

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.

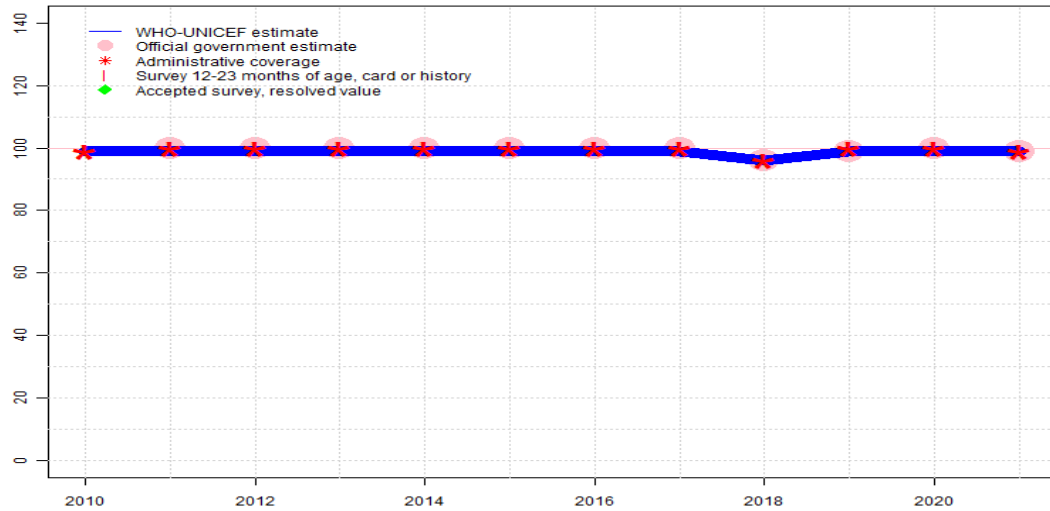
PcV3: percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect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

UZB - BCG



Description:

- 2021: Estimate based on coverage reported by national government. WHO and UNICEF are aware of an ongoing Multiple Indicator Cluster Survey and await the final results. Estimate challenged by: D-
- 2020: Estimate based on coverage reported by national government. Programme reports three month vaccine stock-out at national level. GoC=R+ D+
- 2019: Estimate based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. Programme reports one month vaccine stock-out at national and district level. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. GoC=R+ D+
- 2016: Estimate based on coverage reported by national government. Programme reports two months vaccine stock out at national level. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. Programme reports five month national level stock-out. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ D+
- 2010: Estimate based on reported administrative data. GoC=R+ D+

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	99	99	99	99	99	99	99	99	96	99	99	99
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●
Official	NA	100	100	100	100	100	100	100	96	99	100	99
Administrative	99	100	100	100	100	100	100	100	96	100	100	99
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

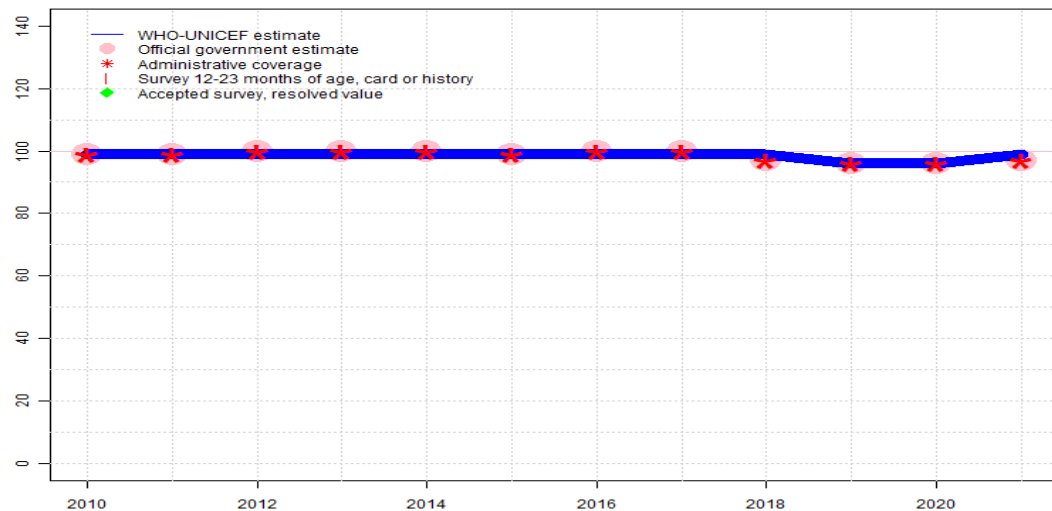
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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Uzbekistan - DTP1

UZB - DTP1



Description:

2021: DTP1 coverage estimated based on DTP3 coverage of 98. WHO and UNICEF are aware of an ongoing Multiple Indicator Cluster Survey and await the final results. Estimate challenged by: R-

2020: Estimate based on coverage reported by national government. Programme reports five month vaccine stock-out at the national level. GoC=R+ D+

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

2018: DTP1 coverage estimated based on DTP3 coverage of 98. Estimate challenged by: R-

2017: Estimate based on coverage reported by national government. GoC=R+ D+

2016: Estimate based on coverage reported by national government. Programme reports four month vaccine stock-out at national level. GoC=R+ D+

2015: Estimate based on coverage reported by national government. Programme reports two month national level stock-out. GoC=R+ D+

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

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

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

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

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

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	99	99	99	99	99	99	99	99	99	96	96	99
Estimate GoC	••	••	••	••	••	••	••	••	•	••	••	•
Official	99	99	100	100	100	99	100	100	97	96	96	97
Administrative	99	99	100	100	100	99	100	100	97	96	96	97
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

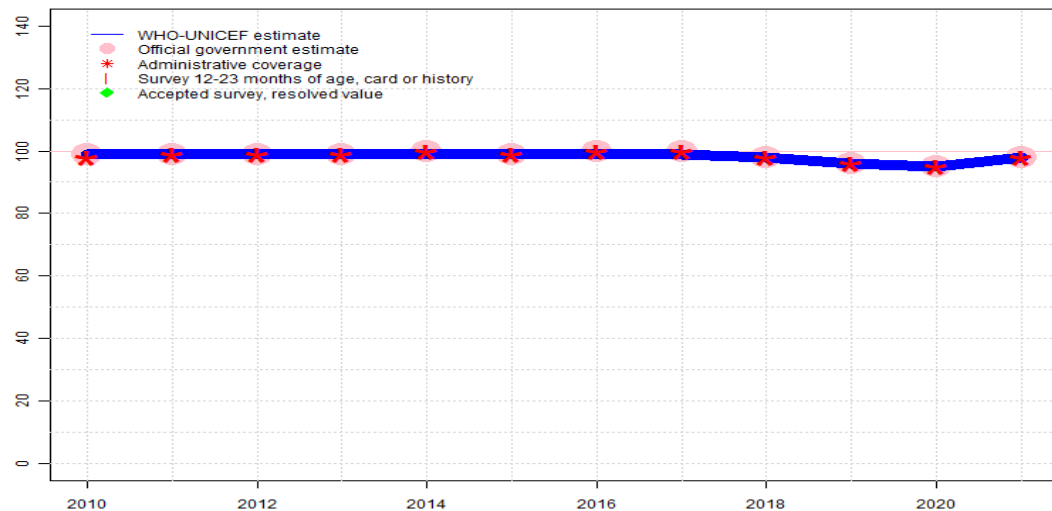
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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Uzbekistan - DTP3

UZB - DTP3



Description:

- 2021: Estimate based on coverage reported by national government. WHO and UNICEF are aware of an ongoing Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+
- 2020: Estimate based on coverage reported by national government. Programme reports five month vaccine stock-out at the national level. GoC=R+ D+
- 2019: Estimate based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. GoC=R+ D+
- 2016: Estimate based on coverage reported by national government. Programme reports four month vaccine stock-out at national level. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. Programme reports two month national level stock-out. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ D+

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	99	99	99	99	99	99	99	99	98	96	95	98
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	99	99	99	99	100	99	100	100	98	96	95	98
Administrative	98	99	99	99	100	99	100	100	98	96	95	98
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

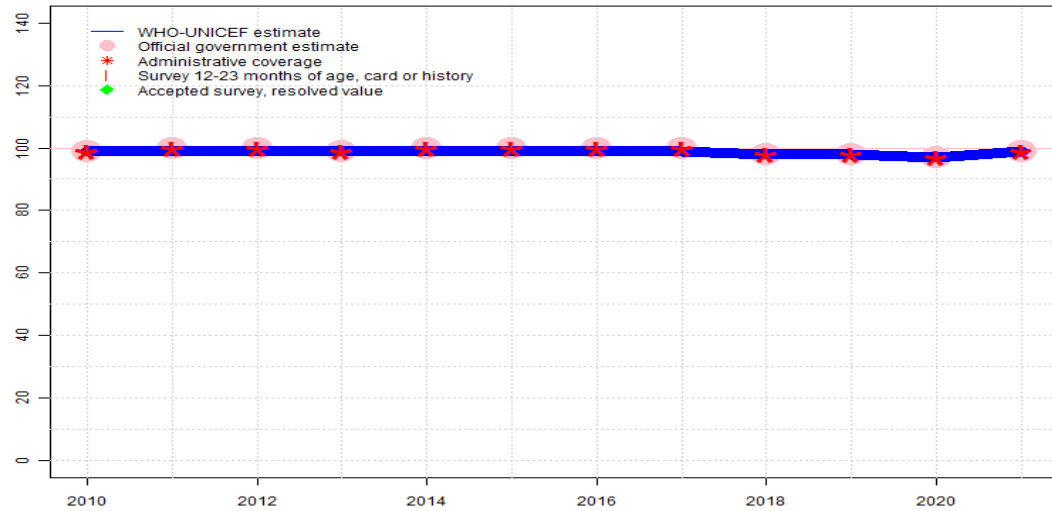
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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Uzbekistan - Pol3

UZB - Pol3



Description:

- 2021: Estimate based on coverage reported by national government. WHO and UNICEF are aware of an ongoing Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+
- 2020: Estimate based on coverage reported by national government. Programme reports three month vaccine stock-out at the national level. GoC=R+ D+
- 2019: Estimate based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. GoC=R+ D+
- 2016: Estimate based on coverage reported by national government. Programme reports one month vaccine stock-out at national level. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ D+

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	99	99	99	99	99	99	99	99	98	98	97	99
Estimate GoC	●●	●●	●●	●●	●●	●●	●	●●	●●	●●	●●	●●
Official	99	100	100	99	100	100	100	100	98	98	97	99
Administrative	99	100	100	99	100	100	100	100	98	98	97	99
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

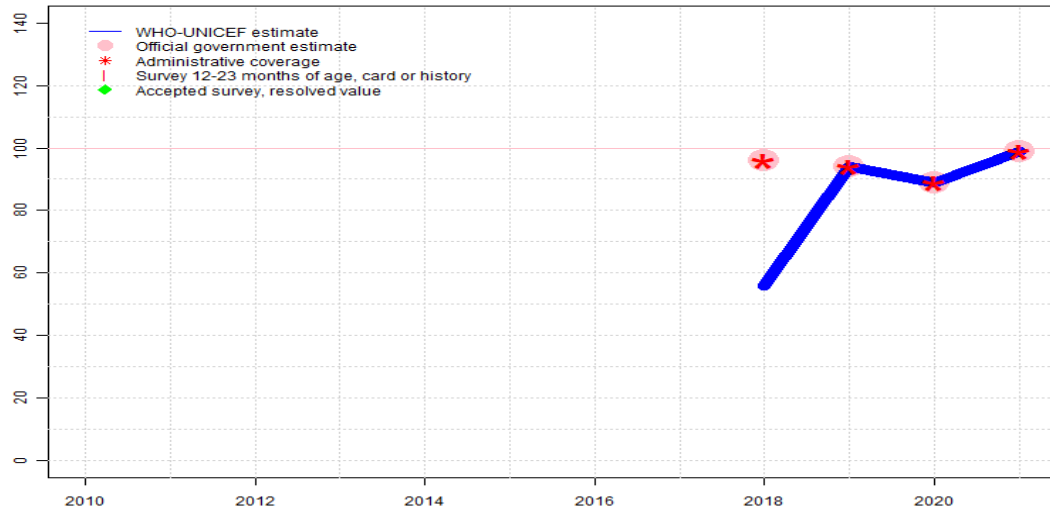
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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Uzbekistan - IPV1

UZB - 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).

- 2021: Estimate based on coverage reported by national government. WHO and UNICEF are aware of an ongoing Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+
- 2020: Estimate based on coverage reported by national government. Programme reports five month vaccine stock-out at the national and district level. GoC=R+ D+
- 2019: Estimate based on coverage reported by national government. Estimate based on reported data following introduction. GoC=R+ D+
- 2018: Inactivated polio vaccine introduced during 2018. Programme reports 96 percent coverage in 56 percent of the population. Estimate based on coverage achieved in the annualized national target population. 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	56	94	89	99
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	•	••	••	••
Official	NA	NA	NA	NA	NA	NA	NA	NA	96	94	89	99
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	96	94	89	99
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

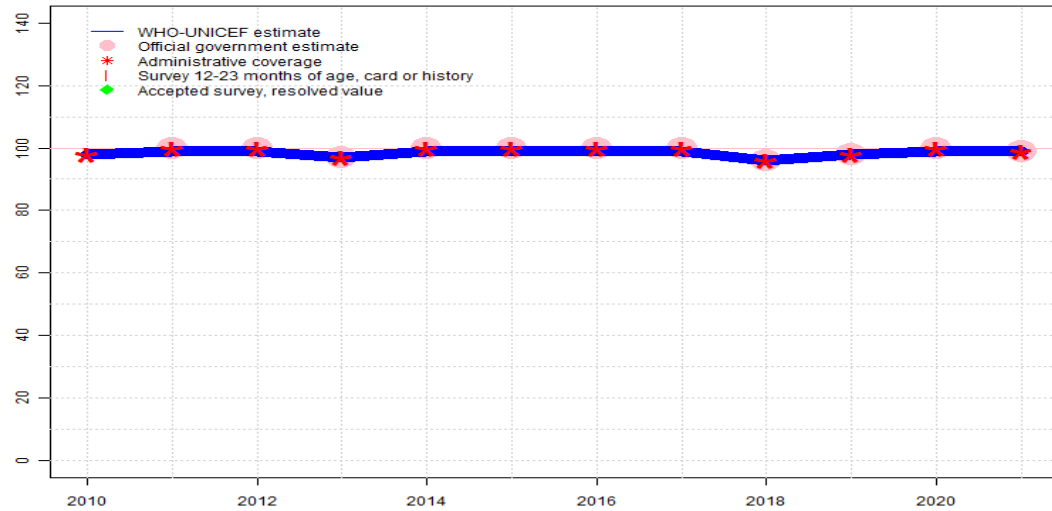
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Uzbekistan - MCV1

UZB - MCV1



Description:

- 2021: Estimate based on coverage reported by national government. WHO and UNICEF are aware of an ongoing Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+
- 2020: Estimate based on coverage reported by national government. GoC=R+ D+
- 2019: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2018: Estimate based on coverage reported by national government. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. GoC=R+ D+
- 2016: Estimate based on coverage reported by national government. Programme reports four month vaccine stock-out at national level. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ D+
- 2010: Estimate based on reported administrative data. GoC=R+ D+

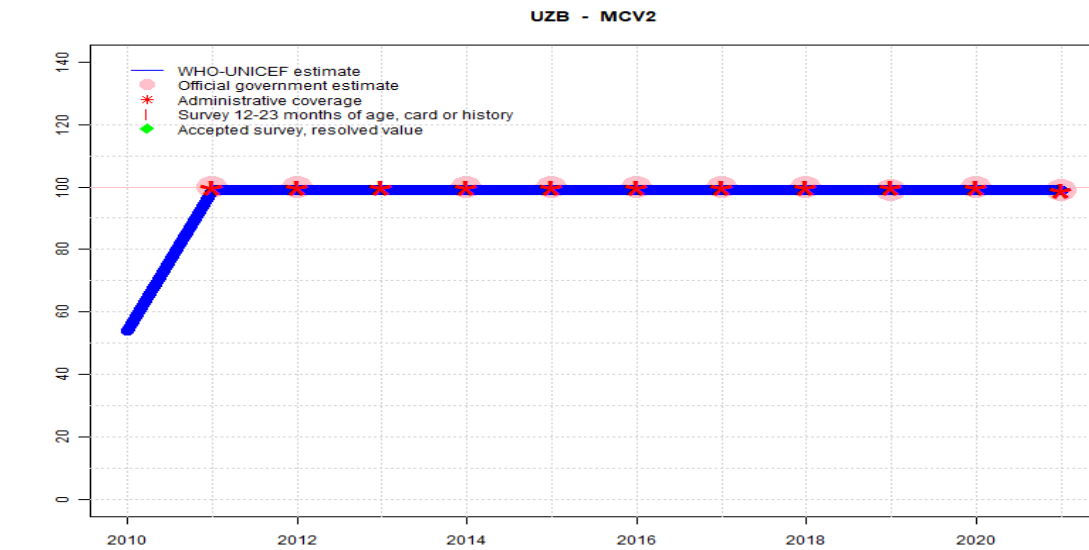
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	98	99	99	97	99	99	99	99	96	98	99	99
Estimate GoC	••	••	••	••	••	••	••	••	••	•	••	••
Official	NA	100	100	97	100	100	100	100	96	98	100	99
Administrative	98	100	100	97	100	100	100	100	96	98	100	99
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	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.

Uzbekistan - MCV2



Description:

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

2021: Estimate based on coverage reported by national government. WHO and UNICEF are aware of an ongoing Multiple Indicator Cluster Survey and await the final results. Estimate challenged by: D-

2020: Estimate based on coverage reported by national government. Estimate challenged by: D-

2019: Estimate based on coverage reported by national government. Estimate challenged by: D-

2018: Estimate based on coverage reported by national government. Estimate challenged by: D-

2017: Estimate based on coverage reported by national government. Estimate challenged by: D-

2016: Estimate based on coverage reported by national government. Estimate challenged by: D-

2015: Estimate based on coverage reported by national government. Estimate challenged by: D-

2014: Estimate based on coverage reported by national government. Estimate challenged by: D-

2013: Estimate based on reported administrative estimate. Estimate challenged by: D-

2012: Estimate based on coverage reported by national government. Estimate challenged by: D-

2011: Estimate based on coverage reported by national government. Estimate challenged by: D-

2010: Estimate based on interpolation between reported values. GoC=No accepted empirical data

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	54	99	99	99	99	99	99	99	99	99	99	99
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	NA	100	100	NA	100	100	100	100	100	99	100	99
Administrative	NA	100	100	100	100	100	100	100	100	100	100	99
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

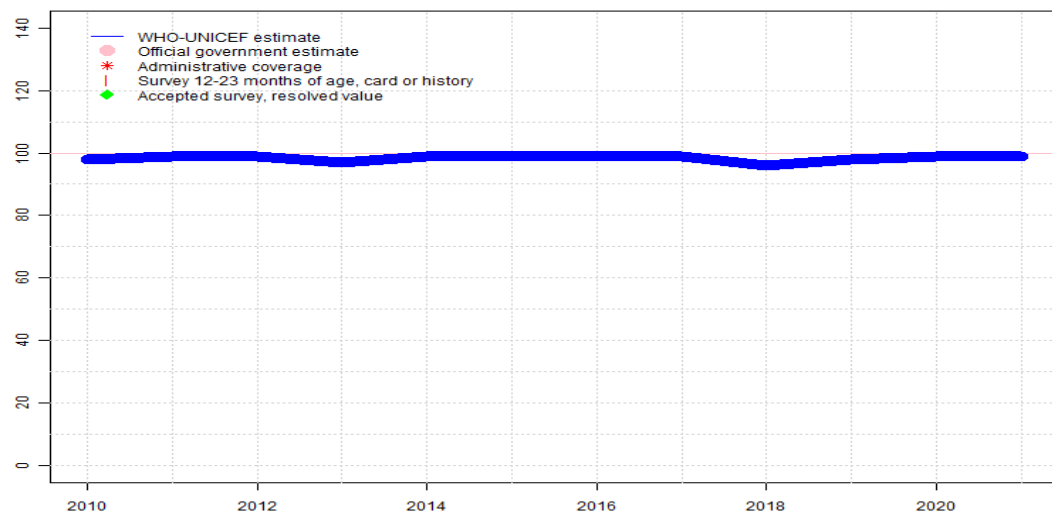
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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Uzbekistan - RCV1

UZB - 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. WHO and UNICEF are aware of an ongoing Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+
 2020: Estimate based on estimated MCV1. GoC=R+ D+
 2019: Estimate based on estimated MCV1. Estimate challenged by: D-
 2018: Estimate based on estimated MCV1. GoC=R+ D+
 2017: Estimate based on estimated MCV1. GoC=R+ D+
 2016: Estimate based on estimated MCV1. GoC=R+ D+
 2015: Estimate based on estimated MCV1. GoC=R+ D+
 2014: Estimate based on estimated MCV1. GoC=R+ D+
 2013: Estimate based on estimated MCV1. GoC=R+ D+
 2012: Estimate based on estimated MCV1. GoC=R+ D+
 2011: Estimate based on estimated MCV1. GoC=R+ D+
 2010: Estimate based on estimated MCV1. GoC=R+ D+

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	98	99	99	97	99	99	99	99	96	98	99	99
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●	●●	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

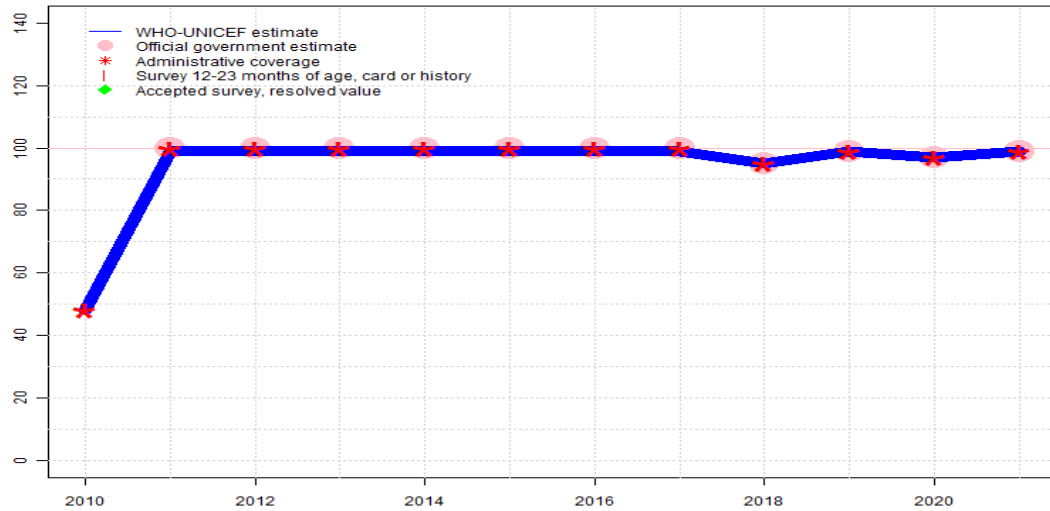
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Uzbekistan - HepBB

UZB - HepBB



Description:

2021: Estimate based on coverage reported by national government. WHO and UNICEF are aware of an ongoing Multiple Indicator Cluster Survey and await the final results. Estimate challenged by: D-

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

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

2018: Estimate based on coverage reported by national government. GoC=R+ D+

2017: Estimate based on coverage reported by national government. GoC=R+ D+

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

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

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

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

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

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

2010: Estimate based on reported administrative estimate. Decline is likely due to five months stock in all 192 district. GoC=R+ D+

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	48	99	99	99	99	99	99	99	95	99	97	99
Estimate GoC	••	••	••	••	••	••	••	••	••	••	••	•
Official	NA	100	100	100	100	100	100	100	95	99	97	99
Administrative	48	100	100	100	100	100	100	100	95	99	97	99
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

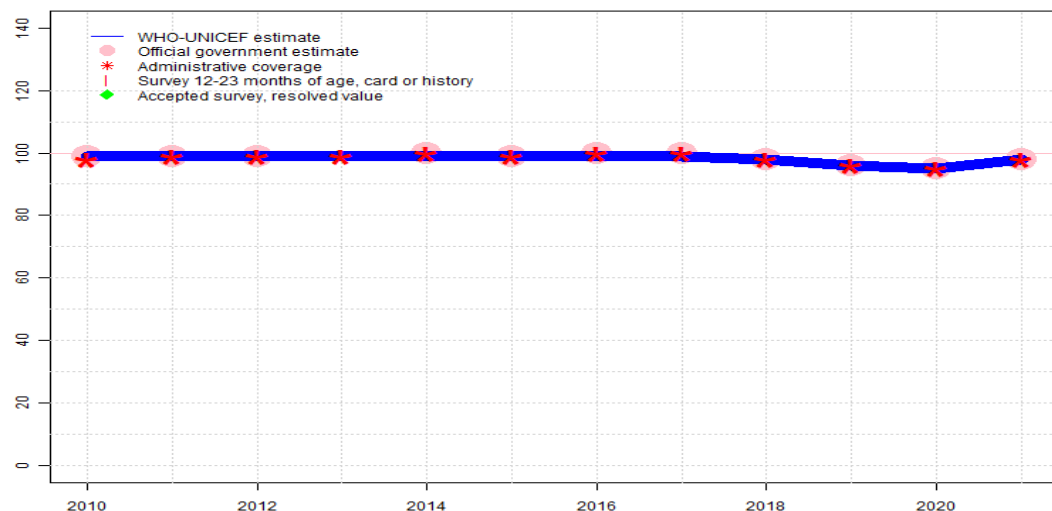
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Uzbekistan - HepB3

UZB - HepB3



Description:

- 2021: Estimate based on coverage reported by national government. WHO and UNICEF are aware of an ongoing Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+
- 2020: Estimate based on coverage reported by national government. Programme reports five month vaccine stock-out at the national level. GoC=R+ D+
- 2019: Estimate based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. GoC=R+ D+
- 2016: Estimate based on coverage reported by national government. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on reported administrative data. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ D+

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	99	99	99	99	99	99	99	99	98	96	95	98
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	99	99	99	NA	100	99	100	100	98	96	95	98
Administrative	98	99	99	99	100	99	100	100	98	96	95	98
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

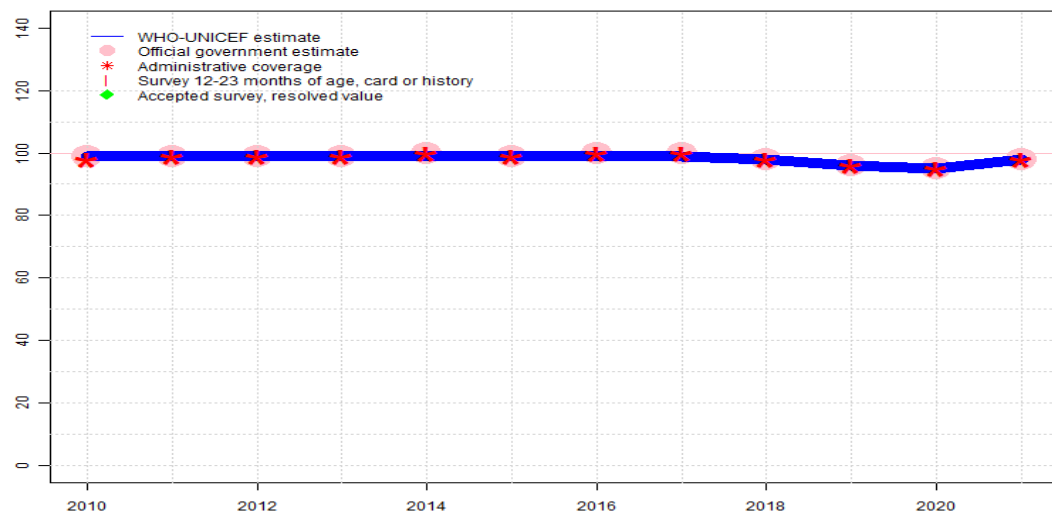
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Uzbekistan - Hib3

UZB - Hib3



Description:

- 2021: Estimate based on coverage reported by national government. WHO and UNICEF are aware of an ongoing Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+
- 2020: Estimate based on coverage reported by national government. Programme reports five month vaccine stock-out at the national level. GoC=R+ D+
- 2019: Estimate based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. Programme reports district-level supply disruption of Hib vaccine. GoC=R+ D+
- 2016: Estimate based on coverage reported by national government. Programme reports one month vaccine stock-out at national and district levels. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ D+

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	99	99	99	99	99	99	99	99	98	96	95	98
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	99	99	99	99	100	99	100	100	98	96	95	98
Administrative	98	99	99	99	100	99	100	100	98	96	95	98
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

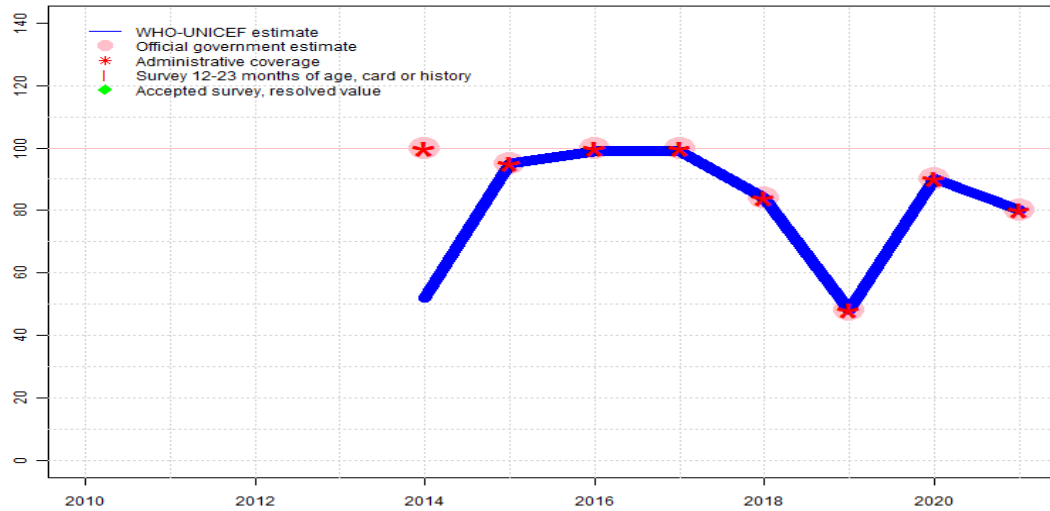
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Uzbekistan - RotaC

UZB - RotaC



Description:

- 2021: Estimate based on coverage reported by national government. WHO and UNICEF are aware of an ongoing Multiple Indicator Cluster Survey and await the final results. Programme reports a two month vaccine stock-out at the national level. Estimate challenged by: D-
- 2020: Estimate based on coverage reported by national government. Programme reports three month vaccine stock-out at the national level. GoC=R+ D+
- 2019: Estimate based on coverage reported by national government. Programme reports four month vaccine stock-out. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. Programme reports four month vaccine stock-out at national and district level. GoC=R+ D+
- 2017: Estimate based on coverage reported by national government. GoC=R+ D+
- 2016: Estimate based on coverage reported by national government. Programme reports four month vaccine stock-out at national and district level. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Rotavirus vaccine introduced during 2014. Programme achieved 100 percent coverage in 52 percent of the national target population. Estimate is based on the national target population. Estimate challenged by: R-

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	NA	NA	NA	NA	52	95	99	99	84	48	90	80
Estimate GoC	NA	NA	NA	NA	•	••	•	••	••	••	••	•
Official	NA	NA	NA	NA	100	95	100	100	84	48	90	80
Administrative	NA	NA	NA	NA	100	95	100	100	84	48	90	80
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

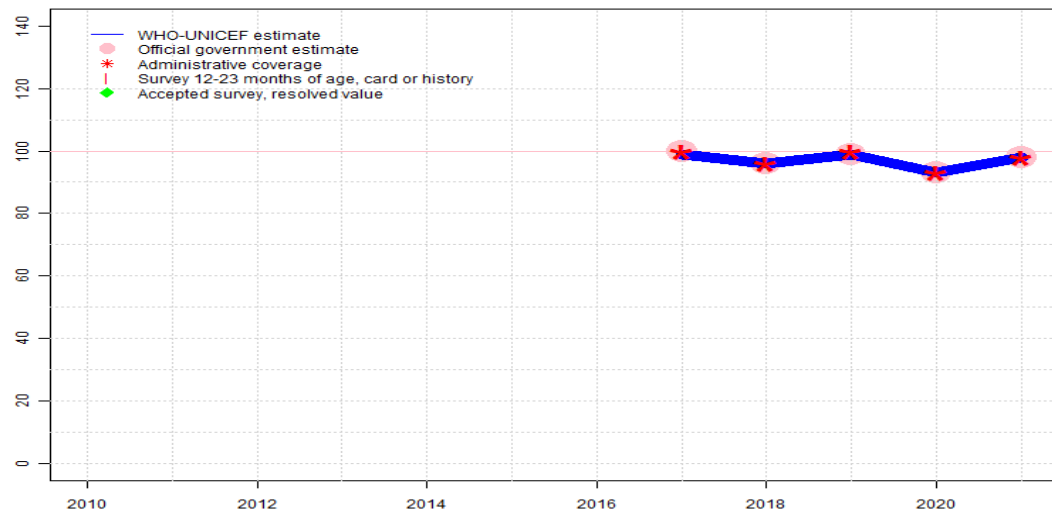
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Uzbekistan - PcV3

UZB - PcV3



Description:

- 2021: Estimate based on coverage reported by national government. WHO and UNICEF are aware of an ongoing Multiple Indicator Cluster Survey and await the final results. GoC=R+ D+
- 2020: Estimate based on coverage reported by national government. Programme reports seven month vaccine stock-out at national and district level. GoC=R+ D+
- 2019: Estimate based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. Programme reports one month vaccine stock-out at national and district level. Estimate challenged by: D-
- 2017: Estimate is based on reported data for second dose coverage. Programme reports one month vaccine stock-out at national and district levels. Pneumococcal conjugate vaccine introduced November 2015. Reporting began in 2017. Estimate challenged by: D-R-

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	NA	NA	NA	NA	NA	NA	NA	99	96	99	93	98
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	•	•	••	••	••
Official	NA	NA	NA	NA	NA	NA	NA	100	96	99	93	98
Administrative	NA	NA	NA	NA	NA	NA	NA	100	96	100	93	98
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.

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Uzbekistan - survey details

2005 Uzbekistan Multiple Indicator Cluster Survey 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	100	15-26 m	1047	96
DTP1	Card or History	99.3	15-26 m	1047	96
DTP3	Card or History	93.2	15-26 m	1047	96
HepB1	Card or History	99.7	15-26 m	1047	96
HepB3	Card or History	90.4	15-26 m	1047	96
MCV1	Card or History	97.4	15-26 m	1047	96
Pol1	Card or History	97.7	15-26 m	1047	96
Pol3	Card or History	89.6	15-26 m	1047	96

1999 Multiple Indicator Cluster Survey, Uzbekistan 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	93.8	12-23 m	630	-

BCG	Card or History	98.9	12-23 m	630	-
BCG	History	5.1	12-23 m	630	-
DTP1	Card	95.1	12-23 m	630	-
DTP1	Card or History	98.4	12-23 m	630	-
DTP1	History	3.3	12-23 m	630	-
DTP3	Card	92.9	12-23 m	630	-
DTP3	Card or History	95.8	12-23 m	630	-
DTP3	History	2.9	12-23 m	630	-
MCV1	Card	91.9	12-23 m	630	-
MCV1	Card or History	97	12-23 m	630	-
MCV1	History	5.1	12-23 m	630	-
Pol1	Card	95.1	12-23 m	630	-
Pol1	Card or History	98.4	12-23 m	630	-
Pol1	History	3.3	12-23 m	630	-
Pol3	Card	93.7	12-23 m	630	-
Pol3	Card or History	95.8	12-23 m	630	-
Pol3	History	2.1	12-23 m	630	-

Further information and estimates for previous years are available at:
<https://data.unicef.org/topic/child-health/immunization/>
<https://immunizationdata.who.int/listing.html>