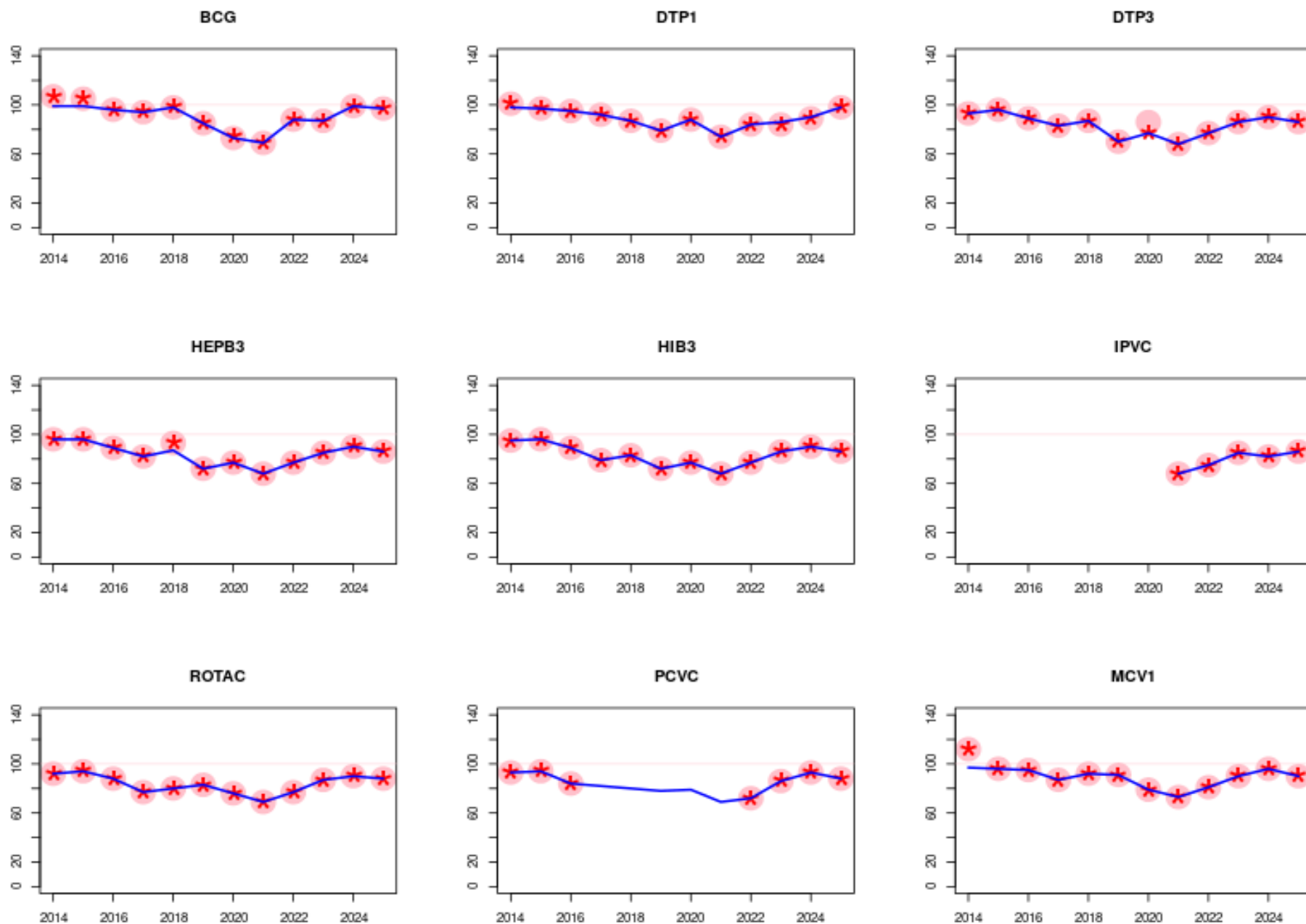




BACKGROUND NOTE Each year WHO and UNICEF jointly review reports submitted by Member States regarding national immunization coverage, finalized survey reports as well as data from published and grey literature. Based on these data, with due consideration to potential biases and the views of local experts, WHO and UNICEF attempt to distinguish between situations where available empirical data accurately reflect immunization system performance and those where the data are likely compromised and present a misleading view of coverage. The estimates refer to immunizations delivered through routine immunization services to children less than 12 months of age, or at the age specified in the recommended immunization schedule, for whom vaccinations are recorded. Immunizations received through supplemental immunization activities, such as polio and measles campaigns, are not included.

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. Bull World Health Organ. * Burton et al. 2012. PLoS One.
* Brown et al. 2013. Open Pub Health Journal. * Danovaro-Holliday et al. 2021. Gates Open Res.

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 6-11, 12-23 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 data collection period.

ABBREVIATIONS AND DEFINITIONS

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.

IPV1: percentage of surviving infants who received the first dose of inactivated polio vaccine.

IPVC: percentage of surviving infants who received the final recommended dose of IPV in the primary series, according to the national immunization schedule primary series (e.g., second or third dose).

MCV1: percentage of surviving infants who received the 1st dose of measles containing vaccine. In countries where the national schedule recommends the 1st dose of MCV at 12 months or later based on the epidemiology of disease in the country, coverage estimates reflect the percentage of children who received the 1st dose of MCV as recommended.

MCV2: percentage of children who received the 2nd dose of measles containing vaccine according to the nationally recommended schedule.

RCV1: percentage of surviving infants who received the 1st dose of rubella containing vaccine. Coverage estimates are based on WHO and UNICEF estimates of coverage for the dose of measles containing vaccine that corresponds to the first measles-rubella combination vaccine. Nationally reported coverage of RCV is not taken into consideration in the production of the estimate.

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.

PCVC: percentage of surviving infants who received the final recommended dose of pneumococcal conjugate vaccine according to the national immunization schedule (e.g., second or third dose).

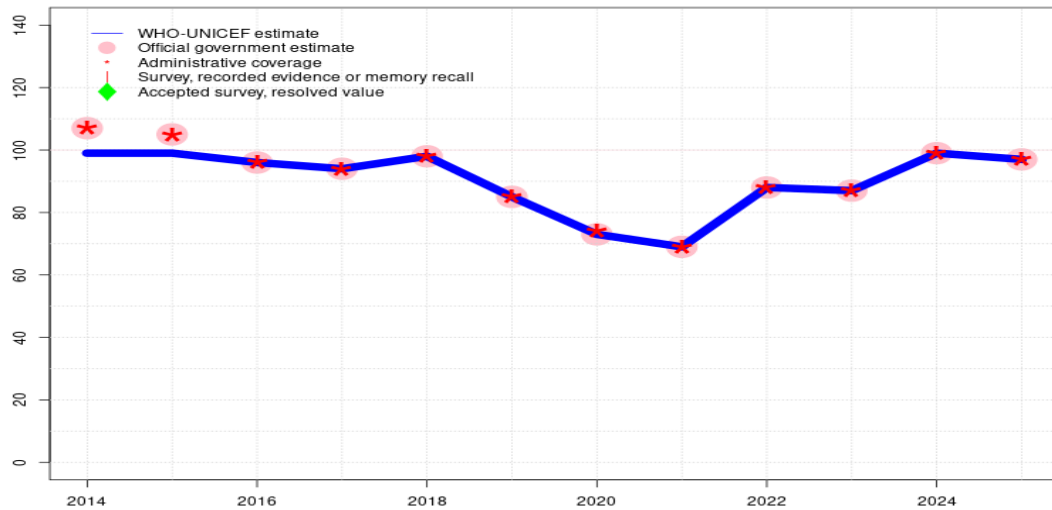
YFV: percentage of surviving infants who received one dose of yellow fever vaccine in countries where YFV is part of the national immunization schedule for children or is recommended in at risk areas; coverage estimates are annualized for the entire cohort of surviving infants.

MENGA: percentage of children who received one dose of meningococcal A conjugate vaccine. MENGA coverage estimates produced for countries in the meningitis belt of sub-Saharan Africa.

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Brazil - BCG

BRA - BCG



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimate	99	99	96	94	98	85	73	69	88	87	99	97
Estimate GoC	•	•	••	••	••	••	••	••	••	••	••	••
Official	107	105	96	94	98	85	73	69	88	87	99	97
Administrative	107	105	96	94	98	85	74	69	88	87	99	97
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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: 2024 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.

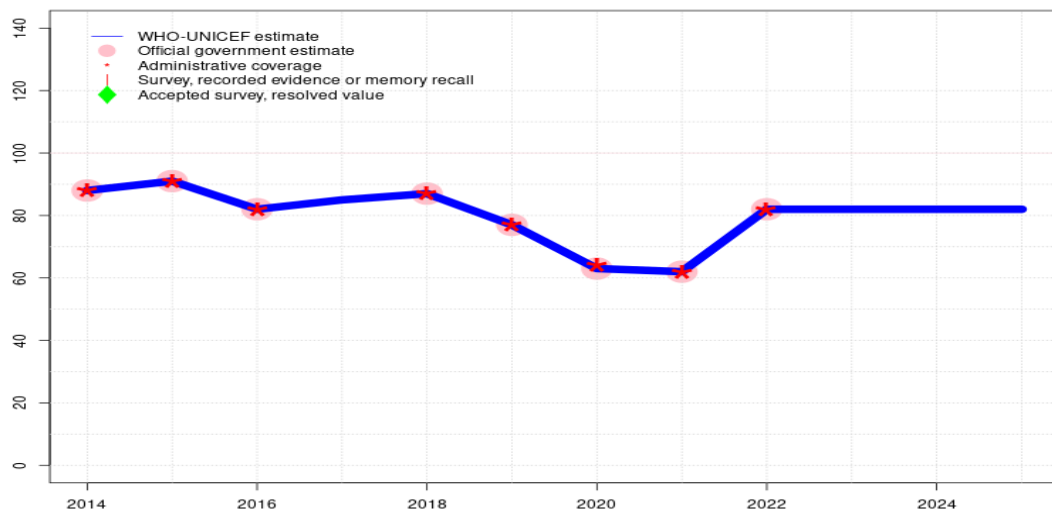
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2025: Estimate informed by reported data. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. GoC=R+ D+
- 2024: Estimate informed by reported data. Estimate of 99 percent changed from previous revision value of 95 percent. GoC=R+ D+
- 2023: Estimate informed by reported data. Estimate of 87 percent changed from previous revision value of 79 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. A nationwide study by Silveira et al. (doi.org/10.1016/j.vaccine.2021.04.046) observed that the COVID-19 pandemic was associated with a 20 percent decrease in childhood vaccinations though much of the decline was indicated to be reversed by the end of 2020, an observation that is not supported by the reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. 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. Programme reports 10 month vaccine stockout. GoC=R+ D+
- 2016: Estimate informed by reported coverage. Programme reports a 1-month vaccine stockout. GoC=R+ D+
- 2015: Estimate of 99 percent assigned by working group. Reported data excluded because 105 percent greater than 100 percent. Programme reports one month stockout. Estimate challenged by: R-
- 2014: Reported data calibrated to 1997 and 2015 levels. Reported data excluded because 107 percent greater than 100 percent. Estimate challenged by: R-

Brazil - HEPBB

BRA - HEPBB



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimate	88	91	82	85	87	77	63	62	82	82	82	82
Estimate GoC	●●	●●	●●	●	●●	●●	●●	●●	●●	●	●	●
Official	88	91	82	-	87	77	63	62	82	-	-	-
Administrative	88	91	82	-	87	77	64	62	82	-	-	-
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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: 2024 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.

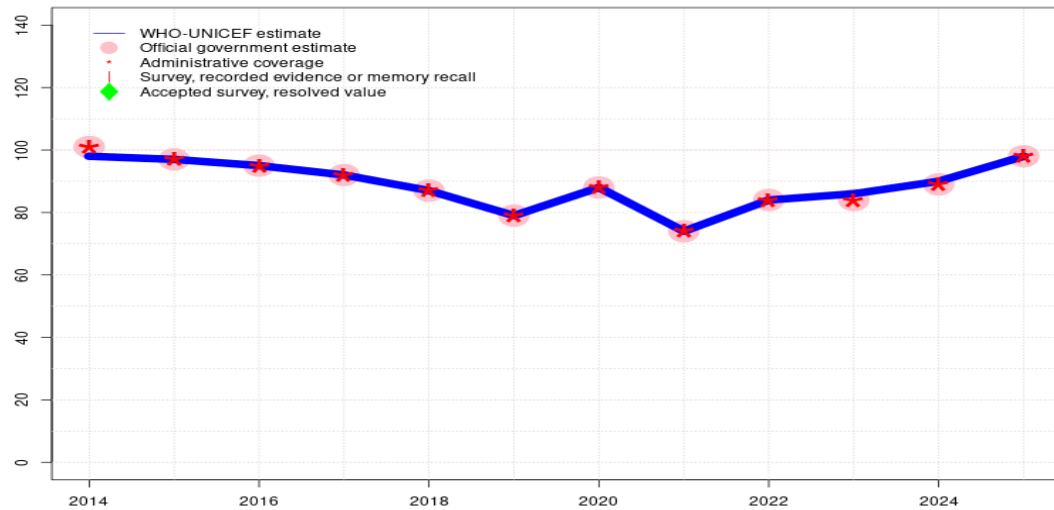
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2025: Estimate informed by extrapolation from reported data. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. From 2022 to 2025, data for the birth dose within 24h is not available. GoC=No accepted empirical data
- 2024: Estimate informed by extrapolation from reported data. Estimate of 82 percent changed from previous revision value of 90 percent. GoC=No accepted empirical data
- 2023: Estimate informed by extrapolation from reported data. Estimate of 82 percent changed from previous revision value of 75 percent. GoC=No accepted empirical data
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. A nationwide study by Silveira et al. (doi.org/10.1016/j.vaccine.2021.04.046) observed that the COVID-19 pandemic was associated with a 20 percent decrease in childhood vaccinations though much of the decline was indicated to be reversed by the end of 2020, an observation that is not supported by the reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. 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 interpolation between reported data. GoC=No accepted empirical data
- 2016: Estimate informed by reported data. Programme reports three months vaccine stockout of HepB vaccine, not clear if combination or single antigen. GoC=R+ D+
- 2015: Estimate informed by reported data. Programme reports two months stockout of mono-valent HepB vaccine. GoC=R+ D+
- 2014: Estimate informed by reported data. Recovery in reported coverage level reflects successful revisions in the information system. GoC=R+ D+

Brazil - DTP1

BRA - DTP1



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimate	98	97	95	92	87	79	88	74	84	86	90	98
Estimate GoC	••	••	••	••	••	••	••	••	••	•	•	••
Official	101	97	95	92	87	79	88	74	84	84	89	98
Administrative	101	97	95	92	87	79	88	74	84	84	89	98
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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: 2024 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.

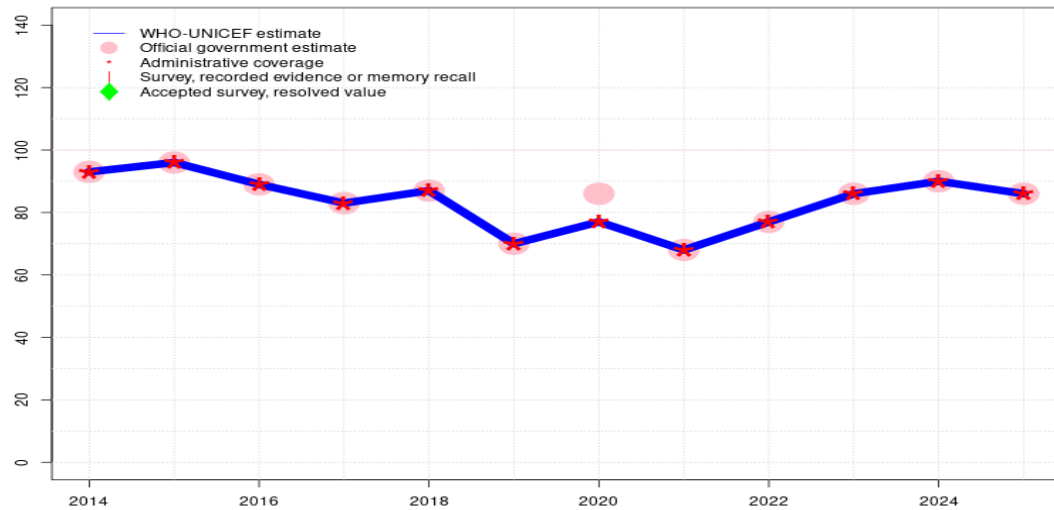
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2025: Estimate informed by reported data. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. GoC=R+ D+
- 2024: Estimate based on DTP3 coverage of 90. Estimate of 90 percent changed from previous revision value of 91 percent. Estimate challenged by: R-
- 2023: Estimate based on DTP3 coverage of 86. Increase in reported coverage reflects intensification activities documented in PAHO newsletter on May 2024 (<https://campaigns.paho.org/t/y-e-mpiycl-dtnkkldjr-0/>). Estimate of 86 percent changed from previous revision value of 90 percent. Estimate challenged by: R-
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. A nationwide study by Silveira et al. (doi.org/10.1016/j.vaccine.2021.04.046) observed that the COVID-19 pandemic was associated with a 20 percent decrease in childhood vaccinations though much of the decline was indicated to be reversed by the end of 2020, an observation that is not supported by the reported data. Increase in reported coverage is unexplained but may reflect recovery from vaccine stockouts reported for 2019. GoC=R+ D+
- 2019: Estimate informed by reported data. Programme reports a one-month (February) followed by a four-month (July-Oct) vaccine stockout at the national level. GoC=R+ D+
- 2018: Estimate informed by reported data. Consistency across vaccines. GoC=R+ D+
- 2017: Estimate informed by reported data. Programme reports two months vaccine stockout. GoC=R+ D+
- 2016: Estimate informed by reported data. Programme reports two months vaccine stockout. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by interpolation between reported data. Reported data excluded because 101 percent greater than 100 percent. GoC=R+ D+

Brazil - DTP3

BRA - DTP3



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimate	93	96	89	83	87	70	77	68	77	86	90	86
Estimate GoC	●●	●●	●●	●●	●●	●●	●	●●	●●	●●	●●	●●
Official	93	96	89	83	87	70	86	68	77	86	90	86
Administrative	93	96	89	83	87	70	77	68	77	86	90	86
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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: 2024 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.

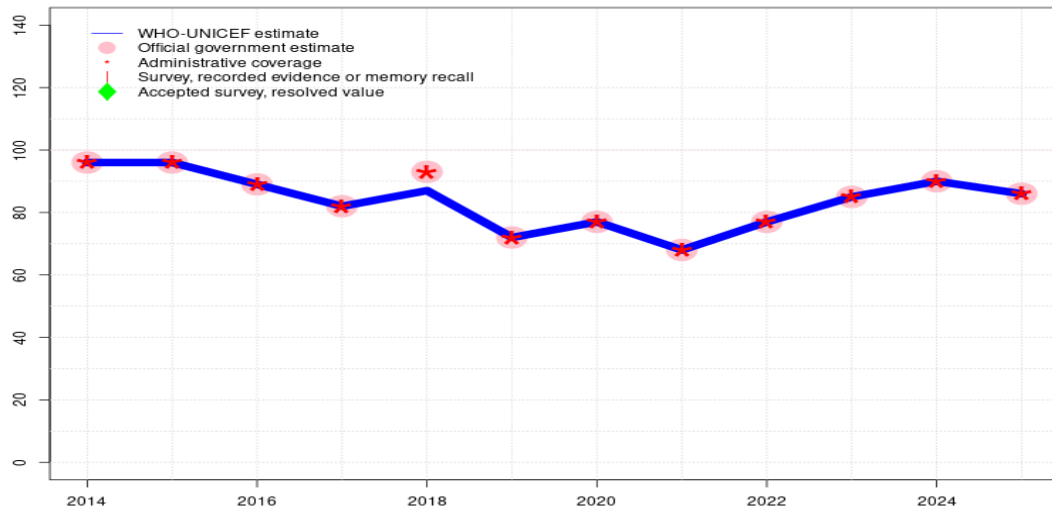
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2025: Estimate informed by reported data. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. GoC=R+ D+
- 2024: Estimate informed by reported data. Estimate of 90 percent changed from previous revision value of 91 percent. GoC=R+ D+
- 2023: Estimate informed by reported data. Increase in reported coverage reflects intensification activities documented in PAHO newsletter on May 2024 (<https://campaigns.paho.org/t/y-e-mpiydl-dtnkkldjr-0/>). Estimate of 86 percent changed from previous revision value of 90 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate based on administrative report. Increase in reported coverage is unexplained but may reflect recovery from vaccine stockouts reported for 2019. Reported data excluded due to an increase from 70 percent to 86 percent with decrease to 68 percent. A nationwide study by Silveira et al. (doi.org/10.1016/j.vaccine.2021.04.046) observed that the COVID-19 pandemic was associated with a 20 percent decrease in childhood vaccinations though much of the decline was indicated to be reversed by the end of 2020, an observation that is not supported by the reported data. Estimate challenged by: R-
- 2019: Estimate informed by reported data. Programme reports a one-month (February) followed by a four-month (July-Oct) vaccine stockout at the national level. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by reported data. Programme reports two months vaccine stockout. GoC=R+ D+
- 2016: Estimate informed by reported data. Programme reports two months vaccine stockout. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+ D+

Brazil - HEPB3

BRA - HEPB3



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimate	96	96	89	82	87	72	77	68	77	85	90	86
Estimate GoC	●●	●●	●●	●●	●	●●	●●	●●	●●	●●	●●	●●
Official	96	96	89	82	93	72	77	68	77	85	90	86
Administrative	96	96	89	82	93	72	77	68	77	85	90	86
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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: 2024 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.

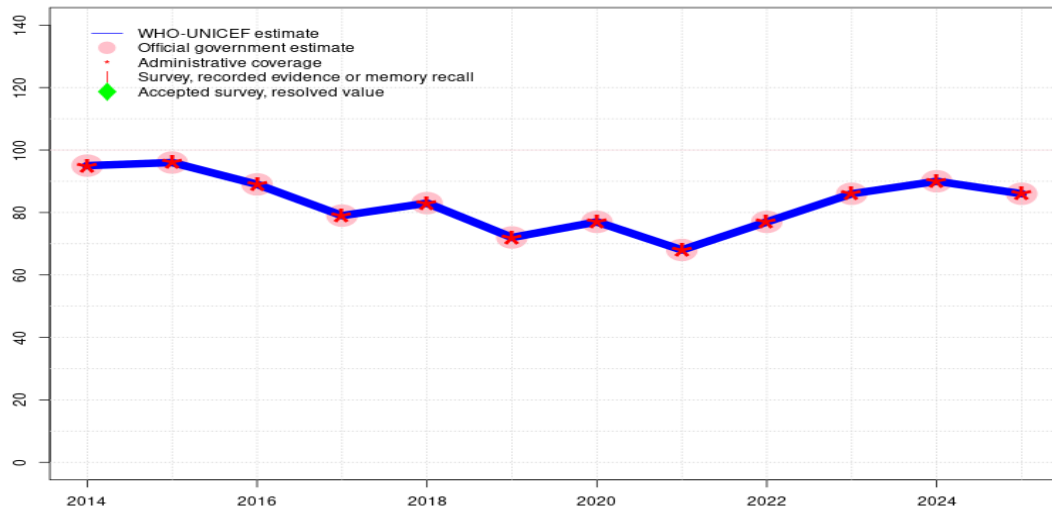
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2025: Estimate informed by reported data. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. GoC=R+ D+
- 2024: Estimate informed by reported data. GoC=R+ D+
- 2023: Estimate informed by reported data. Estimate of 85 percent changed from previous revision value of 90 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. A nationwide study by Silveira et al. (doi.org/10.1016/j.vaccine.2021.04.046) observed that the COVID-19 pandemic was associated with a 20 percent decrease in childhood vaccinations though much of the decline was indicated to be reversed by the end of 2020, an observation that is not supported by the reported data. Increase in reported coverage is unexplained but may reflect recovery from vaccine stockouts reported for 2019. GoC=R+ D+
- 2019: Estimate informed by reported data. Programme reports a one-month (February) followed by a four-month (July-Oct) vaccine stockout at the national level. GoC=R+ D+
- 2018: Estimate informed by estimated DTP3 coverage level. No available explanation for difference in reported coverage levels for HepB3 and DTP3. Reported data excluded due to an increase from 82 percent to 93 percent with decrease to 72 percent. Estimate challenged by: R-
- 2017: Estimate informed by reported data. Programme reports two months vaccine stockout. GoC=R+ D+
- 2016: Estimate informed by reported data. Programme reports three months vaccine stockout of HepB vaccine, not clear if combination or single antigen. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+ D+

Brazil - HIB3

BRA - HIB3



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimate	95	96	89	79	83	72	77	68	77	86	90	86
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	95	96	89	79	83	72	77	68	77	86	90	86
Administrative	95	96	89	79	83	72	77	68	77	86	90	86
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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: 2024 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.

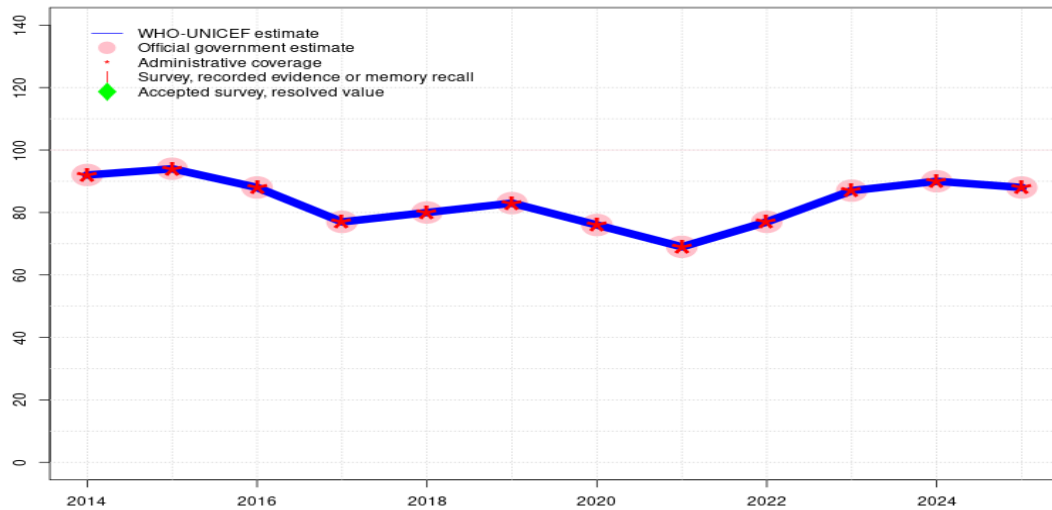
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2025: Estimate informed by reported data. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. GoC=R+ D+
- 2024: Estimate informed by reported data. Estimate of 90 percent changed from previous revision value of 91 percent. GoC=R+ D+
- 2023: Estimate informed by reported data. Estimate of 86 percent changed from previous revision value of 90 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. A nationwide study by Silveira et al. (doi.org/10.1016/j.vaccine.2021.04.046) observed that the COVID-19 pandemic was associated with a 20 percent decrease in childhood vaccinations though much of the decline was indicated to be reversed by the end of 2020, an observation that is not supported by the reported data. Increase in reported coverage is unexplained but may reflect recovery from vaccine stockouts reported for 2019. GoC=R+ D+
- 2019: Estimate informed by reported data. Programme reports a one-month (February) followed by a four-month (July-Oct) vaccine stockout at the national level. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by reported data. Programme reports two months vaccine stockout. GoC=R+ D+
- 2016: Estimate informed by reported data. Programme reports a 1-month vaccine stockout. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+ D+

Brazil - ROTAC

BRA - ROTAC



Description:

- 2025: Estimate informed by reported data. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. GoC=R+ D+
- 2024: Estimate informed by reported data. Estimate of 90 percent changed from previous revision value of 87 percent. GoC=R+ D+
- 2023: Estimate informed by reported data. Estimate of 87 percent changed from previous revision value of 84 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. A nationwide study by Silveira et al. (doi.org/10.1016/j.vaccine.2021.04.046) observed that the COVID-19 pandemic was associated with a 20 percent decrease in childhood vaccinations though much of the decline was indicated to be reversed by the end of 2020, an observation that is not supported by the reported data. 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. Programme reports one month vaccine stockout. 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+

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimate	92	94	88	77	80	83	76	69	77	87	90	88
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	92	94	88	77	80	83	76	69	77	87	90	88
Administrative	92	94	88	77	80	83	76	69	77	87	90	88
Survey	-	-	-	-	-	-	-	-	-	-	-	-

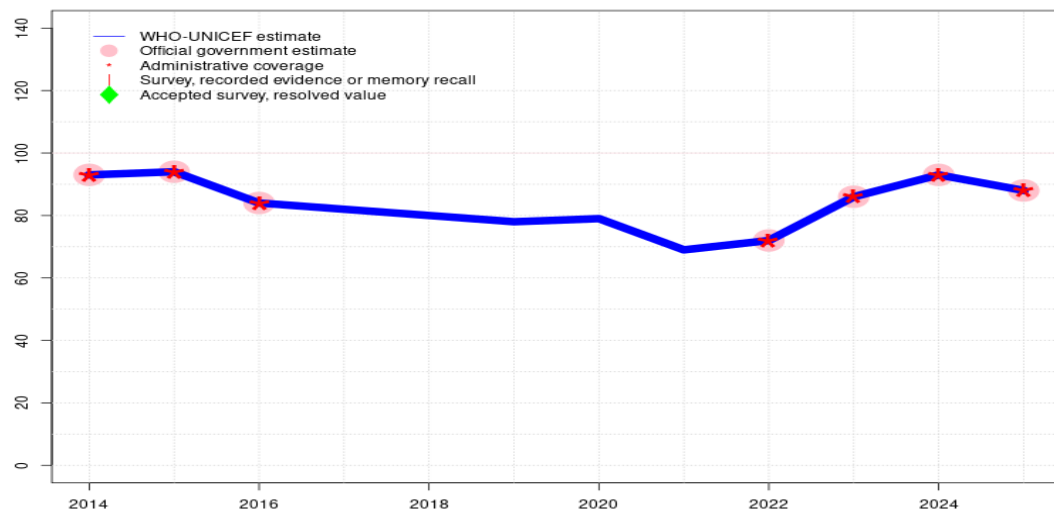
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2024 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.

Brazil - PCVC

BRA - PCVC



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimate	93	94	84	82	80	78	79	69	72	86	93	88
Estimate GoC	●●	●●	●●	●	●	●	●	●	●●	●●	●●	●●
Official	93	94	84	-	-	-	-	-	72	86	93	88
Administrative	93	94	84	-	-	-	-	-	72	86	93	88
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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: 2024 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.

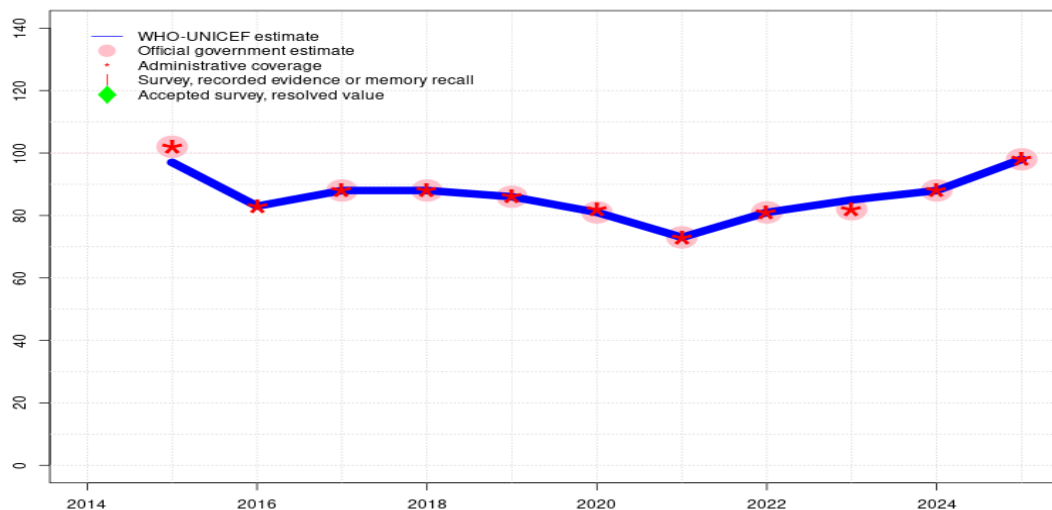
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2025: Estimate informed by reported data. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. GoC=R+ D+
- 2024: Estimate informed by reported data. Estimate of 93 percent changed from previous revision value of 86 percent. GoC=R+ D+
- 2023: Estimate informed by reported data. Estimate of 86 percent changed from previous revision value of 74 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported coverage for the second PCV dose. Coverage for third or booster dose not reported. GoC=No accepted empirical data
- 2020: Estimate informed by reported coverage for the second PCV dose. Coverage for third or booster dose not reported. A nationwide study by Silveira et al. (doi.org/10.1016/j.vaccine.2021.04.046) observed that the COVID-19 pandemic was associated with a 20 percent decrease in childhood vaccinations though much of the decline was indicated to be reversed by the end of 2020, an observation that is not supported by the reported data. GoC=No accepted empirical data
- 2019: Estimate informed by interpolation between reported data. GoC=No accepted empirical data
- 2018: Estimate informed by interpolation between reported data. GoC=No accepted empirical data
- 2017: Estimate informed by interpolation between reported data. GoC=No accepted empirical data
- 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+

Brazil - IPV1

BRA - IPV1



Description:

- 2025: Estimate informed by reported data. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. GoC=R+ D+
- 2024: Estimate informed by reported data. Estimate of 88 percent changed from previous revision value of 91 percent. GoC=R+ D+
- 2023: Estimate based on estimated IPVC coverage. Estimate of 85 percent changed from previous revision value of 83 percent. Estimate challenged by: R-
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. A nationwide study by Silveira et al. (doi.org/10.1016/j.vaccine.2021.04.046) observed that the COVID-19 pandemic was associated with a 20 percent decrease in childhood vaccinations though much of the decline was indicated to be reversed by the end of 2020, an observation that is not supported by the reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. Consistency across vaccines. GoC=R+ D+
- 2017: Estimate informed by reported data. GoC=R+ D+
- 2016: Estimate informed by reported administrative data. Unexplained decline in reported coverage from 2015. GoC=R+ D+
- 2015: Inactivated polio vaccine introduced in 2012 and is recommended as part of a sequential schedule. Reported coverage is over 100 percent. Estimated coverage based on reported DTP1 coverage. Reported data excluded because 102 percent greater than 100 percent. Estimate challenged by: R-

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimate	-	97	83	88	88	86	81	73	81	85	88	98
Estimate GoC	-	●	●●	●●	●●	●●	●●	●●	●●	●	●●	●●
Official	-	102	-	88	88	86	81	73	81	82	88	98
Administrative	-	102	83	88	88	86	82	73	81	82	88	98
Survey	-	-	-	-	-	-	-	-	-	-	-	-

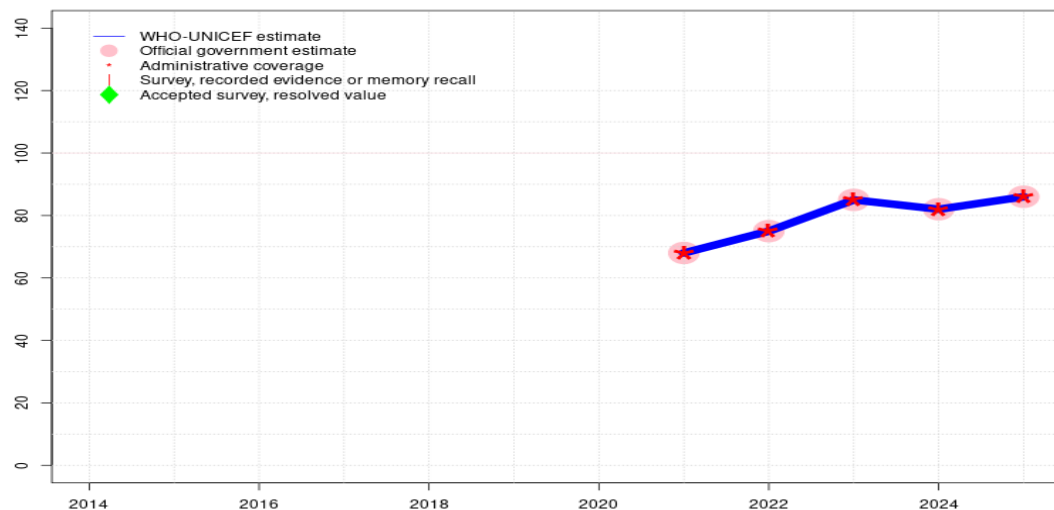
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2024 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.

Brazil - IPV

BRA - IPV



Description:

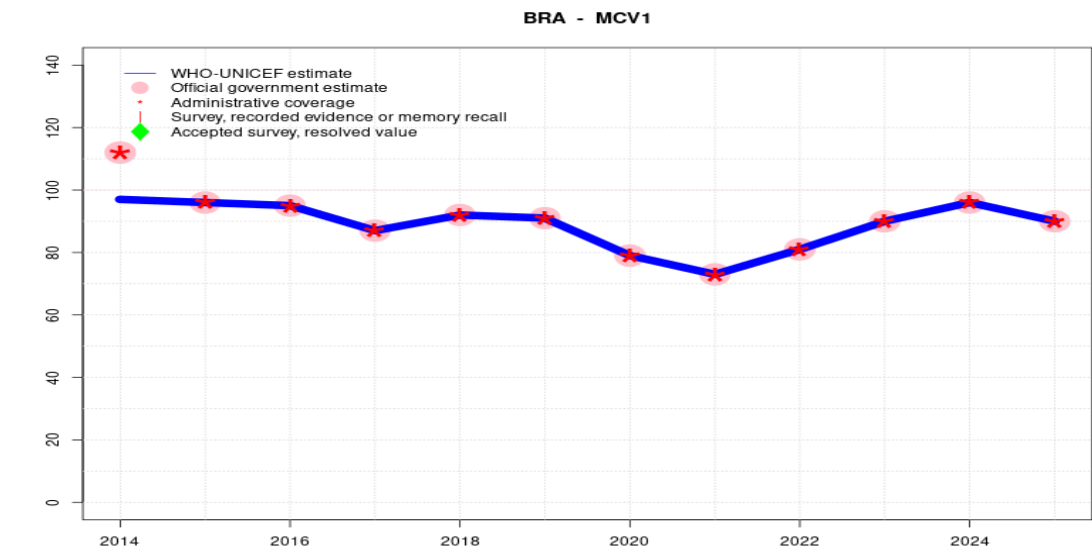
- 2025: Estimate informed by reported data. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. GoC=R+ D+
- 2024: Estimate informed by reported data. Estimate of 82 percent changed from previous revision value of 88 percent. GoC=R+ D+
- 2023: Estimate informed by reported data. Estimate of 85 percent changed from previous revision value of 83 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate of 75 percent changed from previous revision value of 80 percent. GoC=R+ D+
- 2021: Estimate informed by reported data. Third dose of inactivated polio vaccine introduced prior to 2021. Estimate of 68 percent changed from previous revision value of 72 percent. GoC=R+ D+

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimate	-	-	-	-	-	-	-	68	75	85	82	86
Estimate GoC	-	-	-	-	-	-	-	●●	●●	●●	●●	●●
Official	-	-	-	-	-	-	-	68	75	85	82	86
Administrative	-	-	-	-	-	-	-	68	75	85	82	86
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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: 2024 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.



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimate	97	96	95	87	92	91	79	73	81	90	96	90
Estimate GoC	●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	112	96	95	87	92	91	79	73	81	90	96	90
Administrative	112	96	95	87	92	91	79	73	81	90	96	90
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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.

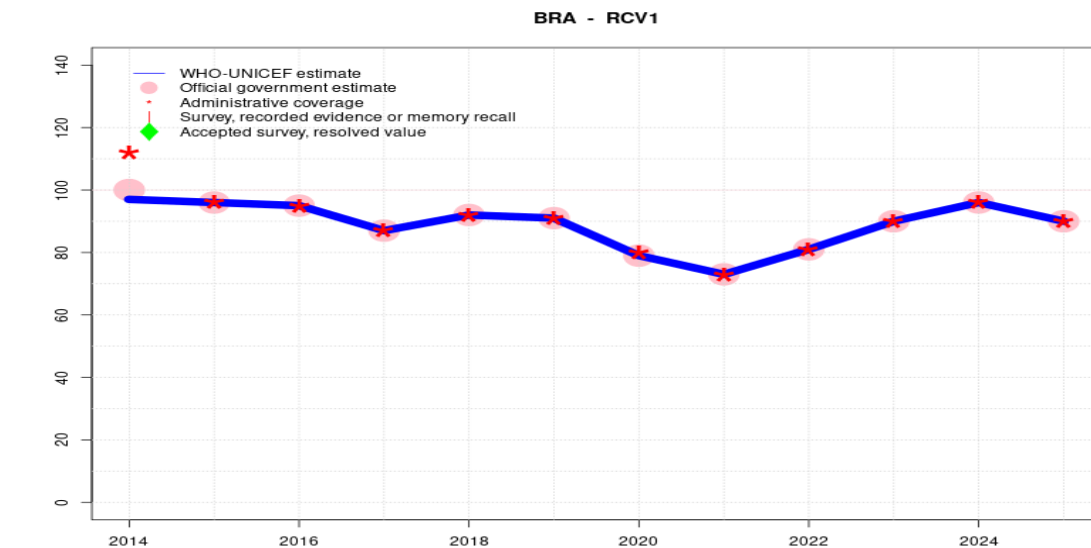
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk 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:

- 2025: Estimate informed by reported data. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. GoC=R+ D+
- 2024: Estimate informed by reported data. Estimate of 96 percent changed from previous revision value of 93 percent. GoC=R+ D+
- 2023: Estimate informed by reported data. Estimate of 90 percent changed from previous revision value of 87 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. A nationwide study by Silveira et al. (doi.org/10.1016/j.vaccine.2021.04.046) observed that the COVID-19 pandemic was associated with a 20 percent decrease in childhood vaccinations though much of the decline was indicated to be reversed by the end of 2020, an observation that is not supported by the reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. 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. Programme reports one month vaccine stockout. GoC=R+ D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. Programme reports one month stockout of MMR vaccine. GoC=R+ D+
- 2014: Estimate informed by interpolation between reported data. Reported data excluded because 112 percent greater than 100 percent. Estimate challenged by: D-

Brazil - RCV1



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimate	97	96	95	87	92	91	79	73	81	90	96	90
Estimate GoC	●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	100	96	95	87	92	91	79	73	81	90	96	90
Administrative	112	96	95	87	92	91	80	73	81	90	96	90
Survey	-	-	-	-	-	-	-	-	-	-	-	-

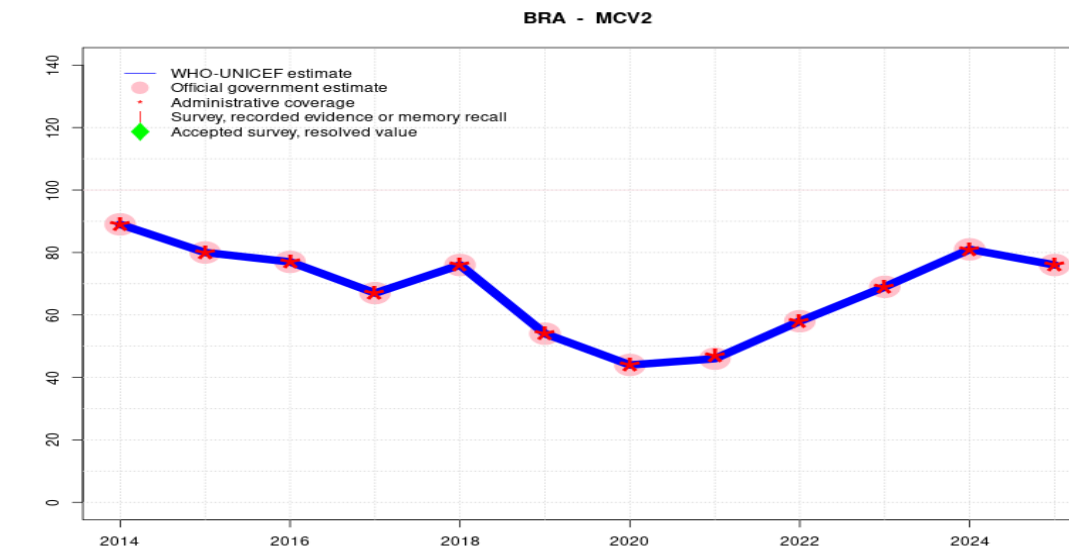
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2024 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:

- 2025: Estimate based on estimated MCV1. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. GoC=R+ D+
- 2024: Estimate based on estimated MCV1. Estimate of 96 percent changed from previous revision value of 93 percent. GoC=R+ D+
- 2023: Estimate based on estimated MCV1. Estimate of 90 percent changed from previous revision value of 87 percent. GoC=R+ D+
- 2022: Estimate based on estimated MCV1. GoC=R+ D+
- 2021: Estimate based on estimated MCV1. GoC=R+ D+
- 2020: Estimate based on estimated MCV1. A nationwide study by Silveira et al. (doi.org/10.1016/j.vaccine.2021.04.046) observed that the COVID-19 pandemic was associated with a 20 percent decrease in childhood vaccinations though much of the decline was indicated to be reversed by the end of 2020, an observation that is not supported by the reported data. 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. Programme reports one month vaccine stockout. GoC=R+ D+
- 2016: Estimate based on estimated MCV1. GoC=R+ D+
- 2015: Estimate based on estimated MCV1. Programme reports one month stockout of MMR vaccine. GoC=R+ D+
- 2014: Estimate based on estimated MCV1. Estimate challenged by: D-



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimate	89	80	77	67	76	54	44	46	58	69	81	76
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	89	80	77	67	76	54	44	46	58	69	81	76
Administrative	89	80	77	67	76	54	44	47	58	69	81	76
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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: 2024 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.

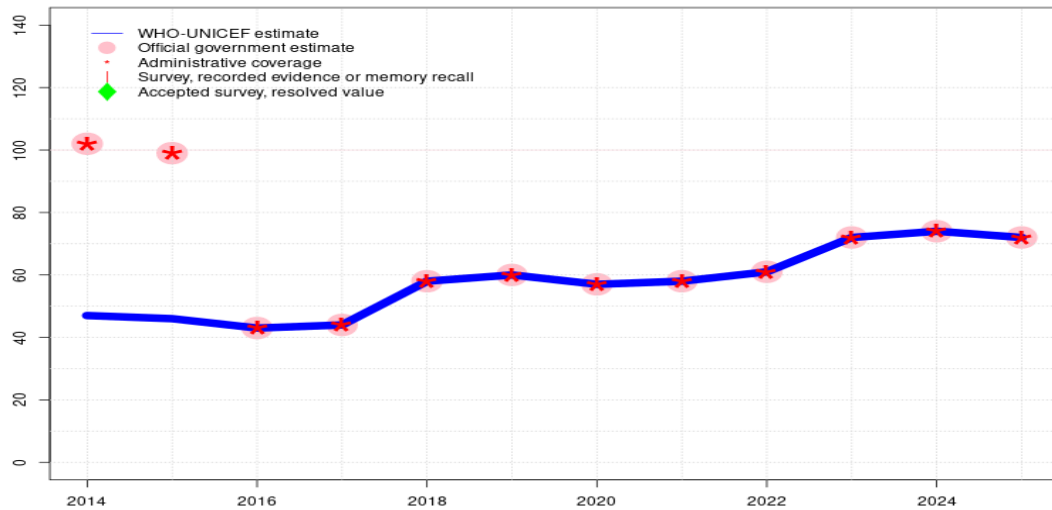
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2025: Estimate informed by reported data. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. GoC=R+ D+
- 2024: Estimate informed by reported data. Estimate of 81 percent changed from previous revision value of 68 percent. GoC=R+ D+
- 2023: Estimate informed by reported data. Estimate of 69 percent changed from previous revision value of 64 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. A nationwide study by Silveira et al. (doi.org/10.1016/j.vaccine.2021.04.046) observed that the COVID-19 pandemic was associated with a 20 percent decrease in childhood vaccinations though much of the decline was indicated to be reversed by the end of 2020, an observation that is not supported by the reported data. 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. Programme reports one month vaccine stockout. GoC=R+ D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. Programme reports one month stockout of MMR vaccine. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+ D+

Brazil - YFV

BRA - YFV



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Estimate	47	46	43	44	58	60	57	58	61	72	74	72
Estimate GoC	●	●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	102	99	43	44	58	60	57	58	61	72	74	72
Administrative	102	99	43	44	58	60	57	58	61	72	74	72
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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: 2024 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:

- 2025: Estimate informed by reported data. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. GoC=R+ D+
- 2024: Estimate informed by reported data. Estimate of 74 percent changed from previous revision value of 73 percent. GoC=R+ D+
- 2023: Estimate informed by reported data. Estimate of 72 percent changed from previous revision value of 70 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. A nationwide study by Silveira et al. (doi.org/10.1016/j.vaccine.2021.04.046) observed that the COVID-19 pandemic was associated with a 20 percent decrease in childhood vaccinations though much of the decline was indicated to be reversed by the end of 2020, an observation that is not supported by the reported data. 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. Programme reports one month vaccine stockout. GoC=R+ D+
- 2016: Programme reports coverage for a national target population, in contrast to previous years. Programme reports one month vaccine stockout. GoC=R+ D+
- 2015: Estimate of 46 percent assigned by working group. Reported coverage of 99 percent in 46 percent of the national target population. Estimate informed by coverage achieved in the total annual national target population. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.
- 2014: Estimate of 47 percent assigned by working group. Programme reports 102 percent coverage in 46 percent of the national target population. Estimate informed by coverage achieved in the total annual national target population. Reported data excluded because 102 percent greater than 100 percent. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

Further information and estimates for previous years are available at:

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

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