

**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.

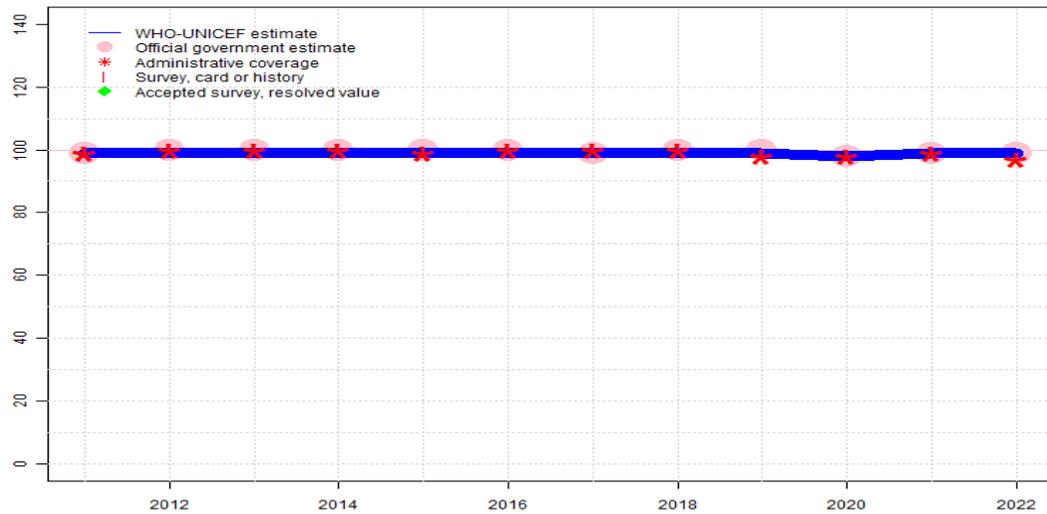
**PcV3:** percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect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

IRN - BCG



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	99	99	99	99	99	99	99	99	98	99	99
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	99	100	100	100	100	100	99	100	100	98	99	99
Administrative	99	100	100	100	99	100	100	100	98	98	99	97
Survey	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:

2022: Estimate informed by reported data. The National Center of Statistics conducts a national census every 5 years. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. Country notes a dramatic decline in annual births. From 2017 to 2022 the reported target population has decreased 30 percent. GoC=R+ D+

2021: Estimate informed by reported data. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. GoC=R+ D+

2020: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system and issues with connectivity in certain areas. WHO and UNICEF also take note of declines in the reported target population estimates of 11 percent between 2019 and 2020. GoC=R+ D+

2019: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system. WHO and UNICEF also take note of declines in the reported target population estimates of 5 percent between 2017 and 2018 and of 10 percent between 2018 and 2019. Several sub-national surveys and a 2019 national survey have been completed in Iran. Survey report only includes data for children with documented evidence of vaccination. GoC=R+ D+

2018: Estimate informed by reported data. GoC=R+ D+

2017: Estimate informed by reported data. GoC=R+ D+

2016: Estimate informed by reported data. Survey results for the 2016 birth cohort support high levels of reported vaccination coverage. GoC=R+ D+

2015: Estimate informed by reported data. GoC=R+ D+

2014: Estimate informed by reported data. GoC=R+ D+

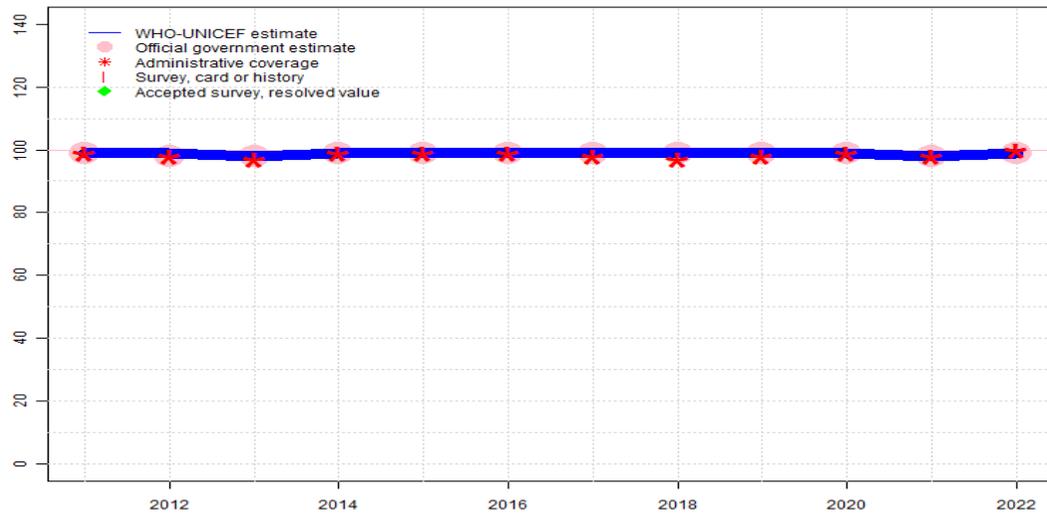
2013: Estimate informed by reported data. GoC=R+ D+

2012: Estimate informed by reported data. GoC=R+ D+

2011: Estimate informed by reported data. GoC=R+ D+

# Iran (Islamic Republic of) - DTP1

IRN - DTP1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	99	98	99	99	99	99	99	99	99	98	99
Estimate GoC	●●	●	●●	●●	●●	●●	●●	●●	●●	●	●●	●●
Official	99	98	98	99	99	99	99	99	99	99	98	99
Administrative	99	98	97	99	99	99	98	97	98	99	98	100
Survey	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:

2022: Estimate informed by reported data. The National Center of Statistics conducts a national census every 5 years. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. Country notes a dramatic decline in annual births. From 2017 to 2022 the reported target population has decreased 30 percent. GoC=R+ D+

2021: Estimate informed by reported data. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. GoC=R+ D+

2020: DTP1 coverage estimated based on DTP3 coverage of 100. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system and issues with connectivity in certain areas. WHO and UNICEF also take note of declines in the reported target population estimates of 11 percent between 2019 and 2020. Estimate challenged by: R-

2019: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system. WHO and UNICEF also take note of declines in the reported target population estimates of 5 percent between 2017 and 2018 and of 10 percent between 2018 and 2019. Several sub-national surveys and a 2019 national survey have been completed in Iran. Survey report only includes data for children with documented evidence of vaccination. GoC=R+ D+

2018: Estimate informed by reported data. GoC=R+ D+

2017: Estimate informed by reported data. GoC=R+ D+

2016: Estimate informed by reported data. Survey results for the 2016 birth cohort support high levels of reported vaccination coverage. GoC=R+ D+

2015: Estimate informed by reported data. GoC=R+ D+

2014: Estimate informed by reported data. GoC=R+ D+

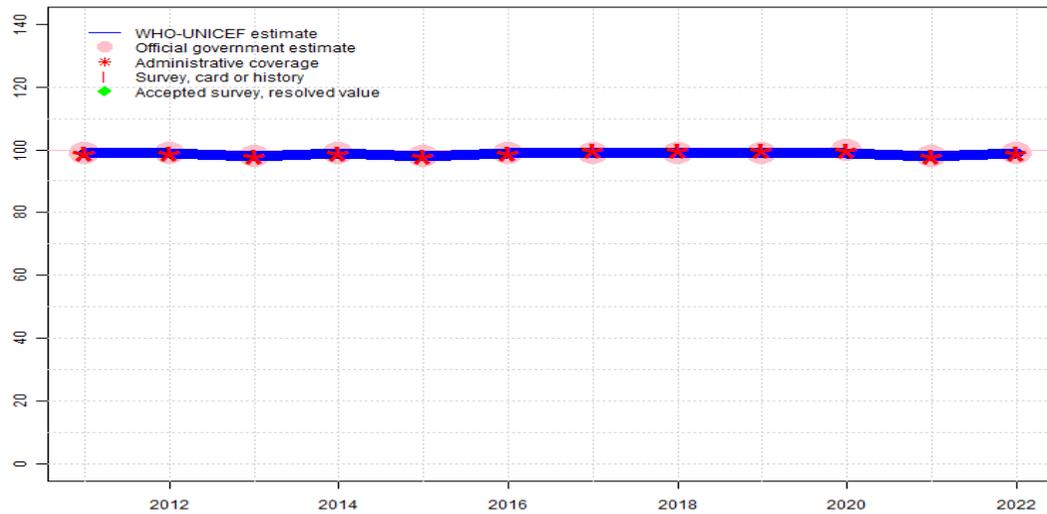
2013: Estimate informed by reported data. GoC=R+ D+

2012: DTP1 coverage estimated based on DTP3 coverage of 99. Estimate challenged by: R-

2011: Estimate informed by reported data. GoC=R+ D+

# Iran (Islamic Republic of) - DTP3

IRN - DTP3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	99	98	99	98	99	99	99	99	99	98	99
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	99	99	98	99	98	99	99	99	99	100	98	99
Administrative	99	99	98	99	98	99	100	100	100	100	98	99
Survey	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:

2022: Estimate informed by reported data. The National Center of Statistics conducts a national census every 5 years. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. Country notes a dramatic decline in annual births. From 2017 to 2022 the reported target population has decreased 30 percent. GoC=R+ D+

2021: Estimate informed by reported data. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. GoC=R+ D+

2020: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system and issues with connectivity in certain areas. WHO and UNICEF also take note of declines in the reported target population estimates of 11 percent between 2019 and 2020. GoC=R+ D+

2019: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system. WHO and UNICEF also take note of declines in the reported target population estimates of 5 percent between 2017 and 2018 and of 10 percent between 2018 and 2019. Several sub-national surveys and a 2019 national survey have been completed in Iran. Survey report only includes data for children with documented evidence of vaccination. GoC=R+ D+

2018: Estimate informed by reported data. GoC=R+ D+

2017: Estimate informed by reported data. GoC=R+ D+

2016: Estimate informed by reported data. Survey results for the 2016 birth cohort support high levels of reported vaccination coverage. GoC=R+ D+

2015: Estimate informed by reported data. GoC=R+ D+

2014: Estimate informed by reported data. GoC=R+ D+

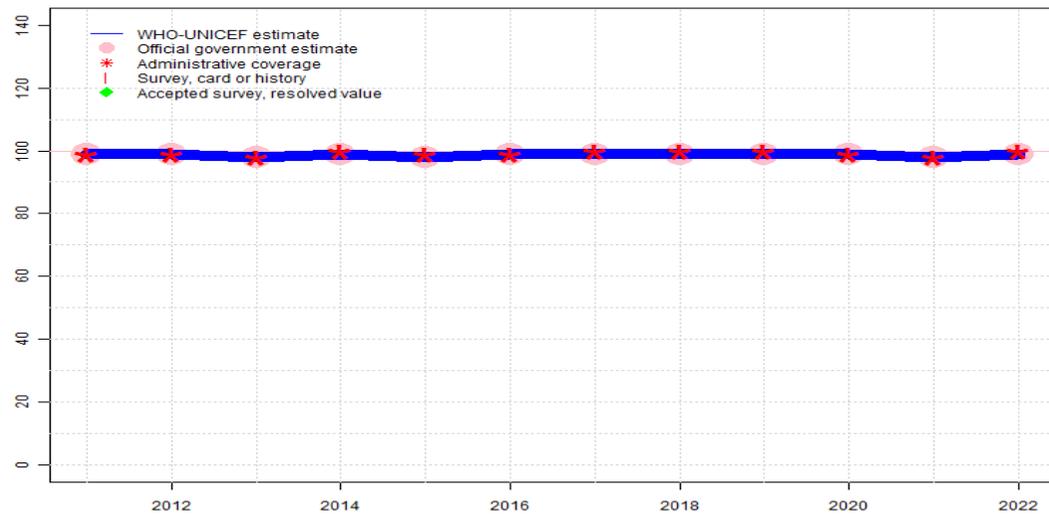
2013: Estimate informed by reported data. GoC=R+ D+

2012: Estimate informed by reported data. GoC=R+ D+

2011: Estimate informed by reported data. GoC=R+ D+

# Iran (Islamic Republic of) - Pol3

IRN - Pol3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	99	98	99	98	99	99	99	99	99	98	99
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	99	99	98	99	98	99	99	99	99	99	98	99
Administrative	99	99	98	100	99	99	100	100	100	99	98	100
Survey	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:

2022: Estimate informed by reported data. The National Center of Statistics conducts a national census every 5 years. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. Country notes a dramatic decline in annual births. From 2017 to 2022 the reported target population has decreased 30 percent. GoC=R+ D+

2021: Estimate informed by reported data. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. GoC=R+ D+

2020: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system and issues with connectivity in certain areas. WHO and UNICEF also take note of declines in the reported target population estimates of 11 percent between 2019 and 2020. GoC=R+ D+

2019: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system. WHO and UNICEF also take note of declines in the reported target population estimates of 5 percent between 2017 and 2018 and of 10 percent between 2018 and 2019. Several sub-national surveys and a 2019 national survey have been completed in Iran. Survey report only includes data for children with documented evidence of vaccination. GoC=R+ D+

2018: Estimate informed by reported data. GoC=R+ D+

2017: Estimate informed by reported data. GoC=R+ D+

2016: Estimate informed by reported data. Survey results for the 2016 birth cohort support high levels of reported vaccination coverage. GoC=R+ D+

2015: Estimate informed by reported data. GoC=R+ D+

2014: Estimate informed by reported data. GoC=R+ D+

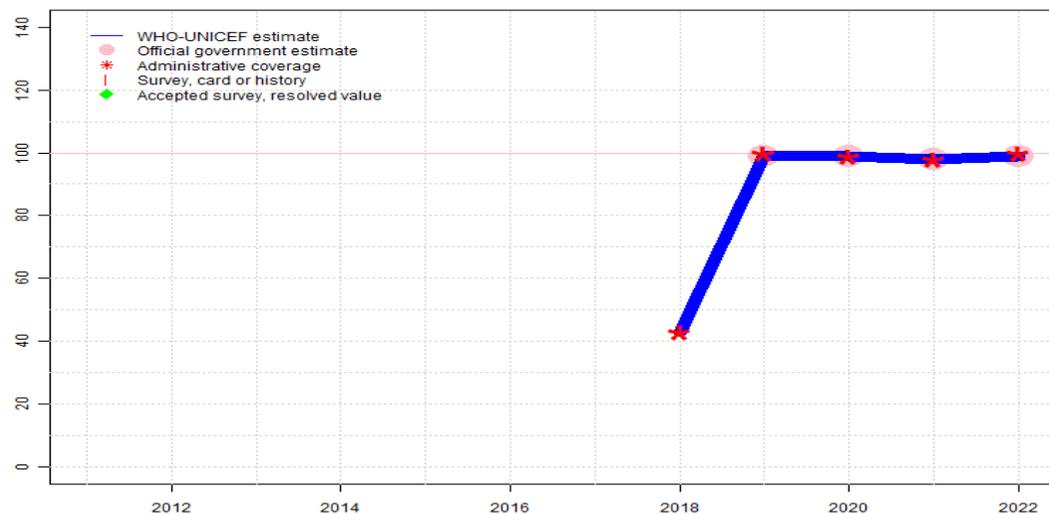
2013: Estimate informed by reported data. GoC=R+ D+

2012: Estimate informed by reported data. GoC=R+ D+

2011: Estimate informed by reported data. GoC=R+ D+

# Iran (Islamic Republic of) - IPV1

IRN - 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).

2022: Estimate informed by reported data. The National Center of Statistics conducts a national census every 5 years. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. Country notes a dramatic decline in annual births. From 2017 to 2022 the reported target population has decreased 30 percent. GoC=R+ D+

2021: Estimate informed by reported data. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. GoC=R+ D+

2020: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system and issues with connectivity in certain areas. WHO and UNICEF also take note of declines in the reported target population estimates of 11 percent between 2019 and 2020. GoC=R+ D+

2019: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system. WHO and UNICEF also take note of declines in the reported target population estimates of 5 percent between 2017 and 2018 and of 10 percent between 2018 and 2019. Several sub-national surveys and a 2019 national survey have been completed in Iran. Survey report only includes data for children with documented evidence of vaccination. Estimate based on reported data following introduction. GoC=R+ D+

2018: Estimate informed by reported administrative data. Inactivated polio vaccine introduced in 2015. Reporting began in 2018. GoC=Assigned by working group. Consistency with other antigens.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	43	99	99	98	99						
Estimate GoC	NA	•	••	••	••	••						
Official	NA	99	99	98	99							
Administrative	NA	43	100	99	98	100						
Survey	NA											

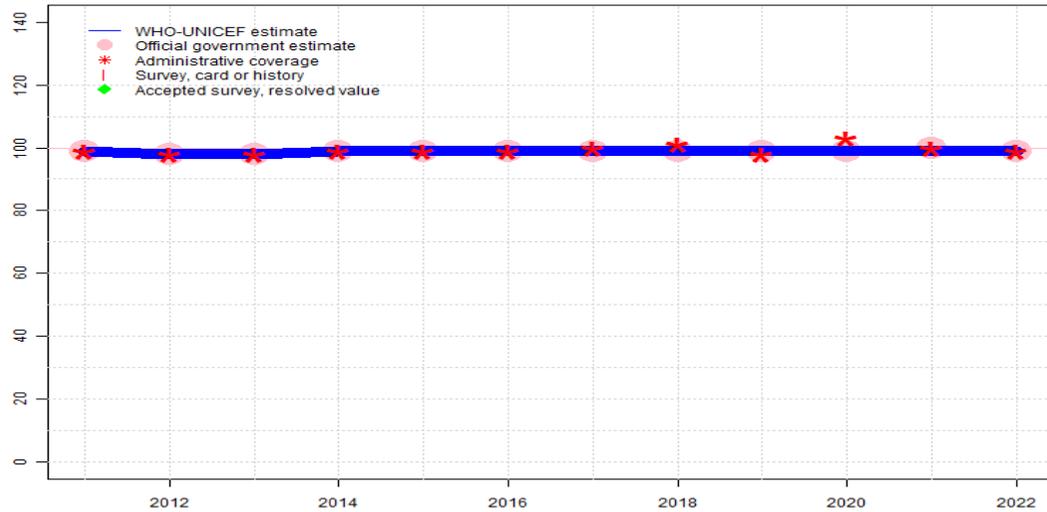
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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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# Iran (Islamic Republic of) - MCV1

IRN - MCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	98	98	99	99	99	99	99	99	99	99	99
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	99	98	98	99	99	99	99	99	99	99	100	99
Administrative	99	98	98	99	99	99	100	101	98	103	100	99
Survey	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:

2022: Estimate informed by reported data. The National Center of Statistics conducts a national census every 5 years. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. Country notes a dramatic decline in annual births. From 2017 to 2022 the reported target population has decreased 30 percent. GoC=R+ D+

2021: Estimate informed by reported data. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. GoC=R+ D+

2020: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system and issues with connectivity in certain areas. WHO and UNICEF also take note of declines in the reported target population estimates of 11 percent between 2019 and 2020. GoC=R+ D+

2019: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system. WHO and UNICEF also take note of declines in the reported target population estimates of 5 percent between 2017 and 2018 and of 10 percent between 2018 and 2019. Several sub-national surveys and a 2019 national survey have been completed in Iran. Survey report only includes data for children with documented evidence of vaccination. GoC=R+ D+

2018: Estimate informed by reported data. GoC=R+ D+

2017: Estimate informed by reported data. GoC=R+ D+

2016: Estimate informed by reported data. Survey results for the 2016 birth cohort support high levels of reported vaccination coverage. GoC=R+ D+

2015: Estimate informed by reported data. GoC=R+ D+

2014: Estimate informed by reported data. GoC=R+ D+

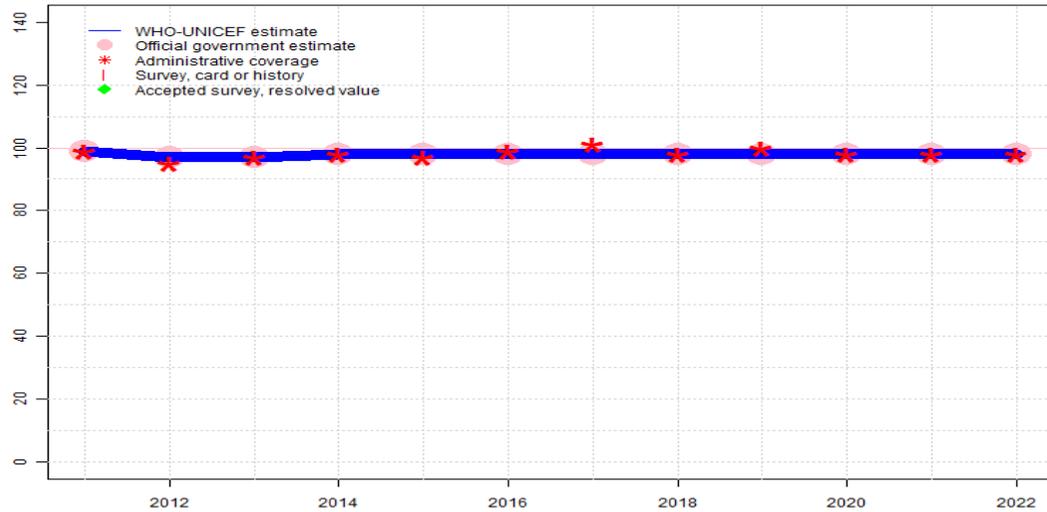
2013: Estimate informed by reported data. GoC=R+ D+

2012: Estimate informed by reported data. GoC=R+ D+

2011: Estimate informed by reported data. GoC=R+ D+

# Iran (Islamic Republic of) - MCV2

IRN - MCV2



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	97	97	98	98	98	98	98	98	98	98	98
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●	●●	●●	●●
Official	99	97	97	98	98	98	98	98	98	98	98	98
Administrative	99	95	97	98	97	99	101	98	100	98	98	98
Survey	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.

2022: Estimate informed by reported data. The National Center of Statistics conducts a national census every 5 years. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. Country notes a dramatic decline in annual births. From 2017 to 2022 the reported target population has decreased 30 percent. GoC=R+ D+

2021: Estimate informed by reported data. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. GoC=R+ D+

2020: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system and issues with connectivity in certain areas. WHO and UNICEF also take note of declines in the reported target population estimates of 11 percent between 2019 and 2020. GoC=R+ D+

2019: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system. WHO and UNICEF also take note of declines in the reported target population estimates of 5 percent between 2017 and 2018 and of 10 percent between 2018 and 2019. Several sub-national surveys and a 2019 national survey have been completed in Iran. Survey report only includes data for children with documented evidence of vaccination. Estimate challenged by: D-

2018: Estimate informed by reported data. GoC=R+ D+

2017: Estimate informed by reported data. GoC=R+ D+

2016: Estimate informed by reported data. Survey results for the 2016 birth cohort support high levels of reported vaccination coverage. GoC=R+ D+

2015: Estimate informed by reported data. GoC=R+ D+

2014: Estimate informed by reported data. GoC=R+ D+

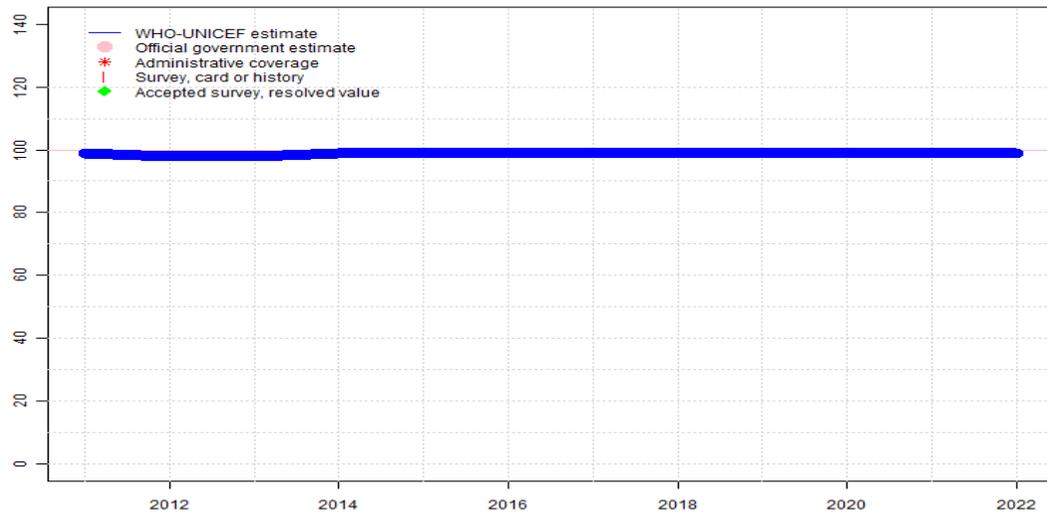
2013: Estimate informed by reported data. GoC=R+ D+

2012: Estimate informed by reported data. GoC=R+ D+

2011: Estimate informed by reported data. GoC=R+ D+

# Iran (Islamic Republic of) - RCV1

IRN - RCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	98	98	99	99	99	99	99	99	99	99	99
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	NA											
Administrative	NA											
Survey	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.

2022: Estimate based on estimated MCV1. The National Center of Statistics conducts a national census every 5 years. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. Country notes a dramatic decline in annual births. From 2017 to 2022 the reported target population has decreased 30 percent. GoC=R+ D+

2021: Estimate based on estimated MCV1. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. GoC=R+ D+

2020: Estimate based on estimated MCV1. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system and issues with connectivity in certain areas. WHO and UNICEF also take note of declines in the reported target population estimates of 11 percent between 2019 and 2020. GoC=R+ D+

2019: Estimate based on estimated MCV1. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system. WHO and UNICEF also take note of declines in the reported target population estimates of 5 percent between 2017 and 2018 and of 10 percent between 2018 and 2019. Several sub-national surveys and a 2019 national survey have been completed in Iran. Survey report only includes data for children with documented evidence of vaccination. GoC=R+ D+

2018: Estimate based on estimated MCV1. GoC=R+ D+

2017: Estimate based on estimated MCV1. GoC=R+ D+

2016: Estimate based on estimated MCV1. Survey results for the 2016 birth cohort support high levels of reported vaccination coverage. GoC=R+ D+

2015: Estimate based on estimated MCV1. GoC=R+ D+

2014: Estimate based on estimated MCV1. GoC=R+ D+

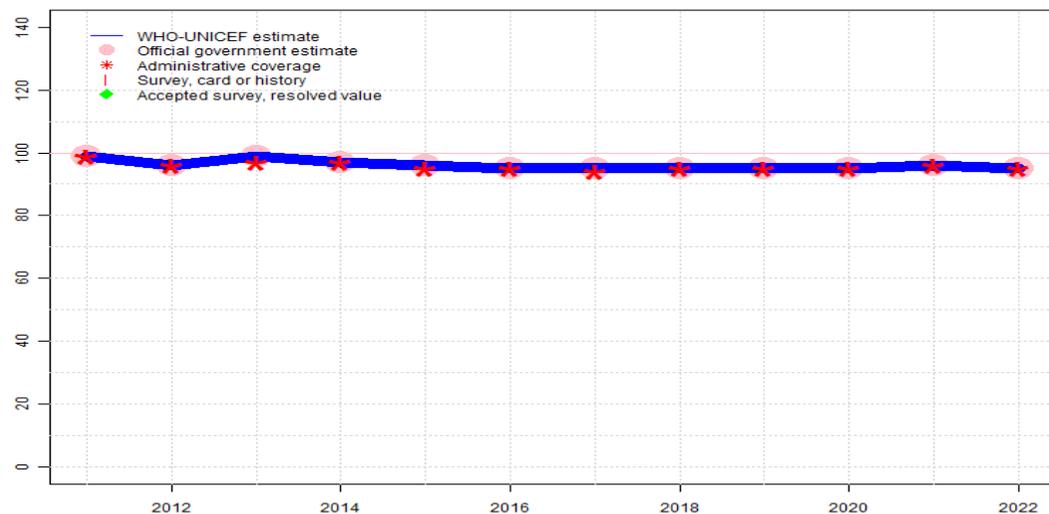
2013: Estimate based on estimated MCV1. GoC=R+ D+

2012: Estimate based on estimated MCV1. GoC=R+ D+

2011: Estimate based on estimated MCV1. GoC=R+ D+

# Iran (Islamic Republic of) - HepBB

IRN - HepBB



## Description:

- 2022: Estimate informed by reported data. The National Center of Statistics conducts a national census every 5 years. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. Country notes a dramatic decline in annual births. From 2017 to 2022 the reported target population has decreased 30 percent. GoC=R+ D+
- 2021: Estimate informed by reported data. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system and issues with connectivity in certain areas. WHO and UNICEF also take note of declines in the reported target population estimates of 11 percent between 2019 and 2020. GoC=R+ D+
- 2019: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system. WHO and UNICEF also take note of declines in the reported target population estimates of 5 percent between 2017 and 2018 and of 10 percent between 2018 and 2019. Several sub-national surveys and a 2019 national survey have been completed in Iran. Survey report only includes data for children with documented evidence of vaccination. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by reported data. GoC=R+ D+
- 2016: Estimate informed by reported data. Survey results for the 2016 birth cohort support high levels of reported vaccination coverage. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+ D+
- 2013: Estimate informed by reported data. GoC=R+ D+
- 2012: Estimate informed by reported data. GoC=R+ D+
- 2011: Estimate informed by reported data. GoC=R+ D+

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	96	99	97	96	95	95	95	95	95	96	95
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	99	96	99	97	96	95	95	95	95	95	96	95
Administrative	99	96	97	97	95	95	94	95	95	95	96	95
Survey	NA											

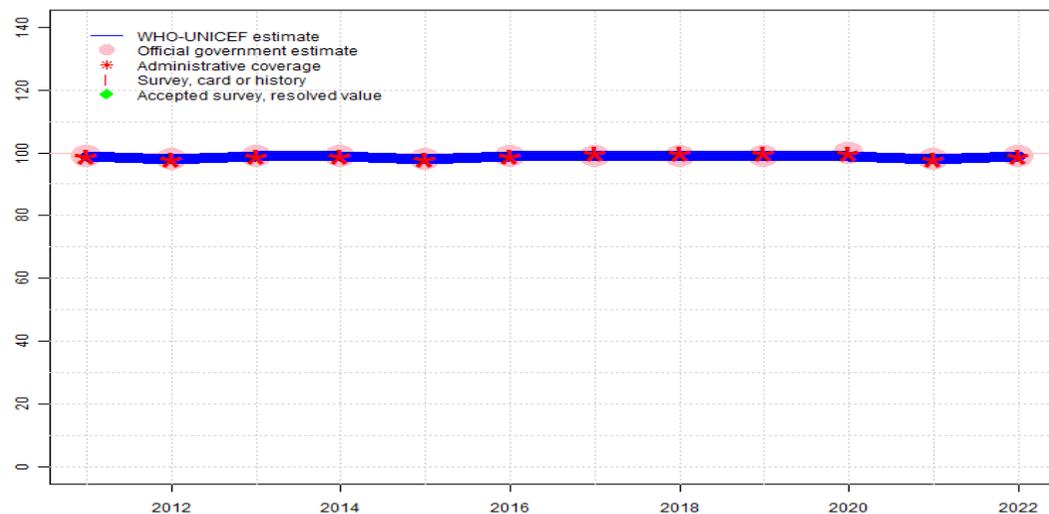
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Iran (Islamic Republic of) - HepB3

IRN - HepB3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	98	99	99	98	99	99	99	99	99	98	99
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	99	98	99	99	98	99	99	99	99	100	98	99
Administrative	99	98	99	99	98	99	100	100	100	100	98	99
Survey	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.

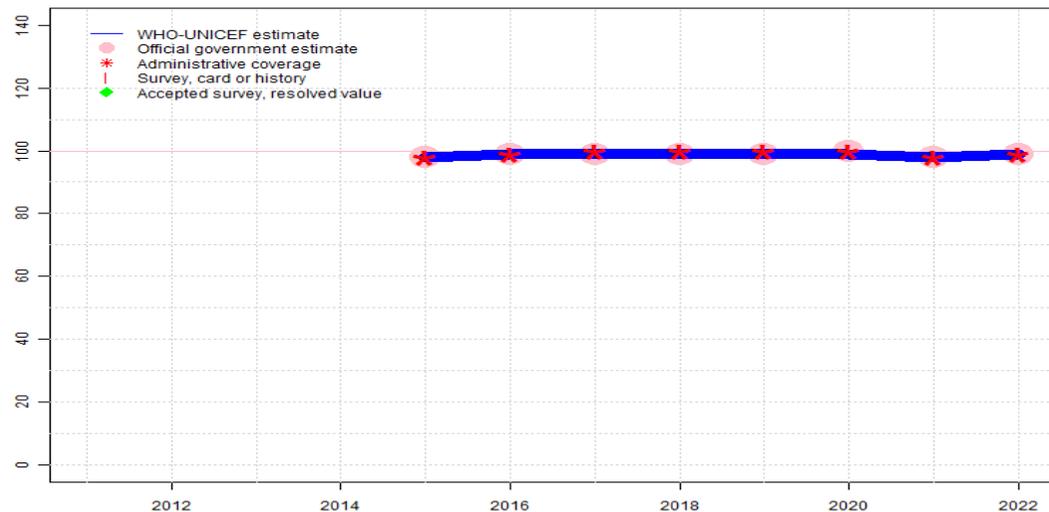
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2022: Estimate informed by reported data. The National Center of Statistics conducts a national census every 5 years. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. Country notes a dramatic decline in annual births. From 2017 to 2022 the reported target population has decreased 30 percent. GoC=R+ D+
- 2021: Estimate informed by reported data. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system and issues with connectivity in certain areas. WHO and UNICEF also take note of declines in the reported target population estimates of 11 percent between 2019 and 2020. GoC=R+ D+
- 2019: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system. WHO and UNICEF also take note of declines in the reported target population estimates of 5 percent between 2017 and 2018 and of 10 percent between 2018 and 2019. Several sub-national surveys and a 2019 national survey have been completed in Iran. Survey report only includes data for children with documented evidence of vaccination. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by reported data. GoC=R+ D+
- 2016: Estimate informed by reported data. Survey results for the 2016 birth cohort support high levels of reported vaccination coverage. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+ D+
- 2013: Estimate informed by reported data. GoC=R+ D+
- 2012: Estimate informed by reported data. GoC=R+ D+
- 2011: Estimate informed by reported data. GoC=R+ D+

# Iran (Islamic Republic of) - Hib3

IRN - Hib3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	98	99	99	99	99	99	98	99
Estimate GoC	NA	NA	NA	NA	●●	●●	●●	●●	●●	●●	●●	●●
Official	NA	NA	NA	NA	98	99	99	99	99	100	98	99
Administrative	NA	NA	NA	NA	98	99	100	100	100	100	98	99
Survey	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:

2022: Estimate informed by reported data. The National Center of Statistics conducts a national census every 5 years. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. Country notes a dramatic decline in annual births. From 2017 to 2022 the reported target population has decreased 30 percent. GoC=R+ D+

2021: Estimate informed by reported data. Declines in reported number of doses administered since 2017 are largely not reflected in reported coverage levels due in part to declines in the reported target population. GoC=R+ D+

2020: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system and issues with connectivity in certain areas. WHO and UNICEF also take note of declines in the reported target population estimates of 11 percent between 2019 and 2020. GoC=R+ D+

2019: Estimate informed by reported data. Programme notes concerns around the completeness of numerator data during the transition from a paper to electronic registry system. WHO and UNICEF also take note of declines in the reported target population estimates of 5 percent between 2017 and 2018 and of 10 percent between 2018 and 2019. Several sub-national surveys and a 2019 national survey have been completed in Iran. Survey report only includes data for children with documented evidence of vaccination. GoC=R+ D+

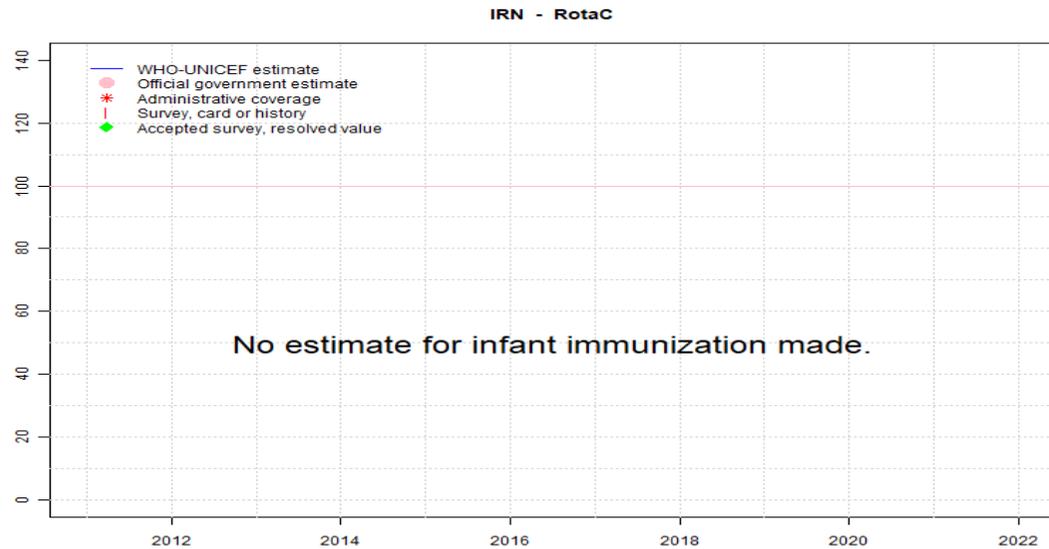
2018: Estimate informed by reported data. GoC=R+ D+

2017: Estimate informed by reported data. GoC=R+ D+

2016: Estimate informed by reported data. Survey results for the 2016 birth cohort support high levels of reported vaccination coverage. Hib introduction in 2014, reporting started in 2015. GoC=R+ D+

2015: Estimate informed by reported data. GoC=R+ D+

# Iran (Islamic Republic of) - RotaC



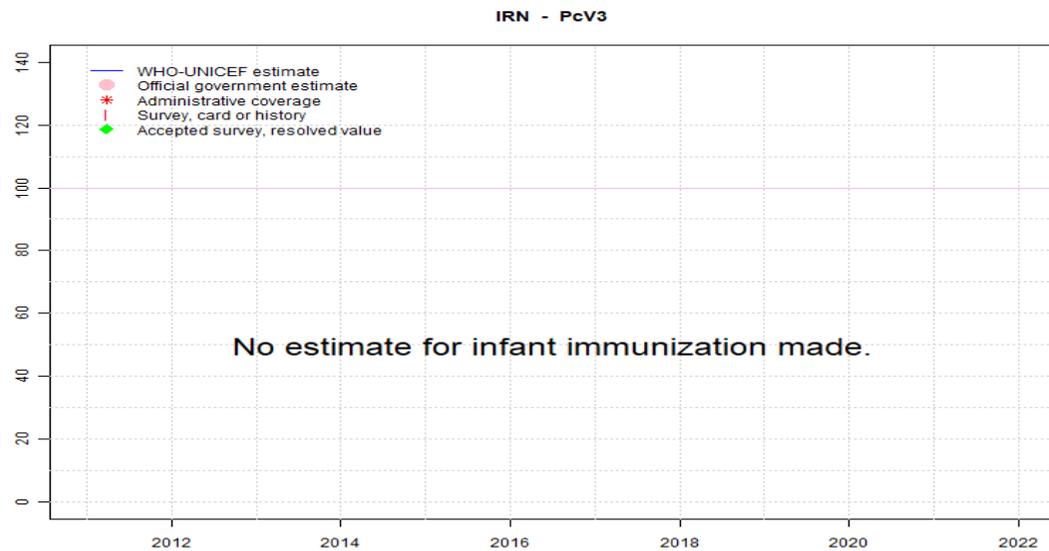
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	NA											

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.

# Iran (Islamic Republic of) - PcV3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	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.

# Iran (Islamic Republic of) - survey details

NOTE: A survey to measure vaccination coverage for infants (i.e., children aged 0 to 11 months) will sample children aged 12 to 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 to 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.

## 2017 Final report of the study of the Immunization Coverage of 24 to 36 Months Old Children in Iran, Spring and Summer 2019

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
MCV2	Card or Facility	98.5	24-36 m	8682	93

## 2016 Final report of the study of the Immunization Coverage of 24 to 36 Months Old Children in Iran, Spring and Summer 2019

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or Facility	98.6	24-36 m	8682	93
DTP1	Card or Facility	98.9	24-36 m	8682	93
DTP3	Card or Facility	98.5	24-36 m	8682	93
HepB1	Card or Facility	98.9	24-36 m	8682	93
HepB3	Card or Facility	98.5	24-36 m	8682	93
HepBB	Card or Facility	90.4	24-36 m	8682	93
Hib1	Card or Facility	98.9	24-36 m	8682	93
Hib3	Card or Facility	98.5	24-36 m	8682	93
MCV1	Card or Facility	98.8	24-36 m	8682	93

Pol1	Card or Facility	98.9	24-36 m	8682	93
Pol3	Card or Facility	98.5	24-36 m	8682	93

## 2009 Islamic Republic of Iran Multiple-Indicator Demographic and Health Survey 2010

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	99	12-23 m	1757	-
BCG	Card	99.1	12-23 m	924	-
BCG	Card	98.9	12-23 m	833	-
DTP1	Card	98.9	12-23 m	924	-
DTP1	Card	98.5	12-23 m	833	-
DTP1	Card	98.7	12-23 m	1757	-
DTP3	Card	96.2	12-23 m	924	-
DTP3	Card	96.9	12-23 m	833	-
DTP3	Card	96.5	12-23 m	1757	-
HepB1	Card	99	12-23 m	924	-
HepB1	Card	98.8	12-23 m	1757	-
HepB1	Card	98.5	12-23 m	833	-
HepB3	Card	95.7	12-23 m	924	-
HepB3	Card	96.8	12-23 m	833	-
HepB3	Card	96.2	12-23 m	1757	-
MCV1	Card	96.7	12-23 m	1757	-
MCV1	Card	97.3	12-23 m	924	-
MCV1	Card	96	12-23 m	833	-
Pol1	Card	99.2	12-23 m	1757	-
Pol1	Card	99	12-23 m	833	-
Pol1	Card	99.3	12-23 m	924	-
Pol3	Card	95.7	12-23 m	1757	-
Pol3	Card	96.1	12-23 m	833	-
Pol3	Card	95.4	12-23 m	924	-

# Iran (Islamic Republic of) - survey details

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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>