

July 1, 2023; page 1

WHO and UNICEF estimates of national immunization coverage - next revision available July  $15,\,2024$ 

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

- $\mathbf{BCG:}\,$  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

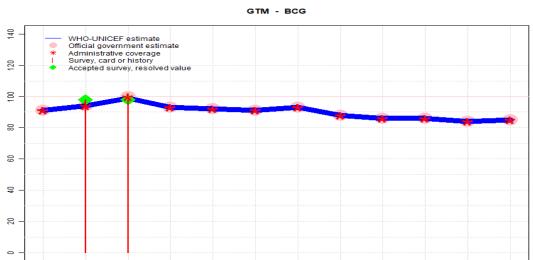
immunization and/or campaign or (ii) a sequential schedule of IPV followed by OPV, WHO and UNICEF estimates for IPV1 reflect coverage with at least one routine dose of IPV among infants <1 year of age among countries. For countries utilizing IPV containing vaccine use only, i.e., no recommended dose 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.

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2022



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	91	94	99	93	92	91	93	88	86	86	84	85
Estimate GoC	•••	•••	•••	•••	•••	••	••	••	••	••	••	••
Official	91	94	100	93	92	91	93	88	86	86	84	85
Administrative	91	94	100	93	92	91	93	88	86	86	84	85
Survey	NA	98	98	NA								

2016

2018

2020

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.

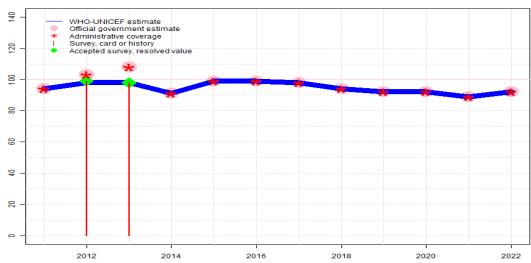
# Description:

- 2022: Estimate informed by reported data. A vaccination coverage survey, conducted in 2022, was focused on the capital area only and thus not included here. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+
- 2021: Estimate informed by reported data. Programme notes challenges with diversion of vaccinators to support delivery of Covid-19 vaccine. For some vaccines recommended during the first year of life, the reported doses administered appears to have declined more than the reported coverage from 2020 to 2021. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports a two months stockout of AD syringes at the national level. GoC=R+ D+  $\,$
- 2019: Estimate informed by reported data. 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. GoC=R+D+
- 2015: Estimate informed by reported data. Programme reports one month stockout. Reported data are provisional. GoC=R+ S+ D+
- 2014: Estimate informed by reported data. Declines in reported coverage during 2014 reflect incomplete reporting and disruptions in routine immunization service delivery resulting from human resource constraints for service delivery and inadequate funding to service delivering NGOs. Programme reports five month stockout of BCG vaccine at national level.. GoC=R+ S+ D+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 98 percent based on 1 survey(s). GoC=R+S+D+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 98 percent based on 1 survey(s). GoC=R+ S+ D+
- 2011: Estimate informed by reported data. Decline in coverage is consistent with patterns in coverage for other antigens. GoC=R+S+D+

2012

2014





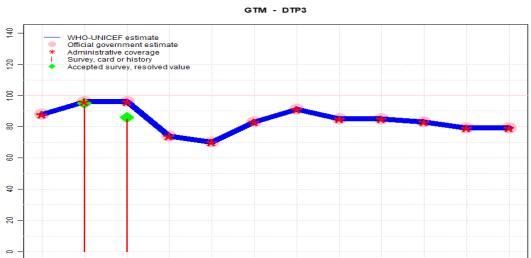
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	94	98	98	91	99	99	98	94	92	92	89	92
Estimate GoC	•••	•	•	•••	•••	••	••	••	••	••	••	••
Official	94	103	108	91	99	99	98	94	92	92	89	92
Administrative	94	103	108	91	99	99	98	94	92	92	89	92
Survey	NA	99	98	NA								

- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
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- 2021: Estimate informed by reported data. Programme notes challenges with diversion of vaccinators to support delivery of Covid-19 vaccine. For some vaccines recommended during the first year of life, the reported doses administered appears to have declined more than the reported coverage from 2020 to 2021. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports a two months stockout of AD syringes at the national level. GoC=R+ D+  $\,$
- 2019: Estimate informed by reported data. 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. GoC=R+D+
- 2015: Estimate informed by reported data. Programme reports two months stockout. Reported data are provisional and suggest recovery from the stockout during 2014. GoC=R+ S+ D+
- 2014: Estimate informed by reported data. Declines in reported coverage during 2014 reflect incomplete reporting and disruptions in routine immunization service delivery resulting from human resource constraints for service delivery and inadequate funding to service delivering NGOs. Programme reports nine month stockout of DTP containing vaccine at national level.. GoC=R+S+D+
- 2013: DTP1 coverage estimated based on DTP3 coverage of 96. Reported data excluded because 108 percent greater than 100 percent. Estimate challenged by: R-
- 2012: DTP1 coverage estimated based on DTP3 coverage of 96. Reported data excluded because 103 percent greater than 100 percent. Estimate challenged by: R-
- 2011: Estimate informed by reported data. GoC=R+S+D+

2022



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	88	96	96	74	70	83	91	85	85	83	79	79
Estimate GoC	•••	•••	•••	•	•	••	••	••	••	••	••	••
Official	88	96	96	74	70	83	91	85	85	83	79	79
Administrative	88	96	96	74	70	83	91	85	85	83	79	79
Survey	NA	93	85	NA								

2016

2018

2020

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

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

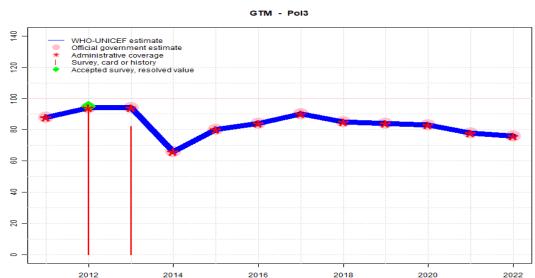
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# Description:

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- 2021: Estimate informed by reported data. Programme notes challenges with diversion of vaccinators to support delivery of Covid-19 vaccine. For some vaccines recommended during the first year of life, the reported doses administered appears to have declined more than the reported coverage from 2020 to 2021. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports a two months stockout of AD syringes at the national level. GoC=R+ D+  $\,$
- 2019: Estimate informed by reported data. 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. GoC=R+ D+
- 2015: Estimate informed by reported data. Programme reports two months stockout. Reported data are provisional. Estimate challenged by: S-
- 2014: Estimate informed by reported data. Declines in reported coverage during 2014 reflect incomplete reporting and disruptions in routine immunization service delivery resulting from human resource constraints for service delivery and inadequate funding to service delivering NGOs. Programme reports nine month stockout of DTP containing vaccine at national level.. Estimate challenged by: S-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 86 percent based on 1 survey(s). Guatema Demographic and Health Survey 2014-2015 card or history results of 85 percent modifed for recall bias to 86 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 79 percent. . GoC=R+S+D+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 1 survey(s). Guatema Demographic and Health Survey 2014-2015 card or history results of 93 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 89 percent and 3rd dose card only coverage of 85 percent. GoC=R+S+D+
- 2011: Estimate informed by reported data. GoC=R+S+D+

2012

2014



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	88	94	94	66	80	84	90	85	84	83	78	76
Estimate GoC	•••	•••	•••	•	••	••	••	••	••	••	••	••
Official	88	94	94	66	80	84	90	85	84	83	78	76
Administrative	88	94	94	66	80	84	90	85	84	83	78	76
Survey	NA	93	82	NA								

- ••• 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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- 2022: Estimate informed by reported data. A vaccination coverage survey, conducted in 2022, was focused on the capital area only and thus not included here. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. Programme reports two months vaccine stockout at national level. GoC=R+D+
- 2021: Estimate informed by reported data. Programme notes challenges with diversion of vaccinators to support delivery of Covid-19 vaccine. For some vaccines recommended during the first year of life, the reported doses administered appears to have declined more than the reported coverage from 2020 to 2021. Programme reports two months vaccine stockout at national level. Estimate of 78 percent changed from previous revision value of 67 percent. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports a two months stockout of AD syringes at the national level. Estimate of 83 percent changed from previous revision value of 72 percent. GoC=R+D+
- 2019: Estimate informed by reported data. Estimate of 84 percent changed from previous revision value of 73 percent. GoC=R+D+
- 2018: Estimate informed by reported data. Estimate of 85 percent changed from previous revision value of 74 percent. GoC=R+D+
- 2017: Estimate informed by reported data. Estimate of 90 percent changed from previous revision value of 79 percent. GoC=R+D+
- 2016: Estimate informed by reported data. Estimate of 84 percent changed from previous revision value of 73 percent. GoC=R+D+
- 2015: Estimate informed by reported data. Programme recovered from prior year stockout. Reported data are provisional. Estimate of 80 percent changed from previous revision value of 69 percent. GoC=R+D+
- 2014: Estimate informed by reported data. Declines in reported coverage during 2014 reflect incomplete reporting and disruptions in routine immunization service delivery resulting from human resource constraints for service delivery and inadequate funding to service delivering NGOs. Programme reports six month stockout of polio vaccine at national level.. Estimate of 66 percent changed from previous revision value of 55 percent. Estimate challenged by: S-
- 2013: Estimate informed by reported data. Guatema Demographic and Health Survey 2014-2015 results ignored by working group. Survey results inconsistent with those of prior year cohort and with results for third dose of DTP containing vaccine. Guatema Demographic and Health Survey 2014-2015 card or history results of 82 percent modified for recall bias to 83 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 76 percent. Estimate of 94 percent changed from previous revision value of 83 percent. GoC=R+S+D+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 1 survey(s). Guatema Demographic and Health Survey 2014-2015 card or history results of 93 percent modified for recall bias to 95 percent based on 1st dose card or

# Guatemala - Pol3

history coverage of 99 percent, 1st dose card only coverage of 89 percent and 3rd dose card only coverage of 85 percent. GoC=R+S+D+2011: Estimate informed by reported data. GoC=R+S+D+



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	95	98	94	90	93	89	91
Estimate GoC	NA	NA	NA	NA	NA	••	••	••	••	•	••	••
Official	NA	NA	NA	NA	NA	95	98	94	90	93	89	91
Administrative	NA	NA	NA	NA	NA	95	98	94	90	93	89	91
Survey	NA											

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

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# Description:

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 vaccination coverage survey, conducted in 2022, was focused on the capital area only and thus not included here. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+D+

2021: Estimate informed by reported data. Programme notes challenges with diversion of vaccinators to support delivery of Covid-19 vaccine. For some vaccines recommended during the first year of life, the reported doses administered appears to have declined more than the reported coverage from 2020 to 2021. GoC=R+D+

2020: Estimate informed by reported data. Programme reports a two months stockout of AD syringes at the national level. Estimate challenged by: D-

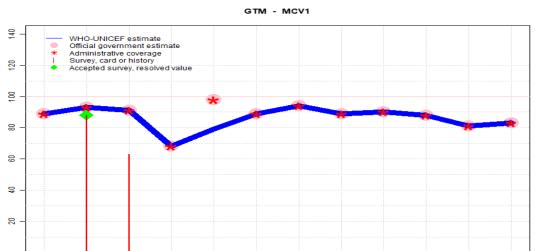
2019: Estimate informed by reported data. GoC=R+ D+

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

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

2016: Estimate informed by reported data. Inactivated polio vaccine introduced in January 2016. GoC=R+ D+

2022



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	89	93	91	68	79	89	94	89	90	88	81	83
Estimate GoC	•••	•••	•••	•	•	••	••	••	••	••	••	••
Official	89	93	91	68	98	89	94	89	90	88	81	83
Administrative	89	93	91	68	98	89	94	89	90	88	81	83
Survey	NA	88	63	NA								

2016

2018

2020

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- ••• 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.

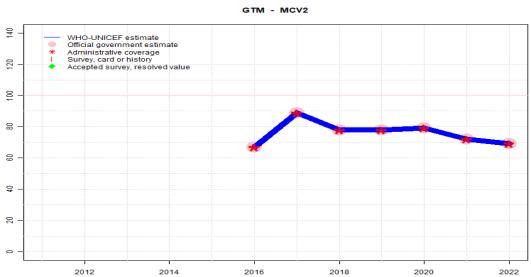
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- 2021: Estimate informed by reported data. Programme notes challenges with diversion of vaccinators to support delivery of Covid-19 vaccine. For some vaccines recommended during the first year of life, the reported doses administered appears to have declined more than the reported coverage from 2020 to 2021. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports a two months stockout of AD syringes at the national level. GoC=R+ D+  $\,$
- 2019: Estimate informed by reported data. 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. . GoC=R+D+
- 2015: Estimate informed by interpolation between reported data. Reported data excluded. Reported data suggests increase in coverage following supply disruptions in 2014 despite report of two months national level stockout during 2015. Reported coverage likely reflect doses delivered to children beyond the target age range. Estimate challenged by: D-
- 2014: Estimate informed by reported data. Declines in reported coverage during 2014 reflect incomplete reporting and disruptions in routine immunization service delivery resulting from human resource constraints for service delivery and inadequate funding to service delivering NGOs. Programme reports seven month stockout of measles containing vaccine at national level.. Estimate challenged by: S-
- 2013: Estimate informed by reported data. Guatema Demographic and Health Survey 2014-2015 results ignored by working group. Survey results likely underestimate actual coverage given survey cohort and recommended age at vaccination for MCV1. GoC=R+ S+ D+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 88 percent based on 1 survey(s). GoC=R+ S+ D+
- 2011: Estimate informed by reported data. GoC=R+S+D+

2012

2014



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	67	89	78	78	79	72	69
Estimate GoC	NA	NA	NA	NA	NA	••	••	••	••	••	••	••
Official	NA	NA	NA	NA	NA	67	89	78	78	79	72	69
Administrative	NA	NA	NA	NA	NA	67	89	78	78	79	72	69
Survey	NA											

- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
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### 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 vaccination coverage survey, conducted in 2022, was focused on the capital area only and thus not included here. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+

2021: Estimate informed by reported data. Programme notes challenges with diversion of vaccinators to support delivery of Covid-19 vaccine. For some vaccines recommended during the first year of life, the reported doses administered appears to have declined more than the reported coverage from 2020 to 2021. GoC=R+D+

2020: Estimate informed by reported data. Programme reports a two months stockout of AD syringes at the national level. GoC=R+D+

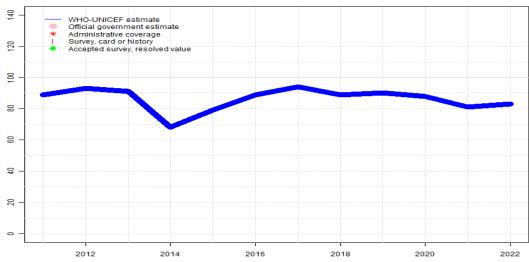
2019: Estimate informed by reported data. GoC=R+ D+

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

2017: Estimate informed by reported data. Roll out after introduction. GoC=R+ D+

2016: Estimate informed by reported data. Second dose of measles containing vaccine introduced in January 2016. GoC=R+ D+





	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	89	93	91	68	79	89	94	89	90	88	81	83
Estimate GoC	•••	•••	•••	•	•	••	••	••	••	••	••	••
Official	NA											
Administrative	NA											
Survey	NA											

- ••• 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 vaccination coverage survey, conducted in 2022, was focused on the capital area only and thus not included here. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+D+

2021: Estimate based on estimated MCV1. Programme notes challenges with diversion of vaccinators to support delivery of Covid-19 vaccine. For some vaccines recommended during the first year of life, the reported doses administered appears to have declined more than the reported coverage from 2020 to 2021. GoC=R+D+

2020: Estimate based on estimated MCV1. Programme reports a two months stockout of AD syringes at the national level. GoC=R+D+

- 2019: Estimate based on estimated MCV1. 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. GoC=R+ D+
- 2015: Estimate based on estimated MCV1. Estimate challenged by: D-
- 2014: Estimate based on estimated MCV1. Declines in reported coverage during 2014 reflect incomplete reporting and disruptions in routine immunization service delivery resulting from human resource constraints for service delivery and inadequate funding to service delivering NGOs.. Estimate challenged by: S-
- 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+

# Guatemala - HepBB



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	31	35	39	21	32	40	53	48	48	48	48	48
Estimate GoC	••	••	••	••	••	••	••	••	•	•	•	•
Official	31	35	39	21	32	40	53	48	NA	NA	NA	NA
Administrative	31	35	39	21	32	40	53	48	NA	NA	NA	NA
Survey	NA											

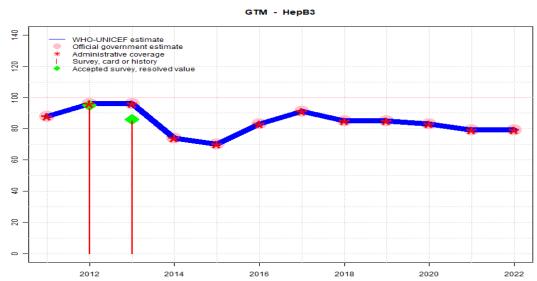
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- 2022: Estimate informed by extrapolation from reported data. A vaccination coverage survey, conducted in 2022, was focused on the capital area only and thus not included here. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. Programme reports one month vaccine stockout at national level. GoC=No accepted empirical data
- 2021: Estimate informed by extrapolation from reported data. Programme notes challenges with diversion of vaccinators to support delivery of Covid-19 vaccine. For some vaccines recommended during the first year of life, the reported doses administered appears to have declined more than the reported coverage from 2020 to 2021. Programme reports one month vaccine stockout at national level. GoC=No accepted empirical data
- 2020: Estimate informed by extrapolation from reported data. Programme reports a two months stockout of AD syringes at the national level. Programme reports a one month vaccine stockout at national level. GoC=No accepted empirical data
- 2019: Estimate informed by extrapolation from reported data. GoC=No accepted empirical data
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by reported data. GoC=R+ D+  $\,$
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. Declines in reported coverage during 2014 reflect incomplete reporting and disruptions in routine immunization service delivery resulting from human resource constraints for service delivery and inadequate funding to service delivering NGOs.. 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+

# Guatemala - HepB3



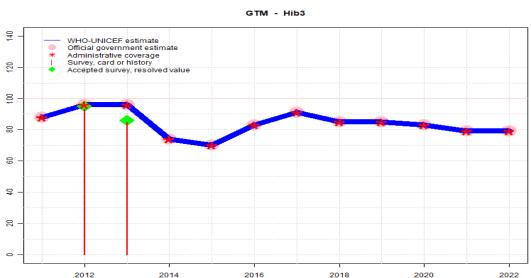
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	_	_		-							-	_
Estimate	88	96	96	74	70	83	91	85	85	83	79	79
Estimate GoC	•••	•••	•••	•	•	••	••	••	••	••	••	••
Official	88	96	96	74	70	83	91	85	85	83	79	79
Administrative	88	96	96	74	70	83	91	85	85	83	79	79
Survey	NA	93	85	NA								

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.

- 2022: Estimate informed by reported data. A vaccination coverage survey, conducted in 2022, was focused on the capital area only and thus not included here. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+
- 2021: Estimate informed by reported data. Programme notes challenges with diversion of vaccinators to support delivery of Covid-19 vaccine. For some vaccines recommended during the first year of life, the reported doses administered appears to have declined more than the reported coverage from 2020 to 2021. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports a two months stockout of AD syringes at the national level. GoC=R+ D+  $\,$
- 2019: Estimate informed by reported data. GoC=R+
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by reported data. GoC=R+ D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. Programme reports two months stockout. Reported data are provisional. Estimate challenged by: S-
- 2014: Estimate informed by reported data. Declines in reported coverage during 2014 reflect incomplete reporting and disruptions in routine immunization service delivery resulting from human resource constraints for service delivery and inadequate funding to service delivering NGOs. Programme reports nine month stockout of DTP containing vaccine at national level.. Estimate challenged by: S-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 86 percent based on 1 survey(s). Guatema Demographic and Health Survey 2014-2015 card or history results of 85 percent modified for recall bias to 86 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 79 percent. Programme reports a five months stockout at national level. GoC=R+S+D+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 1 survey(s). Guatema Demographic and Health Survey 2014-2015 card or history results of 93 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 89 percent and 3rd dose card only coverage of 85 percent. GoC=R+S+D+
- 2011: Estimate informed by reported data. GoC=R+ S+ D+

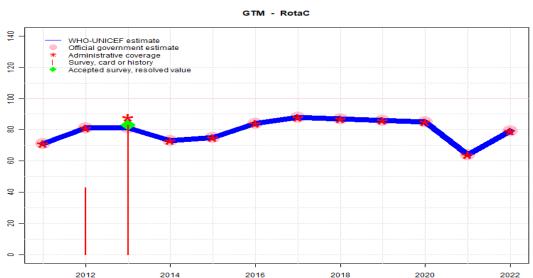


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	88	96	96	74	70	83	91	85	85	83	79	79
Estimate GoC	•••	•••	•••	•	•	••	••	••	••	••	••	••
Official	88	96	96	74	70	83	91	85	85	83	79	79
Administrative	88	96	96	74	70	83	91	85	85	83	79	79
Survey	NA	93	85	NA								

- ••• 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.

- 2022: Estimate informed by reported data. A vaccination coverage survey, conducted in 2022, was focused on the capital area only and thus not included here. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+
- 2021: Estimate informed by reported data. Programme notes challenges with diversion of vaccinators to support delivery of Covid-19 vaccine. For some vaccines recommended during the first year of life, the reported doses administered appears to have declined more than the reported coverage from 2020 to 2021. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports a two months stockout of AD syringes at the national level. GoC=R+ D+  $\,$
- 2019: Estimate informed by reported data. GoC=R+
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by reported data. GoC=R+ D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. Programme reports two months stockout. Reported data are provisional. Estimate challenged by: S-
- 2014: Estimate informed by reported data. Declines in reported coverage during 2014 reflect incomplete reporting and disruptions in routine immunization service delivery resulting from human resource constraints for service delivery and inadequate funding to service delivering NGOs. Programme reports nine month stockout of DTP containing vaccine at national level.. Estimate challenged by: S-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 86 percent based on 1 survey(s). Guatema Demographic and Health Survey 2014-2015 card or history results of 85 percent modifed for recall bias to 86 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 90 percent and 3rd dose card only coverage of 79 percent. . GoC=R+S+D+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 1 survey(s). Guatema Demographic and Health Survey 2014-2015 card or history results of 93 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 89 percent and 3rd dose card only coverage of 85 percent. . GoC=R+S+D+
- 2011: Estimate informed by reported data. GoC=R+ S+ D+

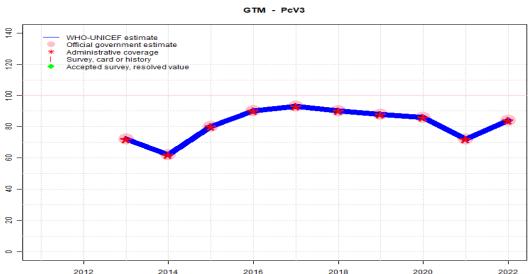


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	71	81	81	73	75	84	88	87	86	85	64	79
Estimate GoC	•	•••	•••	•••	•••	••	••	••	••	••	••	••
Official	71	81	81	73	75	84	88	87	86	85	64	79
Administrative	71	81	88	73	75	84	88	87	86	85	64	79
Survey	NA	43	83	NA								

- ••• 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.

- 2022: Estimate informed by reported data. A vaccination coverage survey, conducted in 2022, was focused on the capital area only and thus not included here. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+
- 2021: Estimate informed by reported data. Programme notes challenges with diversion of vaccinators to support delivery of Covid-19 vaccine. For some vaccines recommended during the first year of life, the reported doses administered appears to have declined more than the reported coverage from 2020 to 2021.. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports a two months stockout of AD syringes at the national level. GoC=R+ D+  $\,$
- 2019: Estimate informed by reported data. 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. GoC=R+D+
- 2015: Estimate informed by reported data. Reported data suggests increase in coverage despite report of one month national level stockout. Reported data are provisional. GoC=R+S+D+
- 2014: Estimate informed by reported data. Declines in reported coverage during 2014 reflect incomplete reporting and disruptions in routine immunization service delivery resulting from human resource constraints for service delivery and inadequate funding to service delivering NGOs. Programme reports three and a half month stockout of rotavirus vaccine at national level.. GoC=R+S+D+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 83 percent based on 1 survey(s). GoC=R+S+D+
- 2012: Estimate informed by reported data. Guatema Demographic and Health Survey 2014-2015 results ignored by working group. Survey results may not reflect coverage during introduction period. GoC=R+S+D+
- 2011: Estimate informed by reported data. Estimate challenged by: D-S-



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	72	62	80	90	93	90	88	86	72	84
Estimate GoC	NA	NA	••	••	••	••	••	••	••	••	••	••
Official	NA	NA	72	62	80	90	93	90	88	86	72	84
Administrative	NA	NA	72	62	80	90	93	90	88	86	72	84
Survey	NA											

- ••• 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.

- 2022: Estimate informed by reported data. A vaccination coverage survey, conducted in 2022, was focused on the capital area only and thus not included here. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. Programme reports one month vaccine stockout at national and subnational levels. GoC=R+ D+
- 2021: Estimate informed by reported data. Programme notes challenges with diversion of vaccinators to support delivery of Covid-19 vaccine. For some vaccines recommended during the first year of life, the reported doses administered appears to have declined more than the reported coverage from 2020 to 2021. Programme reports one month vaccine stockout at national level. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports a two months stockout of AD syringes at the national level. Programme reports a two months vaccine stockout at national level. GoC=R+D+
- 2019: Estimate informed by reported data. 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. GoC=R+ D+
- 2015: Estimate informed by reported data. Programme reports two months stockout. Reported data are provisional. GoC=R+ D+  $\,$
- 2014: Estimate informed by reported data. Declines in reported coverage during 2014 reflect incomplete reporting and disruptions in routine immunization service delivery resulting from human resource constraints for service delivery and inadequate funding to service delivering NGOs. Programme reports five month stockout of PcV vaccine at national level.. GoC=R+D+
- 2013: Estimate informed by reported data. Pneumococcal conjugate vaccine introduced during November 2012. Reporting started during 2013. GoC=R+ D+

# Guatemala - 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.

#### 2013 VI Encuesta Nacional de Salud Materno Infantil 2014-2015

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	97.9	$12\text{-}23~\mathrm{m}$	2391	91
BCG	Card	89.5	$12\text{-}23~\mathrm{m}$	2186	91
BCG	Card or History	98	$12\text{-}23~\mathrm{m}$	2391	91
DTP1	C or H $<$ 12 months	97.1	$12\text{-}23~\mathrm{m}$	2391	91
DTP1	Card	89.5	$12\text{-}23~\mathrm{m}$	2186	91
DTP1	Card or History	97.5	$12\text{-}23~\mathrm{m}$	2391	91
DTP3	C or H $<$ 12 months	79	$12\text{-}23~\mathrm{m}$	2391	91
DTP3	Card	78.6	$12\text{-}23~\mathrm{m}$	2186	91
DTP3	Card or History	84.6	$12\text{-}23 \mathrm{\ m}$	2391	91
HepB1	C  or  H < 12  months	97.1	$12\text{-}23~\mathrm{m}$	2391	91
HepB1	Card	89.5	$12\text{-}23~\mathrm{m}$	2186	91
HepB1	Card or History	97.5	$12\text{-}23 \mathrm{\ m}$	2391	91
HepB3	C  or  H < 12  months	79	$12\text{-}23~\mathrm{m}$	2391	91
HepB3	Card	78.6	$12\text{-}23~\mathrm{m}$	2186	91
HepB3	Card or History	84.6	$12\text{-}23 \mathrm{\ m}$	2391	91
Hib1	C  or  H < 12  months	97.1	12-23  m	2391	91
Hib1	Card	89.5	$12-23 \mathrm{m}$	2186	91
Hib1	Card or History	97.5	$12\text{-}23 \mathrm{\ m}$	2391	91
Hib3	C  or  H < 12  months	79	12-23  m	2391	91
Hib3	Card	78.6	12-23  m	2186	91
Hib3	Card or History	84.6	$12\text{-}23 \mathrm{\ m}$	2391	91
MCV1	C  or  H < 18  months	60.9	$12\text{-}23~\mathrm{m}$	2391	91
MCV1	Card	57.9	$12\text{-}23~\mathrm{m}$	2186	91
MCV1	Card or History	63.2	$12\text{-}23 \mathrm{\ m}$	2391	91

PCV1	C or H $<$ 12 months	87	$12\text{-}23~\mathrm{m}$	2391	91
PCV1	Card	82.4	$12\text{-}23~\mathrm{m}$	2186	91
PCV1	Card or History	88.6	$12\text{-}23~\mathrm{m}$	2391	91
Pol1	C or H $<$ 12 months	97.1	$12\text{-}23~\mathrm{m}$	2391	91
Pol1	Card	89.6	$12\text{-}23~\mathrm{m}$	2186	91
Pol1	Card or History	97.6	$12\text{-}23~\mathrm{m}$	2391	91
Pol3	C or H $<$ 12 months	74.7	$12\text{-}23~\mathrm{m}$	2391	91
Pol3	Card	76.1	$12\text{-}23~\mathrm{m}$	2186	91
Pol3	Card or History	82.5	12-23  m	2391	91
RotaC	C  or  H < 12  months	82.8	12-23  m	2391	91
RotaC	Card	77	$12\text{-}23~\mathrm{m}$	2186	91
RotaC	Card or History	83	$12\text{-}23~\mathrm{m}$	2391	91

#### 2012 VI Encuesta Nacional de Salud Materno Infantil 2014-2015

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Carde soon
BCG	C or H <12 months	98	18-29 m	2446	91
BCG	Card	88.1	18-29 m	2186	91
BCG	Card or History	98.2	18-29 m	2446	91
DTP1	Card of History C or H <12 months		18-29 m	2446	91
DTP1	Card		18-29 m		91
		88.8		2186	
DTP1	Card or History	98.6	18-29 m	2446	91
DTP3	C or H <12 months		18-29 m	2446	91
DTP3	Card	84.9	18-29 m	2186	91
	Card or History	93	18-29 m	2446	91
•	C  or  H < 12  months	98.3	18-29 m	2446	91
HepB1	Card	88.8	18-29 m	2186	91
HepB1	Card or History	98.6	$18-29 \mathrm{\ m}$	2446	91
HepB3	C  or  H < 12  months	88	$18\text{-}29~\mathrm{m}$	2446	91
HepB3	Card	84.9	$18-29 \mathrm{\ m}$	2186	91
HepB3	Card or History	93	18-29 m	2446	91
Hib1	C or H <12 months	98.3	18-29 m	2446	91
Hib1	Card	88.8	18-29 m	2186	91
Hib1	Card or History	98.6	18-29 m	2446	91
Hib3	C or H <12 months	88	18-29 m	2446	91
Hib3	Card	84.9	18-29 m	2186	91
Hib3	Card or History	93	18-29 m	2446	91
MCV1	C or H <18 months		18-29 m	2446	91
MCV1	Card	80.1	18-29 m	2186	91

# Guatemala - survey details

MCV1	Card or History	88.4	18-29 m	2446	91
PCV1	C or H <12 months	44.6	$18-29 \mathrm{\ m}$	2446	91
PCV1	Card	41.4	$18-29 \mathrm{\ m}$	2186	91
PCV1	Card or History	45.5	$18-29 \mathrm{\ m}$	2446	91
Pol1	C or H <12 months	98.4	$18-29 \mathrm{\ m}$	2446	91
Pol1	Card	88.9	$18-29~\mathrm{m}$	2186	91
Pol1	Card or History	98.7	$18-29 \mathrm{\ m}$	2446	91
Pol3	C  or  H < 12  months	87.7	$18-29~\mathrm{m}$	2446	91
Pol3	Card	84.7	$18-29~\mathrm{m}$	2186	91
Pol3	Card or History	93.1	$18\text{-}29~\mathrm{m}$	2446	91
RotaC	C or H $<$ 12 months	42.5	$18-29~\mathrm{m}$	2446	91
RotaC	Card	39.1	$18-29~\mathrm{m}$	2186	91
RotaC	Card or History	42.7	$18\text{-}29~\mathrm{m}$	2446	91
2007 Gu	atemala, Encuesta	Nacional	de Salud	Matern	no Infantil 2008-2009
Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	96.7	12-23 m	1861	87
DTP1	Card or History	95.7	12-23 m	1861	87
DTP3	Card or History	84.3	12-23 m	1861	87
Pol1		95.7		1861	87
Pol3	Card or History	85.2	$12-23 \mathrm{m}$	1861	87
2006 Gu	atemala, Encuesta	Nacional	de Salud	Materr	no Infantil 2008-2009
Vaccine	C C 4: 41 1	0		0 1	G 1
v accinc	Confirmation method	Coverage	Age cohort	Sample	Cards seen

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Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
MCV1	Card or History	89.7	$24\text{-}35~\mathrm{m}$	1861	87

# 2001 Guatemala, Encuesta Nacional de Salud Materno Infantil 2002

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	91.9	$12\text{-}23~\mathrm{m}$	1487	69
DTP1	Card or History	93	$12\text{-}23~\mathrm{m}$	1487	69
DTP3	Card or History	76.7	$12\text{-}23 \mathrm{\ m}$	1487	69
MCV1	Card or History	74.7	$12\text{-}23 \mathrm{\ m}$	1487	69
Pol1	Card or History	94.3	$12\text{-}23 \mathrm{\ m}$	1487	69
Pol3	Card or History	78.1	$12\text{-}23 \mathrm{\ m}$	1487	69

1998 Guatemala, Encuesta Nacional de Salud Materno Infantil 1998-1999

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	_	12-23 m	848	68
BCG	Card	64.9	12-23 m	848	68
BCG	Card or History	90.4	12-23 m	848	68
BCG	History	25.5	$12-23~\mathrm{m}$	848	68
DTP1	C or H $<$ 12 months	87.5	$12\text{-}23 \mathrm{\ m}$	848	68
DTP1	Card	66.3	$12\text{-}23 \mathrm{\ m}$	848	68
DTP1	Card or History	92.4	$12\text{-}23 \mathrm{\ m}$	848	68
DTP1	History	26.1	$12\text{-}23~\mathrm{m}$	848	68
DTP3	C or H $<$ 12 months	54.5	$12\text{-}23~\mathrm{m}$	848	68
DTP3	Card	55.7	$12\text{-}23 \mathrm{\ m}$	848	68
DTP3	Card or History	70.4	$12\text{-}23 \mathrm{\ m}$	848	68
DTP3	History	14.7	$12\text{-}23 \mathrm{\ m}$	848	68
MCV1	C or H $<$ 12 months	53	$12\text{-}23~\mathrm{m}$	848	68
MCV1	Card	58.9	$12\text{-}23~\mathrm{m}$	848	68
MCV1	Card or History	80.6	$12\text{-}23 \mathrm{\ m}$	848	68
MCV1	History	21.6	$12\text{-}23 \mathrm{\ m}$	848	68
Pol1	C or H $<$ 12 months	59.2	$12\text{-}23~\mathrm{m}$	848	68
Pol1	Card	66.6	$12\text{-}23 \mathrm{\ m}$	848	68
Pol1	Card or History	91.7	$12\text{-}23~\mathrm{m}$	848	68
Pol1	History	25.1	$12\text{-}23 \mathrm{\ m}$	848	68
Pol3	C or H $<$ 12 months	52.2	$12\text{-}23 \mathrm{\ m}$	848	68
Pol3	Card	56.2	$12\text{-}23 \mathrm{\ m}$	848	68
Pol3	Card or History	66.7	$12\text{-}23 \mathrm{\ m}$	848	68
Pol3	History	10.5	$12\text{-}23~\mathrm{m}$	848	68

1997 Guatemala, Encuesta Nacional de Salud Materno Infantil 1998-1999

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	77.2	$24-35 \mathrm{\ m}$	868	68
DTP1	C or H $<$ 12 months	80.2	$24-35 \mathrm{\ m}$	868	68
DTP3	C or H $<$ 12 months	50.8	$24-35 \mathrm{\ m}$	868	68
MCV1	C or H $<$ 12 months	48.5	$24-35 \mathrm{\ m}$	868	68
Pol1	C or H $<$ 12 months	80.7	$24-35 \mathrm{\ m}$	868	68
Pol3	C or H $<$ 12 months	48.7	$24\text{-}35~\mathrm{m}$	868	68
DTP3 MCV1 Pol1	C or H <12 months C or H <12 months C or H <12 months	50.8 48.5 80.7	24-35 m 24-35 m 24-35 m	868 868 868	68 68 68

# Guatemala - 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