

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

- 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

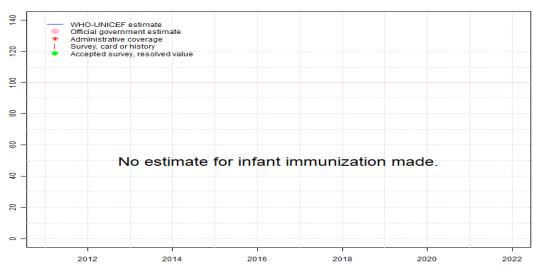
immunization and/or campaign or (ii) a sequential schedule of IPV followed by OPV, WHO and UNICEF estimates for IPV1 reflect coverage with at least one routine dose of IPV among infants <1 year of age among countries. For countries utilizing IPV containing vaccine use only, i.e., no recommended dose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



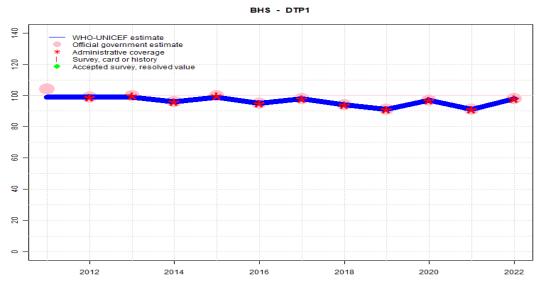


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	NA											

- ••• 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.

Bahamas - DTP1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	99	99	96	99	95	98	94	91	97	91	98
Estimate GoC	••	••	••	•	••	••	•	•	•	•	•	•
Official	104	99	100	96	100	95	98	94	91	97	91	98
Administrative	NA	99	100	96	100	95	98	94	91	97	91	98
Survey	NA											

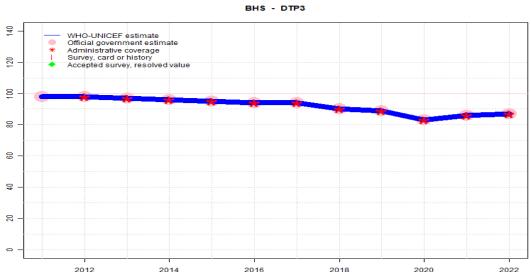
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

- 2022: Estimate informed by reported data. 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 use of an immunization registry as of 2022. Increase in reported coverage for vaccines recommended in the first year of life appears partly due to a decrease of 19 percent in the target population compared to 2021 (and 12 percent lower than that for 2020). Reported number of doses administered for 2022 is lower than that for 2021, and the trend in reported number of doses administered has declined since 2012. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Decline in reported coverage is unexplained. The trend in coverage for other antigens also signals a decline and thus the trend is followed. Estimate of 91 percent changed from previous revision value of 79 percent. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Estimate challenged by: 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. Estimate challenged by: D-
- 2013: Estimate informed by reported data. GoC=R+ D+
- 2012: Estimate informed by reported data. GoC=R+ D+
- 2011: Estimate informed by interpolation between reported data. Reported data excluded because 104 percent greater than 100 percent. GoC=R+

Bahamas - DTP3



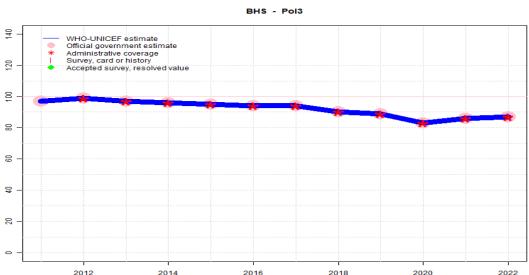
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	98	98	97	96	95	94	94	90	89	83	86	87
Estimate GoC	••	••	••	•	••	••	••	••	•	•	•	•
Official	98	98	97	96	95	94	94	90	89	83	86	87
Administrative	NA	98	97	96	95	94	94	90	89	83	86	87
Survey	NA											

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 reported data. 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 use of an immunization registry as of 2022. Increase in reported coverage for vaccines recommended in the first year of life appears partly due to a decrease of 19 percent in the target population compared to 2021 (and 12 percent lower than that for 2020). Reported number of doses administered for 2022 is lower than that for 2021, and the trend in reported number of doses administered has declined since 2012. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimate of 86 percent changed from previous revision value of 75 percent. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: 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. 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. Estimate challenged by: 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+



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	97	99	97	96	95	94	94	90	89	83	86	87
Estimate GoC	••	••	••	•	••	••	••	••	•	•	•	•
Official	97	99	97	96	95	94	94	90	89	83	86	87
Administrative	NA	99	97	96	95	94	94	90	89	83	86	87
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:

2022: Estimate informed by reported data. 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 use of an immunization registry as of 2022. Increase in reported coverage for vaccines recommended in the first year of life appears partly due to a decrease of 19 percent in the target population compared to 2021 (and 12 percent lower than that for 2020). Reported number of doses administered for 2022 is lower than that for 2021, and the trend in reported number of doses administered has declined since 2012. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate of 86 percent changed from previous revision value of 75 percent. Estimate challenged by: D-

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

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

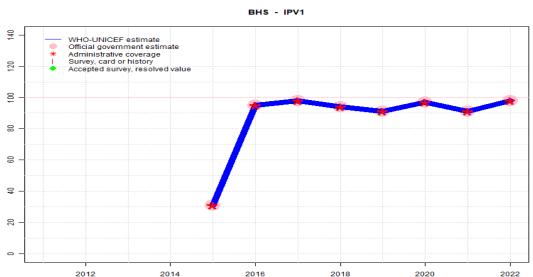
2015: Estimate informed by reported data. GoC=R+ D+

2014: Estimate informed by reported data. Estimate challenged by: 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+



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	31	95	98	94	91	97	91	98
Estimate GoC	NA	NA	NA	NA	••	••	•	•	•	•	•	•
Official	NA	NA	NA	NA	31	95	98	94	91	97	91	98
Administrative	NA	NA	NA	NA	31	95	98	94	91	97	91	98
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:

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. 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 use of an immunization registry as of 2022. Increase in reported coverage for vaccines recommended in the first year of life appears partly due to a decrease of 19 percent in the target population compared to 2021 (and 12 percent lower than that for 2020). Reported number of doses administered for 2022 is lower than that for 2021, and the trend in reported number of doses administered has declined since 2012. Estimate challenged by: D-

2021: Estimate informed by reported data. Decline in reported coverage is unexplained. The trend in coverage for other antigens also signals a decline and thus the trend is followed. Estimate of 91 percent changed from previous revision value of 79 percent. Estimate challenged by: D-

2020: Estimate informed by reported data. Estimate challenged by: D-

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

 $2018{:}$ Estimate informed by reported data. Estimate challenged by: D-

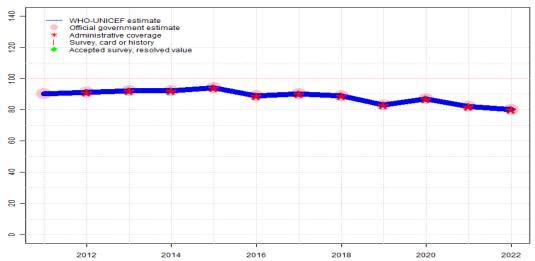
2017: Estimate informed by reported data. Estimate challenged by: $\operatorname{D-}$

2016: Estimate informed by reported data. Estimate is based on reported data following introduction. GoC=R+ D+

2015: Estimate informed by reported data. Inactivated polio vaccine in October 2015. GoC=R+ D+ $\,$

Bahamas - MCV1





	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	90	91	92	92	94	89	90	89	83	87	82	80
Estimate GoC	••	••	••	••	••	••	••	••	••	•	•	•
Official	90	91	92	92	94	89	90	89	83	87	82	80
Administrative	NA	91	92	92	94	89	90	89	83	87	82	80
Survey	NA											

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

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

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

Description:

2022: Estimate informed by reported data. 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 use of an immunization registry as of 2022. Increase in reported coverage for vaccines recommended in the first year of life appears partly due to a decrease of 19 percent in the target population compared to 2021 (and 12 percent lower than that for 2020). Reported number of doses administered for 2022 is lower than that for 2021. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate challenged by: D-

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

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

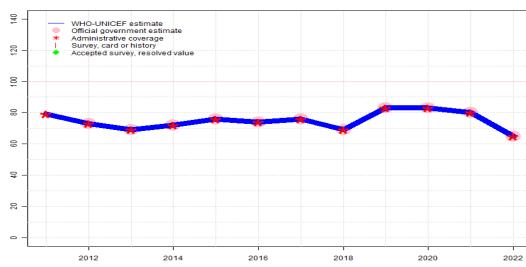
2014: Estimate informed by reported data. GoC=R+ D+

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

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

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





	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	79	73	69	72	76	74	76	69	83	83	80	65
Estimate GoC	••	••	•	•	•	••	••	••	••	•	•	•
Official	NA	73	69	72	76	74	76	69	83	83	80	65
Administrative	79	73	69	72	76	74	76	69	83	83	80	65
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:

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

2022: Estimate informed by reported data. 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 use of an immunization registry as of 2022. Programme indicates that private sector may not follow the recommended age of MMR2 of 15 months, but vaccinate children at pre-school or school entry. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate of 80 percent changed from previous revision value of 82 percent. Estimate challenged by: D-

2020: Estimate informed by reported data. Estimate challenged by: D-

2019: Estimate informed by reported data. Increase in coverage is likely a function of a change in recommended age for the 2nd dose of measles containing vaccine from 4-5 years to 15 months. 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. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

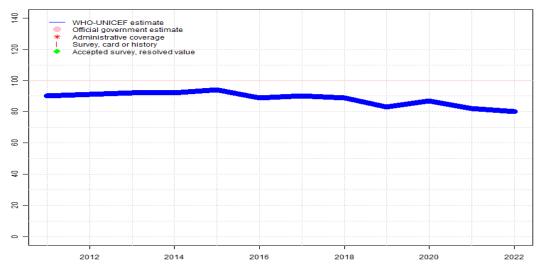
2014: Estimate informed by reported data. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2013: Estimate informed by reported data. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

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

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





	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	-	-		-							-	-
Estimate	90	91	92	92	94	89	90	89	83	87	82	80
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.

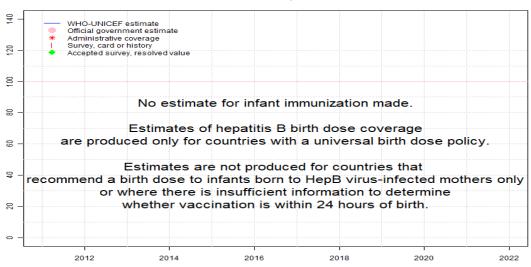
Description:

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. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high quality survey to confirm reported levels of coverage. Estimate challenged by: D-

- 2021: Estimate based on estimated MCV1. Estimate challenged by: D-
- 2020: Estimate based on estimated MCV1. Estimate challenged by: 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+
- 2016: Estimate based on estimated MCV1. GoC=R+D+ 2015: Estimate based on estimated MCV1. GoC=R+D+
- 2014: Estimate based on estimated MCV1. GoC=R+ D+
- 2013: Estimate based on estimated MCV1. GoC=R+ D+
- 2012: Estimate based on estimated MCV1. GoC=R+ D+
- 2011: Estimate based on estimated MCV1. GoC=R+



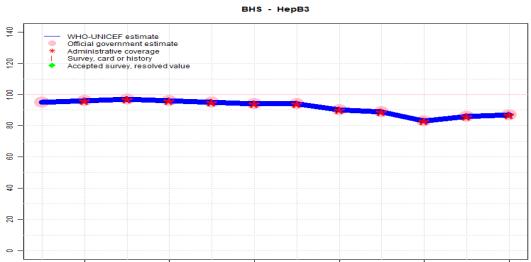


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	NA											

- ••• 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.

Bahamas - HepB3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	95	96	97	96	95	94	94	90	89	83	86	87
Estimate GoC	••	••	••	•	••	••	••	••	•	•	•	•
Official	95	96	97	96	95	94	94	90	89	83	86	87
Administrative	NA	96	97	96	95	94	94	90	89	83	86	87
Survey	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. 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 use of an immunization registry as of 2022. Increase in reported coverage for vaccines recommended in the first year of life appears partly due to a decrease of 19 percent in the target population compared to 2021 (and 12 percent lower than that for 2020). Reported number of doses administered for 2022 is lower than that for 2021, and the trend in reported number of doses administered has declined since 2012. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate of 86 percent changed from previous revision value of 75 percent. Estimate challenged by: D-

2020: Estimate informed by reported data. Estimate challenged by: 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. 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. Estimate challenged by: D-

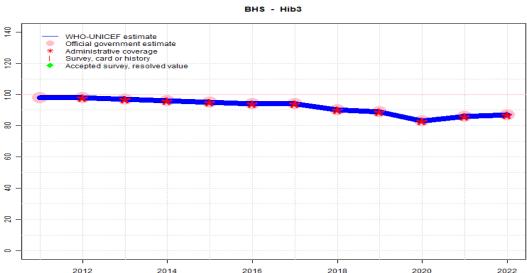
2013: Estimate informed by reported data. GoC=R+ D+

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

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

2012

2014



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	98	98	97	96	95	94	94	90	89	83	86	87
Estimate GoC	••	••	••	•	••	••	••	••	•	•	•	•
Official	98	98	97	96	95	94	94	90	89	83	86	87
Administrative	NA	98	97	96	95	94	94	90	89	83	86	87
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:

2022: Estimate informed by reported data. 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 use of an immunization registry as of 2022. Increase in reported coverage for vaccines recommended in the first year of life appears partly due to a decrease of 19 percent in the target population compared to 2021 (and 12 percent lower than that for 2020). Reported number of doses administered for 2022 is lower than that for 2021, and the trend in reported number of doses administered has declined since 2012. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate of 86 percent changed from previous revision value of 75 percent. Estimate challenged by: D-

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

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

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

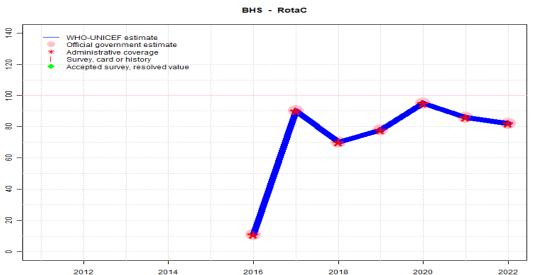
2014: Estimate informed by reported data. Estimate challenged by: D-

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+

Bahamas - RotaC



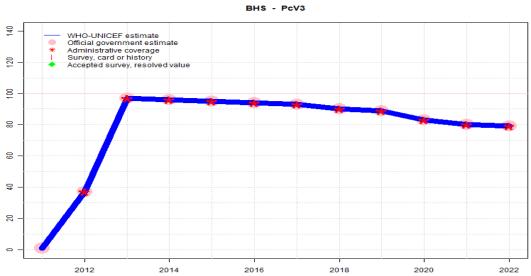
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	11	90	70	78	95	86	82
Estimate GoC	NA	NA	NA	NA	NA	••	••	••	•	•	•	•
Official	NA	NA	NA	NA	NA	11	90	70	78	95	86	82
Administrative	NA	NA	NA	NA	NA	11	90	70	78	95	86	82
Survey	NA											

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 reported data. 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 use of an immunization registry as of 2022. Increase in reported coverage for vaccines recommended in the first year of life appears partly due to a decrease of 19 percent in the target population compared to 2021 (and 12 percent lower than that for 2020). Reported number of doses administered for 2022 is lower than that for 2021. Estimate challenged by: D-
- 2021: Estimate informed by reported data. . Estimate of 86 percent changed from previous revision value of 75 percent. Estimate challenged by: D-
- 2020: Estimate informed by reported data. . Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Programme reports a four-month vaccine stockout. GoC=R+ D+
- 2017: Estimate informed by reported data. Estimate based on reported data the year after vaccine introduction. GoC=R+D+
- 2016: Estimate informed by reported data. Rotavirus introduced in national schedule in 2016. GoC=R+ D+ $\,$



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	1	37	97	96	95	94	93	90	89	83	80	79
Estimate GoC	••	••	••	•	••	••	••	••	•	•	•	•
Official	1	37	97	96	95	94	93	90	89	83	80	79
Administrative	NA	37	97	96	95	94	93	90	89	83	80	79
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. 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 use of an immunization registry as of 2022. Reported coverage ignored consistent with other antigens. Reported number of doses administered for 2022 is lower than that for 2021, and the trend in reported number of doses administered has declined over the past several years. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimate of 80 percent changed from previous revision value of 82 percent. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: 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. 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. Estimate challenged by: D-
- 2013: Estimate informed by reported data. GoC=R+ D+
- 2012: Estimate informed by reported data. Pneumococcal conjugate vaccine introduced nationally in 2012. GoC=R+D+
- 2011: Estimate informed by reported data. GoC=R+

Bahamas: WHO and UNICEF estimates of immunization coverage, 2022 revision

Further information and estimates for previous years are available at:

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

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