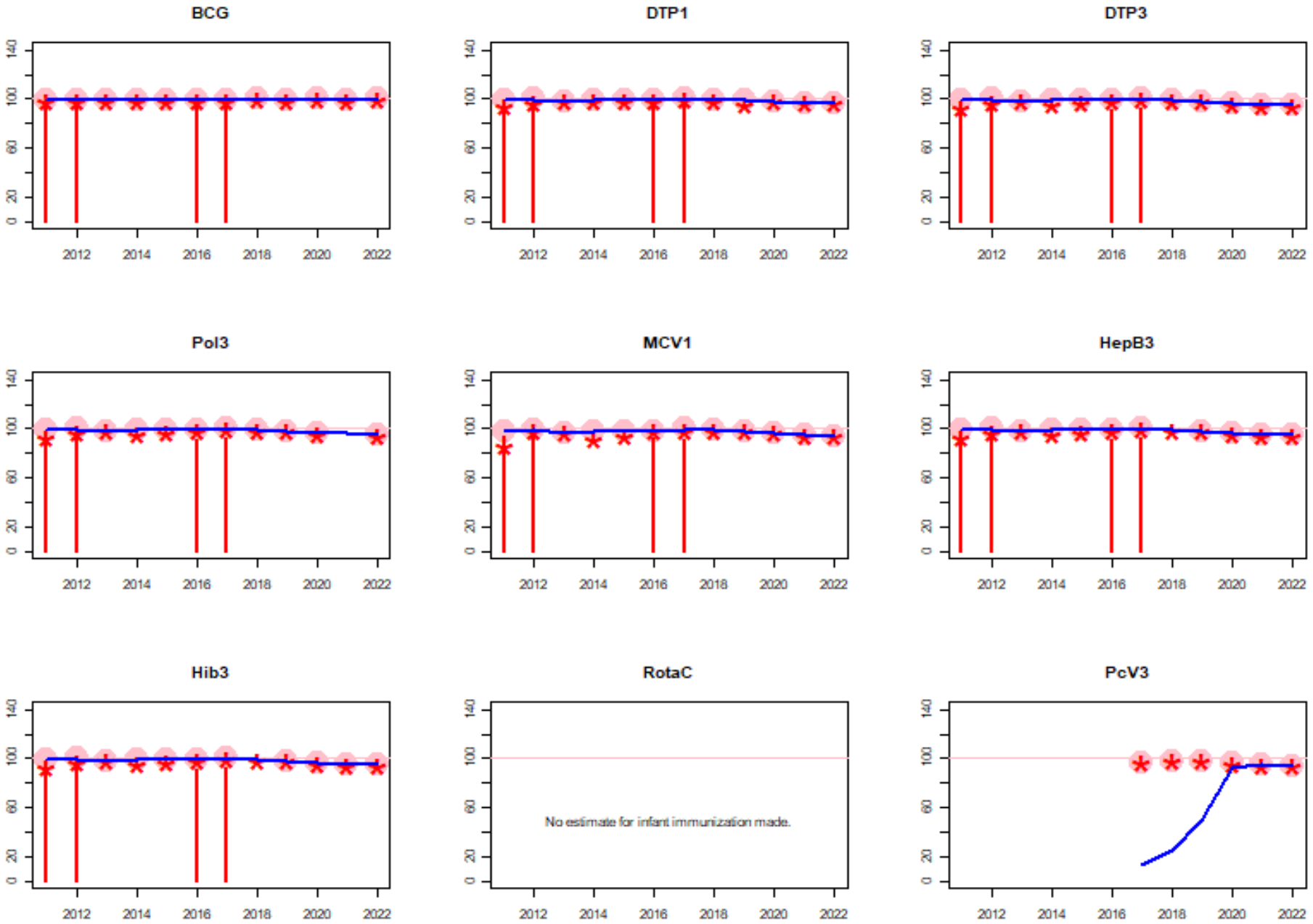

BCG
DTP1
DTP3
Pol3
MCV1
HepB3
Hib3
RotaC
No estimate for infant immunization made.
PcV3
0
20
60
100
140
2012
2014
2016
2018
2020
2022

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. Co verage 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.

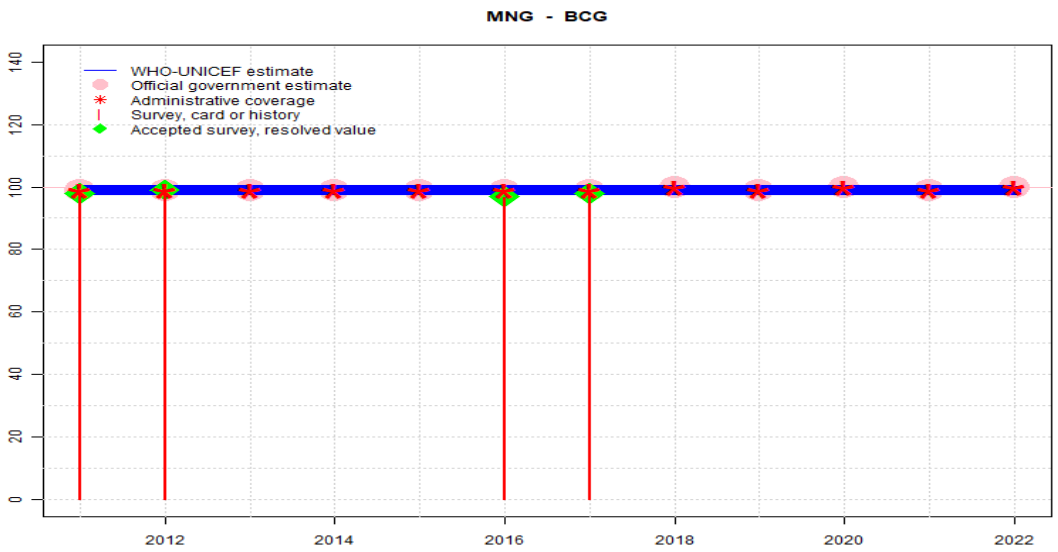
RotaC: percentage of surviving infants who received the final recommended dose of rotavirus vaccine, which can be either the 2nd or the 3rd dose depending on the vaccine.

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.

Disclaimer: All reasonable precautions have been taken by the World Health Organization and United Nations Children's Fund to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization or United Nations Children's Fund be liable for damages arising from its use.

Mongolia - BCG



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	99	99	99	99	99	99	99	99	99	99	99
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●	●●	●●
Official	99	99	99	99	99	99	99	100	99	100	99	100
Administrative	99	99	99	99	99	99	99	100	99	100	99	100
Survey	97.6	99.3	NA	NA	NA	96.7	98	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:

2022: Estimate informed by reported data. A 2022 study of randomly selected provincial and district vaccination centres documents disruptions to the delivery of infant routine immunization (using Penta3 and MMR1 as proxy) during 2021 compared to 2019-2020 due to the COVID-19 pandemic. An unexplained decrease of 10 percent is observed in the reported target population for some antigens. GoC=R+ D+

2021: Estimate informed by reported data. An unexplained decrease of 10 percent in the reported target population is observed between 2020 and 2021 alongside declines in reported number of doses administered. GoC=R+ D+

2020: Estimate informed by reported data. GoC=R+ D+

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

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

2017: Estimate informed by reported data supported by survey. Survey evidence of 98 percent based on 1 survey(s). GoC=R+ S+ D+

2016: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 1 survey(s). GoC=R+ S+ D+

2015: Estimate informed by reported data. Results from recent measles outbreak investigation, that included a review of routine immunization, suggests that actual coverage levels are likely lower than those suggested by the reported coverage. GoC=R+ S+ D+

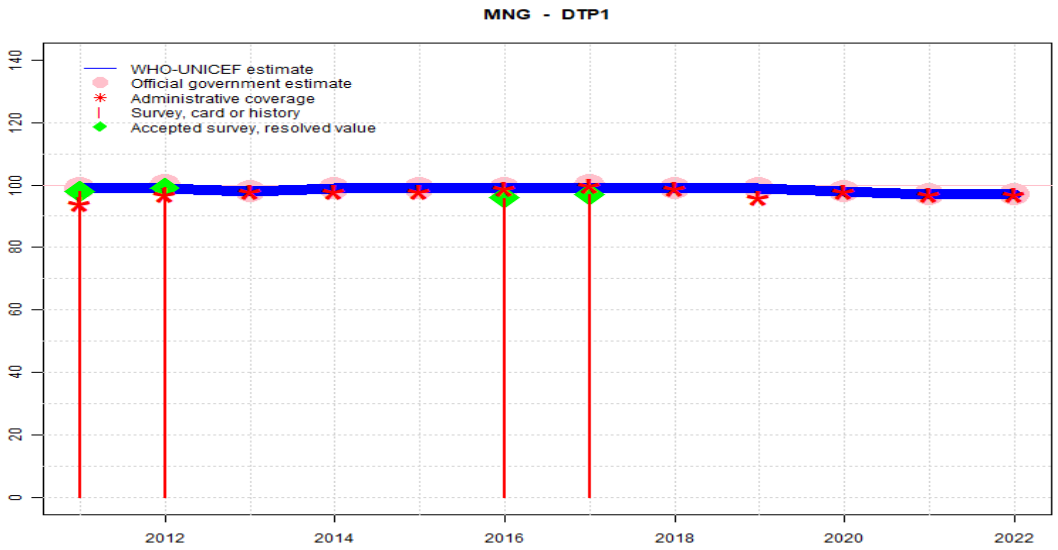
2014: Estimate informed by reported data. GoC=R+ S+ D+

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

2012: Estimate informed by reported data supported by survey. Survey evidence of 99 percent based on 1 survey(s). GoC=R+ S+ D+

2011: Estimate informed by reported data supported by survey. Survey evidence of 98 percent based on 1 survey(s). GoC=R+ S+ D+

Mongolia - DTP1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	99	98	99	99	99	99	99	99	98	97	97
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●	●●	●●
Official	99	100	98	99	99	99	100	99	99	98	97	97
Administrative	94	97	98	98	98	99	100	99	96	98	97	97
Survey	97.9	99.1	NA	NA	NA	95.5	97	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:

2022: Estimate informed by reported data. A 2022 study of randomly selected provincial and district vaccination centres documents disruptions to the delivery of infant routine immunization (using Penta3 and MMR1 as proxy) during 2021 compared to 2019-2020 due to the COVID-19 pandemic. An unexplained decrease of 10 percent is observed in the reported target population for some antigens. GoC=R+ D+

2021: Estimate informed by reported data. An unexplained decrease of 10 percent in the reported target population is observed between 2020 and 2021 alongside declines in reported number of doses administered. GoC=R+ D+

2020: Estimate informed by reported data. GoC=R+ D+

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

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

2017: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 1 survey(s). GoC=R+ S+ D+

2016: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 1 survey(s). GoC=R+ S+ D+

2015: Estimate informed by reported data. Results from recent measles outbreak investigation, that included a review of routine immunization, suggests that actual coverage levels are likely lower than those suggested by the reported coverage. GoC=R+ S+ D+

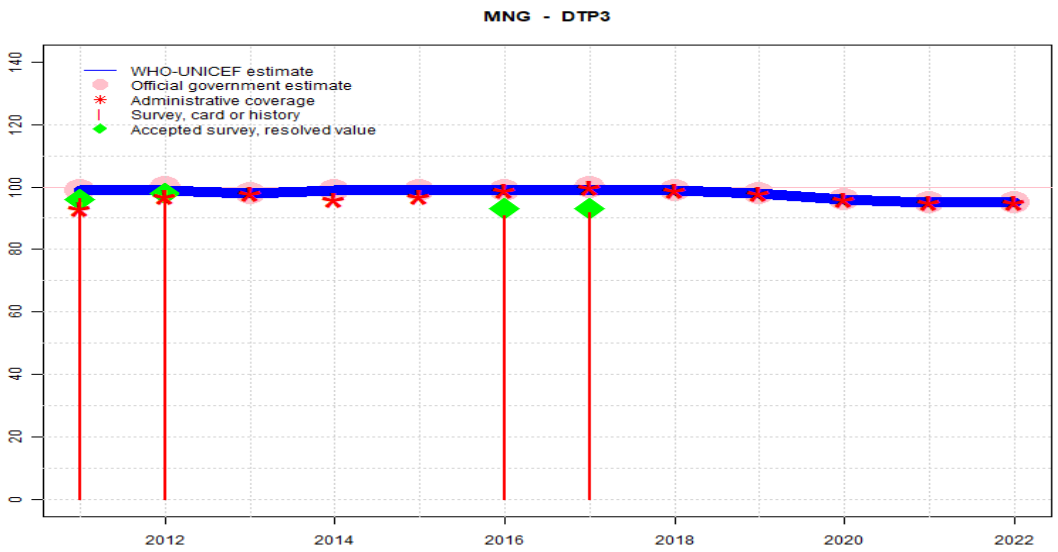
2014: Estimate informed by reported data. GoC=R+ S+ D+

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

2012: Estimate informed by reported data supported by survey. Survey evidence of 99 percent based on 1 survey(s). GoC=R+ S+ D+

2011: Estimate informed by reported data supported by survey. Survey evidence of 98 percent based on 1 survey(s). GoC=R+ S+ D+

Mongolia - DTP3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	99	98	99	99	99	99	99	98	96	95	95
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●	●●	●●
Official	99	100	98	99	99	99	100	99	98	96	95	95
Administrative	93	97	98	96	97	99	100	99	98	96	95	95
Survey	96.2	98	NA	NA	NA	90.9	91.9	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:

2022: Estimate informed by reported data. A 2022 study of randomly selected provincial and district vaccination centres documents disruptions to the delivery of infant routine immunization (using Penta3 and MMR1 as proxy) during 2021 compared to 2019-2020 due to the COVID-19 pandemic. An unexplained decrease of 10 percent is observed in the reported target population for some antigens. GoC=R+ D+

2021: Estimate informed by reported data. An unexplained decrease of 10 percent in the reported target population is observed between 2020 and 2021 alongside declines in reported number of doses administered. GoC=R+ D+

2020: Estimate informed by reported data. GoC=R+ D+

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

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

2017: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey (MICS) 2018 card or history results of 92 percent modifed for recall bias to 93 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 89 percent and 3rd dose card only coverage of 86 percent. GoC=R+ S+ D+

2016: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey (MICS) 2018 card or history results of 91 percent modifed for recall bias to 93 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 84 percent. GoC=R+ S+ D+

2015: Estimate informed by reported data. Results from recent measles outbreak investigation, that included a review of routine immunization, suggests that actual coverage levels are likely lower than those suggested by the reported coverage. GoC=R+ S+ D+

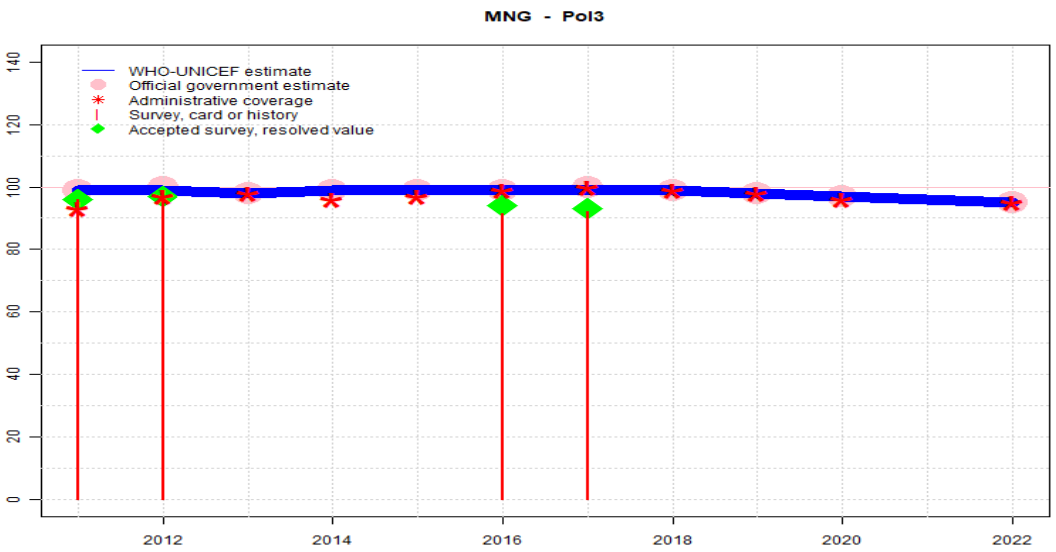
2014: Estimate informed by reported data. GoC=R+ S+ D+

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

2012: Estimate informed by reported data supported by survey. Survey evidence of 98 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey 2013 card or history results of 98 percent modifed for recall bias to 98 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 98 percent and 3rd dose card only coverage of 97 percent. GoC=R+ S+ D+

2011: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey 2013 card or history results of 96 percent modifed for recall bias to 96 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 95 percent and 3rd dose card only coverage of 93 percent. GoC=R+ S+ D+

Mongolia - Pol3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	99	98	99	99	99	99	99	98	97	96	95
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●	●	●●
Official	99	100	98	99	99	99	100	99	98	97	NA	95
Administrative	93	97	98	96	97	99	100	99	98	96	NA	95
Survey	95.9	97.6	NA	NA	NA	91.3	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:

2022: Estimate informed by reported data. A 2022 study of randomly selected provincial and district vaccination centres documents disruptions to the delivery of infant routine immunization (using Penta3 and MMR1 as proxy) during 2021 compared to 2019-2020 due to the COVID-19 pandemic. An unexplained decrease of 10 percent is observed in the reported target population for some antigens. GoC=R+ D+

2021: Estimate informed by interpolation between reported data. An unexplained decrease of 10 percent in the reported target population is observed between 2020 and 2021 alongside declines in reported number of doses administered. Estimate of 96 percent changed from previous revision value of 97 percent. GoC=No accepted empirical data

2020: Estimate informed by reported data. GoC=R+ D+

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

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

2017: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey (MICS) 2018 card or history results of 92 percent modifed for recall bias to 93 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 86 percent. GoC=R+ S+ D+

2016: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey (MICS) 2018 card or history results of 91 percent modifed for recall bias to 94 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 84 percent. GoC=R+ S+ D+

2015: Estimate informed by reported data. Results from recent measles outbreak investigation, that included a review of routine immunization, suggests that actual coverage levels are likely lower than those suggested by the reported coverage. GoC=R+ S+ D+

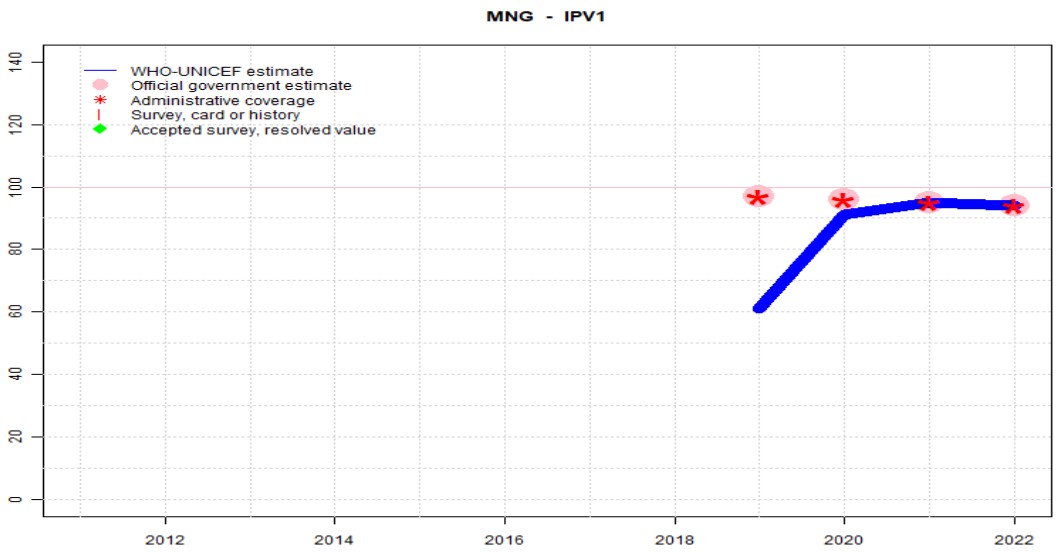
2014: Estimate informed by reported data. GoC=R+ S+ D+

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

2012: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey 2013 card or history results of 98 percent modifed for recall bias to 97 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 98 percent and 3rd dose card only coverage of 97 percent. GoC=R+ S+ D+

2011: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey 2013 card or history results of 96 percent modifed for recall bias to 96 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 95 percent and 3rd dose card only coverage of 93 percent. GoC=R+ S+ D+

Mongolia - IPV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	61	91	95	94
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	•	•	••	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	97	96	95	94
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	97	96	95	94
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

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

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

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).

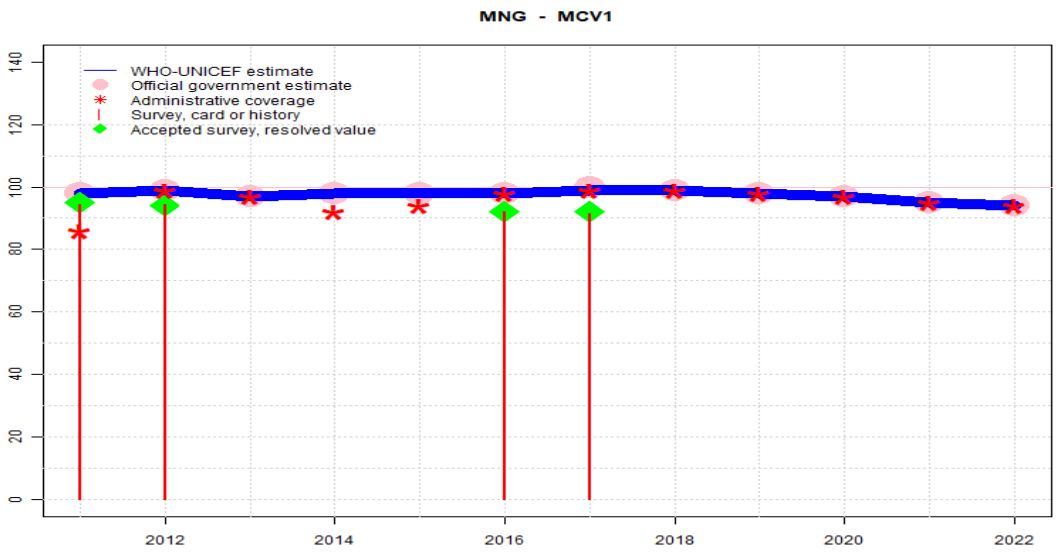
2022: Estimate informed by reported data. A 2022 study of randomly selected provincial and district vaccination centres documents disruptions to the delivery of infant routine immunization (using Penta3 and MMR1 as proxy) during 2021 compared to 2019-2020 due to the COVID-19 pandemic. An unexplained decrease of 10 percent is observed in the reported target population for some antigens. Estimate challenged by: D-

2021: Estimate informed by reported data. An unexplained decrease of 10 percent in the reported target population is observed between 2020 and 2021 alongside declines in reported number of doses administered. GoC=R+ D+

2020: Programme reports 96 percent coverage achieved in 95 percent of the national target population. Estimate is based on annualized coverage for the total national target population. Estimate challenged by: R-

2019: Inactivated polio virus vaccine introduced during April 2019. Programme reports 97 percent coverage achieved in 63 percent of the national target population. Estimate is based on annualized coverage for the total national target population. Estimate challenged by: R-

Mongolia - MCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	98	99	97	98	98	98	99	99	98	97	95	94
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●	●●	●●
Official	98	99	97	98	98	98	100	99	98	97	95	94
Administrative	86	99	97	92	94	98	99	99	98	97	95	94
Survey	94.5	94.2	NA	NA	NA	92.2	91.6	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:

2022: Estimate informed by reported data. A 2022 study of randomly selected provincial and district vaccination centres documents disruptions to the delivery of infant routine immunization (using Penta3 and MMR1 as proxy) during 2021 compared to 2019-2020 due to the COVID-19 pandemic. An unexplained decrease of 10 percent is observed in the reported target population for some antigens. GoC=R+ D+

2021: Estimate informed by reported data. An unexplained decrease of 10 percent in the reported target population is observed between 2020 and 2021 alongside declines in reported number of doses administered. GoC=R+ D+

2020: Estimate informed by reported data. GoC=R+ D+

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

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

2017: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). GoC=R+ S+ D+

2016: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). GoC=R+ S+ D+

2015: Estimate informed by reported data. Results from recent measles outbreak investigation, that included a review of routine immunization, suggests that actual coverage levels are likely lower than those suggested by the reported coverage. GoC=R+ S+ D+

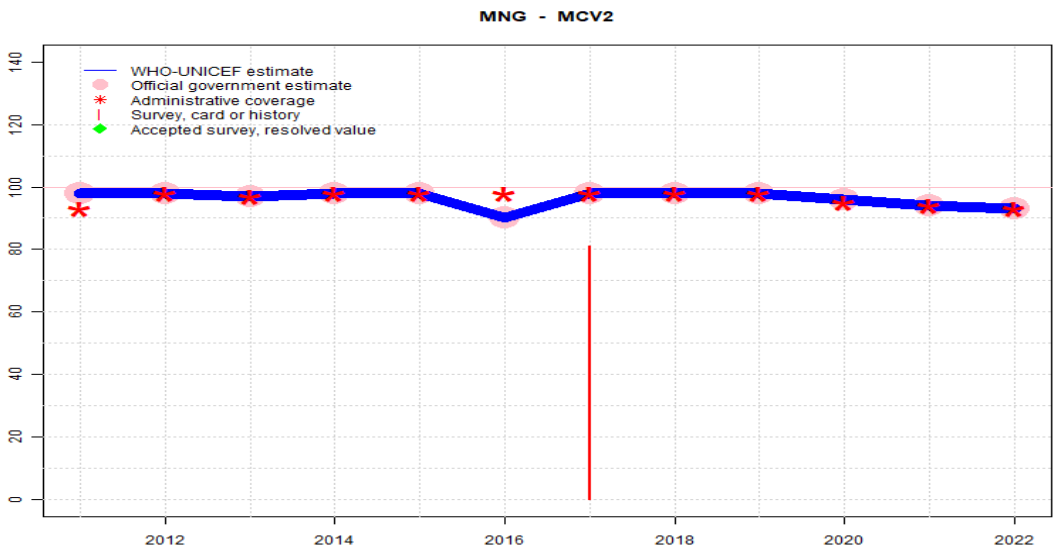
2014: Estimate informed by reported data. GoC=R+ S+ D+

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

2012: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). GoC=R+ S+ D+

2011: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 1 survey(s). GoC=R+ S+ D+

Mongolia - MCV2



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	98	98	97	98	98	90	98	98	98	96	94	93
Estimate GoC	●●	●	●	●	●	●●	●●	●●	●	●●	●	●
Official	98	98	97	98	98	90	98	98	98	96	94	93
Administrative	93	98	97	98	98	98	98	98	98	95	94	93
Survey	NA	NA	NA	NA	NA	NA	81.2	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.

2022: Estimate informed by reported data. A 2022 study of randomly selected provincial and district vaccination centres documents disruptions to the delivery of infant routine immunization (using Penta3 and MMR1 as proxy) during 2021 compared to 2019-2020 due to the COVID-19 pandemic. An unexplained decrease of 10 percent is observed in the reported target population for some antigens. Estimate challenged by: D-

2021: Estimate informed by reported data. An unexplained decrease of 10 percent in the reported target population is observed between 2020 and 2021 alongside declines in reported number of doses administered. Estimate challenged by: D-

2020: Estimate informed by reported data. GoC=R+ D+

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

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

2017: Estimate informed by reported data. Mongolia Social Indicator Sample Survey (MICS) 2018 results ignored by working group. Survey results for MCV2 are inconsistent with those for other antigens that tend to support reported data. GoC=R+ D+

2016: Estimate informed by reported data. GoC=R+ D+

2015: Estimate informed by reported data. Results from recent measles outbreak investigation, that included a review of routine immunization, suggests that actual coverage levels are likely lower than those suggested by the reported coverage. Estimate challenged by: D-

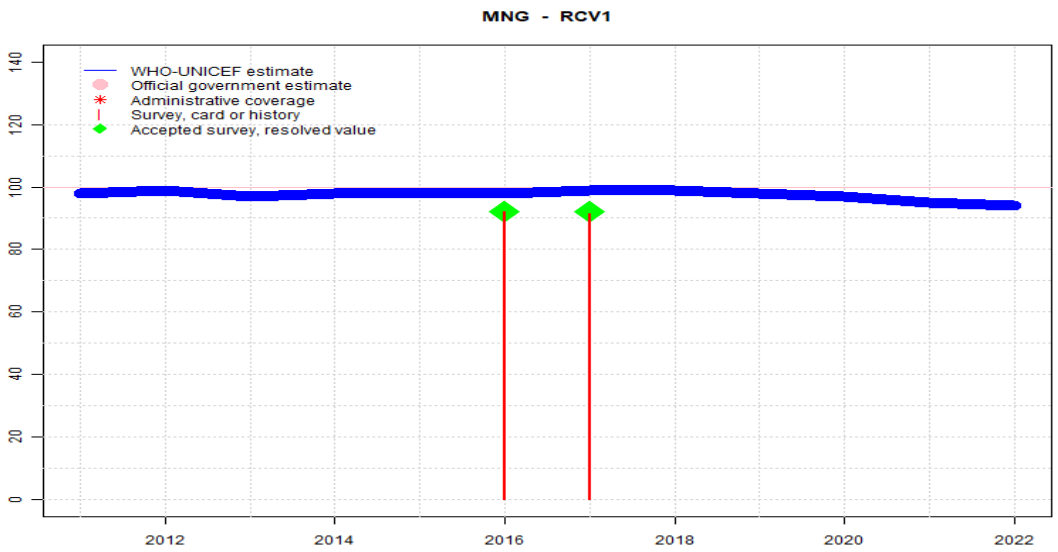
2014: Estimate informed by reported data. Estimate challenged by: D-

2013: Estimate informed by reported data. Estimate challenged by: D-

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

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

Mongolia - RCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	98	99	97	98	98	98	99	99	98	97	95	94
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	92.2	91.6	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.

2022: Estimate based on estimated MCV1. A 2022 study of randomly selected provincial and district vaccination centres documents disruptions to the delivery of infant routine immunization (using Penta3 and MMR1 as proxy) during 2021 compared to 2019-2020 due to the COVID-19 pandemic. An unexplained decrease of 10 percent is observed in the reported target population for some antigens. GoC=R+ D+

2021: Estimate based on estimated MCV1. An unexplained decrease of 10 percent in the reported target population is observed between 2020 and 2021 alongside declines in reported number of doses administered. GoC=R+ D+

2020: Estimate based on estimated MCV1. GoC=R+ D+

2019: Estimate based on estimated MCV1. GoC=R+ S+ D+

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

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

2016: Estimate based on estimated MCV1. GoC=R+ S+ D+

2015: Estimate based on estimated MCV1. Results from recent measles outbreak investigation, that included a review of routine immunization, suggests that actual coverage levels are likely lower than those suggested by the reported coverage. GoC=R+ S+ D+

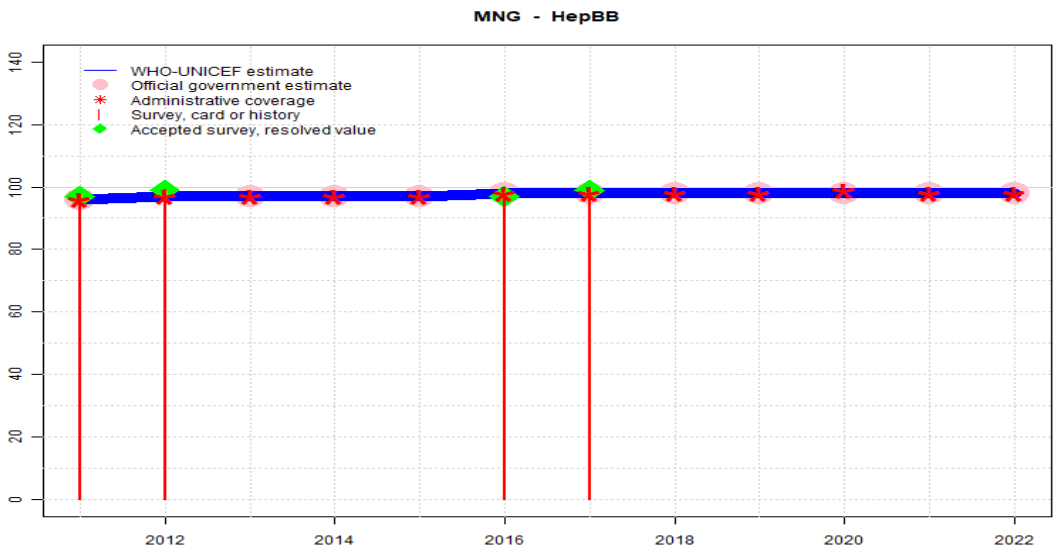
2014: Estimate based on estimated MCV1. GoC=R+ S+ D+

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

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

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

Mongolia - HepBB



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	96	97	97	97	97	98	98	98	98	98	98	98
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●	●●	●●
Official	96	NA	97	97	97	98	98	98	98	98	98	98
Administrative	96	97	97	97	97	98	98	98	98	99	98	98
Survey	97.4	99.1	NA	NA	NA	97.1	98.5	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:

2022: Estimate informed by reported data. A 2022 study of randomly selected provincial and district vaccination centres documents disruptions to the delivery of infant routine immunization (using Penta3 and MMR1 as proxy) during 2021 compared to 2019-2020 due to the COVID-19 pandemic. An unexplained decrease of 10 percent is observed in the reported target population for some antigens. GoC=R+ D+

2021: Estimate informed by reported data. An unexplained decrease of 10 percent in the reported target population is observed between 2020 and 2021 alongside declines in reported number of doses administered. GoC=R+ D+

2020: Estimate informed by reported data. GoC=R+ D+

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

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

2017: Estimate informed by reported data supported by survey. Survey evidence of 99 percent based on 1 survey(s). GoC=R+ S+ D+

2016: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 1 survey(s). GoC=R+ S+ D+

2015: Estimate informed by reported data. Results from recent measles outbreak investigation, that included a review of routine immunization, suggests that actual coverage levels are likely lower than those suggested by the reported coverage. GoC=R+ S+ D+

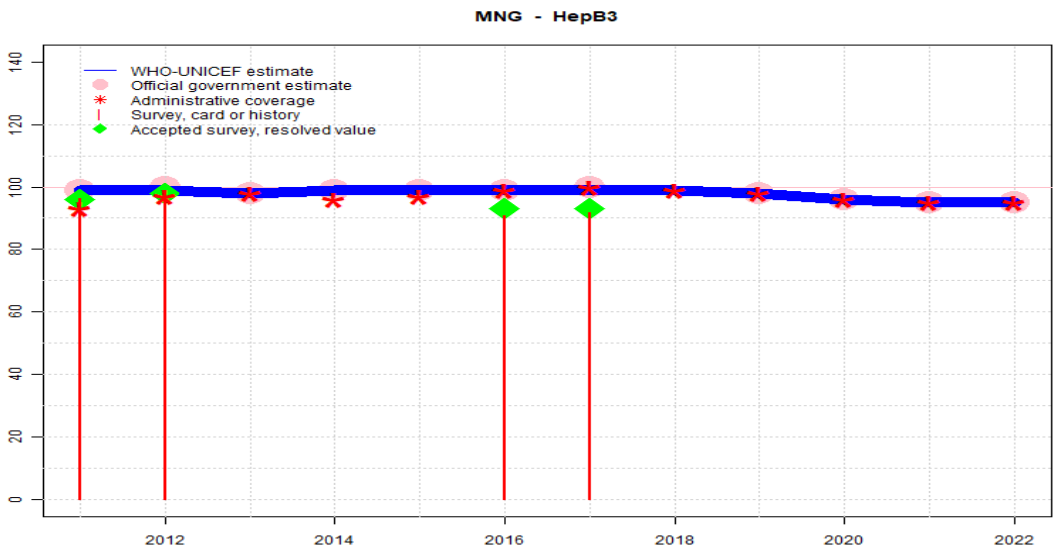
2014: Estimate informed by reported data. GoC=R+ S+ D+

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

2012: Estimate informed by reported administrative data supported by survey. Survey evidence of 99 percent based on 1 survey(s). GoC=R+ S+ D+

2011: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 1 survey(s). GoC=R+ S+ D+

Mongolia - HepB3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	99	98	99	99	99	99	99	98	96	95	95
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●	●●	●●
Official	99	100	98	99	99	99	100	NA	98	96	95	95
Administrative	93	97	98	96	97	99	100	99	98	96	95	95
Survey	96.2	98	NA	NA	NA	90.9	91.9	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:

2022: Estimate informed by reported data. A 2022 study of randomly selected provincial and district vaccination centres documents disruptions to the delivery of infant routine immunization (using Penta3 and MMR1 as proxy) during 2021 compared to 2019-2020 due to the COVID-19 pandemic. An unexplained decrease of 10 percent is observed in the reported target population for some antigens. GoC=R+ D+

2021: Estimate informed by reported data. An unexplained decrease of 10 percent in the reported target population is observed between 2020 and 2021 alongside declines in reported number of doses administered. GoC=R+ D+

2020: Estimate informed by reported data. GoC=R+ D+

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

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

2017: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey (MICS) 2018 card or history results of 92 percent modifed for recall bias to 93 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 89 percent and 3rd dose card only coverage of 86 percent. GoC=R+ S+ D+

2016: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey (MICS) 2018 card or history results of 91 percent modifed for recall bias to 93 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 84 percent. GoC=R+ S+ D+

2015: Estimate informed by reported data. Results from recent measles outbreak investigation, that included a review of routine immunization, suggests that actual coverage levels are likely lower than those suggested by the reported coverage. GoC=R+ S+ D+

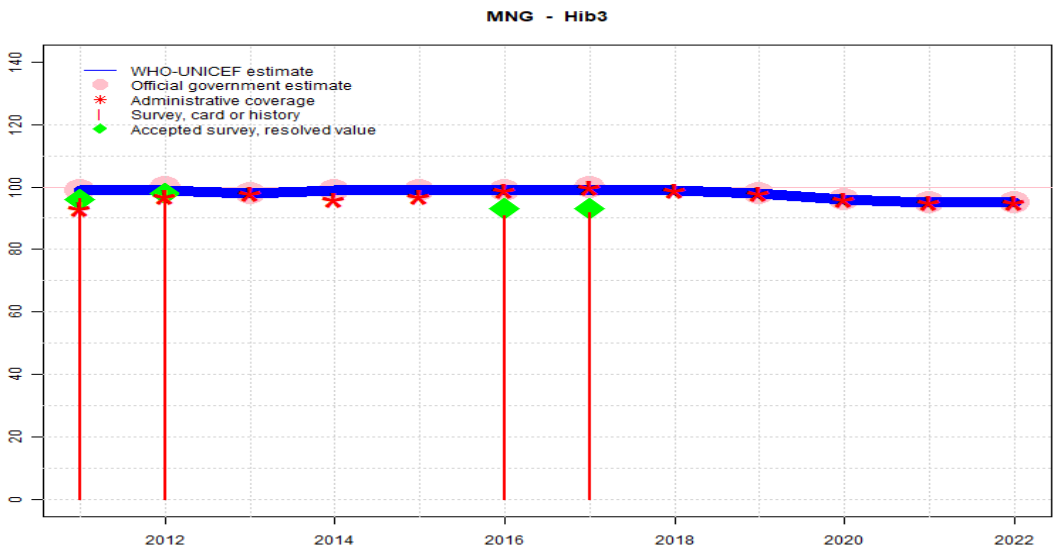
2014: Estimate informed by reported data. GoC=R+ S+ D+

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

2012: Estimate informed by reported data supported by survey. Survey evidence of 98 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey 2013 card or history results of 98 percent modifed for recall bias to 98 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 98 percent and 3rd dose card only coverage of 97 percent. GoC=R+ S+ D+

2011: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey 2013 card or history results of 96 percent modifed for recall bias to 96 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 95 percent and 3rd dose card only coverage of 93 percent. GoC=R+ S+ D+

Mongolia - Hib3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	99	98	99	99	99	99	99	98	96	95	95
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●	●●	●●
Official	99	100	98	99	99	99	100	NA	98	96	95	95
Administrative	93	97	98	96	97	99	100	99	98	96	95	95
Survey	96.2	98	NA	NA	NA	90.9	91.9	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:

2022: Estimate informed by reported data. A 2022 study of randomly selected provincial and district vaccination centres documents disruptions to the delivery of infant routine immunization (using Penta3 and MMR1 as proxy) during 2021 compared to 2019-2020 due to the COVID-19 pandemic. An unexplained decrease of 10 percent is observed in the reported target population for some antigens. GoC=R+ D+

2021: Estimate informed by reported data. An unexplained decrease of 10 percent in the reported target population is observed between 2020 and 2021 alongside declines in reported number of doses administered. GoC=R+ D+

2020: Estimate informed by reported data. GoC=R+ D+

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

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

2017: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey (MICS) 2018 card or history results of 92 percent modifed for recall bias to 93 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 89 percent and 3rd dose card only coverage of 86 percent. GoC=R+ S+ D+

2016: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey (MICS) 2018 card or history results of 91 percent modifed for recall bias to 93 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 84 percent. GoC=R+ S+ D+

2015: Estimate informed by reported data. Results from recent measles outbreak investigation, that included a review of routine immunization, suggests that actual coverage levels are likely lower than those suggested by the reported coverage. GoC=R+ S+ D+

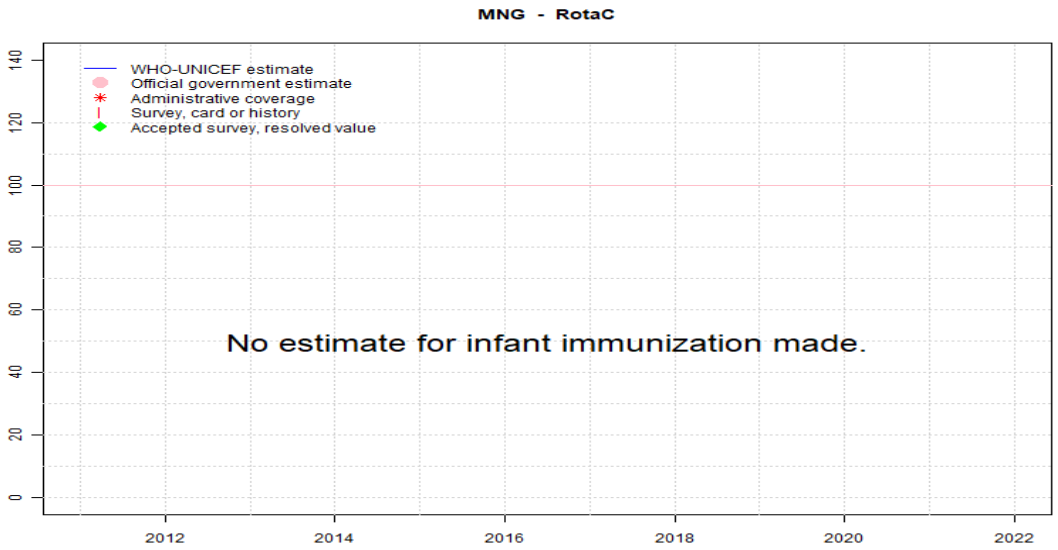
2014: Estimate informed by reported data. GoC=R+ S+ D+

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

2012: Estimate informed by reported data supported by survey. Survey evidence of 98 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey 2013 card or history results of 98 percent modifed for recall bias to 98 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 98 percent and 3rd dose card only coverage of 97 percent. GoC=R+ S+ D+

2011: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 1 survey(s). Mongolia Social Indicator Sample Survey 2013 card or history results of 96 percent modifed for recall bias to 96 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 95 percent and 3rd dose card only coverage of 93 percent. GoC=R+ S+ D+

Mongolia - RotaC



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
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.

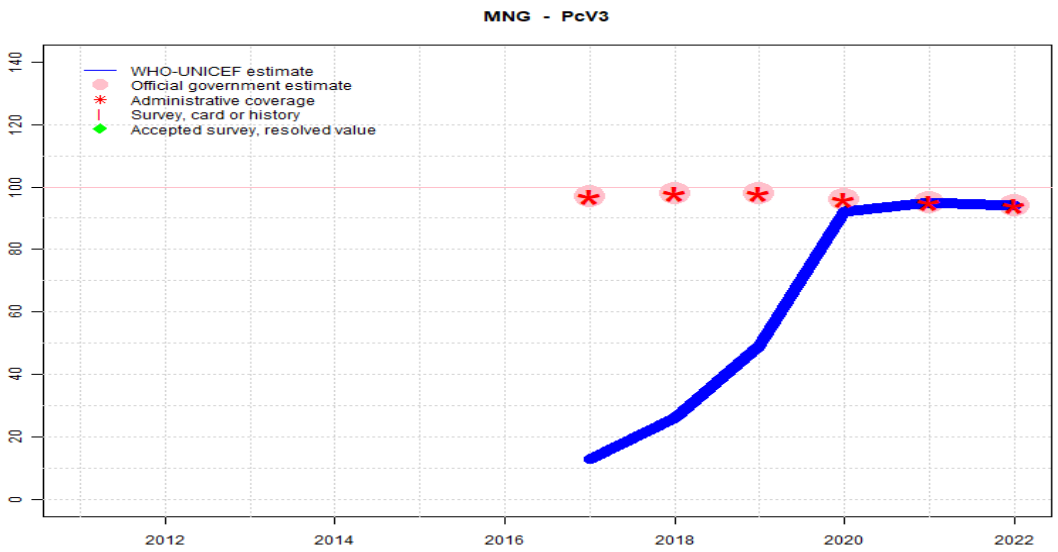
●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk 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.

Mongolia - PcV3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	NA	13	26	49	92	95	94
Estimate GoC	NA	NA	NA	NA	NA	NA	•	•	•	•	••	•
Official	NA	NA	NA	NA	NA	NA	97	98	98	96	95	94
Administrative	NA	NA	NA	NA	NA	NA	97	98	98	96	95	94
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

•• Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

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

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

Description:

2022: Estimate informed by reported data. A 2022 study of randomly selected provincial and district vaccination centres documents disruptions to the delivery of infant routine immunization (using Penta3 and MMR1 as proxy) during 2021 compared to 2019-2020 due to the COVID-19 pandemic. An unexplained decrease of 10 percent is observed in the reported target population for some antigens. Estimate challenged by: D-

2021: Estimate informed by reported data. An unexplained decrease of 10 percent in the reported target population is observed between 2020 and 2021 alongside declines in reported number of doses administered. GoC=R+ D+

2020: Programme reports 96 percent coverage achieved in 95 percent of national target population. Estimated coverage reflects that achieved in the annual national target population. Estimate challenged by: R-

2019: Programme reports 98 percent coverage achieved in 50 percent of national target population. Estimated coverage reflects that achieved in the annual national target population. Estimate challenged by: R-

2018: Programme reports 98 percent coverage achieved in 26 percent of national target population. Estimated coverage reflects that achieved in the annual national target population. Estimate challenged by: R-

2017: Partial vaccine introduction in 2016. Reporting started in 2017. Reported coverage of 97 percent is for 13 percent of national target population. Estimate challenged by: R-

Mongolia - 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 Mongolia Social Indicator Sample Survey (MICS) 2018

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	96.8	12-23 m	1092	93
BCG	Card	91.2	12-23 m	1092	93
BCG	Card or History	98	12-23 m	1092	93
BCG	History	6.8	12-23 m	1092	93
DTP1	C or H <12 months	95.1	12-23 m	1092	93
DTP1	Card	89.1	12-23 m	1092	93
DTP1	Card or History	97	12-23 m	1092	93
DTP1	History	7.9	12-23 m	1092	93
DTP3	C or H <12 months	89.7	12-23 m	1092	93
DTP3	Card	85.6	12-23 m	1092	93
DTP3	Card or History	91.9	12-23 m	1092	93
DTP3	History	6.2	12-23 m	1092	93
HepB1	C or H <12 months	95.1	12-23 m	1092	93
HepB1	Card	89.1	12-23 m	1092	93
HepB1	Card or History	97	12-23 m	1092	93
HepB1	History	7.9	12-23 m	1092	93
HepB3	C or H <12 months	89.7	12-23 m	1092	93
HepB3	Card	85.6	12-23 m	1092	93
HepB3	Card or History	91.9	12-23 m	1092	93
HepB3	History	6.2	12-23 m	1092	93
HepBB	C or H <12 months	96.9	12-23 m	1092	93
HepBB	Card	91.2	12-23 m	1092	93
HepBB	Card or History	98.5	12-23 m	1092	93
HepBB	History	7.3	12-23 m	1092	93
Hib1	C or H <12 months	95.1	12-23 m	1092	93
Hib1	Card	89.1	12-23 m	1092	93
Hib1	Card or History	97	12-23 m	1092	93
Hib1	History	7.9	12-23 m	1092	93
Hib3	C or H <12 months	89.7	12-23 m	1092	93
Hib3	Card	85.6	12-23 m	1092	93
Hib3	Card or History	91.9	12-23 m	1092	93
Hib3	History	6.2	12-23 m	1092	93
MCV1	C or H <12 months	87.1	12-23 m	1092	93
MCV1	Card	83.6	12-23 m	1092	93
MCV1	Card or History	91.6	12-23 m	1092	93
MCV1	History	8	12-23 m	1092	93
MCV2	C or H <12 months	65.7	24-35 m	1238	93
MCV2	Card	69.1	24-35 m	1238	93
MCV2	Card or History	81.2	24-35 m	1238	93
MCV2	History	12.2	24-35 m	1238	93
Pol1	C or H <12 months	95.6	12-23 m	1092	93
Pol1	Card	90.1	12-23 m	1092	93
Pol1	Card or History	97.3	12-23 m	1092	93
Pol1	History	7.1	12-23 m	1092	93
Pol3	C or H <12 months	89.8	12-23 m	1092	93
Pol3	Card	85.8	12-23 m	1092	93
Pol3	Card or History	92	12-23 m	1092	93
Pol3	History	6.2	12-23 m	1092	93

2016 Mongolia Social Indicator Sample Survey (MICS) 2018

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94	24-35 m	1238	93
BCG	Card	86.5	24-35 m	1238	93
BCG	Card or History	96.7	24-35 m	1238	93
BCG	History	10.3	24-35 m	1238	93
DTP1	C or H <12 months	91.9	24-35 m	1238	93
DTP1	Card	85.5	24-35 m	1238	93
DTP1	Card or History	95.5	24-35 m	1238	93
DTP1	History	10	24-35 m	1238	93
DTP3	C or H <12 months	87.2	24-35 m	1238	93
DTP3	Card	83.5	24-35 m	1238	93
DTP3	Card or History	90.9	24-35 m	1238	93

DTP3	History	7.4	24-35 m	1238	93
HepB1	C or H <12 months	91.9	24-35 m	1238	93
HepB1	Card	85.5	24-35 m	1238	93
HepB1	Card or History	95.5	24-35 m	1238	93
HepB1	History	10	24-35 m	1238	93
HepB3	C or H <12 months	87.2	24-35 m	1238	93
HepB3	Card	83.5	24-35 m	1238	93
HepB3	Card or History	90.9	24-35 m	1238	93
HepB3	History	7.4	24-35 m	1238	93
HepBB	C or H <12 months	94.4	24-35 m	1238	93
HepBB	Card	86.5	24-35 m	1238	93
HepBB	Card or History	97.1	24-35 m	1238	93
HepBB	History	10.6	24-35 m	1238	93
Hib1	C or H <12 months	91.9	24-35 m	1238	93
Hib1	Card	85.5	24-35 m	1238	93
Hib1	Card or History	95.5	24-35 m	1238	93
Hib1	History	10	24-35 m	1238	93
Hib3	C or H <12 months	87.2	24-35 m	1238	93
Hib3	Card	83.5	24-35 m	1238	93
Hib3	Card or History	90.9	24-35 m	1238	93
Hib3	History	7.4	24-35 m	1238	93
MCV1	C or H <12 months	84.9	24-35 m	1238	93
MCV1	Card	81.7	24-35 m	1238	93
MCV1	Card or History	92.2	24-35 m	1238	93
MCV1	History	10.5	24-35 m	1238	93
Pol1	C or H <12 months	93.6	24-35 m	1238	93
Pol1	Card	85.8	24-35 m	1238	93
Pol1	Card or History	96.3	24-35 m	1238	93
Pol1	History	10.5	24-35 m	1238	93
Pol3	C or H <12 months	87.5	24-35 m	1238	93
Pol3	Card	83.5	24-35 m	1238	93
Pol3	Card or History	91.3	24-35 m	1238	93
Pol3	History	7.7	24-35 m	1238	93

2012 Mongolia Social Indicator Sample Survey 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93.3	12-23 m	1180	99
BCG	Card	97.7	12-23 m	1180	99
BCG	Card or History	99.3	12-23 m	1180	99
BCG	History	1.5	12-23 m	1180	99
DTP1	C or H <12 months	94.5	12-23 m	1180	99
DTP1	Card	98.2	12-23 m	1180	99
DTP1	Card or History	99.1	12-23 m	1180	99
DTP1	History	0.9	12-23 m	1180	99
DTP3	C or H <12 months	92.5	12-23 m	1180	99
DTP3	Card	96.7	12-23 m	1180	99
DTP3	Card or History	98	12-23 m	1180	99
DTP3	History	1.2	12-23 m	1180	99
HepB1	C or H <12 months	94.5	12-23 m	1180	99
HepB1	Card	98.2	12-23 m	1180	99
HepB1	Card or History	99.1	12-23 m	1180	99
HepB1	History	0.9	12-23 m	1180	99
HepB3	C or H <12 months	92.5	12-23 m	1180	99
HepB3	Card	96.7	12-23 m	1180	99
HepB3	Card or History	98	12-23 m	1180	99
HepB3	History	1.2	12-23 m	1180	99
HepBB	C or H <12 months	93.1	12-23 m	1180	99
HepBB	Card	97.6	12-23 m	1180	99
HepBB	Card or History	99.1	12-23 m	1180	99
HepBB	History	1.5	12-23 m	1180	99
Hib1	C or H <12 months	94.5	12-23 m	1180	99
Hib1	Card	98.2	12-23 m	1180	99
Hib1	Card or History	99.1	12-23 m	1180	99
Hib1	History	0.9	12-23 m	1180	99
Hib3	C or H <12 months	92.5	12-23 m	1180	99
Hib3	Card	96.7	12-23 m	1180	99
Hib3	Card or History	98	12-23 m	1180	99
Hib3	History	1.2	12-23 m	1180	99
MCV1	C or H <12 months	86.1	12-23 m	1180	99
MCV1	Card	90.4	12-23 m	1180	99
MCV1	Card or History	94.2	12-23 m	1180	99
MCV1	History	3.8	12-23 m	1180	99
Pol1	C or H <12 months	94.4	12-23 m	1180	99
Pol1	Card	98.2	12-23 m	1180	99
Pol1	Card or History	98.9	12-23 m	1180	99
Pol1	History	0.7	12-23 m	1180	99
Pol3	C or H <12 months	92.3	12-23 m	1180	99
Pol3	Card	96.7	12-23 m	1180	99

Pol3	Card or History	97.6	12-23 m	1180	99
Pol3	History	0.9	12-23 m	1180	99

2011 Mongolia Social Indicator Sample Survey 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	86.5	24-35 m	1236	99
BCG	Card	94.4	24-35 m	1236	99
BCG	Card or History	97.6	24-35 m	1236	99
BCG	History	3.2	24-35 m	1236	99
DTP1	C or H <12 months	86.1	24-35 m	1236	99
DTP1	Card	95.2	24-35 m	1236	99
DTP1	Card or History	97.9	24-35 m	1236	99
DTP1	History	2.8	24-35 m	1236	99
DTP3	C or H <12 months	84.2	24-35 m	1236	99
DTP3	Card	93.4	24-35 m	1236	99
DTP3	Card or History	96.2	24-35 m	1236	99
DTP3	History	2.8	24-35 m	1236	99
HepB1	C or H <12 months	86.1	24-35 m	1236	99
HepB1	Card	95.2	24-35 m	1236	99
HepB1	Card or History	97.9	24-35 m	1236	99
HepB1	History	2.8	24-35 m	1236	99
HepB3	C or H <12 months	84.2	24-35 m	1236	99
HepB3	Card	93.4	24-35 m	1236	99
HepB3	Card or History	96.2	24-35 m	1236	99
HepB3	History	2.8	24-35 m	1236	99
HepBB	C or H <12 months	86	24-35 m	1236	99
HepBB	Card	94.4	24-35 m	1236	99
HepBB	Card or History	97.4	24-35 m	1236	99
HepBB	History	3.1	24-35 m	1236	99
Hib1	C or H <12 months	86.1	24-35 m	1236	99
Hib1	Card	95.2	24-35 m	1236	99
Hib1	Card or History	97.9	24-35 m	1236	99
Hib1	History	2.8	24-35 m	1236	99
Hib3	C or H <12 months	84.2	24-35 m	1236	99
Hib3	Card	93.4	24-35 m	1236	99
Hib3	Card or History	96.2	24-35 m	1236	99
Hib3	History	2.8	24-35 m	1236	99
MCV1	C or H <12 months	79.1	24-35 m	1236	99
MCV1	Card	89.2	24-35 m	1236	99
MCV1	Card or History	94.5	24-35 m	1236	99
MCV1	History	5.3	24-35 m	1236	99
Pol1	C or H <12 months	86	24-35 m	1236	99
Pol1	Card	95.1	24-35 m	1236	99
Pol1	Card or History	97.6	24-35 m	1236	99
Pol1	History	2.4	24-35 m	1236	99
Pol3	C or H <12 months	83.9	24-35 m	1236	99
Pol3	Card	93.4	24-35 m	1236	99
Pol3	Card or History	95.9	24-35 m	1236	99
Pol3	History	2.6	24-35 m	1236	99

2009 Mongolia Multiple Indicator Cluster Survey 2010

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	97.9	12-23 m	-	85
BCG	Card	83.1	12-23 m	-	85
BCG	Card or History	98	12-23 m	944	85
BCG	History	14.9	12-23 m	-	85
DTP1	C or H <12 months	95.5	12-23 m	-	85
DTP1	Card	81.4	12-23 m	-	85
DTP1	Card or History	96	12-23 m	944	85
DTP1	History	14.2	12-23 m	-	85
DTP3	C or H <12 months	92.1	12-23 m	-	85
DTP3	Card	79.1	12-23 m	-	85
DTP3	Card or History	92	12-23 m	944	85
DTP3	History	13.3	12-23 m	-	85
HepBB	C or H <12 months	96.7	12-23 m	-	85
HepBB	Card	82.9	12-23 m	-	85
HepBB	Card or History	96.7	12-23 m	-	85
HepBB	History	13.7	12-23 m	-	85
MCV1	C or H <12 months	86.6	12-23 m	-	85
MCV1	Card	74.6	12-23 m	-	85
MCV1	Card or History	88	12-23 m	944	85
MCV1	History	13.2	12-23 m	-	85
Pol1	C or H <12 months	97.6	12-23 m	-	85
Pol1	Card	84	12-23 m	-	85
Pol1	Card or History	98	12-23 m	944	85
Pol1	History	13.7	12-23 m	-	85

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Pol3	C or H <12 months	93.3	12-23 m	-	85
Pol3	Card	81.8	12-23 m	-	85
Pol3	Card or History	94	12-23 m	944	85
Pol3	History	12	12-23 m	-	85

2004 Mongolia Child and Development 2005 Survey (MICS-3)

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	97.6	12-23 m	724	80
BCG	Card	79.7	12-23 m	724	80
BCG	Card or History	97.6	12-23 m	724	80
BCG	History	17.9	12-23 m	724	80
DTP1	C or H <12 months	92.6	12-23 m	724	80
DTP1	Card	76.7	12-23 m	724	80
DTP1	Card or History	93.6	12-23 m	724	80
DTP1	History	16.9	12-23 m	724	80
DTP3	C or H <12 months	92	12-23 m	724	80
DTP3	Card	76.3	12-23 m	724	80
DTP3	Card or History	93.2	12-23 m	724	80
DTP3	History	16.9	12-23 m	724	80
MCV1	C or H <12 months	76.1	12-23 m	724	80
MCV1	Card	73.7	12-23 m	724	80
MCV1	Card or History	88.2	12-23 m	724	80
MCV1	History	14.5	12-23 m	724	80
Pol1	C or H <12 months	97.1	12-23 m	724	80
Pol1	Card	79.8	12-23 m	724	80
Pol1	Card or History	97.6	12-23 m	724	80
Pol1	History	17.9	12-23 m	724	80
Pol3	C or H <12 months	93	12-23 m	724	80
Pol3	Card	76.3	12-23 m	724	80
Pol3	Card or History	94.2	12-23 m	724	80
Pol3	History	17.9	12-23 m	724	80

1999 Mongolia, Child and Development survey-2000 (MICS-2), 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	89.8	12-23 m	1255	90
BCG	Card or History	95.6	12-23 m	1255	90
BCG	History	5.8	12-23 m	1255	90
DTP1	Card	86.9	12-23 m	1255	90
DTP1	Card or History	91.9	12-23 m	1255	90
DTP1	History	5	12-23 m	1255	90
DTP3	Card	86.8	12-23 m	1255	90
DTP3	Card or History	89.2	12-23 m	1255	90
DTP3	History	2.4	12-23 m	1255	90
MCV1	Card	82.3	12-23 m	1255	90
MCV1	Card or History	85.7	12-23 m	1255	90
MCV1	History	3.3	12-23 m	1255	90
Pol1	Card	87.1	12-23 m	1255	90
Pol1	Card or History	92.3	12-23 m	1255	90
Pol1	History	5.2	12-23 m	1255	90
Pol3	Card	86.9	12-23 m	1255	90
Pol3	Card or History	88.8	12-23 m	1255	90
Pol3	History	2	12-23 m	1255	90

Mongolia - survey details

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