

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

BACKGROUND NOTE: Each year WHO and UNICEF jointly review reports submitted by Member States regarding national immunization coverage, finalized survey reports as well as data from the published and grey literature. Based on these data, with due consideration to potential biases and the views of local experts, WHO and UNICEF attempt to distinguish between situations where the available empirical data accurately reflect immunization system performance and those where the data are likely to be compromised and present a misleading view of immunization coverage while jointly estimating the most likely coverage levels for each country.

WHO and UNICEF estimates are country-specific; that is to say, each country's data are reviewed individually, and data are not borrowed from other countries in the absence of data. Estimates are not based on ad hoc adjustments to reported data; in some instances empirical data are available from a single source, usually the nationally reported coverage data. In cases where no data are available for a given country/vaccine/year combination, data are considered from earlier and later years and interpolated to estimate coverage for the missing year(s). In cases where data sources are mixed and show large variation, an attempt is made to identify the most likely estimate with consideration of the possible biases in available data. For methods see:

*Burton et al. 2009. WHO and UNICEF estimates of national infant immunization coverage: methods and processes.

*Burton et al. 2012. A formal representation of the WHO and UNICEF estimates of national immunization coverage: a computational logic approach.

*Brown et al. 2013. An introduction to the grade of confidence used to characterize uncertainty around the WHO and UNICEF estimates of national immunization coverage.

DATA SOURCES.

- **ADMINISTRATIVE coverage:** Reported by national authorities and based on aggregated administrative reports from health service providers on the number of vaccinations administered during a given period (numerator data) and reported target population data (denominator data). May be biased by inaccurate numerator and/or denominator data.
- **OFFICIAL coverage:** Estimated coverage reported by national authorities that reflects their assessment of the most likely coverage based on any combination of administrative coverage, survey-based estimates or other data sources or adjustments. Approaches to determine OFFICIAL coverage may differ across countries.
- **SURVEY coverage:** Based on estimated coverage from population-based household surveys among children aged 12-23 months or 24-35 months following a review of survey methods and results. Information is based on the combination of vaccination history from documented evidence or caregiver recall. Survey results are considered for the appropriate birth cohort based on the period of data collection.

ABBREVIATIONS

 ${\bf BCG:}\,$ percentage of births who received one dose of Bacillus Calmette Guerin vaccine.

- **DTP1 / DTP3:** percentage of surviving infants who received the 1st / 3rd dose, respectively, of diphtheria and tetanus toxoid with pertussis containing vaccine.
- **Pol3:** percentage of surviving infants who received the 3rd dose of polio containing vaccine. May be either oral or inactivated polio vaccine.
- **IPV1:** percentage of surviving infants who received at least one dose of inactivated polio vaccine. In countries utilizing an immunization schedule recommending either (i) a primary series of three doses of oral polio vaccine (OPV) plus at least one dose of IPV where OPV is included in routine

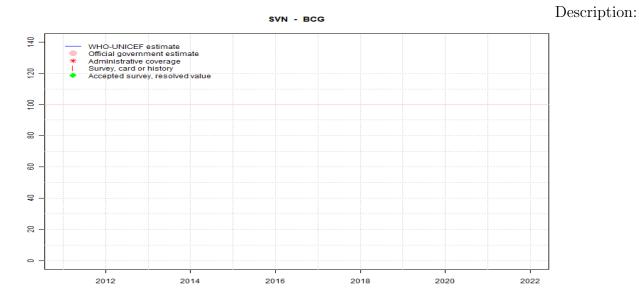
immunization and/or campaign or (ii) a sequential schedule of IPV followed by OPV, WHO and UNICEF estimates for IPV1 reflect coverage with at least one routine dose of IPV among infants <1 year of age among countries. For countries utilizing IPV containing vaccine use only, i.e., no recommended dose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

Production of IPV coverage estimates, which begins in 2015, results in no change of the estimated coverage levels for the 3rd dose of polio (Pol3). For countries recommending routine immunization with a primary series of three doses of IPV alone, WHO and UNICEF estimated Pol3 coverage is equivalent to estimated coverage with three doses of IPV. For countries with a sequential schedule, estimated Pol3 coverage is based on that for the 3rd dose of polio vaccine regardless of vaccine type.

- **MCV1:** percentage of surviving infants who received the 1st dose of measles containing vaccine. In countries where the national schedule recommends the 1st dose of MCV at 12 months or later based on the epidemiology of disease in the country, coverage estimates reflect the percentage of children who received the 1st dose of MCV as recommended.
- **MCV2:** percentage of children who received the 2nd dose of measles containing vaccine according to the nationally recommended schedule.
- **RCV1:** percentage of surviving infants who received the 1st dose of rubella containing vaccine. 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 nor are the data represented in the accompanying graph and data table.
- **HepBB:** percentage of births which received a dose of hepatitis B vaccine within 24 hours of delivery. Estimates of hepatitis B birth dose coverage are produced only for countries with a universal birth dose policy. Estimates are not produced for countries that recommend a birth dose to infants born to HepB virus-infected mothers only or where there is insufficient information to determine whether vaccination is within 24 hours of birth.
- **HepB3:** percentage of surviving infants who received the 3rd dose of hepatitis B containing vaccine following the birth dose.
- **Hib3:** percentage of surviving infants who received the 3rd dose of Haemophilus influenzae type b containing vaccine.
- **RotaC:** percentage of surviving infants who received the final recommended dose of rotavirus vaccine, which can be either the 2nd or the 3rd dose depending on the vaccine.
- **PcV3:** percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect the percentage of surviving infants who received two doses of PcV prior to the 1st birthday.
- **YFV:** percentage of surviving infants who received one dose of yellow fever vaccine in countries where YFV is part of the national immunization schedule for children or is recommended in at risk areas; coverage estimates are annualized for the entire cohort of surviving infants.

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Slovenia - BCG



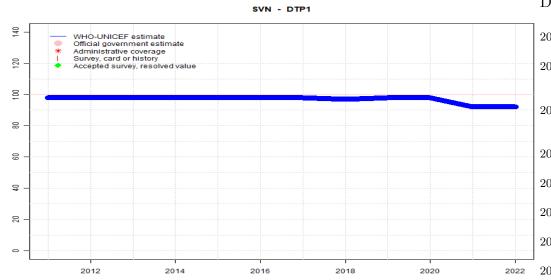
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	NA											

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

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

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

Slovenia - DTP1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	98	98	98	98	98	98	98	97	98	98	92	92
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	NA											
Administrative	NA											
Survey	NA											

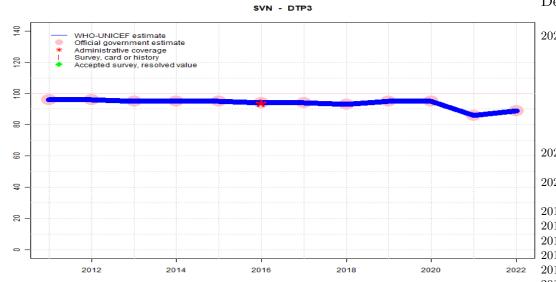
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- ●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+].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

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

- 2022: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data
- 2021: Estimate based on extrapolation from data reported by national government. Decline in coverage between 2020 and 2021 is the result of COVID-19 pandemic disruptions. GoC=No accepted empirical data
- 2020: DTP1 coverage estimated based on DTP3 coverage of 95. Reported coverage derived from an assessment of a random sample of children from the information system. GoC=No accepted empirical data
- 2019: DTP1 coverage estimated based on DTP3 coverage of 95. GoC=No accepted empirical data
- 2018: DTP1 coverage estimated based on DTP3 coverage of 93. GoC=No accepted empirical data
- 2017: DTP1 coverage estimated based on DTP3 coverage of 94. GoC=No accepted empirical data
- 2016: DTP1 coverage estimated based on DTP3 coverage of 94. GoC=No accepted empirical data
- 2015: DTP1 coverage estimated based on DTP3 coverage of 95. GoC=No accepted empirical data
- 2014: DTP1 coverage estimated based on DTP3 coverage of 95. GoC=No accepted empirical data
- 2013: DTP1 coverage estimated based on DTP3 coverage of 95. GoC=No accepted empirical data
- 2012: DTP1 coverage estimated based on DTP3 coverage of 96. GoC=No accepted empirical data
- 2011: DTP1 coverage estimated based on DTP3 coverage of 96. GoC=No accepted empirical data

Slovenia - DTP3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	96	96	95	95	95	94	94	93	95	95	86	89
Estimate GoC	••	••	••	••	••	••	••	••	••	••	••	••
Official	96	96	95	95	95	94	94	93	95	95	86	89
Administrative	NA	NA	NA	NA	NA	94	NA	NA	NA	NA	NA	NA
Survey	NA											

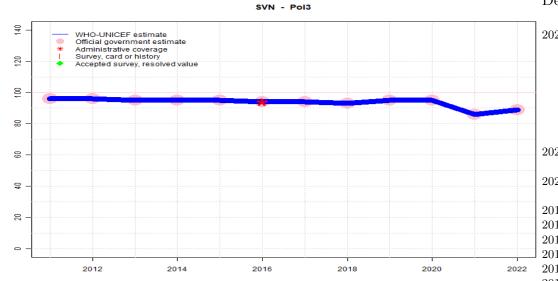
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

- 2022: Estimate informed by reported data. Reported official coverage for preschool children based on a random sample of children obtained from the immunization information system in 2020 (eCRO). To assess 3rd dose coverage, the birth cohort for the period January to December 2020 was used. The proportion vaccinated was estimated with an accuracy of +/-1.5 percent, random sampling and an assumption of 93 percent vaccination leading to a sample size of 1200 children which corresponds to nearly 5 percent of all children in the annual birth cohort. To further improve representativeness, a stratified random sample of 6 percent of children in each health region was selected. GoC=R+
- 2021: Estimate informed by reported data. Decline in coverage between 2020 and 2021 is the result of COVID-19 pandemic disruptions. GoC=R+
- 2020: Estimate informed by reported data. Reported coverage derived from an assessment of a random sample of children from the information system. GoC=R+
- 2019: Estimate informed by reported data. 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+ D+
- 2015: Estimate informed by reported data. GoC=R+
- 2014: Estimate informed by reported data. GoC=R+
- 2013: Estimate informed by reported data. GoC=R+
- 2012: Estimate informed by reported data. GoC=R+
- 2011: Estimate informed by reported data. GoC=R+

Slovenia - Pol3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	96	96	95	95	95	94	94	93	95	95	86	89
Estimate GoC	••	••	••	••	••	••	••	••	••	••	••	••
Official	96	96	95	95	95	94	94	93	95	95	86	89
Administrative	NA	NA	NA	NA	NA	94	NA	NA	NA	NA	NA	NA
Survey	NA											

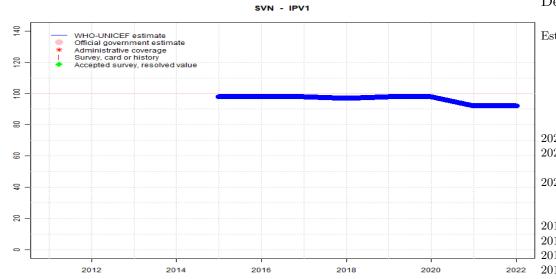
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- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+].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

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

- 2022: Estimate informed by reported data. Reported official coverage for preschool children based on a random sample of children obtained from the immunization information system in 2020 (eCRO). To assess 3rd dose coverage, the birth cohort for the period January to December 2020 was used. The proportion vaccinated was estimated with an accuracy of +/-1.5 percent, random sampling and an assumption of 93 percent vaccination leading to a sample size of 1200 children which corresponds to nearly 5 percent of all children in the annual birth cohort. To further improve representativeness, a stratified random sample of 6 percent of children in each health region was selected. GoC=R+
- 2021: Estimate informed by reported data. Decline in coverage between 2020 and 2021 is unexplained. GoC=R+
- 2020: Estimate informed by reported data. Reported coverage derived from an assessment of a random sample of children from the information system. GoC=R+
- 2019: Estimate informed by reported data. 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+ D+
- 2015: Estimate informed by reported data. GoC=R+
- 2014: Estimate informed by reported data. GoC=R+
- 2013: Estimate informed by reported data. GoC=R+
- 2012: Estimate informed by reported data. GoC=R+
- 2011: Estimate informed by reported data. GoC=R+

Slovenia - IPV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	98	98	98	97	98	98	92	92
Estimate GoC	NA	NA	NA	NA	•	•	•	•	•	•	•	•
Official	NA											
Administrative	NA											
Survey	NA											

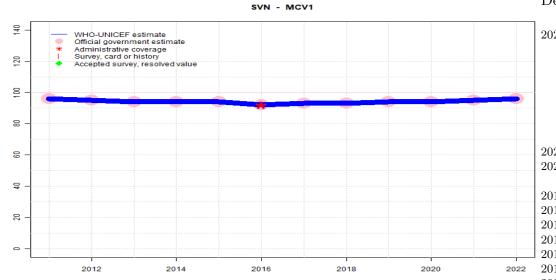
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

- Estimates for a dose of inactivated polio vaccine (IPV) begin in 2015 following the Global Polio Eradication Initiative's Polio Eradication and Endgame Strategic Plan: 2013-2018 which recommended at least one full dose or two fractional doses of IPV into routine immunization schedules as a strategy to mitigate the potential consequences should any re-emergence of type 2 poliovirus occur following the planned withdrawal of Sabin type 2 strains from oral polio vaccine (OPV).
- 2022: Estimate informed by estimated DTP1 coverage. GoC=No accepted empirical data
- 2021: Estimate based on estimated DTP1 coverage. Decline in coverage between 2020 and 2021 is the result of COVID-19 pandemic disruptions. GoC=No accepted empirical data
- 2020: Estimate based on estimated DTP1 coverage. Reported coverage derived from an assessment of a random sample of children from the information system. GoC=No accepted empirical data
- 2019: Estimate based on estimated DTP1 coverage. GoC=No accepted empirical data
- 2018: Estimate based on estimated DTP1 coverage. GoC=No accepted empirical data
- 2017: Estimate is based on estimated DTP1 coverage. GoC=No accepted empirical data
- 2016: Estimate is based on estimated DTP1 coverage. GoC=No accepted empirical data
- 2015: Inactivated polio vaccine administered as part of DTP-Hib-IPV combination vaccine. Estimate is based on estimated DTP1 coverage. GoC=No accepted empirical data

Slovenia - MCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	96	95	94	94	94	92	93	93	94	94	95	96
Estimate GoC	••	••	••	••	••	••	••	••	••	••	••	••
Official	96	95	94	94	94	92	93	93	94	94	95	96
Administrative	NA	NA	NA	NA	NA	92	NA	NA	NA	NA	NA	NA
Survey	NA											

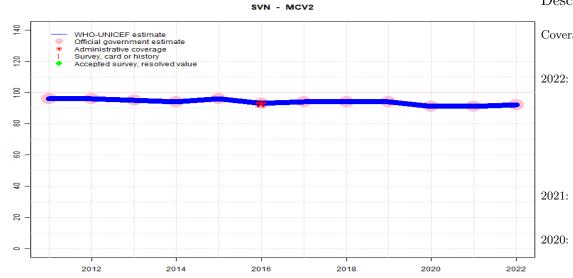
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- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+].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

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

- 2022: Estimate informed by reported data. Reported official coverage for preschool children based on a random sample of children obtained from the immunization information system in 2020 (eCRO). To assess 1st dose coverage, the birth cohort for the period January to December 2020 was used. The proportion vaccinated was estimated with an accuracy of +/-1.5 percent, random sampling and an assumption of 93 percent vaccination leading to a sample size of 1200 children which corresponds to nearly 5 percent of all children in the annual birth cohort. To further improve representativeness, a stratified random sample of 6 percent of children in each health region was selected. GoC=R+
- 2021: Estimate informed by reported data. GoC=R+
- 2020: Estimate informed by reported data. Reported coverage derived from an assessment of a random sample of children from the information system. GoC=R+
- 2019: Estimate informed by reported data. 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+ D+
- 2015: Estimate informed by reported data. GoC=R+
- 2014: Estimate informed by reported data. GoC=R+
- 2013: Estimate informed by reported data. GoC=R+
- 2012: Estimate informed by reported data. GoC=R+
- 2011: Estimate informed by reported data. GoC=R+

Slovenia - MCV2



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	96	96	95	94	96	93	94	94	94	91	91	92
Estimate GoC	••	••	••	••	••	••	••	••	••	••	••	••
Official	96	96	95	94	96	93	94	94	94	91	91	92
Administrative	NA	NA	NA	NA	NA	93	NA	NA	NA	NA	NA	NA
Survey	NA											

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

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

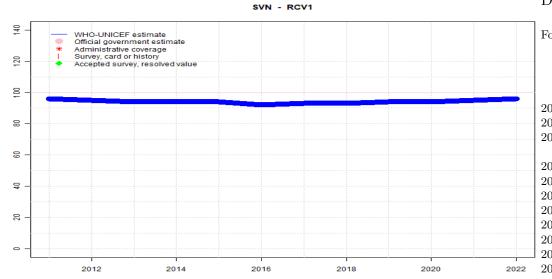
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

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

- 22: Estimate informed by reported data. Reported official coverage for preschool children based on a random sample of children obtained from the immunization information system (eCRO). To assess 2nd dose coverage, the birth cohort for the period January to December 2015 was used. The proportion vaccinated was estimated with an accuracy of +/-1.5 percent, random sampling and an assumption of 93 percent vaccination leading to a sample size of 1000 children which corresponds to nearly 5 percent of all children in the annual birth cohort. To further improve representativeness, a stratified random sample of 6 percent of children in each health region was selected. GoC=R+
- 2021: Estimate informed by reported data. Reported official coverage obtained from mandatory reports from healthcare providers (school doctors) from school years 2020-2021. GoC=R+
- 2020: Estimate informed by reported data. Reported coverage derived from an assessment of a random sample of children from the information system. Reported official coverage obtained from mandatory reports from healthcare providers (school doctors) from school years 2019-2020. GoC=R+
- 2019: Estimate informed by reported data. 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+ D+
- 2015: Estimate informed by reported data. GoC=R+
- 2014: Estimate informed by reported data. GoC=R+
- 2013: Estimate informed by reported data. GoC=R+
- 2012: Estimate informed by reported data. GoC=R+
- 2011: Estimate informed by reported data. GoC=R+

Slovenia - RCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	96	95	94	94	94	92	93	93	94	94	95	96
Estimate GoC	••	••	••	••	••	••	••	••	••	••	••	••
Official	NA											
Administrative	NA											
Survey	NA											

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

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

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

- For this revision, coverage estimates for the first dose of rubella containing vaccine are based on WHO and UNICEF estimates of coverage of measles containing vaccine. Nationally reported coverage of rubella containing vaccine is not taken into consideration nor are they represented in the the accompanying graph and data table.
- 2022: Estimate based on estimated MCV1. GoC=R+
- 2021: Estimate based on estimated MCV1. GoC=R+ $\,$
- 2020: Estimate based on estimated MCV1. Reported coverage derived from an assessment of a random sample of children from the information system. GoC=R+
- 2019: Estimate based on estimated MCV1. 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+ D+ $\,$
- 2015: Estimate based on estimated MCV1. GoC=R+
- 2014: Estimate based on estimated MCV1. GoC=R+
- 2013: Estimate based on estimated MCV1. GoC=R+
- 2012: Estimate based on estimated MCV1. GoC=R+
- 2011: Estimate based on estimated MCV1. GoC=R+ $\,$

Slovenia - HepBB

SVN - HepBB

₹ re	ecommend 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.
	Estimates are not produced for countries that
8	Estimates of hepatitis B birth dose coverage are produced only for countries with a universal birth dose policy.
8 -	No estimate for infant immunization made.
<u></u>	
120	WHO-UNICEF estimate Official government estimate Administrative coverage Survey, card or history Accepted survey, resolved value

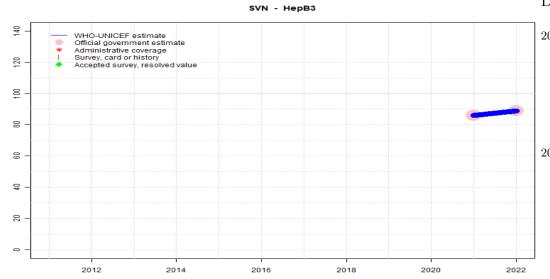
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	NA											

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

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

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

Slovenia - HepB3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	86	89									
Estimate GoC	NA	••	••									
Official	NA	86	89									
Administrative	NA											
Survey	NA											

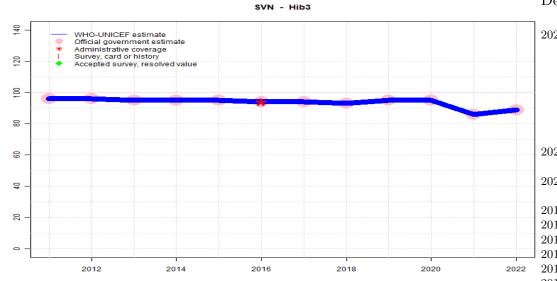
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

- 2022: Estimate informed by reported data. Reported official coverage for preschool children based on a random sample of children obtained from the immunization information system in 2020 (eCRO). To assess 3rd dose coverage, the birth cohort for the period January to December 2020 was used. The proportion vaccinated was estimated with an accuracy of +/-1.5 percent, random sampling and an assumption of 93 percent vaccination leading to a sample size of 1200 children which corresponds to nearly 5 percent of all children in the annual birth cohort. To further improve representativeness, a stratified random sample of 6 percent of children in each health region was selected. GoC=R+
- 2021: Estimate informed by reported data. Hexavalent vaccine DTaP-IPV-Hib-HepB introduced in 2020, reporting for HepB 3 started for 2021. GoC=R+

Slovenia - Hib3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	96	96	95	95	95	94	94	93	95	95	86	89
Estimate GoC	••	••	••	••	••	••	••	••	••	••	••	••
Official	96	96	95	95	95	94	94	93	95	95	86	89
Administrative	NA	NA	NA	NA	NA	94	NA	NA	NA	NA	NA	NA
Survey	NA											

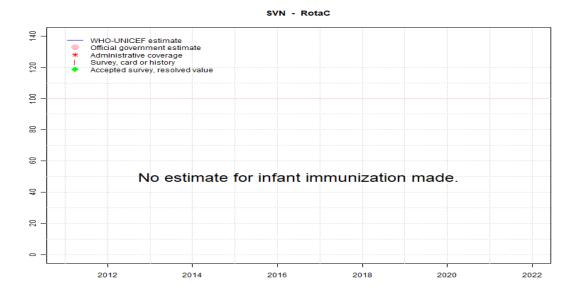
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

- 2022: Estimate informed by reported data. Reported official coverage for preschool children based on a random sample of children obtained from the immunization information system in 2020 (eCRO). To assess 3rd dose coverage, the birth cohort for the period January to December 2020 was used. The proportion vaccinated was estimated with an accuracy of +/-1.5 percent, random sampling and an assumption of 93 percent vaccination leading to a sample size of 1200 children which corresponds to nearly 5 percent of all children in the annual birth cohort. To further improve representativeness, a stratified random sample of 6 percent of children in each health region was selected. GoC=R+
- 2021: Estimate informed by reported data. Decline in coverage between 2020 and 2021 is the result of COVID-19 pandemic disruptions. GoC=R+
- 2020: Estimate informed by reported data. Reported coverage derived from an assessment of a random sample of children from the information system. GoC=R+
- 2019: Estimate informed by reported data. 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+ D+
- 2015: Estimate informed by reported data. GoC=R+
- 2014: Estimate informed by reported data. GoC=R+
- 2013: Estimate informed by reported data. GoC=R+
- 2012: Estimate informed by reported data. GoC=R+
- 2011: Estimate informed by reported data. GoC=R+

Slovenia - RotaC



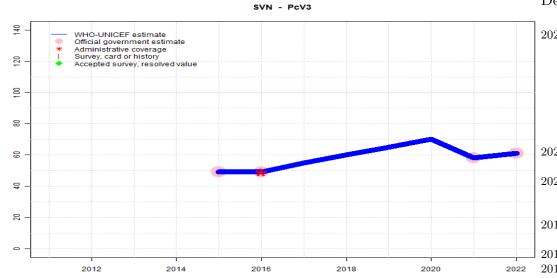
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	NA											

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

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

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

Slovenia - PcV3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	49	49	55	60	65	70	58	61
Estimate GoC	NA	NA	NA	NA	••	••	•	•	•	•	••	••
Official	NA	NA	NA	NA	49	49	NA	NA	NA	NA	58	61
Administrative	NA	NA	NA	NA	NA	49	NA	NA	NA	NA	NA	NA
Survey	NA											

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

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

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

- 2022: Estimate informed by reported data. Reported official coverage for preschool children based on a random sample of children obtained from the immunization information system in 2020 (eCRO). To assess 3rd dose coverage, the birth cohort for the period January to December 2020 was used. The proportion vaccinated was estimated with an accuracy of +/-1.5 percent, random sampling and an assumption of 93 percent vaccination leading to a sample size of 1200 children which corresponds to nearly 5 percent of all children in the annual birth cohort. To further improve representativeness, a stratified random sample of 6 percent of children in each health region was selected. GoC=R+
- 2021: Estimate informed by reported data. Reported coverage is for the third dose of PCV and not the second dose as in previous years. GoC=R+
- 2020: Estimate based on reported coverage for the second dose of PCV. Reported coverage derived from an assessment of a random sample of children from the information system. GoC=No accepted empirical data
- 2019: Estimate based on reported coverage for the second dose of PCV GoC=No accepted empirical data
- 2018: Coverage reported for PCV second dose. GoC=No accepted empirical data
- 2017: Coverage reported for PCV2. GoC=No accepted empirical data
- 2016: Estimate informed by reported data. Reported official coverage based on mandatory reports from healthcare providers, which is believed to cover at least 95 percent of all children registered in the central population registry of Slovenia. GoC=R+ D+
- 2015: Estimate informed by reported data. Pneumococcal conjugate vaccine introduced during 2015 using a 2+1 schedule. Reported official coverage based on mandatory reports from healthcare providers, which is believed to cover at least 95 percent of all children registered in the central population registry of Slovenia. GoC=R+

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