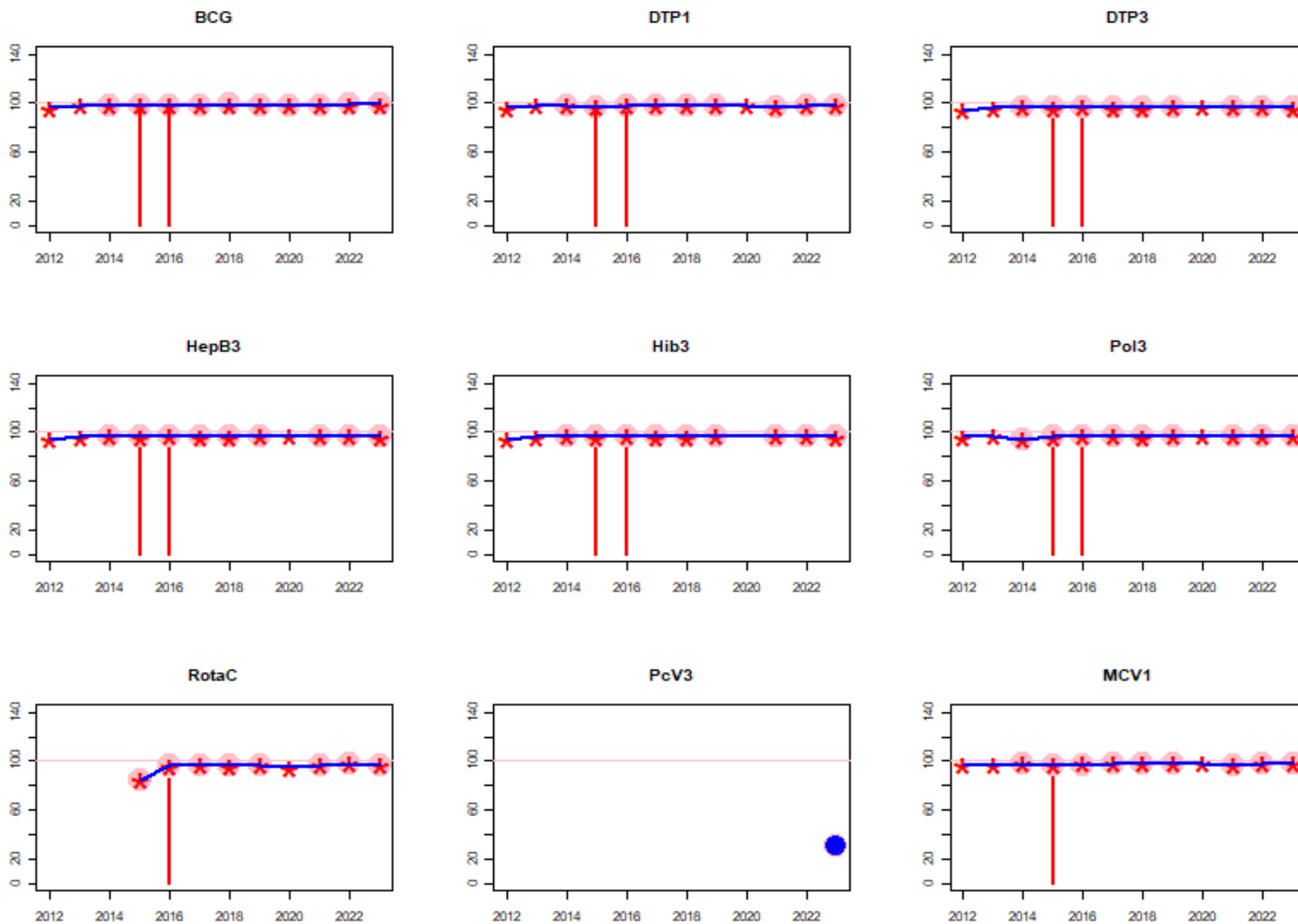


Tajikistan: WHO and UNICEF estimates of immunization coverage: 2023 revision



# Tajikistan: WHO and UNICEF estimates of immunization coverage: 2023 revision

**BACKGROUND NOTE:** Each year WHO and UNICEF jointly review reports submitted by Member States regarding national immunization coverage, finalized survey reports as well as data from 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 available empirical data accurately reflect immunization system performance and those where the data are likely compromised and present a misleading view of coverage.

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. Bull World Health Organ.

\*Burton et al. 2012. PLoS One.

\*Danovaro-Holliday et al. 2021. Gates Open Res.

## 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 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 data collection period.

## 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. For countries utilizing IPV containing vaccine only, i.e., no recommended dose of OPV, 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.

**IPV2:** percentage of surviving infants who received a 2nd dose of inactivated polio vaccine. IPV2 coverage estimates produced for OPV using countries.

**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.

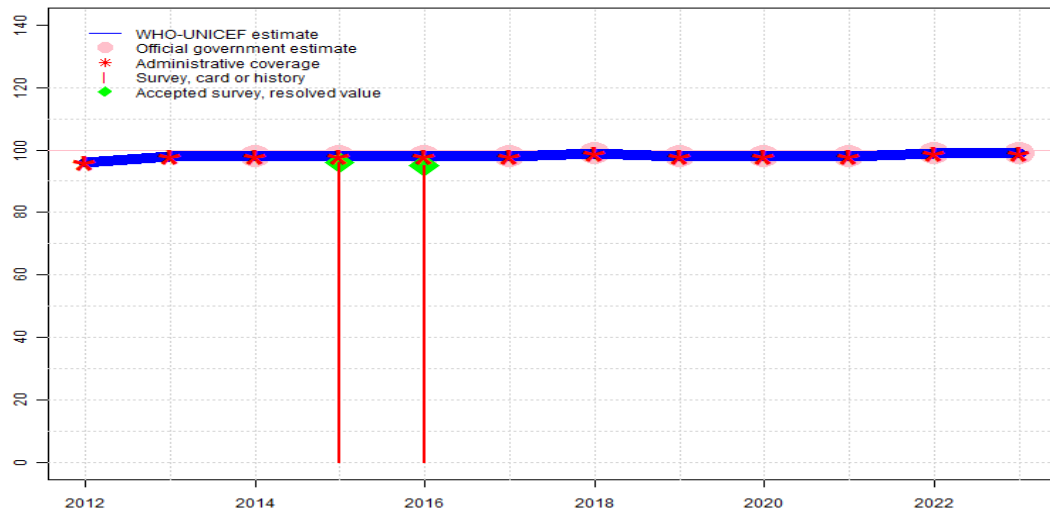
**YFV:** percentage of surviving infants who received one dose of yellow fever vaccine in countries where YFV is part of the national immunization schedule for children or is recommended in at risk areas; coverage estimates are annualized for the entire cohort of surviving infants.

**MengA:** percentage of children who received one dose of meningococcal A conjugate vaccine. MengA coverage estimates produced for countries in the meningitis belt of sub-Saharan Africa.

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# Tajikistan - BCG

TJK - BCG



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	96	98	98	98	98	98	99	98	98	98	99	99
Estimate GoC	●●	●	●●●	●●●	●●●	●	●	●	●●	●	●	●●
Official	NA	NA	98	98	98	98	99	98	98	98	99	99
Administrative	96	98	98	98	98	98	99	98	98	98	99	99
Survey	NA	NA	NA	96	95	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.

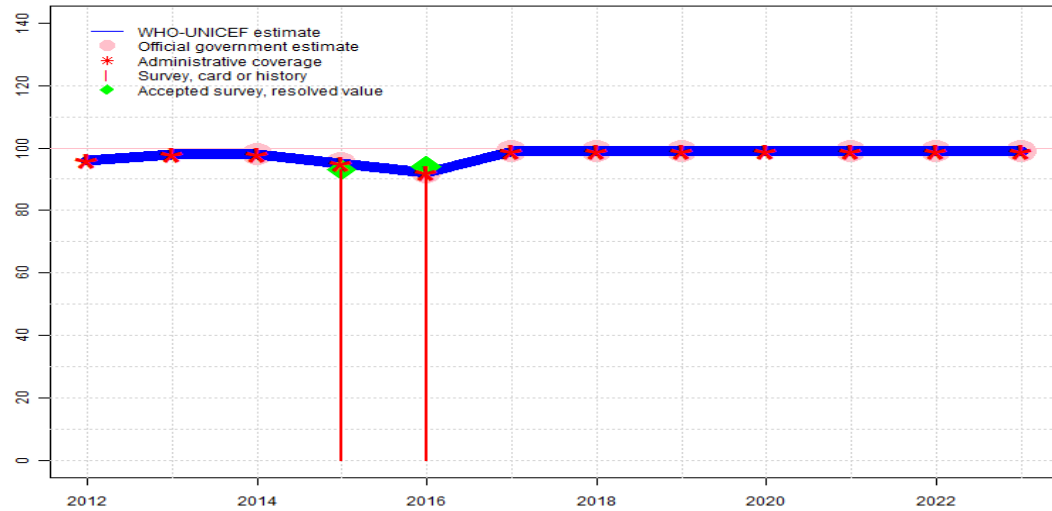
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2023: Estimate informed by reported data. WHO and UNICEF are aware of an ongoing Demographic and Health Survey and await the final results. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimated coverage likely an overestimate. Declines observed in numerators between 2020 and 2021 but not reflected in reported coverage. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) 2020-2021. A data review exercise conducted in 2021 suggested heterogeneity in coverage. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimated coverage likely an overestimate. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) during 2020-2021. GoC=R+ D+
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Programme reports results from vaccination coverage survey conducted in 12 rayons in October 2018 among children aged 12 to 35 months for 2016 birth cohort. Survey results consistent with high levels of access and utilization of vaccination services. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Estimate challenged by: D-
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 1 survey(s). GoC=R+ S+ D+
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 1 survey(s). GoC=R+ S+ D+
- 2014: Estimate informed by reported data. GoC=R+ S+ D+
- 2013: Estimate informed by reported administrative data. Estimate challenged by: D-
- 2012: Estimate informed by reported administrative data. Estimate of 96 percent changed from previous revision value of 97 percent. GoC=R+ D+

# Tajikistan - HepBB

TJK - HepBB



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	96	98	98	95	92	99	99	99	99	99	99	99
Estimate GoC	●●	●	●●●	●●●	●●●	●	●	●	●●	●	●	●●
Official	NA	NA	98	95	92	99	99	99	NA	99	99	99
Administrative	96	98	98	95	92	99	99	99	99	99	99	99
Survey	NA	NA	NA	93	94	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.

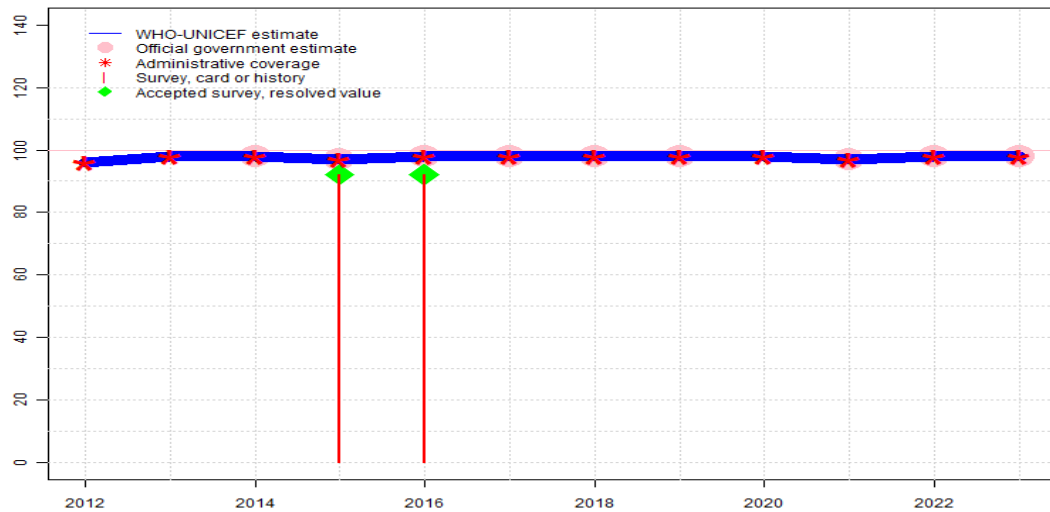
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2023: Estimate informed by reported data. WHO and UNICEF are aware of an ongoing Demographic and Health Survey and await the final results. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimated coverage likely an overestimate. Declines observed in numerators between 2020 and 2021 but not reflected in reported coverage. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) 2020-2021. A data review exercise conducted in 2021 suggested heterogeneity in coverage. Estimate challenged by: D-
- 2020: Estimate informed by reported administrative data. Estimated coverage likely an overestimate. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) during 2020-2021. GoC=R+ D+
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Programme reports results from vaccination coverage survey conducted in 12 rayons in October 2018 among children aged 12 to 35 months for 2016 birth cohort. Survey results consistent with high levels of access and utilization of vaccination services. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Estimate challenged by: D-
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). GoC=R+ S+ D+
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+ S+ D+
- 2014: Estimate informed by reported data. GoC=R+ S+ D+
- 2013: Estimate informed by reported data. Estimate challenged by: D-
- 2012: Estimate informed by reported data. Estimate of 96 percent changed from previous revision value of 98 percent. GoC=R+ D+

# Tajikistan - DTP1

TJK - DTP1



## Description:

- 2023: Estimate informed by reported data. WHO and UNICEF are aware of an ongoing Demographic and Health Survey and await the final results. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. Estimated coverage likely an overestimate. Declines observed in numerators between 2020 and 2021 but not reflected in reported coverage. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) 2020-2021. A data review exercise conducted in 2021 suggested heterogeneity in coverage. Estimate challenged by: D-
- 2020: Estimate informed by reported administrative data. Estimated coverage likely an overestimate. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) during 2020-2021. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. Programme reports results from vaccination coverage survey conducted in 12 rayons in October 2018 among children aged 12 to 35 months for 2016 birth cohort. Survey results consistent with high levels of access and utilization of vaccination services. GoC=R+ S+ D+
- 2017: Estimate informed by reported data. GoC=R+ S+ D+
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). Programme reports a vaccine stockout at the national level for two months. GoC=R+ S+ D+
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). GoC=R+ S+ D+
- 2014: Estimate informed by reported data. GoC=R+ S+ D+
- 2013: Estimate informed by reported administrative data. GoC=R+ S+ D+
- 2012: Estimate informed by reported administrative data. GoC=R+ D+

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	96	98	98	97	98	98	98	98	98	97	98	98
Estimate GoC	●●	●●●	●●●	●●●	●●●	●●●	●●●	●●	●●	●	●●	●●
Official	NA	NA	98	97	98	98	98	98	NA	97	98	98
Administrative	96	98	98	97	98	98	98	98	98	97	98	98
Survey	NA	NA	NA	92	92	NA	NA	NA	NA	NA	NA	NA

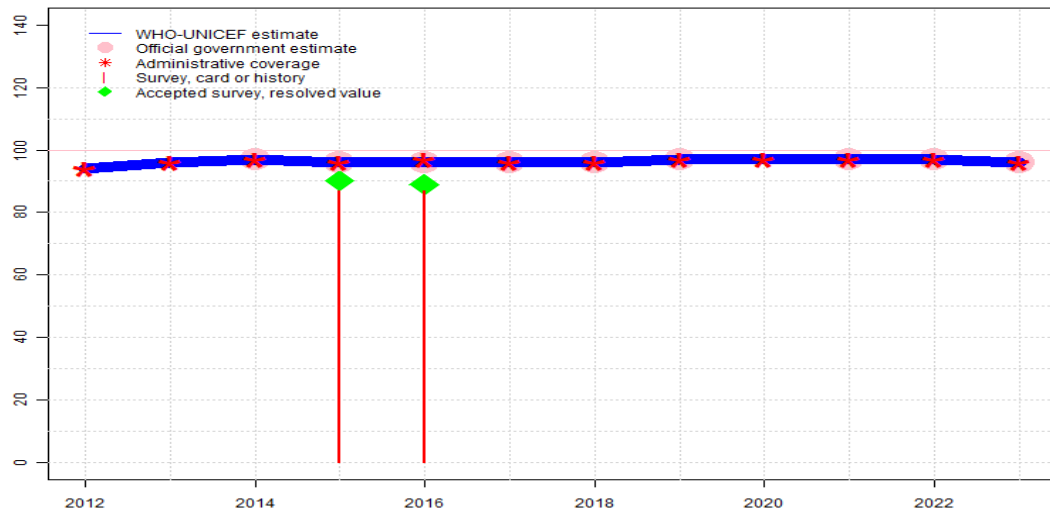
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Tajikistan - DTP3

TJK - DTP3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	94	96	97	96	96	96	96	97	97	97	97	96
Estimate GoC	••	•••	•••	•••	•••	•••	•••	••	••	•	•	••
Official	NA	NA	97	96	96	96	96	97	NA	97	97	96
Administrative	94	96	97	96	97	96	96	97	97	97	97	96
Survey	NA	NA	NA	87	87	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.

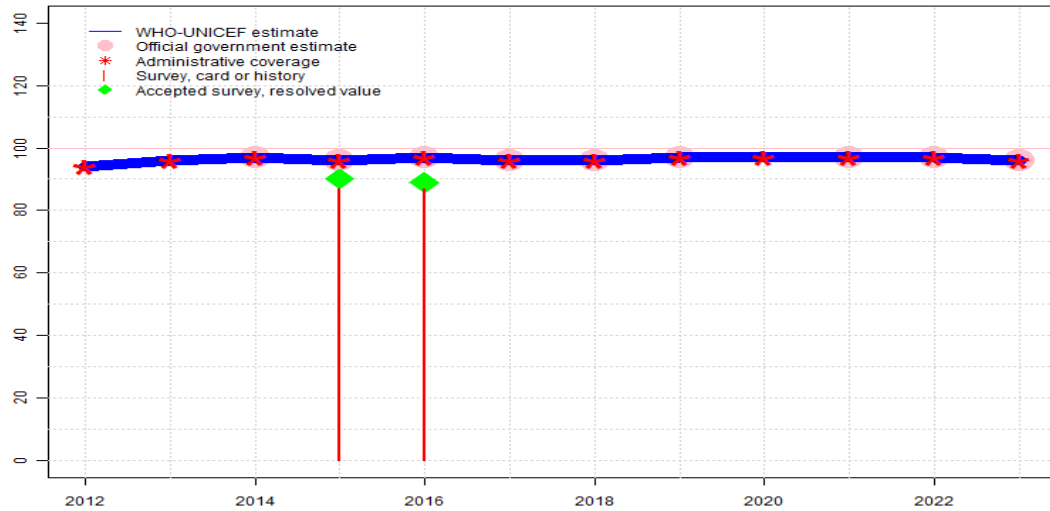
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2023: Estimate informed by reported data. WHO and UNICEF are aware of an ongoing Demographic and Health Survey and await the final results. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimated coverage likely an overestimate. Declines observed in numerators between 2020 and 2021 but not reflected in reported coverage. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) 2020-2021. A data review exercise conducted in 2021 suggested heterogeneity in coverage. Estimate challenged by: D-
- 2020: Estimate informed by reported administrative data. Estimated coverage likely an overestimate. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) during 2020-2021. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. Programme reports results from vaccination coverage survey conducted in 12 rayons in October 2018 among children aged 12 to 35 months for 2016 birth cohort. Survey results consistent with high levels of access and utilization of vaccination services. GoC=R+ S+ D+
- 2017: Estimate informed by reported data. GoC=R+ S+ D+
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 89 percent based on 1 survey(s). Tajikistan Demographic and Health Survey 2017 card or history results of 87 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 83 percent. Programme reports a vaccine stockout at the national level for two months. GoC=R+ S+ D+
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 90 percent based on 1 survey(s). Tajikistan Demographic and Health Survey 2017 card or history results of 87 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 85 percent and 3rd dose card only coverage of 83 percent. GoC=R+ S+ D+
- 2014: Estimate informed by reported data. GoC=R+ S+ D+
- 2013: Estimate informed by reported administrative data. GoC=R+ S+ D+
- 2012: Estimate informed by reported administrative data. GoC=R+ D+

# Tajikistan - HepB3

TJK - HepB3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	94	96	97	96	97	96	96	97	97	97	97	96
Estimate GoC	●●	●●●	●	●●●	●●●	●●●	●●●	●●	●●	●	●	●●
Official	NA	NA	97	96	97	96	96	97	NA	97	97	96
Administrative	94	96	97	96	97	96	96	97	97	97	97	96
Survey	NA	NA	NA	87	87	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.

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- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

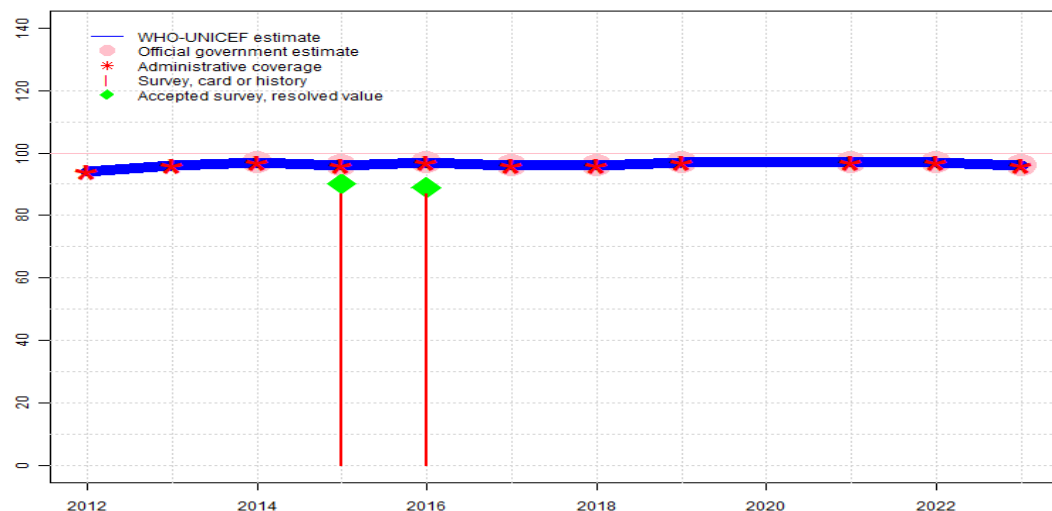
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- 2021: Estimate informed by reported data. Estimated coverage likely an overestimate. Declines observed in numerators between 2020 and 2021 but not reflected in reported coverage. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) 2020-2021. A data review exercise conducted in 2021 suggested heterogeneity in coverage. Estimate challenged by: D-
- 2020: Estimate informed by reported administrative data. Estimated coverage likely an overestimate. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) during 2020-2021. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. Programme reports results from vaccination coverage survey conducted in 12 rayons in October 2018 among children aged 12 to 35 months for 2016 birth cohort. Survey results consistent with high levels of access and utilization of vaccination services. GoC=R+ S+ D+
- 2017: Estimate informed by reported data. GoC=R+ S+ D+
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 89 percent based on 1 survey(s). Tajikistan Demographic and Health Survey 2017 card or history results of 87 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 83 percent. GoC=R+ S+ D+
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 90 percent based on 1 survey(s). Tajikistan Demographic and Health Survey 2017 card or history results of 87 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 85 percent and 3rd dose card only coverage of 83 percent. GoC=R+ S+ D+
- 2014: Estimate informed by reported data. Estimate challenged by: D-
- 2013: Estimate informed by reported administrative data. GoC=R+ S+ D+
- 2012: Estimate informed by reported administrative data. GoC=R+ D+

# Tajikistan - Hib3

TJK - Hib3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	94	96	97	96	97	96	96	97	97	97	97	96
Estimate GoC	●●	●●●	●●●	●●●	●●●	●●●	●●●	●●	●	●	●	●●
Official	NA	NA	97	96	97	96	96	97	NA	97	97	96
Administrative	94	96	97	96	97	96	96	97	NA	97	97	96
Survey	NA	NA	NA	87	87	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.

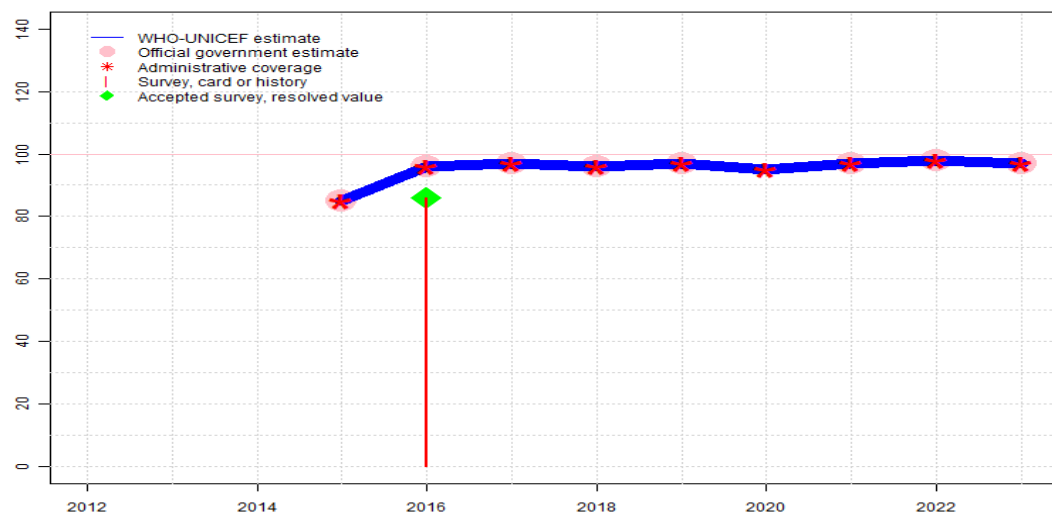
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## Description:

- 2023: Estimate informed by reported data. WHO and UNICEF are aware of an ongoing Demographic and Health Survey and await the final results. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimated coverage likely an overestimate. Declines observed in numerators between 2020 and 2021 but not reflected in reported coverage. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) 2020-2021. A data review exercise conducted in 2021 suggested heterogeneity in coverage. Estimate challenged by: D-
- 2020: Estimate informed by interpolation between reported data. Estimated coverage likely an overestimate. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) during 2020-2021. GoC=No accepted empirical data
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. Programme reports results from vaccination coverage survey conducted in 12 rayons in October 2018 among children aged 12 to 35 months for 2016 birth cohort. Survey results consistent with high levels of access and utilization of vaccination services. GoC=R+ S+ D+
- 2017: Estimate informed by reported data. GoC=R+ S+ D+
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 89 percent based on 1 survey(s). Tajikistan Demographic and Health Survey 2017 card or history results of 87 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 83 percent. GoC=R+ S+ D+
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 90 percent based on 1 survey(s). Tajikistan Demographic and Health Survey 2017 card or history results of 87 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 85 percent and 3rd dose card only coverage of 83 percent. GoC=R+ S+ D+
- 2014: Estimate informed by reported data. GoC=R+ S+ D+
- 2013: Estimate informed by reported data. GoC=R+ S+ D+
- 2012: Estimate informed by reported data. GoC=R+ D+

# Tajikistan - RotaC

TJK - RotaC



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	85	96	97	96	97	95	97	98	97
Estimate GoC	NA	NA	NA	●●●	●●●	●	●●●	●●	●●	●	●	●●
Official	NA	NA	NA	85	96	97	96	97	NA	97	98	97
Administrative	NA	NA	NA	85	96	97	96	97	95	97	98	97
Survey	NA	NA	NA	NA	86	NA	NA	NA	NA	NA	NA	NA

## Description:

- 2023: Estimate informed by reported data. WHO and UNICEF are aware of an ongoing Demographic and Health Survey and await the final results. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimated coverage likely an overestimate. Declines observed in numerators between 2020 and 2021 but not reflected in reported coverage. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) 2020-2021. A data review exercise conducted in 2021 suggested heterogeneity in coverage. Estimate challenged by: D-
- 2020: Estimate informed by reported administrative data. Estimated coverage likely an overestimate. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) during 2020-2021. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. Programme reports results from vaccination coverage survey conducted in 12 rayons in October 2018 among children aged 12 to 35 months for 2016 birth cohort. Survey results consistent with high levels of access and utilization of vaccination services. GoC=R+ S+ D+
- 2017: Estimate informed by reported data. Estimate challenged by: S-
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 86 percent based on 1 survey(s). GoC=R+ S+ D+
- 2015: Estimate informed by reported data. Rotavirus vaccine introduced in January 2015. GoC=R+ S+ D+

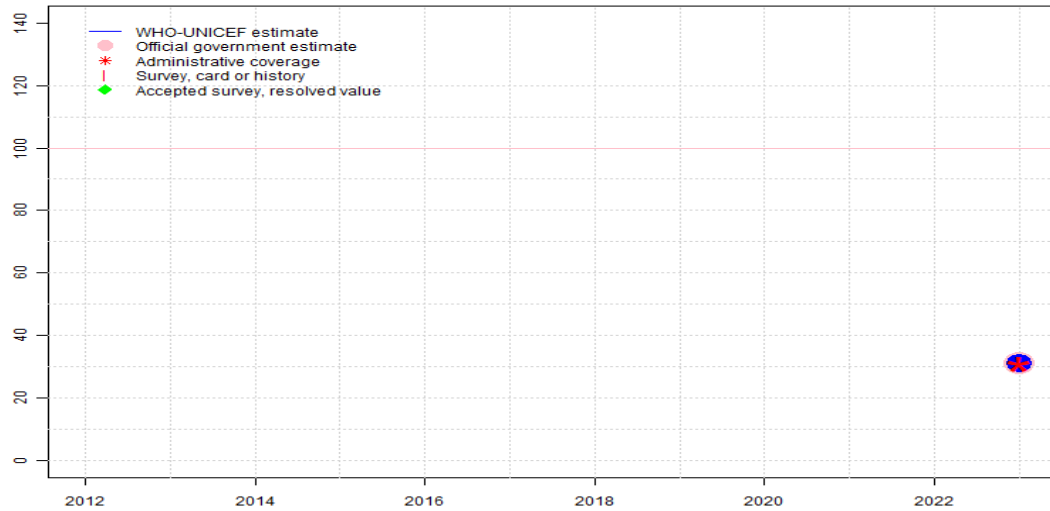
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Tajikistan - PcV3

TJK - PcV3



## Description:

2023: Estimate informed by reported data. WHO and UNICEF are aware of an ongoing Demographic and Health Survey and await the final results. Pneumococcal conjugate vaccine introduced during late 2022 . Vaccine recommended for administration at 2 months, 4 months and 12 months. Reported coverage reflects that for the booster dose at 12 months. GoC=R+ D+

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

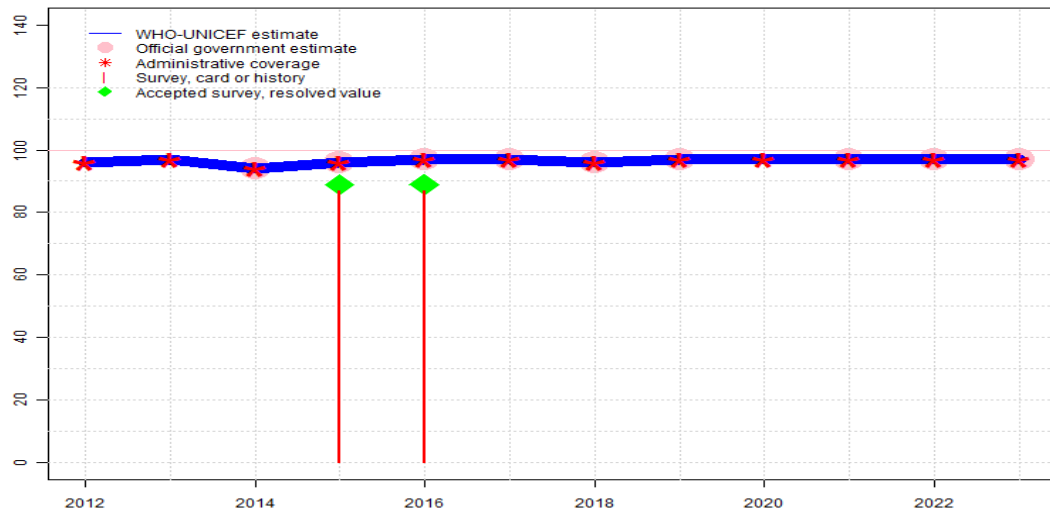
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Tajikistan - Pol3

TJK - Pol3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	96	97	94	96	97	97	96	97	97	97	97	97
Estimate GoC	●●	●●●	●●●	●●●	●●●	●●●	●●●	●●	●●	●	●●	●●
Official	NA	NA	94	96	97	97	96	97	NA	97	97	97
Administrative	96	97	94	96	97	97	96	97	97	97	97	97
Survey	NA	NA	NA	87	87	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.

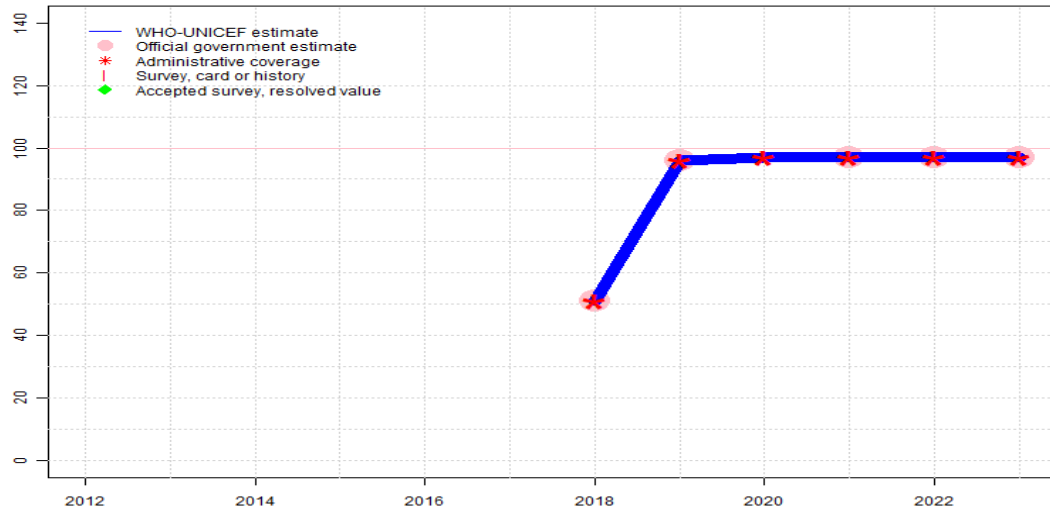
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2023: Estimate informed by reported data. WHO and UNICEF are aware of an ongoing Demographic and Health Survey and await the final results. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. Estimated coverage likely an overestimate. Declines observed in numerators between 2020 and 2021 but not reflected in reported coverage. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) 2020-2021. A data review exercise conducted in 2021 suggested heterogeneity in coverage. Estimate challenged by: D-
- 2020: Estimate informed by reported administrative data. Estimated coverage likely an overestimate. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) during 2020-2021. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. Programme reports results from vaccination coverage survey conducted in 12 rayons in October 2018 among children aged 12 to 35 months for 2016 birth cohort. Survey results consistent with high levels of access and utilization of vaccination services. GoC=R+ S+ D+
- 2017: Estimate informed by reported data. GoC=R+ S+ D+
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 89 percent based on 1 survey(s). Tajikistan Demographic and Health Survey 2017 card or history results of 87 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 87 percent and 3rd dose card only coverage of 84 percent. GoC=R+ S+ D+
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 89 percent based on 1 survey(s). Tajikistan Demographic and Health Survey 2017 card or history results of 87 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 83 percent. GoC=R+ S+ D+
- 2014: Estimate informed by reported data. Programme reports one month stockout at national level. GoC=R+ S+ D+
- 2013: Estimate informed by reported administrative data. GoC=R+ S+ D+
- 2012: Estimate informed by reported administrative data. GoC=R+ D+

# Tajikistan - IPV1

TJK - 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).

2023: Estimate informed by reported data. WHO and UNICEF are aware of an ongoing Demographic and Health Survey and await the final results. GoC=R+ D+

2022: Estimate informed by reported data. GoC=R+ D+

2021: Estimate informed by reported data. Estimated coverage likely an overestimate. Declines observed in numerators between 2020 and 2021 but not reflected in reported coverage. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) 2020-2021. A data review exercise conducted in 2021 suggested heterogeneity in coverage. Estimate challenged by: D-

2020: Estimate informed by reported administrative data. Estimated coverage likely an overestimate. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) during 2020-2021. GoC=R+ D+

2019: Estimate informed by reported data. Estimate informed by reported data following introduction. GoC=R+ D+

2018: Estimate informed by reported data. Programme reports results from vaccination coverage survey conducted in 12 rayons in October 2018 among children aged 12 to 35 months for 2016 birth cohort. Survey results consistent with high levels of access and utilization of vaccination services. Inactivated polio vaccine introduced in July 2018. GoC=R+ D+

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	NA	NA	NA	51	96	97	97	97	97
Estimate GoC	NA	NA	NA	NA	NA	NA	••	••	••	•	••	••
Official	NA	NA	NA	NA	NA	NA	51	96	NA	97	97	97
Administrative	NA	NA	NA	NA	NA	NA	51	96	97	97	97	97
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

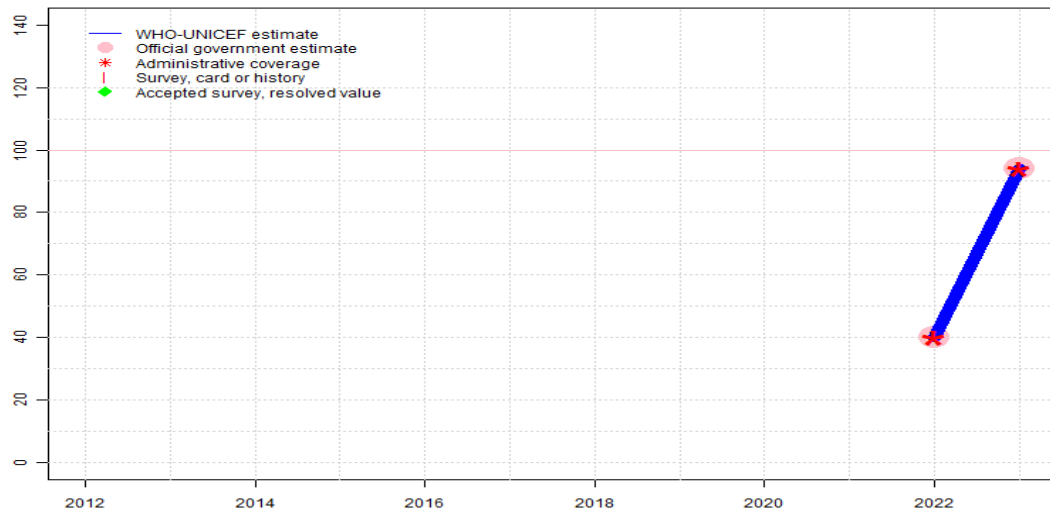
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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.

# Tajikistan - IPV2

TJK - IPV2



## Description:

Estimates for a second dose of inactivated polio vaccine (IPV) begin in 2021 following a Strategic Advisory Group of Experts on Immunization (SAGE) recommendation in October 2020 that a second IPV dose increases protection against all polioviruses, including protection against paralysis caused by vaccine derived polio virus (type 2) (VDPV2). The addition of IPV2 is the next step towards complete OPV withdrawal. IPV2 coverage estimates produced for OPV using countries.

2023: Estimate informed by reported data. WHO and UNICEF are aware of an ongoing Demographic and Health Survey and await the final results. GoC=R+ D+

2022: Estimate informed by reported data. Second dose of inactivated polio vaccine introduced during 2022. GoC=R+ D+

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40	94
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	●●	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40	94
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40	94
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

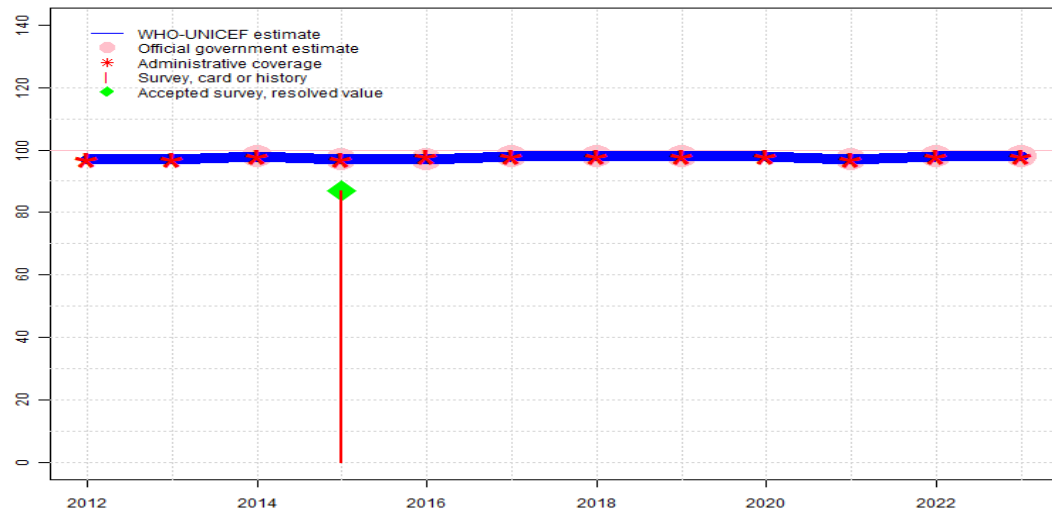
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

# Tajikistan - MCV1

TJK - MCV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	97	97	98	97	97	98	98	98	98	97	98	98
Estimate GoC	●●	●	●	●●●	●●●	●	●	●●	●●	●●	●	●
Official	NA	NA	98	97	97	98	98	98	NA	97	98	98
Administrative	97	97	98	97	98	98	98	98	98	97	98	98
Survey	NA	NA	NA	87	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.

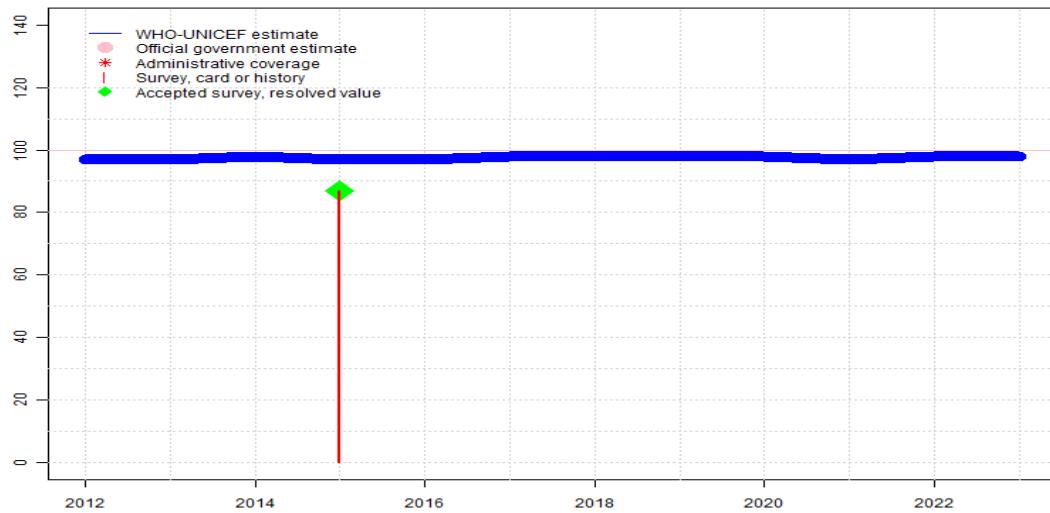
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2023: Estimate informed by reported data. WHO and UNICEF are aware of an ongoing Demographic and Health Survey and await the final results. Estimate challenged by: D-
- 2022: Estimate informed by reported data. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimated coverage likely an overestimate. Declines observed in numerators between 2020 and 2021 but not reflected in reported coverage. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) 2020-2021. A data review exercise conducted in 2021 suggested heterogeneity in coverage. GoC=R+ D+
- 2020: Estimate informed by reported administrative data. Estimated coverage likely an overestimate. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) during 2020-2021. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. Programme reports results from vaccination coverage survey conducted in 12 rayons in October 2018 among children aged 12 to 35 months for 2016 birth cohort. Survey results consistent with high levels of access and utilization of vaccination services. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Estimate challenged by: S-
- 2016: Estimate informed by reported data. GoC=R+ S+ D+
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 87 percent based on 1 survey(s). GoC=R+ S+ D+
- 2014: Estimate informed by reported data. Estimate challenged by: D-S-
- 2013: Estimate informed by reported administrative data. Estimate of 97 percent changed from previous revision value of 92 percent. Estimate challenged by: D-
- 2012: Estimate informed by reported administrative data. Estimate of 97 percent changed from previous revision value of 94 percent. GoC=R+ D+

# Tajikistan - RCV1

TJK - RCV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	97	97	98	97	97	98	98	98	98	97	98	98
Estimate GoC	●●	●	●	●●●	●●●	●	●	●●	●●	●●	●	●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	87	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.

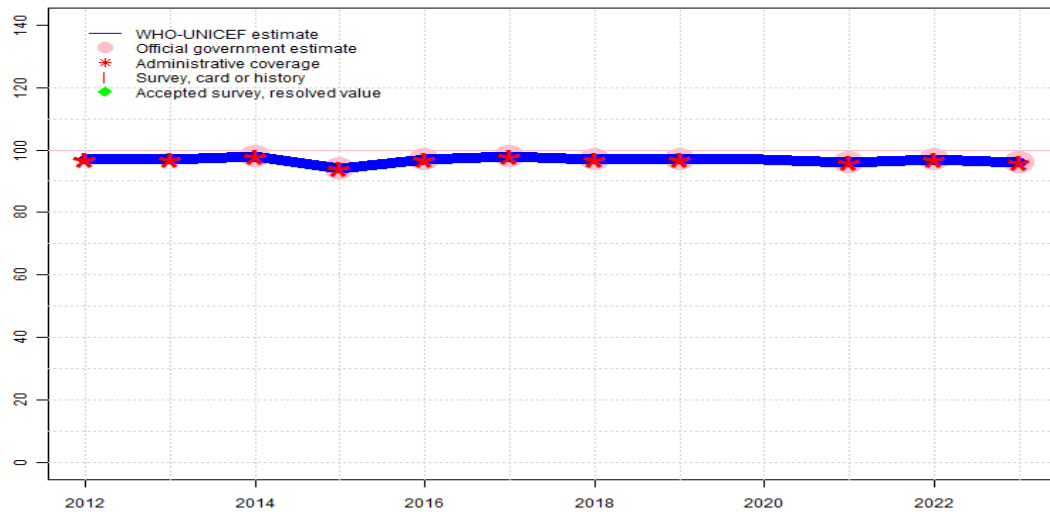
## Description:

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.

- 2023: Estimate based on estimated MCV1. WHO and UNICEF are aware of an ongoing Demographic and Health Survey and await the final results. Estimate challenged by: D-
- 2022: Estimate based on estimated MCV1. Estimate challenged by: D-
- 2021: Estimate based on estimated MCV1. Estimated coverage likely an overestimate. Declines observed in numerators between 2020 and 2021 but not reflected in reported coverage. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) 2020-2021. A data review exercise conducted in 2021 suggested heterogeneity in coverage. GoC=R+ D+
- 2020: Estimate based on estimated MCV1. Estimated coverage likely an overestimate. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) during 2020-2021. GoC=R+ D+
- 2019: Estimate based on estimated MCV1. GoC=R+ D+
- 2018: Estimate based on estimated MCV1. Programme reports results from vaccination coverage survey conducted in 12 rayons in October 2018 among children aged 12 to 35 months for 2016 birth cohort. Survey results consistent with high levels of access and utilization of vaccination services. Estimate challenged by: D-
- 2017: Estimate based on estimated MCV1. Estimate challenged by: S-
- 2016: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2015: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2014: Estimate based on estimated MCV1. Estimate challenged by: D-S-
- 2013: Estimate based on estimated MCV1. Estimate of 97 percent changed from previous revision value of 92 percent. Estimate challenged by: D-
- 2012: Estimate based on estimated MCV1. Estimate of 97 percent changed from previous revision value of 94 percent. GoC=R+ D+

# Tajikistan - MCV2

TJK - MCV2



## Description:

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

2023: Estimate informed by reported data. WHO and UNICEF are aware of an ongoing Demographic and Health Survey and await the final results. Estimate challenged by: D-

2022: Estimate informed by reported data. GoC=R+ D+

2021: Estimate informed by reported data. Estimated coverage likely an overestimate. Declines observed in numerators between 2020 and 2021 but not reflected in reported coverage. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) 2020-2021. A data review exercise conducted in 2021 suggested heterogeneity in coverage. GoC=R+ D+

2020: Estimate informed by interpolation between reported data. Estimated coverage likely an overestimate. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) during 2020-2021. GoC=No accepted empirical data

2019: Estimate informed by reported data. Estimate challenged by: D-

2018: Estimate informed by reported data. Programme reports results from vaccination coverage survey conducted in 12 rayons in October 2018 among children aged 12 to 35 months for 2016 birth cohort. Survey results consistent with high levels of access and utilization of vaccination services. Estimate challenged by: D-

2017: Estimate informed by reported data. Estimate challenged by: D-

2016: Estimate informed by reported data. Estimate challenged by: D-

2015: Estimate informed by reported data. Estimate challenged by: D-

2014: Estimate informed by reported data. Estimate challenged by: D-

2013: Estimate informed by reported administrative data. Estimate of 97 percent changed from previous revision value of 92 percent. Estimate challenged by: D-

2012: Estimate informed by reported administrative data. Estimate challenged by: D-

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	97	97	98	94	97	98	97	97	97	96	97	96
Estimate GoC	•	•	•	•	•	•	•	•	•	••	••	•
Official	NA	NA	98	94	97	98	97	97	NA	96	97	96
Administrative	97	97	98	94	97	98	97	97	NA	96	97	96
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.

# Tajikistan - survey details

NOTE: A survey to measure vaccination coverage for infants (i.e., children aged 0-11 months) will sample children aged 12-23 months at the time of survey to capture the youngest annual cohort of children who should have completed the vaccination schedule. Because WUENIC are for infant vaccinations, survey data in this report are presented to reflect the birth year of the youngest survey cohort. For example, results for a survey conducted during December 2020 among children aged 12-23 months at the time of the survey reflect the immunization experience of children born in 2019. Depending on the timing of survey field work, results may reflect the immunization experience of children born and vaccinated 1 or 2 years prior to the survey field work.

## 2016 Tajikistan Demographic and Health Survey 2017

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94.9	12-23 m	1394	90
BCG	Card	88	12-23 m	1253	90
BCG	Card or History	95.3	12-23 m	1394	90
BCG	History	7.2	12-23 m	141	90
DTP1	C or H <12 months	92.2	12-23 m	1394	90
DTP1	Card	86.2	12-23 m	1253	90
DTP1	Card or History	92.4	12-23 m	1394	90
DTP1	History	6.2	12-23 m	141	90
DTP3	C or H <12 months	85	12-23 m	1394	90
DTP3	Card	82.7	12-23 m	1253	90
DTP3	Card or History	87	12-23 m	1394	90
DTP3	History	4.3	12-23 m	141	90
HepB1	C or H <12 months	92.2	12-23 m	1394	90
HepB1	Card	86.2	12-23 m	1253	90
HepB1	Card or History	92.4	12-23 m	1394	90
HepB1	History	6.2	12-23 m	141	90
HepB3	C or H <12 months	85	12-23 m	1394	90
HepB3	Card	82.7	12-23 m	1253	90
HepB3	Card or History	87	12-23 m	1394	90
HepB3	History	4.3	12-23 m	141	90
HepBB	C or H <12 months	92.1	12-23 m	1394	90
HepBB	Card	86.7	12-23 m	1253	90
HepBB	Card or History	93.7	12-23 m	1394	90
HepBB	History	7	12-23 m	141	90

Hib1	C or H <12 months	92.2	12-23 m	1394	90
Hib1	Card	86.2	12-23 m	1253	90
Hib1	Card or History	92.4	12-23 m	1394	90
Hib1	History	6.2	12-23 m	141	90
Hib3	C or H <12 months	85	12-23 m	1394	90
Hib3	Card	82.7	12-23 m	1253	90
Hib3	Card or History	87	12-23 m	1394	90
Hib3	History	4.3	12-23 m	141	90
Pol1	C or H <12 months	92.3	12-23 m	1394	90
Pol1	Card	86.8	12-23 m	1253	90
Pol1	Card or History	92.4	12-23 m	1394	90
Pol1	History	5.7	12-23 m	141	90
Pol3	C or H <12 months	85.3	12-23 m	1394	90
Pol3	Card	83.5	12-23 m	1253	90
Pol3	Card or History	87.1	12-23 m	1394	90
Pol3	History	3.5	12-23 m	141	90
RotaC	C or H <12 months	84.8	12-23 m	1394	90
RotaC	Card	81.2	12-23 m	1253	90
RotaC	Card or History	85.6	12-23 m	1394	90
RotaC	History	4.4	12-23 m	141	90

## 2015 Tajikistan Demographic and Health Survey 2017

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94.5	24-35 m	1269	-
BCG	Card	87.1	24-35 m	1119	-
BCG	Card or History	95.6	24-35 m	1269	-
BCG	History	8.5	24-35 m	150	-
DTP1	C or H <12 months	90.3	24-35 m	1269	-
DTP1	Card	85.4	24-35 m	1119	-
DTP1	Card or History	91.8	24-35 m	1269	-
DTP1	History	6.4	24-35 m	150	-
DTP3	C or H <12 months	83.6	24-35 m	1269	-
DTP3	Card	82.9	24-35 m	1119	-
DTP3	Card or History	87.2	24-35 m	1269	-
DTP3	History	4.3	24-35 m	150	-
HepB1	C or H <12 months	90.3	24-35 m	1269	-
HepB1	Card	85.4	24-35 m	1119	-
HepB1	Card or History	91.8	24-35 m	1269	-

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HepB1	History	6.4	24-35 m	150	-	DTP1	Card or History	97.5	18-29 m	1148	91
HepB3	C or H <12 months	83.6	24-35 m	1269	-	DTP1	History	6.9	18-29 m	103	91
HepB3	Card	82.9	24-35 m	1119	-	DTP3	C or H <18 months	91.7	18-29 m	1148	91
HepB3	Card or History	87.2	24-35 m	1269	-	DTP3	Card	88.5	18-29 m	1044	91
HepB3	History	4.3	24-35 m	150	-	DTP3	Card or History	93.1	18-29 m	1148	91
HepBB	C or H <12 months	91.1	24-35 m	1269	-	DTP3	History	4.6	18-29 m	103	91
HepBB	Card	85.1	24-35 m	1119	-	HepB1	C or H <18 months	97.4	18-29 m	1148	91
HepBB	Card or History	93.2	24-35 m	1269	-	HepB1	Card	90.6	18-29 m	1044	91
HepBB	History	8.1	24-35 m	150	-	HepB1	Card or History	97.5	18-29 m	1148	91
Hib1	C or H <12 months	90.3	24-35 m	1269	-	HepB1	History	6.9	18-29 m	103	91
Hib1	Card	85.4	24-35 m	1119	-	HepB3	C or H <18 months	91.7	18-29 m	1148	91
Hib1	Card or History	91.8	24-35 m	1269	-	HepB3	Card	88.5	18-29 m	1044	91
Hib1	History	6.4	24-35 m	150	-	HepB3	Card or History	93.1	18-29 m	1148	91
Hib3	C or H <12 months	83.6	24-35 m	1269	-	HepB3	History	4.6	18-29 m	103	91
Hib3	Card	82.9	24-35 m	1119	-	HepBB	C or H <18 months	93.4	18-29 m	1148	91
Hib3	Card or History	87.2	24-35 m	1269	-	HepBB	Card	88.5	18-29 m	1044	91
Hib3	History	4.3	24-35 m	150	-	HepBB	Card or History	93.4	18-29 m	1148	91
MCV1	C or H <24 months	85.3	24-35 m	1269	-	HepBB	History	5	18-29 m	103	91
MCV1	Card	81.6	24-35 m	1119	-	Hib1	C or H <18 months	97.4	18-29 m	1148	91
MCV1	Card or History	87.3	24-35 m	1269	-	Hib1	Card	90.6	18-29 m	1044	91
MCV1	History	5.7	24-35 m	150	-	Hib1	Card or History	97.5	18-29 m	1148	91
Pol1	C or H <12 months	90.9	24-35 m	1269	-	Hib1	History	6.9	18-29 m	103	91
Pol1	Card	85.8	24-35 m	1119	-	Hib3	C or H <18 months	91.7	18-29 m	1148	91
Pol1	Card or History	92.3	24-35 m	1269	-	Hib3	Card	88.5	18-29 m	1044	91
Pol1	History	6.5	24-35 m	150	-	Hib3	Card or History	93.1	18-29 m	1148	91
Pol3	C or H <12 months	84.1	24-35 m	1269	-	Hib3	History	4.6	18-29 m	103	91
Pol3	Card	83.4	24-35 m	1119	-	MCV1	C or H <18 months	91.4	18-29 m	1148	91
Pol3	Card or History	87.1	24-35 m	1269	-	MCV1	Card	88.5	18-29 m	1044	91
Pol3	History	3.8	24-35 m	150	-	MCV1	Card or History	95.2	18-29 m	1148	91
						MCV1	History	6.7	18-29 m	103	91
						Pol1	C or H <18 months	97.3	18-29 m	1148	91
						Pol1	Card	90.6	18-29 m	1044	91
						Pol1	Card or History	97.4	18-29 m	1148	91
						Pol1	History	6.8	18-29 m	103	91
						Pol3	C or H <18 months	91.7	18-29 m	1148	91
						Pol3	Card	88.5	18-29 m	1044	91
						Pol3	Card or History	92.3	18-29 m	1148	91
						Pol3	History	3.8	18-29 m	103	91

## 2011 Tajikistan Demographic and Health Survey 2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <18 months	98.3	18-29 m	1148	91
BCG	Card	90.6	18-29 m	1044	91
BCG	Card or History	98.3	18-29 m	1148	91
BCG	History	7.6	18-29 m	103	91
DTP1	C or H <18 months	97.4	18-29 m	1148	91
DTP1	Card	90.6	18-29 m	1044	91

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## 2006 Tajikistan Living Standards Measurement Survey 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	87.5	12-23 m	157759	-
MCV1	Card or History	57.3	12-23 m	157759	-
Pol1	Card or History	83.3	12-23 m	157759	-
Pol3	Card or History	50.3	12-23 m	157759	-

Pol1	Card	81.2	18-29 m	826	-
Pol1	Card or History	93.1	18-29 m	826	-
Pol1	History	11.9	18-29 m	826	-
Pol3	C or H <12 months	78.9	18-29 m	826	-
Pol3	Card	79	18-29 m	826	-
Pol3	Card or History	82.1	18-29 m	826	-
Pol3	History	3.2	18-29 m	826	-

## 2004 Tajikistan Multiple Indicator Cluster Survey 2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94.5	18-29 m	826	-
BCG	Card	81	18-29 m	826	-
BCG	Card or History	94.9	18-29 m	826	-
BCG	History	13.9	18-29 m	826	-
DTP1	C or H <12 months	91	18-29 m	826	-
DTP1	Card	81.6	18-29 m	826	-
DTP1	Card or History	93	18-29 m	826	-
DTP1	History	11.3	18-29 m	826	-
DTP3	C or H <12 months	81.6	18-29 m	826	-
DTP3	Card	80.2	18-29 m	826	-
DTP3	Card or History	86.3	18-29 m	826	-
DTP3	History	6.1	18-29 m	826	-
HepB1	C or H <12 months	84.5	18-29 m	826	-
HepB1	Card	70.3	18-29 m	826	-
HepB1	Card or History	85.2	18-29 m	826	-
HepB1	History	14.9	18-29 m	826	-
HepB3	C or H <12 months	68.9	18-29 m	826	-
HepB3	Card	67	18-29 m	826	-
HepB3	Card or History	72.9	18-29 m	826	-
HepB3	History	6	18-29 m	826	-
MCV1	C or H <12 months	91.1	18-29 m	826	-
MCV1	Card	77.8	18-29 m	826	-
MCV1	Card or History	92	18-29 m	826	-
MCV1	History	14.3	18-29 m	826	-
Pol1	C or H <12 months	91.9	18-29 m	826	-

## 1999 Multiple Indicator Cluster Survey, Tajikistan 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	88.7	12-23 m	745	78
BCG	Card	76.2	12-23 m	745	78
BCG	Card or History	91.8	12-23 m	745	78
BCG	History	15.6	12-23 m	745	78
DTP1	C or H <12 months	83.8	12-23 m	745	78
DTP1	Card	76.2	12-23 m	745	78
DTP1	Card or History	87.6	12-23 m	745	78
DTP1	History	11.4	12-23 m	745	78
DTP3	C or H <12 months	75.6	12-23 m	745	78
DTP3	Card	74.5	12-23 m	745	78
DTP3	Card or History	81.9	12-23 m	745	78
DTP3	History	18.1	12-23 m	745	78
MCV1	C or H <12 months	61.2	12-23 m	745	78
MCV1	Card	66.7	12-23 m	745	78
MCV1	Card or History	78.8	12-23 m	745	78
MCV1	History	12.1	12-23 m	745	78
Pol1	C or H <12 months	89.3	12-23 m	745	78
Pol1	Card	77.6	12-23 m	745	78
Pol1	Card or History	91.7	12-23 m	745	78
Pol1	History	14.1	12-23 m	745	78
Pol3	C or H <12 months	78.3	12-23 m	745	78
Pol3	Card	75.2	12-23 m	745	78
Pol3	Card or History	84.3	12-23 m	745	78
Pol3	History	9.1	12-23 m	745	78

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Further information and estimates for previous years are available at:

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

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