

# United States of America: WHO and UNICEF estimates of immunization coverage: 2024 revision

**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.

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.

**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. For countries utilizing IPV containing vaccine only, i.e., no recommended dose of OPV, 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.

**IPV2:** percentage of surviving infants who received a 2nd dose of inactivated polio vaccine. IPV2 coverage estimates produced for OPV using countries.

**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.

**HEPB3:** 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.

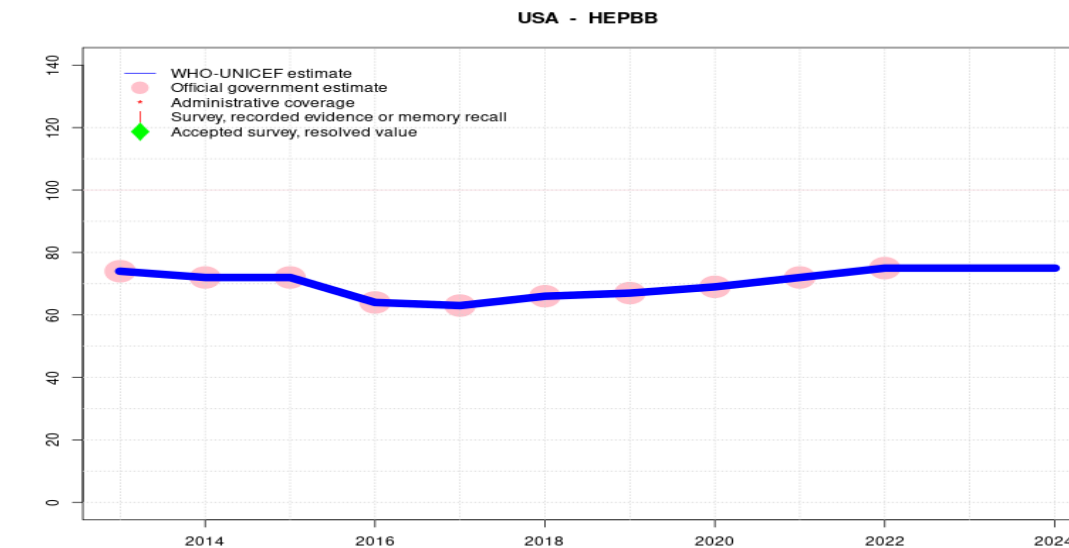
**PCV3:** percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect the percentage of surviving infants who received two doses of PCV prior to the 1st birthday if coverage for the booster dose is not reported.

**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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# United States of America - HEPBB



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	74	72	72	64	63	66	67	69	72	75	75	75
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●	●
Official	74	72	72	64	63	66	67	69	72	75	-	-
Administrative	-	-	-	-	-	-	-	-	-	-	-	-
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.

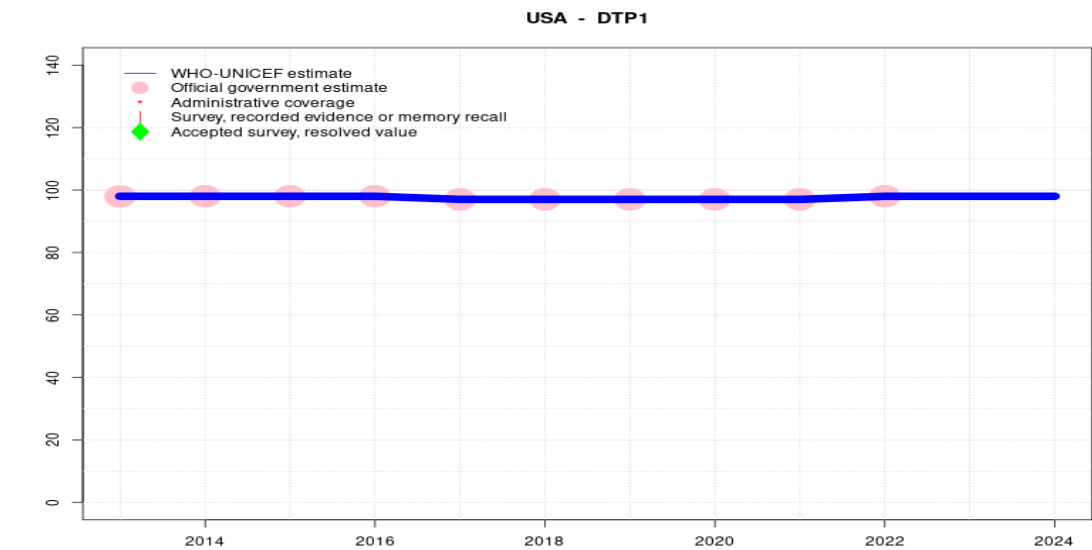
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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## Description:

- 2024: Estimate informed by extrapolation from reported data. GoC=No accepted empirical data
- 2023: Estimate informed by extrapolation from reported data. GoC=No accepted empirical data
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- 2021: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2021 reflect estimates obtained from children born in 2017 and 2018. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. See: MMWR January, 2023. GoC=R+
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- 2018: Estimate informed by reported data. GoC=R+
- 2017: Estimate informed by reported data. GoC=R+
- 2016: Estimate informed by reported data. GoC=R+
- 2015: Estimate informed by reported data. GoC=R+
- 2014: Estimate informed by reported data. GoC=R+
- 2013: Estimate informed by reported data. GoC=R+

# United States of America - DTP1



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	98	98	98	98	97	97	97	97	97	98	98	98
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●	●
Official	98	98	98	98	97	97	97	97	97	98	-	-
Administrative	-	-	-	-	-	-	-	-	-	-	-	-
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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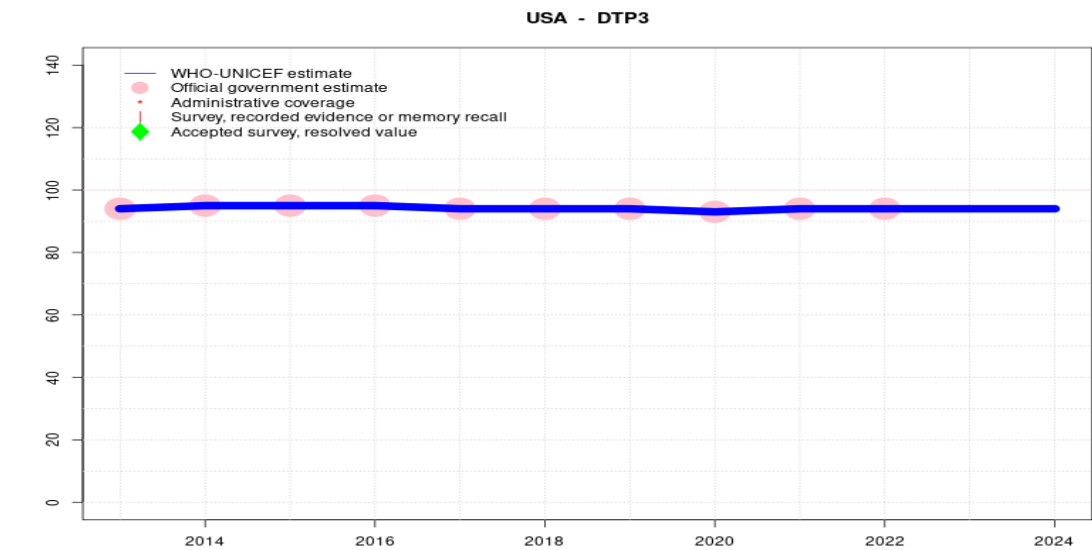
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
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- 2018: Estimate informed by reported data. GoC=R+
- 2017: Estimate informed by reported data. GoC=R+
- 2016: Estimate informed by reported data. GoC=R+
- 2015: Estimate informed by reported data. GoC=R+
- 2014: Estimate informed by reported data. GoC=R+
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# United States of America - DTP3



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	94	95	95	95	94	94	94	93	94	94	94	94
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●	●
Official	94	95	95	95	94	94	94	93	94	94	-	-
Administrative	-	-	-	-	-	-	-	-	-	-	-	-
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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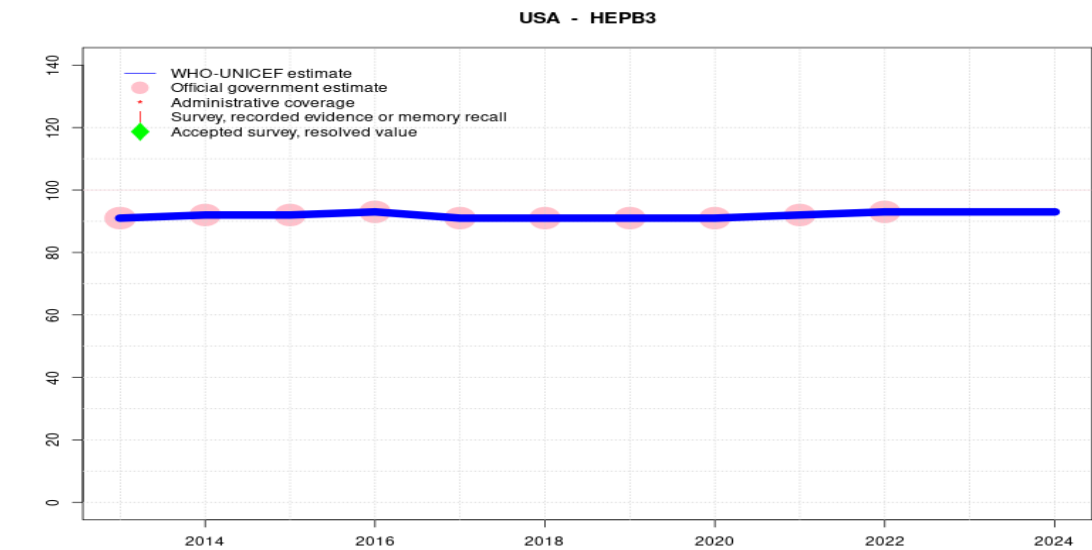
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- 2015: Estimate informed by reported data. GoC=R+
- 2014: Estimate informed by reported data. GoC=R+
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# United States of America - HEPB3



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	91	92	92	93	91	91	91	91	92	93	93	93
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●	●
Official	91	92	92	93	91	91	91	91	92	93	-	-
Administrative	-	-	-	-	-	-	-	-	-	-	-	-
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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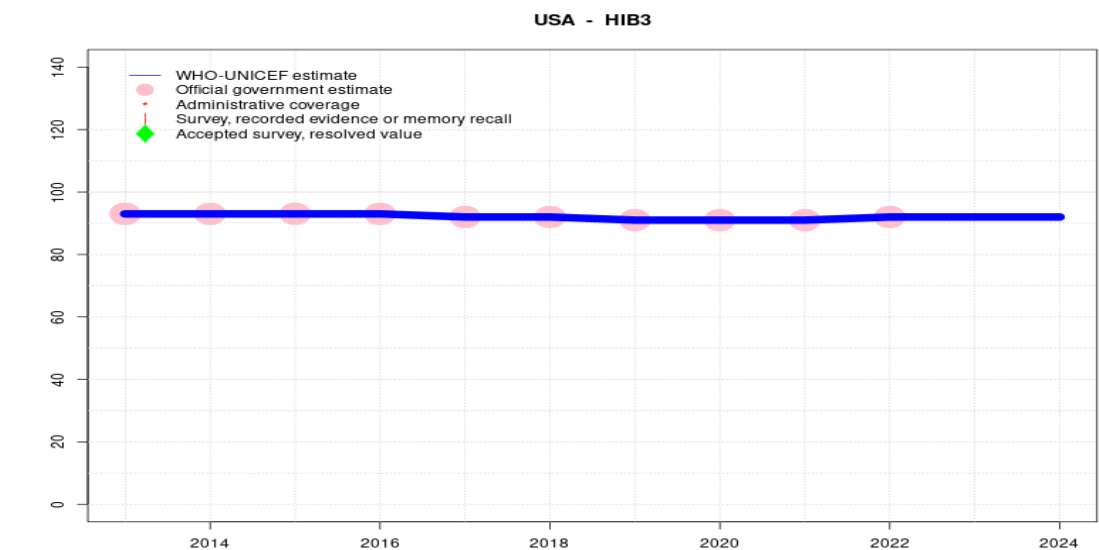
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Estimate	93	93	93	93	92	92	91	91	91	92	92	92
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●	●
Official	93	93	93	93	92	92	91	91	91	92	-	-
Administrative	-	-	-	-	-	-	-	-	-	-	-	-
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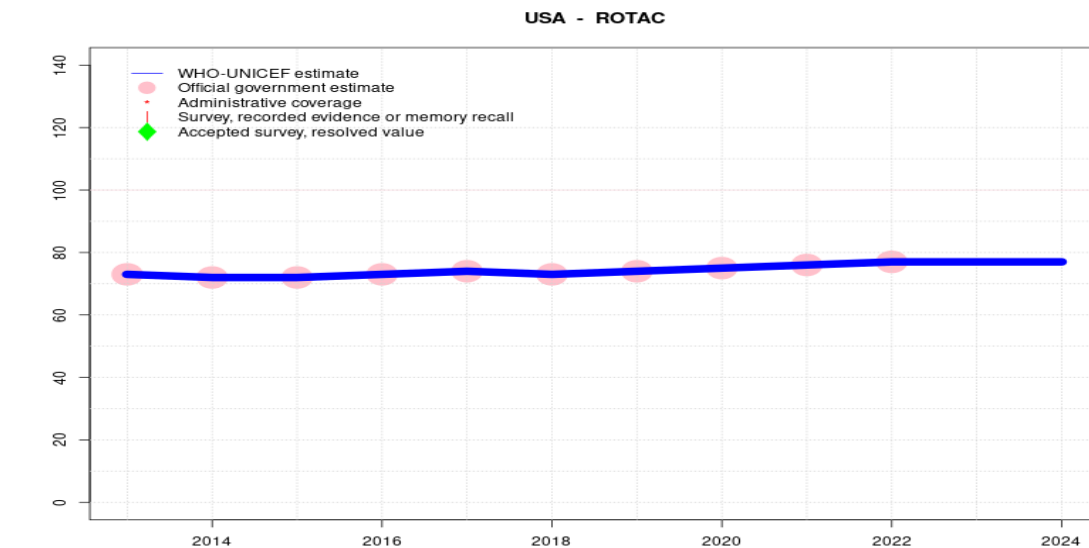
# United States of America - Hib3

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



# United States of America - ROTAC



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	73	72	72	73	74	73	74	75	76	77	77	77
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●	●
Official	73	72	72	73	74	73	74	75	76	77	-	-
Administrative	-	-	-	-	-	-	-	-	-	-	-	-
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.

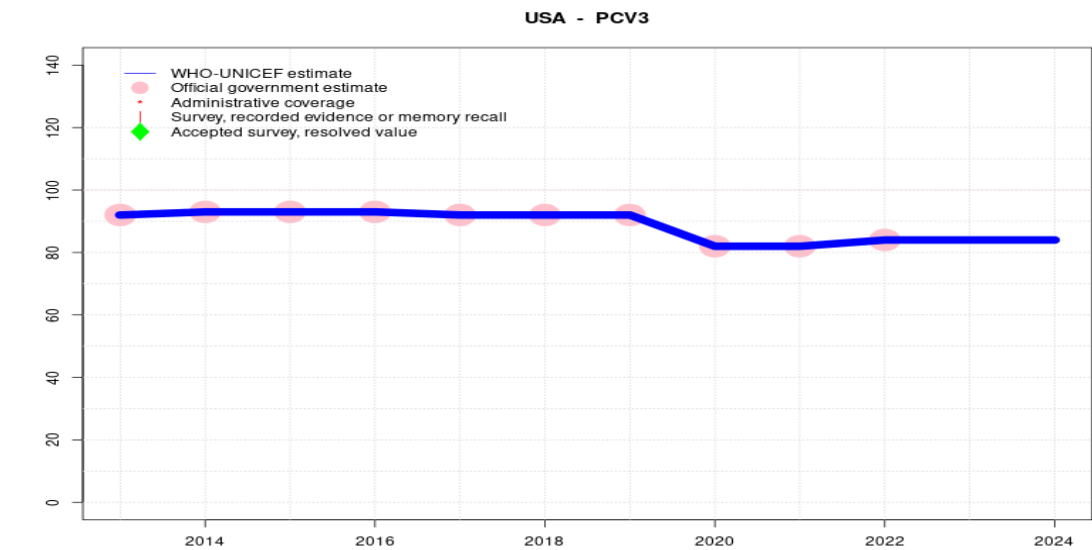
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2024: Estimate informed by extrapolation from reported data. GoC=No accepted empirical data
- 2023: Estimate informed by extrapolation from reported data. GoC=No accepted empirical data
- 2022: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2022 reflect estimates obtained from children born in 2018 and 2019. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. GoC=R+
- 2021: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2021 reflect estimates obtained from children born in 2017 and 2018. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. See: MMWR January, 2023. GoC=R+
- 2020: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2020 reflect estimates of coverage by age 24 months, except for rotavirus that it is by eight months, obtained from children born in 2016 and 2017. See: MMWR October 23, 2020 69 pp. 1505-1511. Reported data for 2020 does not include disruptions related to COVID-19. Thus, WUENIC estimates for 2020 are likely an overestimate. Several reports from various jurisdictions in the United States suggest disruptions to the immunization program. For example, for 10 jurisdictions, declines were close to 15 percent for some vaccines in March-May 2020 compared to the same period 2018-2019. MMWR June 11, 2021 70 pp. 840-845. GoC=R+
- 2019: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2019 reflect estimates obtained from children born in 2015 and 2016. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. This approach to data analysis represents a change from prior reporting, which was done by survey year. GoC=R+
- 2018: Estimate informed by reported data. GoC=R+
- 2017: Estimate informed by reported data. GoC=R+
- 2016: Estimate informed by reported data. GoC=R+
- 2015: Estimate informed by reported data. GoC=R+
- 2014: Estimate informed by reported data. GoC=R+
- 2013: Estimate informed by reported data. GoC=R+

# United States of America - PCV3



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	92	93	93	93	92	92	92	82	82	84	84	84
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●	●
Official	92	93	93	93	92	92	92	82	82	84	-	-
Administrative	-	-	-	-	-	-	-	-	-	-	-	-
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.

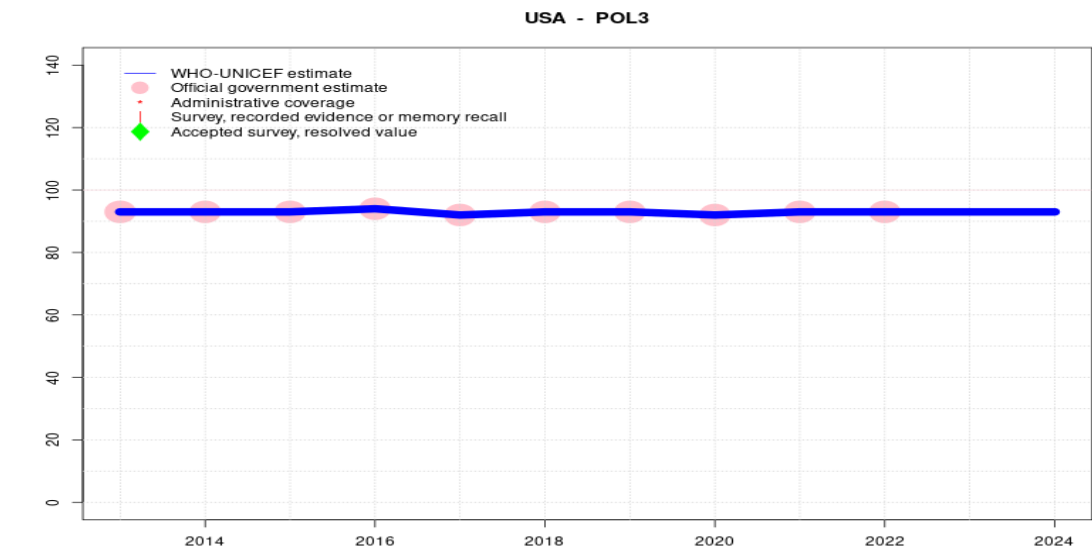
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2024: Estimate informed by extrapolation from reported data. GoC=No accepted empirical data
- 2023: Estimate informed by extrapolation from reported data. GoC=No accepted empirical data
- 2022: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2022 reflect estimates obtained from children born in 2018 and 2019. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. GoC=R+
- 2021: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2021 reflect estimates obtained from children born in 2017 and 2018. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. See: MMWR January, 2023. GoC=R+
- 2020: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2020 reflect estimates of coverage by age 24 months, except for rotavirus that it is by eight months, obtained from children born in 2016 and 2017. See: MMWR October 23, 2020 69 pp. 1505-1511. Reported data for 2020 does not include disruptions related to COVID-19. Thus, WUENIC estimates for 2020 are likely an overestimate. Several reports from various jurisdictions in the United States suggest disruptions to the immunization program. For example, for 10 jurisdictions, declines were close to 15 percent for some vaccines in March-May 2020 compared to the same period 2018-2019. MMWR June 11, 2021 70 pp. 840-845. Reported coverage may reflect that for the fourth dose of PCV. GoC=R+
- 2019: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2019 reflect estimates obtained from children born in 2015 and 2016. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. This approach to data analysis represents a change from prior reporting, which was done by survey year. GoC=R+
- 2018: Estimate informed by reported data. GoC=R+
- 2017: Estimate informed by reported data. GoC=R+
- 2016: Estimate informed by reported data. GoC=R+
- 2015: Estimate informed by reported data. GoC=R+
- 2014: Estimate informed by reported data. GoC=R+
- 2013: Estimate informed by reported data. GoC=R+

# United States of America - POL3



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	93	93	93	94	92	93	93	92	93	93	93	93
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●	●
Official	93	93	93	94	92	93	93	92	93	93	-	-
Administrative	-	-	-	-	-	-	-	-	-	-	-	-
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.

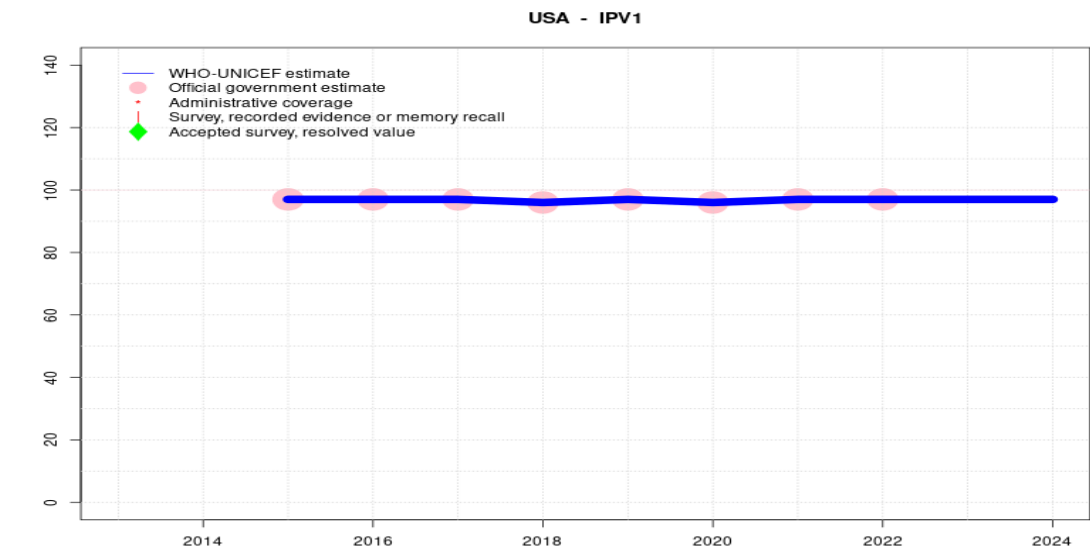
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2024: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data
- 2023: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data
- 2022: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2022 reflect estimates obtained from children born in 2018 and 2019. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. GoC=R+
- 2021: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2021 reflect estimates obtained from children born in 2017 and 2018. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. See: MMWR January, 2023. GoC=R+
- 2020: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2020 reflect estimates of coverage by age 24 months, except for rotavirus that it is by eight months, obtained from children born in 2016 and 2017. See: MMWR October 23, 2020 69 pp. 1505-1511. Reported data for 2020 does not include disruptions related to COVID-19. Thus, WUENIC estimates for 2020 are likely an overestimate. Several reports from various jurisdictions in the United States suggest disruptions to the immunization program. For example, for 10 jurisdictions, declines were close to 15 percent for some vaccines in March-May 2020 compared to the same period 2018-2019. MMWR June 11, 2021 70 pp. 840-845. GoC=R+
- 2019: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2019 reflect estimates obtained from children born in 2015 and 2016. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. This approach to data analysis represents a change from prior reporting, which was done by survey year. GoC=R+
- 2018: Estimate informed by reported data. GoC=R+
- 2017: Estimate informed by reported data. GoC=R+
- 2016: Estimate informed by reported data. GoC=R+
- 2015: Estimate informed by reported data. GoC=R+
- 2014: Estimate informed by reported data. GoC=R+
- 2013: Estimate informed by reported data. GoC=R+

# United States of America - IPV1



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	-	-	97	97	97	96	97	96	97	97	97	97
Estimate GoC	-	-	••	••	••	••	••	••	••	••	•	•
Official	-	-	97	97	97	96	97	96	97	97	-	-
Administrative	-	-	-	-	-	-	-	-	-	-	-	-
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.

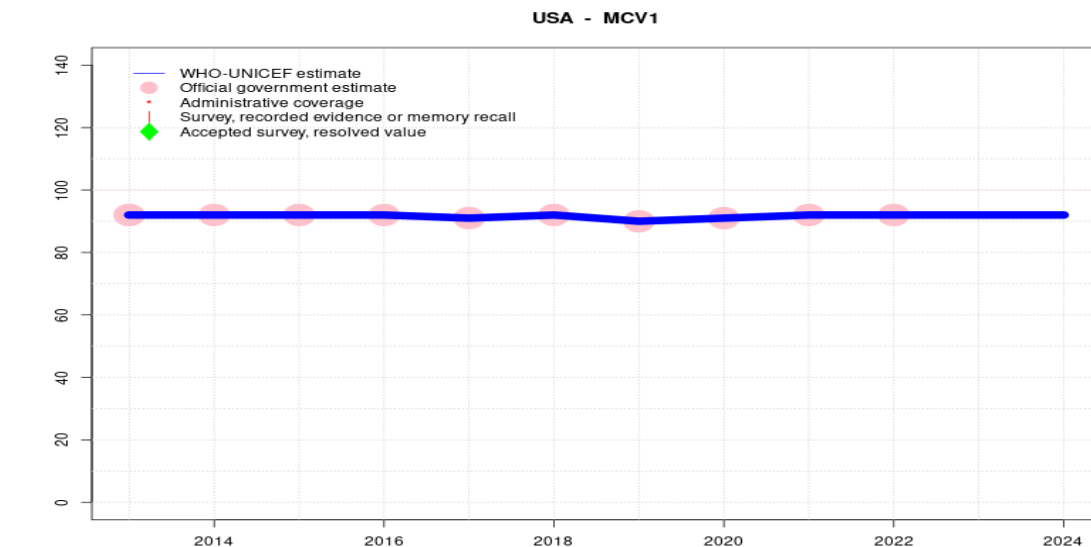
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2024: Estimate informed by extrapolation from reported data. GoC=No accepted empirical data
- 2023: Estimate informed by extrapolation from reported data. GoC=No accepted empirical data
- 2022: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2022 reflect estimates obtained from children born in 2018 and 2019. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. GoC=R+
- 2021: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2021 reflect estimates obtained from children born in 2017 and 2018. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. See: MMWR January, 2023. GoC=R+
- 2020: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2020 reflect estimates of coverage by age 24 months, except for rotavirus that it is by eight months, obtained from children born in 2016 and 2017. See: MMWR October 23, 2020 69 pp. 1505-1511. Reported data for 2020 does not include disruptions related to COVID-19. Thus, WUENIC estimates for 2020 are likely an overestimate. Several reports from various jurisdictions in the United States suggest disruptions to the immunization program. For example, for 10 jurisdictions, declines were close to 15 percent for some vaccines in March-May 2020 compared to the same period 2018-2019. MMWR June 11, 2021 70 pp. 840-845. GoC=R+
- 2019: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2019 reflect estimates obtained from children born in 2015 and 2016. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. This approach to data analysis represents a change from prior reporting, which was done by survey year. GoC=R+
- 2018: Estimate informed by reported data. GoC=R+
- 2017: Estimate informed by reported data. GoC=R+
- 2016: Estimate informed by reported data. GoC=R+
- 2015: Estimate informed by reported data. GoC=R+



# United States of America - MCV1



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	92	92	92	92	91	92	90	91	92	92	92	92
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●	●
Official	92	92	92	92	91	92	90	91	92	92	-	-
Administrative	-	-	-	-	-	-	-	-	-	-	-	-
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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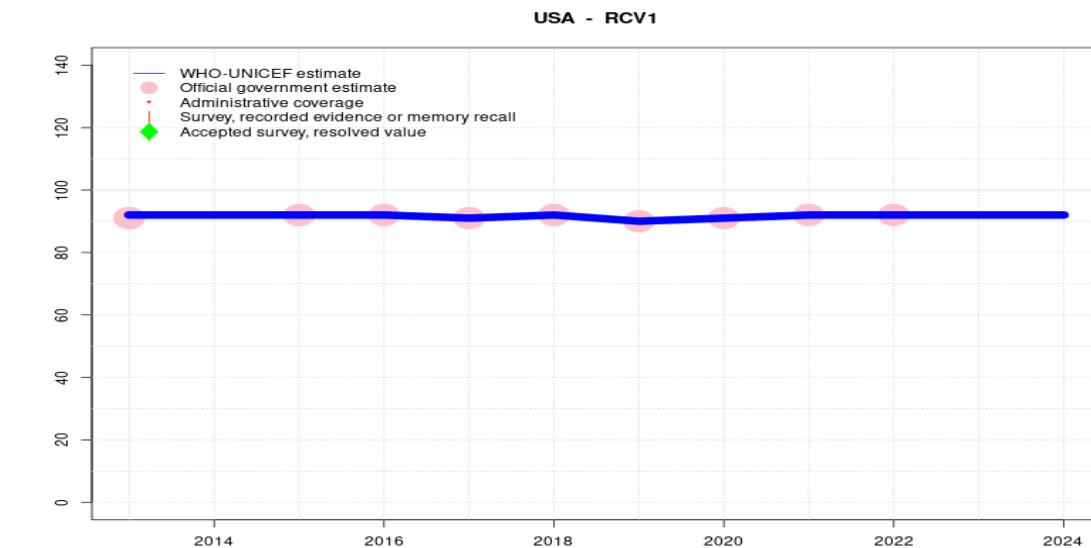
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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## Description:

- 2024: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data
- 2023: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data
- 2022: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2022 reflect estimates obtained from children born in 2018 and 2019. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. GoC=R+
- 2021: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2021 reflect estimates obtained from children born in 2017 and 2018. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. See: MMWR January, 2023. GoC=R+
- 2020: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2020 reflect estimates of coverage by age 24 months, except for rotavirus that it is by eight months, obtained from children born in 2016 and 2017. See: MMWR October 23, 2020 69 pp. 1505-1511. Reported data for 2020 does not include disruptions related to COVID-19. Thus, WUENIC estimates for 2020 are likely an overestimate. Several reports from various jurisdictions in the United States suggest disruptions to the immunization program. For example, for 10 jurisdictions, declines were close to 15 percent for some vaccines in March-May 2020 compared to the same period 2018-2019. MMWR June 11, 2021 70 pp. 840-845. GoC=R+
- 2019: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2019 reflect estimates obtained from children born in 2015 and 2016. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. This approach to data analysis represents a change from prior reporting, which was done by survey year. GoC=R+
- 2018: Estimate informed by reported data. GoC=R+
- 2017: Estimate informed by reported data. GoC=R+
- 2016: Estimate informed by reported data. GoC=R+
- 2015: Estimate informed by reported data. GoC=R+
- 2014: Estimate informed by reported data. GoC=R+
- 2013: Estimate informed by reported data. GoC=R+

# United States of America - RCV1



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	92	92	92	92	91	92	90	91	92	92	92	92
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●	●
Official	91	-	92	92	91	92	90	91	92	92	-	-
Administrative	-	-	-	-	-	-	-	-	-	-	-	-
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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- 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.

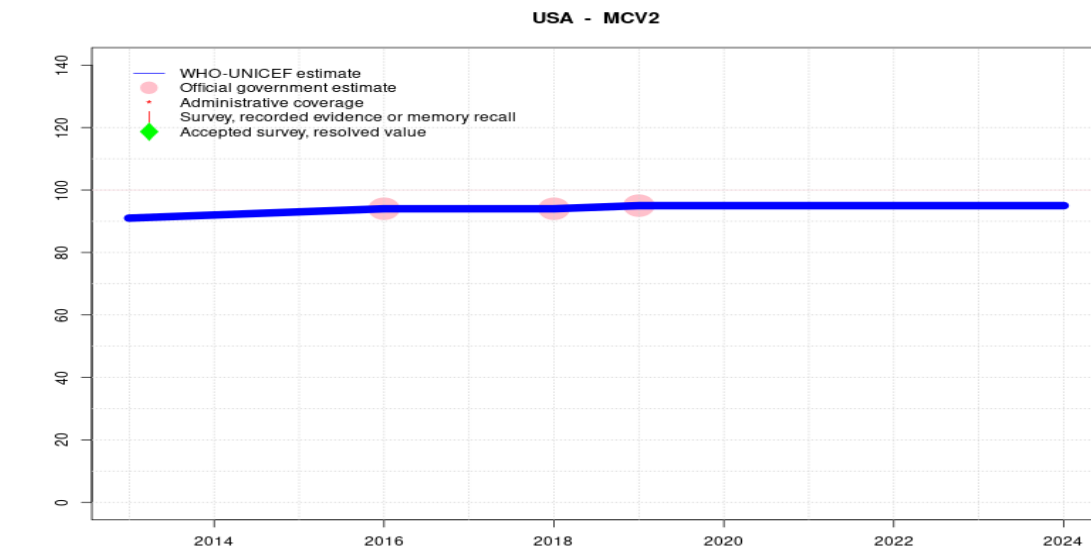
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2024: Estimate based on estimated MCV1. GoC=No accepted empirical data
- 2023: Estimate based on estimated MCV1. GoC=No accepted empirical data
- 2022: Estimate based on estimated MCV1. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2022 reflect estimates obtained from children born in 2018 and 2019. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. GoC=R+
- 2021: Estimate based on estimated MCV1. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2021 reflect estimates obtained from children born in 2017 and 2018. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. See: MMWR January, 2023. GoC=R+
- 2020: Estimate based on estimated MCV1. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2020 reflect estimates of coverage by age 24 months, except for rotavirus that it is by eight months, obtained from children born in 2016 and 2017. See: MMWR October 23, 2020 69 pp. 1505-1511. Reported data for 2020 does not include disruptions related to COVID-19. Thus, WUENIC estimates for 2020 are likely an overestimate. Several reports from various jurisdictions in the United States suggest disruptions to the immunization program. For example, for 10 jurisdictions, declines were close to 15 percent for some vaccines in March-May 2020 compared to the same period 2018-2019. MMWR June 11, 2021 70 pp. 840-845. GoC=R+
- 2019: Estimate based on estimated MCV1. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2019 reflect estimates obtained from children born in 2015 and 2016. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. This approach to data analysis represents a change from prior reporting, which was done by survey year. GoC=R+
- 2018: Estimate based on estimated MCV1. GoC=R+
- 2017: Estimate based on estimated MCV1. GoC=R+
- 2016: Estimate based on estimated MCV1. GoC=R+
- 2015: Estimate based on estimated MCV1. GoC=R+
- 2014: Estimate based on estimated MCV1. GoC=R+
- 2013: Estimate based on estimated MCV1. GoC=R+



# United States of America - MCV2



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	91	92	93	94	94	94	95	95	95	95	95	95
Estimate GoC	●	●	●	●●	●	●●	●●	●	●	●	●	●
Official	-	-	-	94	-	94	95	-	-	-	-	-
Administrative	-	-	-	-	-	-	-	-	-	-	-	-
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:

- 2024: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data
- 2023: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data
- 2022: Estimate based on extrapolation from data reported by national government. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2022 reflect estimates obtained from children born in 2018 and 2019. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. GoC=No accepted empirical data
- 2021: Estimate based on extrapolation from data reported by national government. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2021 reflect estimates obtained from children born in 2017 and 2018. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. See: MMWR January, 2023. GoC=No accepted empirical data
- 2020: Estimate based on extrapolation from data reported by national government. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2020 reflect estimates of coverage by age 24 months, except for rotavirus that it is by eight months, obtained from children born in 2016 and 2017. See: MMWR October 23, 2020 69 pp. 1505-1511. Reported data for 2020 does not include disruptions related to COVID-19. Thus, WUENIC estimates for 2020 are likely an overestimate. Several reports from various jurisdictions in the United States suggest disruptions to the immunization program. For example, for 10 jurisdictions, declines were close to 15 percent for some vaccines in March-May 2020 compared to the same period 2018-2019. MMWR June 11, 2021 70 pp. 840-845. GoC=No accepted empirical data
- 2019: Estimate informed by reported data. Reported coverage is derived from the National Immunization Survey-Child, an annual survey of children 19-35 months of age. The NIS-Child is a list-assisted random digit-dialled telephone survey followed by mailed survey to immunization providers. Reported data for 2019 reflect estimates obtained from children born in 2015 and 2016. Kaplan Meier analysis was used to estimate vaccination coverage by age 24 months, except for rotavirus and Hepatitis A. This approach to data analysis represents a change from prior reporting, which was done by survey year. GoC=R+
- 2018: Estimate informed by reported data. GoC=R+
- 2017: Estimate informed by interpolation between reported data. GoC=No accepted empirical data
- 2016: Estimate informed by reported data. Reported coverage is based on the median of the

# United States of America - MCV2

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state-specific MMR2 plus coverage for the 2016-17 school year. GoC=R+

2015: Estimate informed by interpolation between reported data. GoC=No accepted empirical data

2014: Estimate informed by interpolation between reported data. Beginning in 2014, the recommended age of administration for MCV2 changed from by age 6 years to by age 4 years. GoC=No accepted empirical data

2013: Estimate informed by interpolation between reported data. GoC=No accepted empirical data

# United States of America - Survey Details

**NOTE** A survey to measure vaccination coverage for infants (i.e., children aged 0-11 months) will sample children aged 12-23 months at the time of survey to capture the youngest annual cohort of children who should have completed the vaccination schedule. Because WUENIC are for infant vaccinations, survey data in this report are presented to reflect the birth year of the youngest survey cohort. For example, results for a survey conducted during December 2020 among children aged 12-23 months at the time of the survey reflect the immunization experience of children born in 2019. Depending on the timing of survey field work, results may reflect the immunization experience of children born and vaccinated one or two years prior to the survey field work.

The survey results below present vaccination coverage estimates by antigen, confirmation method, and child's age at the time of the survey. Coverage based on **Recall** reflects information based upon a mother's or caregiver's memory. Coverage based on **Record** reflects information drawn from documented vaccination history in home- and/or facility-based records. **Evidence seen** reflects the percentage of children in the sample with documented evidence of vaccination history seen by the survey team.

## 2020 National Immunization Survey-Child, United States, 2021-2023

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record or Recall	92.5	19-35 m	28688	-
HEPB3	Record or Recall	91.1	19-35 m	28688	-
HEPBB	Record or Recall	79.5	19-35 m	28688	-
HIB3	Record or Recall	76.8	19-35 m	28688	-
MCV1	Record or Recall	90.3	19-35 m	28688	-
PCV3	Record or Recall	91.6	19-35 m	28688	-
POL3	Record or Recall	91.9	19-35 m	28688	-
RCV1	Record or Recall	90.3	19-35 m	28688	-
ROTAC	Record or Recall	75.1	19-35 m	28688	-

## 2019 National Immunization Survey-Child, United States, 2020-2022

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record or Recall	93.8	19-35 m	27733	-
HEPB3	Record or Recall	92.1	19-35 m	27733	-
HEPBB	Record or Recall	81.5	19-35 m	27733	-
HIB3	Record or Recall	93.4	19-35 m	27733	-
MCV1	Record or Recall	91.6	19-35 m	27733	-

PCV3	Record or Recall	92.8	19-35 m	27733	-
POL3	Record or Recall	93	19-35 m	27733	-
RCV1	Record or Recall	93	19-35 m	27733	-
ROTAC	Record or Recall	76.6	19-35 m	27733	-

## 2018 National Immunization Survey-Child, United States, 2019–2021

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record or Recall	94.2	19-35 m	29598	-
HEPB3	Record or Recall	92.7	19-35 m	29598	-
HEPBB	Record or Recall	79.8	19-35 m	29598	-
HIB3	Record or Recall	93.6	19-35 m	29598	-
MCV1	Record or Recall	91.6	19-35 m	29598	-
PCV3	Record or Recall	93.3	19-35 m	29598	-
POL3	Record or Recall	93.4	19-35 m	29598	-
RCV1	Record or Recall	91.6	19-35 m	29598	-
ROTAC	Record or Recall	77.1	19-35 m	29598	-

## 2017 National Immunization Survey-Child, United States, 2018–2020

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record or Recall	93.7	19-35 m	29114	-
HEPB3	Record or Recall	91.9	19-35 m	29114	-
HEPBB	Record or Recall	78.4	19-35 m	29114	-
HIB3	Record or Recall	92.9	19-35 m	29114	-
MCV1	Record or Recall	91.6	19-35 m	29114	-
PCV3	Record or Recall	92.4	19-35 m	29114	-
POL3	Record or Recall	92.7	19-35 m	29114	-
RCV1	Record or Recall	91.6	19-35 m	29114	-
ROTAC	Record or Recall	75.6	19-35 m	29114	-

## 2016 National Immunization Survey-Child, United States, 2017–2019

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record or Recall	93.3	19-35 m	25970	-
HEPB3	Record or Recall	91.4	19-35 m	25970	-
HEPBB	Record or Recall	76.3	19-35 m	25970	-

# United States of America - Survey Details

HIB3	Record or Recall	92.2	19-35 m	25970	-
MCV1	Record or Recall	90.7	19-35 m	25970	-
PCV3	Record or Recall	91.6	19-35 m	25970	-
POL3	Record or Recall	92.1	19-35 m	25970	-
RCV1	Record or Recall	90.7	19-35 m	25970	-
ROTAC	Record or Recall	75.3	19-35 m	25970	-

## 2015 National Immunization Survey-Child, United States, 2017

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record or Recall	94	19-35 m	15333	-
HEPB3	Record or Recall	91.4	19-35 m	15333	-
HEPBB	Record or Recall	73.6	19-35 m	15333	-
HIB3	Record or Recall	92.8	19-35 m	15333	-
MCV1	Record or Recall	91.5	19-35 m	15333	-
PCV3	Record or Recall	91.9	19-35 m	15333	-
POL3	Record or Recall	92.7	19-35 m	15333	-
RCV1	Record or Recall	91.5	19-35 m	15333	-
ROTAC	Record or Recall	73.2	19-35 m	15333	-

## 2014 National Immunization Survey-Child, United States, 2016

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record or Recall	93.7	19-35 m	14988	-
HEPB3	Record or Recall	90.5	19-35 m	14988	-
HEPBB	Record or Recall	71.1	19-35 m	14988	-
HIB3	Record or Recall	92.8	19-35 m	14988	-
MCV1	Record or Recall	91.1	19-35 m	14988	-
PCV3	Record or Recall	91.8	19-35 m	14988	-
POL3	Record or Recall	91.9	19-35 m	14988	-
RCV1	Record or Recall	91.1	19-35 m	14988	-
ROTAC	Record or Recall	74.1	19-35 m	14988	-

## 2013 National Immunization Survey-Child, United States, 2015

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record or Recall	95	19-35 m	15167	-
HEPB3	Record or Recall	92.6	19-35 m	15167	-
HEPBB	Record or Recall	72.4	19-35 m	15167	-
HIB3	Record or Recall	82.7	19-35 m	15167	-
MCV1	Record or Recall	91.9	19-35 m	15167	-
PCV3	Record or Recall	93.3	19-35 m	15167	-
POL3	Record or Recall	93.7	19-35 m	15167	-
RCV1	Record or Recall	91.9	19-35 m	15167	-
ROTAC	Record or Recall	73.2	19-35 m	15167	-

## 2012 National Immunization Survey, 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record or Recall	94.7	19-35 m	14893	-
HEPB3	Record or Recall	91.6	19-35 m	14893	-
HEPBB	Record or Recall	72.4	19-35 m	14893	-
HIB3	Record or Recall	92.6	19-35 m	14893	-
MCV1	Record or Recall	91.5	19-35 m	14893	-
PCV3	Record or Recall	92.6	19-35 m	14893	-
POL3	Record or Recall	93.3	19-35 m	14893	-
RCV1	Record or Recall	91.5	19-35 m	14893	-
ROTAC	Record or Recall	71.7	19-35 m	14893	-

## 2011 National Immunization Survey, 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record or Recall	93.6	19-35 m	13611	-
HEPB3	Record or Recall	89.7	19-35 m	13611	-
HIB3	Record or Recall	92.3	19-35 m	13611	-
MCV1	Record or Recall	90.1	19-35 m	13611	-
PCV3	Record or Recall	91.9	19-35 m	13611	-
POL3	Record or Recall	91.8	19-35 m	13611	-
ROTAC	Record or Recall	72.6	19-35 m	13611	-

## 2010 National Immunization Survey 2012

# United States of America - Survey Details

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record or Recall	93.8	19-23 m	16000	-
HEPB3	Record or Recall	88.8	19-23 m	16000	-
HIB3	Record or Recall	92.7	19-23 m	16000	-
MCV1	Record or Recall	89.3	19-23 m	16000	-
PCV3	Record or Recall	91.8	19-23 m	16000	-
POL3	Record or Recall	91.9	19-23 m	16000	-
ROTAC	Record or Recall	68.6	19-23 m	16000	-

## 2009 National Immunization Survey 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record	95.5	19-35 m	19534	-
HEPB3	Record	91.1	19-35 m	19534	-
HEPBB	Record	68.6	19-35 m	19534	-
HIB3	Record	94	19-35 m	19534	-
MCV1	Record	91.6	19-35 m	19534	-
PCV3	Record	93.6	19-35 m	19534	-
POL3	Record	93.9	19-35 m	19534	-
ROTAC	Record	67.3	19-35 m	19534	-

## 2005 National Immunization Survey (NIS) 2008

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record	95.6	19-35 m	18430	-
HEPB3	Record	92.8	19-35 m	18430	-
HIB3	Record	90	19-35 m	18430	-
MCV1	Record	90.3	19-35 m	18430	-
POL3	Record	92.3	19-35 m	18430	-

## 2004 National Immunization Survey (NIS) 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record	95.5	19-35 m	17017	-

HEPB3	Record	92.7	19-35 m	17017	-
HIB3	Record	92.6	19-35 m	17017	-
MCV1	Record	92.3	19-35 m	17017	-
POL3	Record	92.6	19-35 m	17017	-

## 2003 National Immunization Survey (NIS) 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record	95.8	19-35 m	-	-
HEPB3	Record	93.3	19-35 m	-	-
HIB3	Record	93.4	19-35 m	-	-
MCV1	Record	92.3	19-35 m	-	-
POL3	Record	92.8	19-35 m	-	-

## 2002 National Immunization Survey (NIS) 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record	96.1	19-35 m	-	-
HEPB3	Record	92.9	19-35 m	-	-
HIB3	Record	93.9	19-35 m	-	-
MCV1	Record	91.5	19-35 m	-	-
POL3	Record	91.7	19-35 m	-	-

## 2001 National Immunization Survey (NIS) 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record	95.9	19-35 m	-	-
HEPB3	Record	92.4	19-35 m	-	-
HIB3	Record	93.5	19-35 m	-	-
MCV1	Record	93	19-35 m	-	-
POL3	Record	91.6	19-35 m	-	-

## 2000 National Immunization Survey (NIS) 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record	96	19-35 m	-	-
HEPB3	Record	92.4	19-35 m	-	-
HIB3	Record	93.9	19-35 m	-	-
MCV1	Record	93	19-35 m	-	-
POL3	Record	91.6	19-35 m	-	-

2000 National Immunization Survey 2002

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP3	Record or Recall	93.9	19-35 m	-	-
HEPB3	Record or Recall	88.3	19-35 m	-	-
MCV1	Record or Recall	91.3	19-35 m	-	-
POL3	Record or Recall	89.8	19-35 m	-	-

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