70
DTP1	History	34.9	24-35 m	1187	70
DTP3	C or H <12 months	72.6	24-35 m	2890	70
DTP3	Card	53.1	24-35 m	1703	70
DTP3	Card or History	76.6	24-35 m	2890	70
DTP3	History	23.5	24-35 m	1187	70
HepB1	C or H <12 months	90.7	24-35 m	2890	70
HepB1	Card	58.1	24-35 m	1703	70
HepB1	Card or History	93	24-35 m	2890	70
HepB1	History	34.9	24-35 m	1187	70
HepB3	C or H <12 months	72.6	24-35 m	2890	70
HepB3	Card	53.1	24-35 m	1703	70
HepB3	Card or History	76.6	24-35 m	2890	70

HepB3	History	23.5	24-35 m	1187	70
Hib1	C or H <12 months	90.7	24-35 m	2890	70
Hib1	Card	58.1	24-35 m	1703	70
Hib1	Card or History	93	24-35 m	2890	70
Hib1	History	34.9	24-35 m	1187	70
Hib3	C or H <12 months	72.6	24-35 m	2890	70
Hib3	Card	53.1	24-35 m	1703	70
Hib3	Card or History	76.6	24-35 m	2890	70
Hib3	History	23.5	24-35 m	1187	70
MCV1	C or H <12 months	71	24-35 m	2890	70
MCV1	Card	51.4	24-35 m	1703	70
MCV1	Card or History	85.4	24-35 m	2890	70
MCV1	History	34	24-35 m	1187	70
PCV1	C or H <12 months	79.1	24-35 m	2890	70
PCV1	Card	51.6	24-35 m	1703	70
PCV1	Card or History	81.8	24-35 m	2890	70
PCV1	History	30.2	24-35 m	1187	70
PCV3	C or H <12 months	51.6	24-35 m	2890	70
PCV3	Card	37.7	24-35 m	1703	70
PCV3	Card or History	57.2	24-35 m	2890	70
PCV3	History	19.5	24-35 m	1187	70
Pol1	C or H <12 months	88.9	24-35 m	2890	70
Pol1	Card	57.9	24-35 m	1703	70
Pol1	Card or History	91.3	24-35 m	2890	70
Pol1	History	33.5	24-35 m	1187	70
Pol3	C or H <12 months	57.6	24-35 m	2890	70
Pol3	Card	50.4	24-35 m	1703	70
Pol3	Card or History	60.5	24-35 m	2890	70
Pol3	History	10.1	24-35 m	1187	70
RotaC	C or H <12 months	2.9	24-35 m	2890	70
RotaC	Card	1.8	24-35 m	1703	70
RotaC	Card or History	3.8	24-35 m	2890	70
RotaC	History	2	24-35 m	1187	70

## 2011 Routine Immunization Coverage Survey in Uganda: National Report 2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	78	12-23 m	25811	79

# Uganda - survey details

BCG	Card or History	97	12-23 m	33265	79
DTP1	Card	77	12-23 m	25811	79
DTP1	Card or History	96	12-23 m	33265	79
DTP3	Card	74	12-23 m	25811	79
DTP3	Card or History	92	12-23 m	33265	79
MCV1	Card	70	12-23 m	25811	79
MCV1	Card or History	85	12-23 m	33265	79

## 2010 Uganda Demographic and Health Survey 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	92.1	12-23 m	1480	59
BCG	Card	58.2	12-23 m	876	59
BCG	Card or History	93.7	12-23 m	1480	59
BCG	History	35.5	12-23 m	604	59
DTP1	C or H <12 months	91.4	12-23 m	1480	59
DTP1	Card	58	12-23 m	876	59
DTP1	Card or History	93.1	12-23 m	1480	59
DTP1	History	35.1	12-23 m	604	59
DTP3	C or H <12 months	67.9	12-23 m	1480	59
DTP3	Card	49.8	12-23 m	876	59
DTP3	Card or History	71.5	12-23 m	1480	59
DTP3	History	21.7	12-23 m	604	59
HepB1	C or H <12 months	91.4	12-23 m	1480	59
HepB1	Card	58	12-23 m	876	59
HepB1	Card or History	93.1	12-23 m	1480	59
HepB1	History	35.1	12-23 m	604	59
HepB3	C or H <12 months	67.9	12-23 m	1480	59
HepB3	Card	49.8	12-23 m	876	59
HepB3	Card or History	71.5	12-23 m	1480	59
HepB3	History	21.7	12-23 m	604	59
Hib1	C or H <12 months	91.4	12-23 m	1480	59
Hib1	Card	58	12-23 m	876	59
Hib1	Card or History	93.1	12-23 m	1480	59
Hib1	History	35.1	12-23 m	604	59
Hib3	C or H <12 months	67.9	12-23 m	1480	59
Hib3	Card	49.8	12-23 m	876	59
Hib3	Card or History	71.5	12-23 m	1480	59
Hib3	History	21.7	12-23 m	604	59

MCV1	C or H <12 months	58.4	12-23 m	1480	59
MCV1	Card	47.1	12-23 m	876	59
MCV1	Card or History	75.8	12-23 m	1480	59
MCV1	History	28.7	12-23 m	604	59
Pol1	C or H <12 months	90.9	12-23 m	1480	59
Pol1	Card	58.2	12-23 m	876	59
Pol1	Card or History	93.3	12-23 m	1480	59
Pol1	History	35	12-23 m	604	59
Pol3	C or H <12 months	59.5	12-23 m	1480	59
Pol3	Card	49.1	12-23 m	876	59
Pol3	Card or History	62.9	12-23 m	1480	59
Pol3	History	13.8	12-23 m	604	59

## 2009 Uganda Demographic and Health Survey 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	92.7	24-35 m	1515	59
DTP1	C or H <12 months	90.6	24-35 m	1515	59
DTP3	C or H <12 months	55.2	24-35 m	1515	59
MCV1	C or H <12 months	58.5	24-35 m	1515	59
Pol1	C or H <12 months	90.4	24-35 m	1515	59
Pol3	C or H <12 months	64.3	24-35 m	1515	59

## 2008 Uganda Demographic and Health Survey 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	91.1	36-47 m	1473	59
DTP1	C or H <12 months	90.4	36-47 m	1473	59
DTP3	C or H <12 months	54.8	36-47 m	1473	59
MCV1	C or H <12 months	60.6	36-47 m	1473	59
Pol1	C or H <12 months	90.4	36-47 m	1473	59
Pol3	C or H <12 months	66.7	36-47 m	1473	59

## 2007 Uganda Demographic and Health Survey 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93	48-59 m	1438	59

# Uganda - survey details

DTP1	C or H <12 months	91.6	48-59 m	1438	59
DTP3	C or H <12 months	54	48-59 m	1438	59
MCV1	C or H <12 months	63.9	48-59 m	1438	59
Pol1	C or H <12 months	90.5	48-59 m	1438	59
Pol3	C or H <12 months	65	48-59 m	1438	59

## 2005 Uganda Demographic and Health Survey 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	89.4	12-23 m	1590	63
BCG	Card	61.8	12-23 m	1590	63
BCG	Card or History	90.5	12-23 m	1590	63
BCG	History	28.7	12-23 m	1590	63
DTP1	C or H <12 months	87	12-23 m	1590	63
DTP1	Card	61.7	12-23 m	1590	63
DTP1	Card or History	89.8	12-23 m	1590	63
DTP1	History	28.1	12-23 m	1590	63
DTP3	C or H <12 months	58.9	12-23 m	1590	63
DTP3	Card	49.4	12-23 m	1590	63
DTP3	Card or History	63.9	12-23 m	1590	63
DTP3	History	14.5	12-23 m	1590	63
MCV1	C or H <12 months	52.3	12-23 m	1590	63
MCV1	Card	45.5	12-23 m	1590	63
MCV1	Card or History	68.1	12-23 m	1590	63
MCV1	History	22.5	12-23 m	1590	63
Pol1	C or H <12 months	88.2	12-23 m	1590	63
Pol1	Card	61.3	12-23 m	1590	63
Pol1	Card or History	90.3	12-23 m	1590	63
Pol1	History	29	12-23 m	1590	63
Pol3	C or H <12 months	54.7	12-23 m	1590	63
Pol3	Card	49.4	12-23 m	1590	63
Pol3	Card or History	59.3	12-23 m	1590	63
Pol3	History	9.9	12-23 m	1590	63

## 2004 Uganda EPI Plus Coverage Survey 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
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BCG	Card or History	93.1	12-23 m	232	73
DTP1	Card or History	85.2	12-23 m	232	73
DTP3	Card or History	76.3	12-23 m	232	73
HepB1	Card or History	85.2	12-23 m	232	73
HepB3	Card or History	76.3	12-23 m	232	73
Hib3	Card or History	76.3	12-23 m	232	73
MCV1	Card or History	71.2	12-23 m	232	73
Pol1	Card or History	88.4	12-23 m	232	73
Pol3	Card or History	75	12-23 m	232	73

## 1999 Uganda Demographic and Health Survey 2000-2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	75	12-23 m	1504	-
BCG	Card	46.2	12-23 m	1504	-
BCG	Card or History	78.7	12-23 m	1504	-
BCG	History	32.5	12-23 m	1504	-
DTP1	C or H <12 months	72.9	12-23 m	1504	-
DTP1	Card	44.8	12-23 m	1504	-
DTP1	Card or History	77	12-23 m	1504	-
DTP1	History	32.2	12-23 m	1504	-
DTP3	C or H <12 months	42	12-23 m	1504	-
DTP3	Card	31.2	12-23 m	1504	-
DTP3	Card or History	46.1	12-23 m	1504	-
DTP3	History	15	12-23 m	1504	-
MCV1	C or H <12 months	42.3	12-23 m	1504	-
MCV1	Card	32.2	12-23 m	1504	-
MCV1	Card or History	56.8	12-23 m	1504	-
MCV1	History	24.6	12-23 m	1504	-
Pol1	C or H <12 months	79.4	12-23 m	1504	-
Pol1	Card	45.7	12-23 m	1504	-
Pol1	Card or History	83.9	12-23 m	1504	-
Pol1	History	38.2	12-23 m	1504	-
Pol3	C or H <12 months	49.6	12-23 m	1504	-
Pol3	Card	33.5	12-23 m	1504	-
Pol3	Card or History	54.1	12-23 m	1504	-
Pol3	History	20.6	12-23 m	1504	-

## Uganda - survey details

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1997 Uganda Immunization Coverage Validation Survey 1998/1999

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	82.5	12-23 m	10466	-
DTP1	Card or History	78	12-23 m	10466	-

DTP3	Card or History	54.5	12-23 m	10466	-
MCV1	Card or History	53.1	12-23 m	10466	-
Pol1	Card or History	79.4	12-23 m	10466	-
Pol3	Card or History	54.9	12-23 m	10466	-

Further information and estimates for previous years are available at:

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

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