

**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.

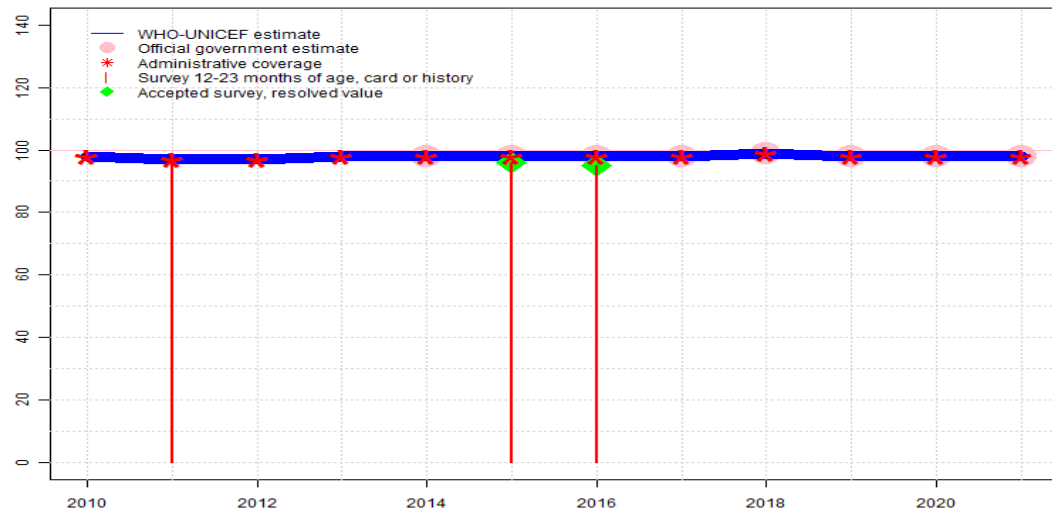
**PcV3:** percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect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

TJK - BCG



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	98	97	97	98	98	98	98	98	99	98	98	98
Estimate GoC	••	••	••	•••	•••	•••	•••	•••	•••	••	••	•
Official	NA	NA	NA	NA	98	98	98	98	99	98	98	98
Administrative	98	97	97	98	98	98	98	98	99	98	98	98
Survey	NA	98	NA	NA	NA	96	95	NA	NA	NA	NA	NA

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

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

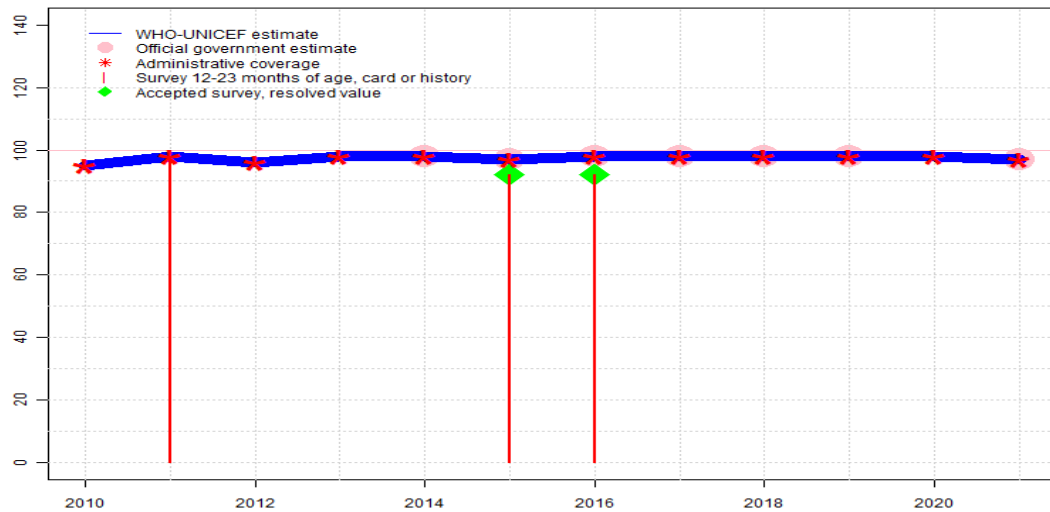
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2021: Estimate based on coverage reported by national government. 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 based on coverage reported by national government. 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 coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. 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 based on coverage reported by national government. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on reported administrative data. GoC=R+ S+ D+
- 2012: Estimate based on reported administrative data. GoC=R+ D+
- 2011: Estimate based on reported administrative data. Tajikistan Demographic and Health Survey 2012 results ignored by working group. . GoC=R+ D+
- 2010: Estimate based on reported administrative data. GoC=R+ D+

# Tajikistan - DTP1

TJK - DTP1



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	95	98	96	98	98	97	98	98	98	98	98	97
Estimate GoC	••	••	••	•••	•••	•••	•••	•••	•••	••	••	••
Official	NA	NA	NA	NA	98	97	98	98	98	98	NA	97
Administrative	95	98	96	98	98	97	98	98	98	98	98	97
Survey	NA	98	NA	NA	NA	92	92	NA	NA	NA	NA	NA

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

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

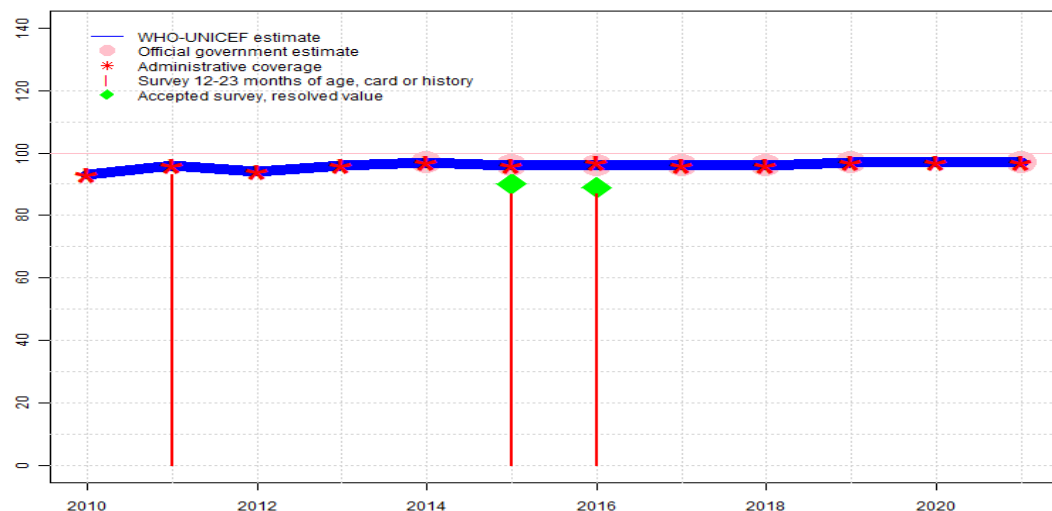
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2021: Estimate based on coverage reported by national government. 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 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 based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. 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 based on coverage reported by national government. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government supported by survey. Survey evidence of 92 percent based on 1 survey(s). Programme reports a vaccine stock-out at the national level for 2 months. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 92 percent based on 1 survey(s). GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on reported administrative data. GoC=R+ S+ D+
- 2012: Estimate based on reported administrative data. GoC=R+ D+
- 2011: Estimate based on reported administrative data. Tajikistan Demographic and Health Survey 2012 results ignored by working group. . GoC=R+ D+
- 2010: Estimate based on reported administrative data. GoC=R+ D+

# Tajikistan - DTP3

TJK - DTP3



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	93	96	94	96	97	96	96	96	96	97	97	97
Estimate GoC	••	••	••	•••	•••	•••	•••	•••	•••	••	••	••
Official	NA	NA	NA	NA	97	96	96	96	96	97	NA	97
Administrative	93	96	94	96	97	96	97	96	96	97	97	97
Survey	NA	93	NA	NA	NA	87	87	NA	NA	NA	NA	NA

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

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

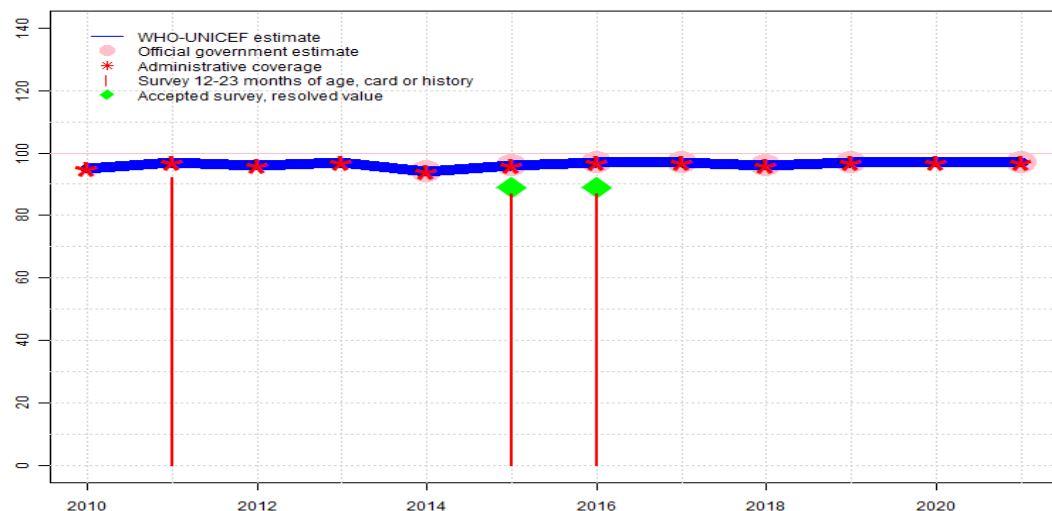
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2021: Estimate based on coverage reported by national government. 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 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 based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. 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 based on coverage reported by national government. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government 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 stock-out at the national level for 2 months. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government 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 based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on reported administrative data. GoC=R+ S+ D+
- 2012: Estimate based on reported administrative data. GoC=R+ D+
- 2011: Estimate based on reported administrative data. Tajikistan Demographic and Health Survey 2012 results ignored by working group. Tajikistan Demographic and Health Survey 2012 card or history results of 93 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 91 percent and 3rd dose card only coverage of 88 percent. GoC=R+ D+
- 2010: Estimate based on reported administrative data. GoC=R+ D+

# Tajikistan - Pol3

TJK - Pol3



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	95	97	96	97	94	96	97	97	96	97	97	97
Estimate GoC	●●	●●	●●	●●●	●●●	●●●	●●●	●●●	●●●	●●	●●	●●
Official	NA	NA	NA	NA	94	96	97	97	96	97	NA	97
Administrative	95	97	96	97	94	96	97	97	96	97	97	97
Survey	NA	92	NA	NA	NA	87	87	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.
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- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

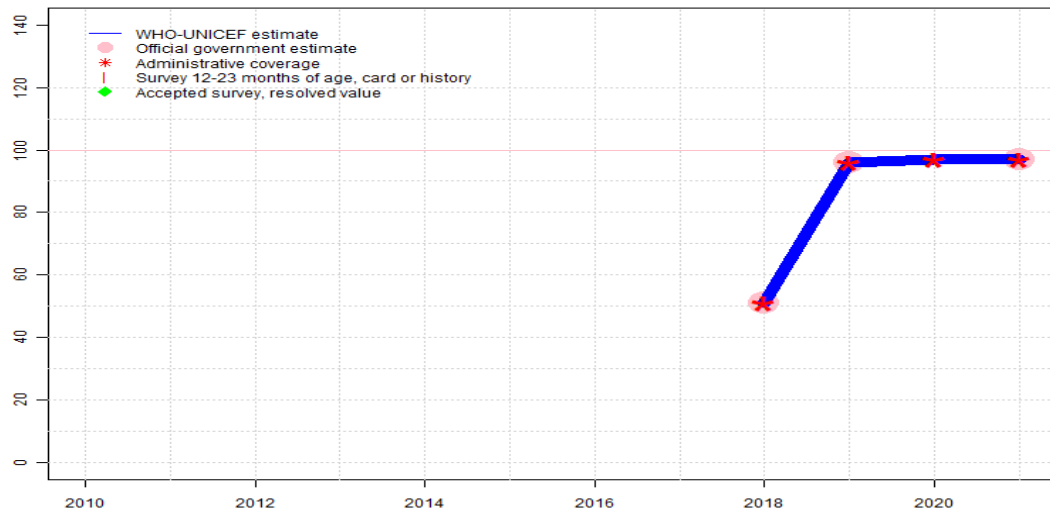
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2021: Estimate based on coverage reported by national government. 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 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 based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. 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 based on coverage reported by national government. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government 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 based on coverage reported by national government 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 based on coverage reported by national government. Programme reports one month stock-out at national level. GoC=R+ S+ D+
- 2013: Estimate based on reported administrative data. GoC=R+ S+ D+
- 2012: Estimate based on reported administrative data. GoC=R+ D+
- 2011: Estimate based on reported administrative data. Tajikistan Demographic and Health Survey 2012 results ignored by working group. Tajikistan Demographic and Health Survey 2012 card or history results of 92 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 91 percent and 3rd dose card only coverage of 88 percent. GoC=R+ D+
- 2010: Estimate based on reported administrative data. GoC=R+ D+

# Tajikistan - IPV1

TJK - IPV1



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	51	96	97	97
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	••	••	••	••
Official	NA	NA	NA	NA	NA	NA	NA	NA	51	96	NA	97
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	51	96	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.

## 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. 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+

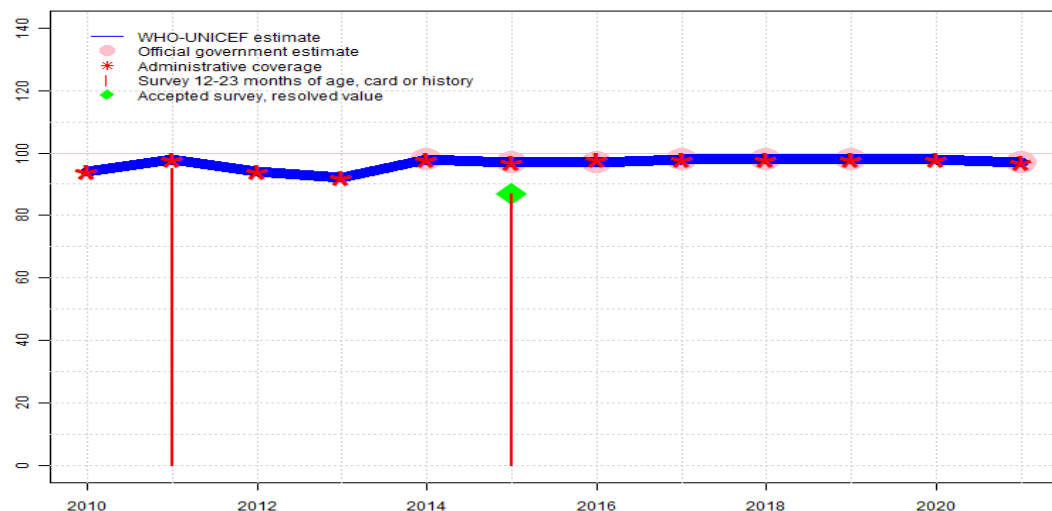
2020: Estimate based on reported administrative estimate. Estimated coverage likely an overestimate. Country experienced an outbreak of circulating vaccine-derived poliovirus (cVDPV) during 2020-2021. GoC=R+ D+

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

2018: Estimate based on coverage reported by national government. 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+

# Tajikistan - MCV1

TJK - MCV1



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	94	98	94	92	98	97	97	98	98	98	98	97
Estimate GoC	•	••	••	•••	•	•••	•••	•	••	••	••	••
Official	NA	NA	NA	NA	98	97	97	98	98	98	NA	97
Administrative	94	98	94	92	98	97	98	98	98	98	98	97
Survey	NA	95	NA	NA	NA	87	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.

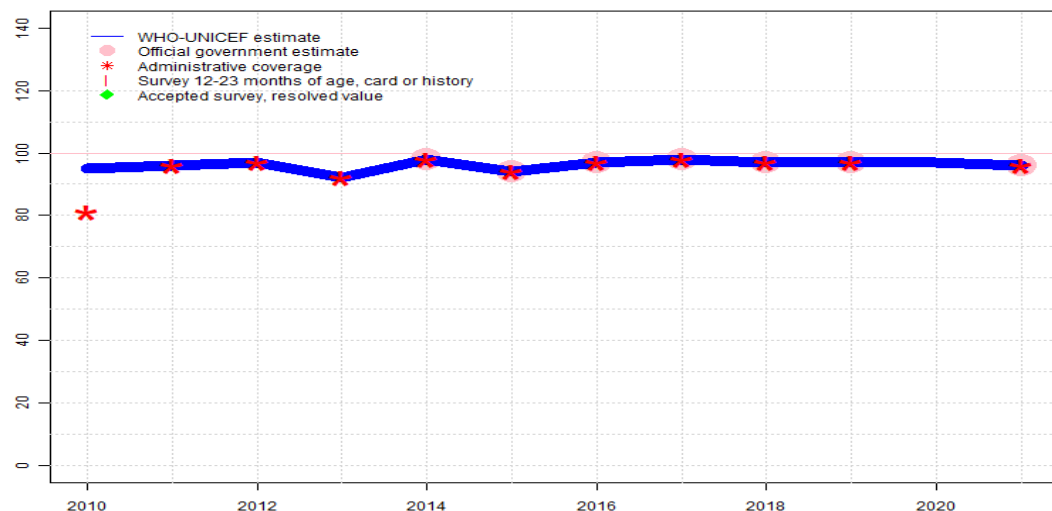
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2021: Estimate based on coverage reported by national government. 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 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 based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. 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+ D+
- 2017: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2016: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 87 percent based on 1 survey(s). GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2013: Estimate based on reported administrative data. GoC=R+ S+ D+
- 2012: Estimate based on reported administrative data. GoC=R+ D+
- 2011: Estimate based on reported administrative data. Tajikistan Demographic and Health Survey 2012 results ignored by working group. . GoC=R+ D+
- 2010: Estimate based on reported administrative data. Estimate challenged by: D-

# Tajikistan - MCV2

TJK - MCV2



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	95	96	97	92	98	94	97	98	97	97	97	96
Estimate GoC	•	•	•	•	•	•	•	•	•	••	•	••
Official	NA	NA	NA	NA	98	94	97	98	97	97	NA	96
Administrative	81	96	97	92	98	94	97	98	97	97	NA	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.

## 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. 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 interpolation between reported values. 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 based on coverage reported by national government. GoC=R+ D+

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

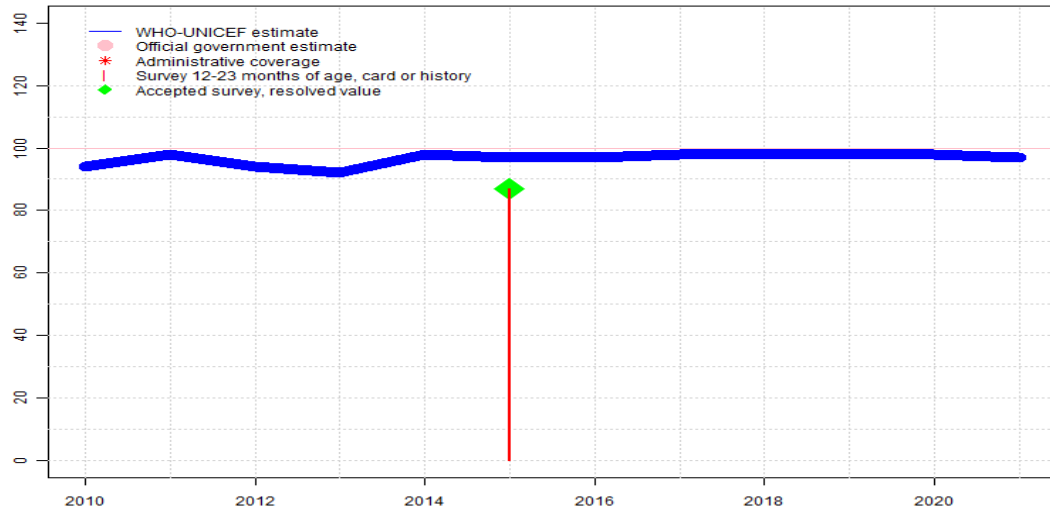
2012: Estimate based on reported administrative estimate. Estimate challenged by: D-

2011: Estimate based on reported administrative estimate. Estimate challenged by: D-

2010: Estimate based on interpolation between reported values. Reported data excluded due to decline in reported coverage from 93 percent to 81 percent with increase to 96 percent. Estimate challenged by: D-

# Tajikistan - RCV1

TJK - RCV1



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	94	98	94	92	98	97	97	98	98	98	98	97
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	87	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.

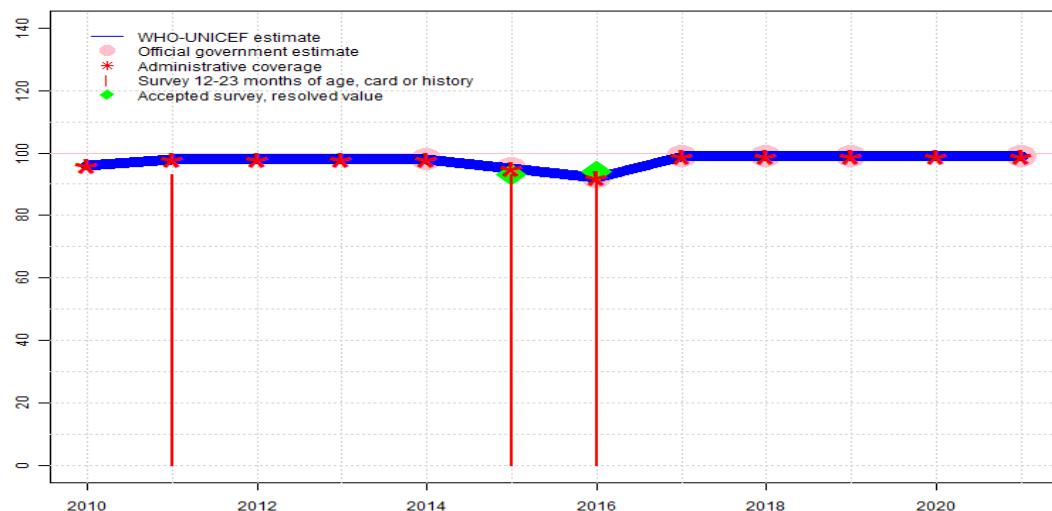
## Description:

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.

- 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. GoC=R+ 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: S-
- 2013: Estimate based on estimated MCV1. GoC=R+ S+ 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. Estimate challenged by: D-

# Tajikistan - HepBB

TJK - HepBB



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	96	98	98	98	98	95	92	99	99	99	99	99
Estimate GoC	••	••	••	•••	•••	•••	•••	•••	•••	••	••	•
Official	NA	NA	NA	NA	98	95	92	99	99	99	NA	99
Administrative	96	98	98	98	98	95	92	99	99	99	99	99
Survey	NA	93	NA	NA	NA	93	94	NA	NA	NA	NA	NA

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

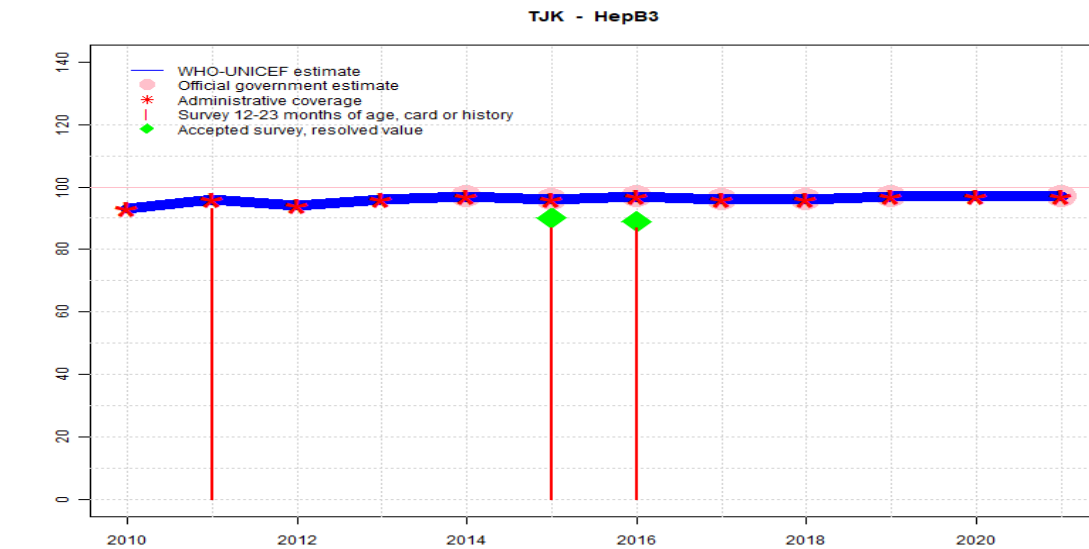
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

## Description:

- 2021: Estimate based on coverage reported by national government. 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 based on 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 based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. 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 based on coverage reported by national government. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+ S+ D+
- 2014: Estimate based on reported data. GoC=R+ S+ D+
- 2013: Estimate based on reported data. GoC=R+ S+ D+
- 2012: Estimate based on reported data. GoC=R+ D+
- 2011: Estimate based on reported data. Tajikistan Demographic and Health Survey 2012 results ignored by working group. . GoC=R+ D+
- 2010: Estimate based on reported data. GoC=R+ D+

# Tajikistan - HepB3



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	93	96	94	96	97	96	97	96	96	97	97	97
Estimate GoC	••	••	••	•••	•	•••	•••	•••	•••	••	••	••
Official	NA	NA	NA	NA	97	96	97	96	96	97	NA	97
Administrative	93	96	94	96	97	96	97	96	96	97	97	97
Survey	NA	93	NA	NA	NA	87	87	NA	NA	NA	NA	NA

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

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

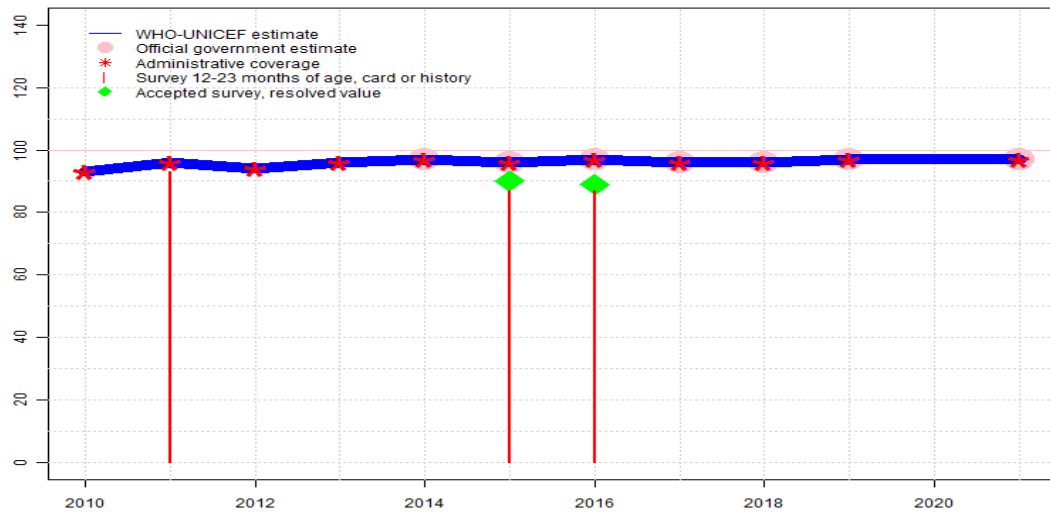
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2021: Estimate based on coverage reported by national government. 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 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 based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. 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 based on coverage reported by national government. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government 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 based on coverage reported by national government 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 based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on reported administrative data. GoC=R+ S+ D+
- 2012: Estimate based on reported administrative data. GoC=R+ D+
- 2011: Estimate based on reported administrative data. Tajikistan Demographic and Health Survey 2012 results ignored by working group. Tajikistan Demographic and Health Survey 2012 card or history results of 93 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 91 percent and 3rd dose card only coverage of 88 percent. GoC=R+ D+
- 2010: Estimate based on reported administrative data. GoC=R+ D+

# Tajikistan - Hib3

TJK - Hib3



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	93	96	94	96	97	96	97	96	96	97	97	97
Estimate GoC	••	••	••	•••	•••	•••	•••	•••	•••	••	•	••
Official	NA	NA	NA	NA	97	96	97	96	96	97	NA	97
Administrative	93	96	94	96	97	96	97	96	96	97	NA	97
Survey	NA	93	NA	NA	NA	87	87	NA	NA	NA	NA	NA

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

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

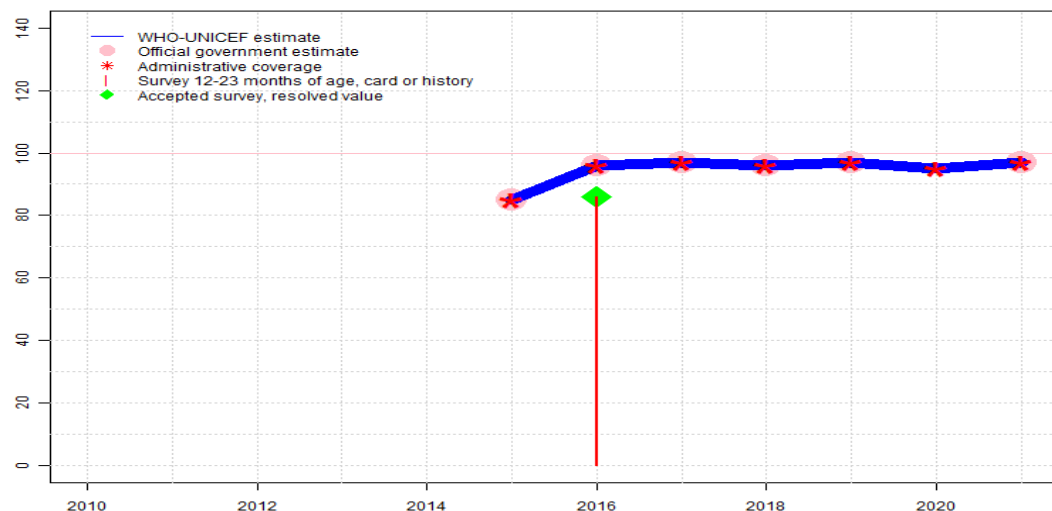
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2021: Estimate based on coverage reported by national government. 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 interpolation between data reported by national government. 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 based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. 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 based on coverage reported by national government. GoC=R+ S+ D+
- 2016: Estimate based on coverage reported by national government 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 based on coverage reported by national government 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 based on reported data. GoC=R+ S+ D+
- 2013: Estimate based on reported data. GoC=R+ S+ D+
- 2012: Estimate based on reported data. GoC=R+ D+
- 2011: Estimate based on reported data. Tajikistan Demographic and Health Survey 2012 results ignored by working group. Tajikistan Demographic and Health Survey 2012 card or history results of 93 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 91 percent and 3rd dose card only coverage of 88 percent. GoC=R+ D+
- 2010: Estimate based on reported data. GoC=R+ D+

# Tajikistan - RotaC

TJK - RotaC



## Description:

- 2021: Estimate based on coverage reported by national government. 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 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 based on coverage reported by national government. GoC=R+ D+
- 2018: Estimate based on coverage reported by national government. 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 based on coverage reported by national government. Estimate challenged by: S-
- 2016: Estimate based on coverage reported by national government supported by survey. Survey evidence of 86 percent based on 1 survey(s). GoC=R+ S+ D+
- 2015: Estimate based on reported data. Rotavirus vaccine introduced in January 2015. GoC=R+ S+ D+

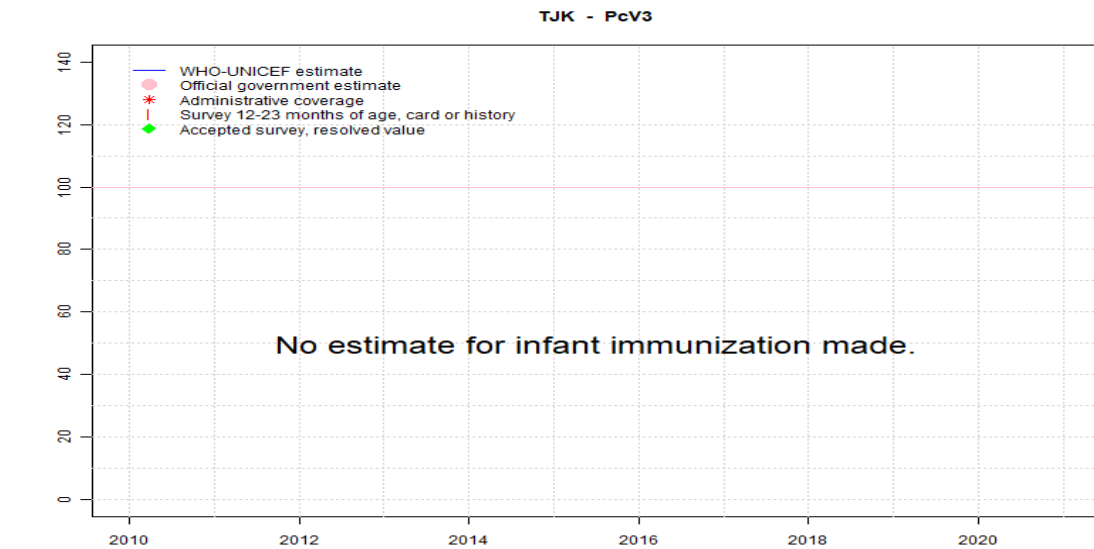
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Estimate	NA	NA	NA	NA	NA	85	96	97	96	97	95	97
Estimate GoC	NA	NA	NA	NA	NA	•••	•••	•	•••	••	••	••
Official	NA	NA	NA	NA	NA	85	96	97	96	97	NA	97
Administrative	NA	NA	NA	NA	NA	85	96	97	96	97	95	97
Survey	NA	NA	NA	NA	NA	NA	86	NA	NA	NA	NA	NA

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 - PcV3



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

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

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

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

# Tajikistan - survey details

## 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	90
BCG	Card	87.1	24-35 m	1119	90
BCG	Card or History	95.6	24-35 m	1269	90
BCG	History	8.5	24-35 m	150	90
DTP1	C or H <12 months	90.3	24-35 m	1269	90
DTP1	Card	85.4	24-35 m	1119	90
DTP1	Card or History	91.8	24-35 m	1269	90
DTP1	History	6.4	24-35 m	150	90
DTP3	C or H <12 months	83.6	24-35 m	1269	90
DTP3	Card	82.9	24-35 m	1119	90
DTP3	Card or History	87.2	24-35 m	1269	90
DTP3	History	4.3	24-35 m	150	90
HepB1	C or H <12 months	90.3	24-35 m	1269	90
HepB1	Card	85.4	24-35 m	1119	90
HepB1	Card or History	91.8	24-35 m	1269	90
HepB1	History	6.4	24-35 m	150	90
HepB3	C or H <12 months	83.6	24-35 m	1269	90
HepB3	Card	82.9	24-35 m	1119	90
HepB3	Card or History	87.2	24-35 m	1269	90
HepB3	History	4.3	24-35 m	150	90
HepBB	C or H <12 months	91.1	24-35 m	1269	90
HepBB	Card	85.1	24-35 m	1119	90
HepBB	Card or History	93.2	24-35 m	1269	90
HepBB	History	8.1	24-35 m	150	90
Hib1	C or H <12 months	90.3	24-35 m	1269	90
Hib1	Card	85.4	24-35 m	1119	90
Hib1	Card or History	91.8	24-35 m	1269	90
Hib1	History	6.4	24-35 m	150	90

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Hib3	C or H <12 months	83.6	24-35 m	1269	90
Hib3	Card	82.9	24-35 m	1119	90
Hib3	Card or History	87.2	24-35 m	1269	90
Hib3	History	4.3	24-35 m	150	90
MCV1	C or H <24 months	85.3	24-35 m	1269	90
MCV1	Card	81.6	24-35 m	1119	90
MCV1	Card or History	87.3	24-35 m	1269	90
MCV1	History	5.7	24-35 m	150	90
Pol1	C or H <12 months	90.9	24-35 m	1269	90
Pol1	Card	85.8	24-35 m	1119	90
Pol1	Card or History	92.3	24-35 m	1269	90
Pol1	History	6.5	24-35 m	150	90
Pol3	C or H <12 months	84.1	24-35 m	1269	90
Pol3	Card	83.4	24-35 m	1119	90
Pol3	Card or History	87.1	24-35 m	1269	90
Pol3	History	3.8	24-35 m	150	90

## 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
DTP1	Card or History	97.5	18-29 m	1148	91
DTP1	History	6.9	18-29 m	103	91
DTP3	C or H <18 months	91.7	18-29 m	1148	91
DTP3	Card	88.5	18-29 m	1044	91
DTP3	Card or History	93.1	18-29 m	1148	91
DTP3	History	4.6	18-29 m	103	91
HepB1	C or H <18 months	97.4	18-29 m	1148	91
HepB1	Card	90.6	18-29 m	1044	91
HepB1	Card or History	97.5	18-29 m	1148	91
HepB1	History	6.9	18-29 m	103	91
HepB3	C or H <18 months	91.7	18-29 m	1148	91
HepB3	Card	88.5	18-29 m	1044	91
HepB3	Card or History	93.1	18-29 m	1148	91

HepB3	History	4.6	18-29 m	103	91
HepBB	C or H <18 months	93.4	18-29 m	1148	91
HepBB	Card	88.5	18-29 m	1044	91
HepBB	Card or History	93.4	18-29 m	1148	91
HepBB	History	5	18-29 m	103	91
Hib1	C or H <18 months	97.4	18-29 m	1148	91
Hib1	Card	90.6	18-29 m	1044	91
Hib1	Card or History	97.5	18-29 m	1148	91
Hib1	History	6.9	18-29 m	103	91
Hib3	C or H <18 months	91.7	18-29 m	1148	91
Hib3	Card	88.5	18-29 m	1044	91
Hib3	Card or History	93.1	18-29 m	1148	91
Hib3	History	4.6	18-29 m	103	91
MCV1	C or H <18 months	91.4	18-29 m	1148	91
MCV1	Card	88.5	18-29 m	1044	91
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

## 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	-

## 2004 Tajikistan Multiple Indicator Cluster Survey 2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
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# Tajikistan - survey details

BCG	C or H <12 months	94.5	18-29 m	826	83
BCG	Card	81	18-29 m	826	83
BCG	Card or History	94.9	18-29 m	826	83
BCG	History	13.9	18-29 m	826	83
DTP1	C or H <12 months	91	18-29 m	826	83
DTP1	Card	81.6	18-29 m	826	83
DTP1	Card or History	93	18-29 m	826	83
DTP1	History	11.3	18-29 m	826	83
DTP3	C or H <12 months	81.6	18-29 m	826	83
DTP3	Card	80.2	18-29 m	826	83
DTP3	Card or History	86.3	18-29 m	826	83
DTP3	History	6.1	18-29 m	826	83
HepB1	C or H <12 months	84.5	18-29 m	826	83
HepB1	Card	70.3	18-29 m	826	83
HepB1	Card or History	85.2	18-29 m	826	83
HepB1	History	14.9	18-29 m	826	83
HepB3	C or H <12 months	68.9	18-29 m	826	83
HepB3	Card	67	18-29 m	826	83
HepB3	Card or History	72.9	18-29 m	826	83
HepB3	History	6	18-29 m	826	83
MCV1	C or H <12 months	91.1	18-29 m	826	83
MCV1	Card	77.8	18-29 m	826	83
MCV1	Card or History	92	18-29 m	826	83
MCV1	History	14.3	18-29 m	826	83
Pol1	C or H <12 months	91.9	18-29 m	826	83
Pol1	Card	81.2	18-29 m	826	83
Pol1	Card or History	93.1	18-29 m	826	83
Pol1	History	11.9	18-29 m	826	83
Pol3	C or H <12 months	78.9	18-29 m	826	83
Pol3	Card	79	18-29 m	826	83
Pol3	Card or History	82.1	18-29 m	826	83

Pol3 History 3.2 18-29 m 826 83

## 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

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