

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

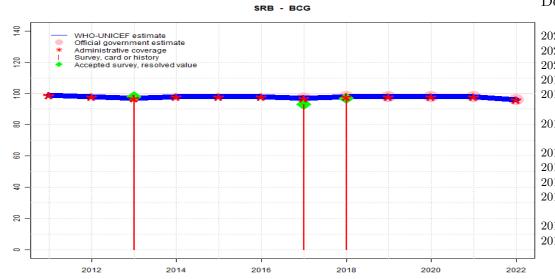
immunization and/or campaign or (ii) a sequential schedule of IPV followed by OPV, WHO and UNICEF estimates for IPV1 reflect coverage with at least one routine dose of IPV among infants <1 year of age among countries. For countries utilizing IPV containing vaccine use only, i.e., no recommended dose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



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	98	97	98	98	98	97	98	98	98	98	96
Estimate GoC	•••	•••	•••	•••	•••	•••	•••	•••	•••	•	٠	••
Official	NA	NA	NA	NA	NA	NA	97	98	98	98	98	96
Administrative	99	98	97	98	98	98	97	98	98	98	98	96
Survey	NA	NA	98	NA	NA	NA	93	97	NA	NA	NA	NA

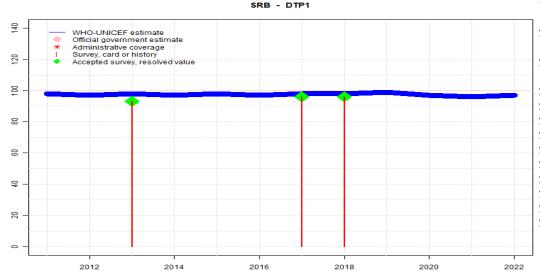
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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. GoC=R+ D+
- 2021: Estimate informed by reported data. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. GoC=R+ S+ D+
- 2018: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 1 survey(s). GoC=R+ S+ D+
- 2017: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+ S+ D+
- 2016: Estimate informed by reported administrative data. GoC=R+ S+ D+
- 2015: Estimate informed by reported administrative data. GoC=R+ S+ D+
- 2014: Estimate informed by reported administrative data. GoC=R+ S+ D+
- 2013: Estimate informed by reported administrative data supported by survey. Survey evidence of 98 percent based on 1 survey(s). GoC=R+ S+ D+
- 2012: Estimate informed by reported administrative data. GoC=R+ S+ D+
- 2011: Estimate informed by reported administrative data. Estimates do not include Kosovo. GoC=R+ S+ D+

# Serbia - DTP1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	98	97	98	97	98	97	98	98	99	97	96	97
Estimate GoC	••	••	••	••	••	••	••	••	••	••	•	•
Official	NA											
Administrative	NA											
Survey	NA	NA	93	NA	NA	NA	96	96	NA	NA	NA	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.

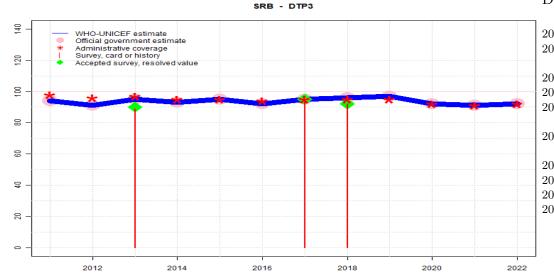
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

### Description:

- 2022: DTP1 coverage estimated based on DTP3 coverage of 92. GoC=No accepted empirical data
- 2021: Estimate is assigned for consistency with neighbouring years. Estimate of 96 percent changed from previous revision value of 97 percent. GoC=No accepted empirical data
- 2020: DTP1 coverage estimated based on DTP3 coverage of 92. GoC=S+  $\,$
- 2019: DTP1 coverage estimated based on DTP3 coverage of 97. GoC=S+  $\,$
- 2018: DTP1 coverage estimated based on DTP3 coverage of 96. GoC=S+  $\,$
- 2017: DTP1 coverage estimated based on DTP3 coverage of 95. GoC=S+  $\,$
- 2016: Estimate based on DTP3 coverage of 92. GoC=S+  $\,$
- 2015: Estimate based on DTP3 coverage of 95. GoC=S+  $\,$
- 2014: Estimate based on DTP3 coverage of 93. GoC=S+  $\,$
- 2013: DTP1 coverage estimated based on DTP3 coverage of 95. GoC=S+
- 2012: Estimate based on DTP3 coverage of 91. GoC=S+  $\,$

2011: Estimate based on DTP3 coverage of 94. Estimates do not include Kosovo. GoC=S+

# Serbia - DTP3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	94	91	95	93	95	92	95	96	97	92	91	92
Estimate GoC	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	••	••
Official	94	91	95	93	95	92	95	96	97	92	91	92
Administrative	98	96	97	95	95	94	95	95	95	92	91	92
Survey	NA	NA	89	NA	NA	NA	95	92	NA	NA	NA	NA

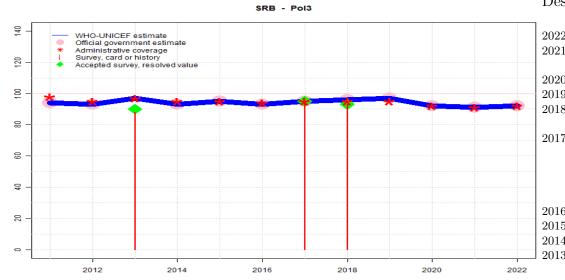
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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. GoC=R+ D+
- 2021: Estimate informed by reported data. Estimate of 91 percent changed from previous revision value of 92 percent. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ S+ D+
- 2019: Estimate informed by reported data. GoC=R+ S+ D+
- 2018: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). GoC=R+ S+ D+
- 2017: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 1 survey(s). GoC=R+ S+ D+
- 2016: Estimate informed by reported data. GoC=R+ S+ D+
- 2015: Estimate informed by reported data. GoC=R+ S+ D+
- 2014: Estimate informed by reported data. GoC=R+ S+ D+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 90 percent based on 1 survey(s). Serbia Multiple Indicator Cluster Survey 2014 card or history results of 89 percent modifed for recall bias to 90 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 87 percent and 3rd dose card only coverage of 84 percent. GoC=R+S+D+
- 2012: Estimate informed by reported data. GoC=R+ S+ D+
- 2011: Estimate informed by reported data. Estimates do not include Kosovo. GoC=R+ S+ D+

## Serbia - Pol3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	94	93	97	93	95	93	95	96	97	92	91	92
Estimate GoC	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	••	••
Official	94	93	NA	93	95	93	95	96	97	92	91	92
Administrative	98	95	97	95	95	94	95	95	95	92	91	92
Survey	NA	NA	88	NA	NA	NA	94	93	NA	NA	NA	NA

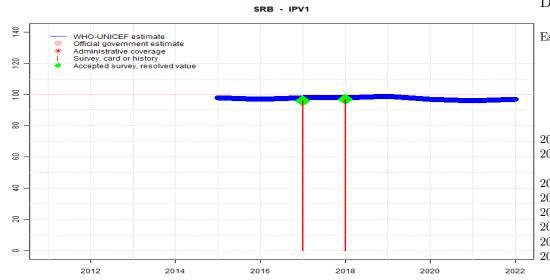
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- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
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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. GoC=R+ D+
- 2021: Estimate informed by reported data. Estimate of 91 percent changed from previous revision value of 92 percent. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ S+ D+
- 2019: Estimate informed by reported data. GoC=R+ S+ D+
- 2018: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+ S+ D+
- 2017: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 1 survey(s). Serbia Multiple Indicator Cluster Survey 2019 card or history results of 94 percent modifed for recall bias to 95 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 85 percent and 3rd dose card only coverage of 84 percent. GoC=R+ S+ D+
- 2016: Estimate informed by reported data. GoC=R+ S+ D+
- 2015: Estimate informed by reported data. GoC=R+ S+ D+
- 2014: Estimate informed by reported data. GoC=R+ S+ D+
- 2013: Estimate informed by reported administrative data supported by survey. Survey evidence of 90 percent based on 1 survey(s). Serbia Multiple Indicator Cluster Survey 2014 card or history results of 88 percent modifed for recall bias to 90 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 86 percent and 3rd dose card only coverage of 83 percent. GoC=R+ S+ D+
- 2012: Estimate informed by reported data. GoC=R+ S+ D+
- 2011: Estimate informed by reported data. Estimates do not include Kosovo. GoC=R+ S+ D+

# Serbia - IPV1



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

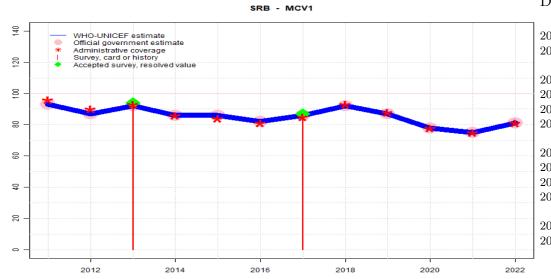
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- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. 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.

- 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 extrapolation from prior year. GoC=No accepted empirical data
- 2021: Estimate based on extrapolation from prior year. Estimate of 96 percent changed from previous revision value of 97 percent. GoC=No accepted empirical data
- 2020: Estimate based on estimated DTP1 coverage. GoC=S+  $\,$
- 2019: Estimate based on estimated DTP1 coverage. GoC=S+  $\,$
- 2018: Estimate based on estimated DTP1 coverage. GoC=S+  $\,$
- 2017: Estimate based on estimated DTP1 coverage. GoC=S+  $\,$
- 2016: Estimate is based on estimated DTP1 coverage level. GoC=S+  $\,$
- 2015: Estimate is based on estimated DTP1 coverage level. GoC=S+  $\,$

# Serbia - MCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	93	87	92	86	86	82	86	92	87	78	75	81
Estimate GoC	•••	•••	•••	•••	•••	•••	•••	•••	•••	••	••	••
Official	93	87	92	86	86	82	86	92	87	78	75	81
Administrative	96	90	93	86	84	81	85	93	88	78	75	81
Survey	NA	NA	94	NA	NA	NA	87	NA	NA	NA	NA	NA

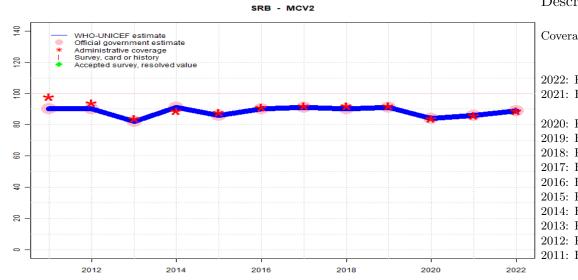
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- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. 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.

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- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. Estimate of 75 percent changed from previous revision value of 78 percent. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ S+ D+
- 2018: Estimate informed by reported data. GoC=R+ S+ D+  $\,$
- 2017: Estimate informed by reported data supported by survey. Survey evidence of 87 percent based on 1 survey(s). GoC=R+ S+ D+
- 2016: Estimate informed by reported data. GoC=R+ S+ D+
- 2015: Estimate informed by reported data. GoC=R+ S+ D+
- 2014: Estimate informed by reported data. GoC=R+ S+ D+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). GoC=R+ S+ D+
- 2012: Estimate informed by reported data. GoC=R+ S+ D+
- 2011: Estimate informed by reported data. Estimates do not include Kosovo. GoC=R+ S+ D+

# Serbia - MCV2



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	90	90	82	91	86	90	91	90	91	84	86	89
Estimate GoC	••	••	••	••	••	••	••	••	••	••	••	••
Official	90	90	82	91	86	90	91	90	91	84	86	89
Administrative	98	94	84	89	88	91	92	92	92	84	86	89
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.
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#### Description:

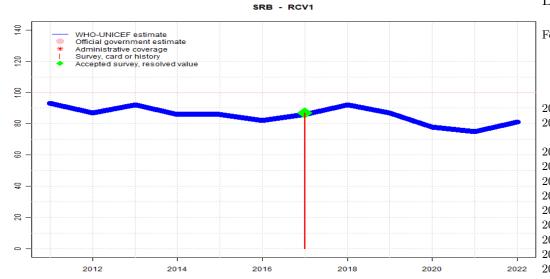
Coverage estimates for the second dose of measles containing vaccine are for children by the nationally recommended age.

2022: Estimate informed by reported data. GoC=R+ D+

2021: Estimate informed by reported data. Estimate of 86 percent changed from previous revision value of 84 percent. GoC=R+ D+

- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by reported data. GoC=R+ D+
- 2016: Estimate informed by reported data. GoC=R+D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+D+
- 2013: Estimate informed by reported data. GoC=R+D+
- 2012: Estimate informed by reported data. GoC=R+D+
- 2011: Estimate informed by reported data. GoC=R+ D+

# Serbia - RCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	93	87	92	86	86	82	86	92	87	78	75	81
Estimate GoC	•••	•••	•••	•••	•••	•••	•••	•••	•••	••	••	••
Official	NA											
Administrative	NA											
Survey	NA	NA	NA	NA	NA	NA	87	NA	NA	NA	NA	NA

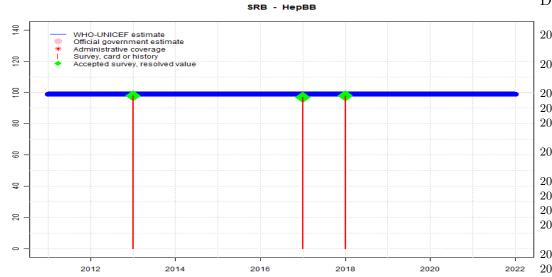
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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+ D+  $\,$
- 2021: Estimate based on estimated MCV1. Estimate of 75 percent changed from previous revision value of 78 percent. GoC=R+ D+
- 2020: Estimate based on estimated MCV1. GoC=R+ D+  $\,$
- 2019: Estimate based on estimated MCV1. GoC=R+ S+ D+  $\,$
- 2018: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2017: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2016: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2015: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2014: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2013: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2012: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2011: Estimate based on estimated MCV1. GoC=R+ S+ D+

# Serbia - HepBB



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	99	99	99	99	99	99	99	99	99	99	99	99
Estimate GoC	••	••	••	••	••	••	••	••	••	••	•	•
Official	NA											
Administrative	NA											
Survey	NA	NA	98	NA	NA	NA	97	98	NA	NA	NA	NA

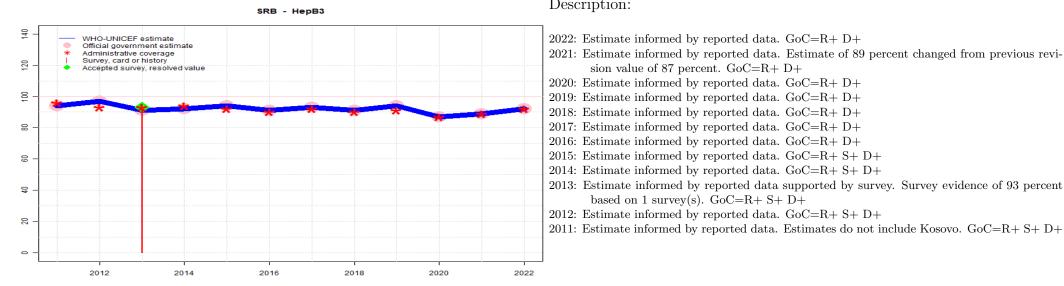
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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 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. GoC=No accepted empirical data
- 2020: Estimate based on extrapolation from data reported by national government. GoC=S+  $\,$
- 2019: Estimate based on extrapolation from data reported by national government. GoC=S+
- 2018: Estimate based on extrapolation from data reported by national government supported by survey. Survey evidence of 98 percent based on 1 survey(s). GoC=S+
- 2017: Estimate based on extrapolation from data reported by national government supported by survey. Survey evidence of 97 percent based on 1 survey(s). GoC=S+
- 2016: . GoC=S+
- 2015: . GoC=S+  $\,$
- 2014: . GoC=S+
- 2013: Estimate based on extrapolation from data reported by national government supported by survey. Survey evidence of 98 percent based on 1 survey(s). GoC=S+
- 2012: Estimate based on extrapolation from data reported by national government. GoC=S+  $\,$
- 2011: Estimate based on extrapolation from data reported by national government. GoC=S+

# Serbia - HepB3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	94	97	91	92	94	91	93	91	94	87	89	92
Estimate GoC	•••	•••	•••	•••	•••	••	••	••	••	••	••	••
Official	94	97	91	92	94	91	93	91	94	87	89	92
Administrative	96	93	93	94	92	90	92	90	91	87	89	92
Survey	NA	NA	93	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.

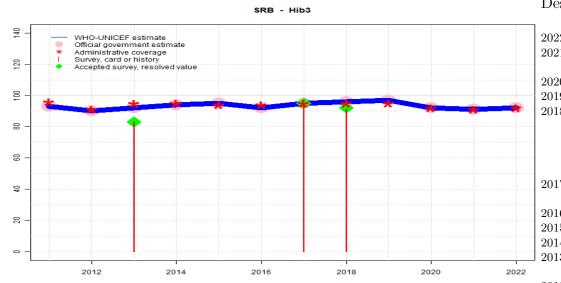
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

#### Description:

2021: Estimate informed by reported data. Estimate of 89 percent changed from previous revi-

- 2011: Estimate informed by reported data. Estimates do not include Kosovo. GoC=R+S+D+

## Serbia - Hib3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	93	90	92	94	95	92	95	96	97	92	91	92
Estimate GoC	•••	•••	•••	•	•	•••	•••	•••	•••	•••	••	••
Official	93	90	92	94	95	92	95	96	97	92	91	92
Administrative	96	91	95	95	94	94	95	95	95	92	91	92
Survey	NA	NA	83	NA	NA	NA	95	91	NA	NA	NA	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. GoC=R+ D+
- 2021: Estimate informed by reported data. Estimate of 91 percent changed from previous revision value of 92 percent. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ S+ D+
- 2019: Estimate informed by reported data. GoC=R+ S+ D+
- 2018: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). Serbia Multiple Indicator Cluster Survey 2019 card or history results of 91 percent modifed for recall bias to 92 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 80 percent and 3rd dose card only coverage of 77 percent. GoC=R+ S+ D+
- 2017: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 1 survey(s). GoC=R+ S+ D+
- 2016: Estimate informed by reported data. GoC=R+ S+ D+
- 2015: Estimate informed by reported data. Estimate challenged by: S-
- 2014: Estimate informed by reported data. Estimate challenged by: S-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 83 percent based on 1 survey(s). GoC=R+ S+ D+
- 2012: Estimate informed by reported data. GoC=R+ S+ D+
- 2011: Estimate informed by reported data. Estimates do not include Kosovo. GoC=R+ S+ D+

# Serbia - RotaC

SRB - RotaC 140 WHO-UNICEF estimate • Official government estimate -16 Administrative coverage Survey, card or history Accepted survey, resolved value 120 ₿. 8 8 No estimate for infant immunization made. 육 -8 0 2012 2014 2016 2018 2020 2022

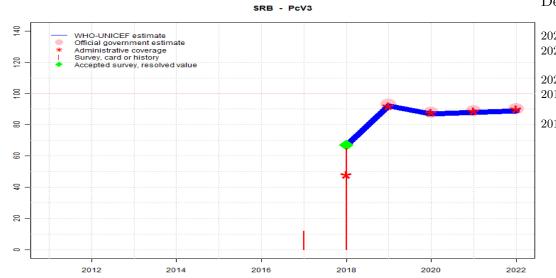
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	NA											

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.

# Serbia - PcV3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	67	92	87	88	89						
Estimate GoC	NA	•	•	•	•	•						
Official	NA	93	88	89	90							
Administrative	NA	48	92	88	89	90						
Survey	NA	NA	NA	NA	NA	NA	12	65	NA	NA	NA	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: Reported data calibrated to 2019 levels. Estimate challenged by: R-
- 2021: Reported data calibrated to 2019 levels. Estimate of 88 percent changed from previous revision value of 87 percent. Estimate challenged by: R-
- 2020: Reported data calibrated to 2019 levels. Estimate challenged by: R-S-
- 2019: Estimate of 92 percent assigned by working group. Estimate based on reported administrative data. Estimate challenged by: R-S-
- 2018: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 67 percent based on 1 survey(s). Serbia Multiple Indicator Cluster Survey 2019 card or history results of 65 percent modifed for recall bias to 67 percent based on 1st dose card or history coverage of 71 percent, 1st dose card only coverage of 60 percent and 3rd dose card only coverage of 57 percent. Pneumococcal conjugate vaccine introduced in April 2018 Estimate challenged by: R-

### Serbia - survey details

NOTE: A survey to measure vaccination coverage for infants (i.e., children aged 0 to 11 months) will sample children aged 12 to 23 months at the time of survey to capture the youngest annual cohort of children who should have completed the vaccination schedule. Because WUENIC are for infant vaccinations, survey data in this report are presented to reflect the birth year of the youngest survey cohort. For example, results for a survey conducted during December 2020 among children aged 12 to 23 months at the time of the survey reflect the immunization experience of children born in 2019. Depending on the timing of survey field work, results may reflect the immunization experience of children born and vaccinated 1 or 2 years prior to the survey field work.

#### 2018 Serbia Multiple Indicator Cluster Survey 2019

vacune	Commination method	Coverage	Age conort	Sample	Carus a
BCG	C or H ${<}12$ months	96.4	$12\text{-}23~\mathrm{m}$	365	68
BCG	Card	77.3	$12\text{-}23~\mathrm{m}$	365	68
BCG	Card or History	96.6	$12\text{-}23~\mathrm{m}$	365	68
BCG	History	19.3	$12\text{-}23 \mathrm{~m}$	365	68
DTP1	C or H ${<}12$ months	94.8	$12\text{-}23~\mathrm{m}$	365	68
DTP1	Card	80.8	$12\text{-}23~\mathrm{m}$	365	68
DTP1	Card or History	96.5	12-23  m	365	68
DTP1	History	15.6	$12-23 \mathrm{m}$	365	68
DTP3	C or H ${<}12 \text{ months}$	91.3	$12-23 \mathrm{m}$	365	68
DTP3	Card	78	$12\text{-}23~\mathrm{m}$	365	68
DTP3	Card or History	91.8	12-23  m	365	68
DTP3	History	13.9	$12\text{-}23~\mathrm{m}$	365	68
HepB1	C or H ${<}12$ months	96	$12\text{-}23~\mathrm{m}$	365	68
HepB1	Card	81.2	$12\text{-}23~\mathrm{m}$	365	68
HepB1	Card or History	96.3	$12-23 \mathrm{m}$	365	68
HepB1	History	15.1	$12\text{-}23~\mathrm{m}$	365	68
HepBB	C or H ${<}12$ months	97.6	$12\text{-}23~\mathrm{m}$	365	68
HepBB	Card	81.4	$12\text{-}23~\mathrm{m}$	365	68
HepBB	Card or History	97.6	$12-23 \mathrm{m}$	365	68
HepBB	History	16.2	$12\text{-}23~\mathrm{m}$	365	68
Hib1	C or H ${<}12$ months	94.1	$12\text{-}23~\mathrm{m}$	365	68
Hib1	Card	80.1	$12-23 \mathrm{m}$	365	68
Hib1	Card or History	95.8	$12\text{-}23~\mathrm{m}$	365	68
Hib1	History	15.6	$12\text{-}23~\mathrm{m}$	365	68

Hib3	C or H $< 12$ months	90.6	12-23  m	365	68
Hib3	Card	77.3	12-23  m	365	68
Hib3	Card or History	91.1	$12-23 \mathrm{m}$	365	68
Hib3	History	13.9	$12-23 \mathrm{m}$	365	68
IPV1	C or H $< 12$ months	95.5	$12-23 \mathrm{m}$	365	68
IPV1	Card	80.8	$12-23 \mathrm{m}$	365	68
IPV1	Card or History	97.2	$12-23 \mathrm{m}$	365	68
IPV1	History	16.4	$12-23 \mathrm{m}$	365	68
PCV1	C or $H < 12$ months	70.9	$12-23 \mathrm{m}$	365	68
PCV1	Card	60	$12-23 \mathrm{~m}$	365	68
PCV1	Card or History	71.4	$12-23 \mathrm{m}$	365	68
PCV1	History	11.4	$12-23 \mathrm{m}$	365	68
PCV3	C or H $< 12$ months	64.2	$12-23 \mathrm{m}$	365	68
PCV3	Card	56.7	$12-23 \mathrm{m}$	365	68
PCV3	Card or History	65.4	$12-23 \mathrm{m}$	365	68
PCV3	History	8.7	$12-23 \mathrm{m}$	365	68
Pol1	C or $H < 12$ months	95.5	$12-23 \mathrm{m}$	365	68
Pol1	Card	80.8	$12-23 \mathrm{m}$	365	68
Pol1	Card or History	97.2	$12-23 \mathrm{~m}$	365	68
Pol1	History	16.4	$12-23 \mathrm{~m}$	365	68
Pol3	C or H $< 12$ months	92	$12-23 \mathrm{m}$	365	68
Pol3	Card	78	$12-23 \mathrm{m}$	365	68
Pol3	Card or History	92.6	$12-23 \mathrm{~m}$	365	68
Pol3	History	14.6	12-23 m	365	68
	*				

#### 2017 Serbia Multiple Indicator Cluster Survey 2019

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H ${<}12$ months	92.5	$24\text{-}35~\mathrm{m}$	384	68
BCG	Card	76.7	$24\text{-}35~\mathrm{m}$	384	68
BCG	Card or History	93	$24\text{-}35~\mathrm{m}$	384	68
BCG	History	16.4	$24\text{-}35~\mathrm{m}$	384	68
DTP1	C or H ${<}12$ months	95.4	$24\text{-}35~\mathrm{m}$	384	68
DTP1	Card	85.2	$24\text{-}35~\mathrm{m}$	384	68
DTP1	Card or History	96	$24\text{-}35~\mathrm{m}$	384	68
DTP1	History	10.9	$24\text{-}35~\mathrm{m}$	384	68
DTP3	C or H ${<}12$ months	89.8	$24\text{-}35~\mathrm{m}$	384	68
DTP3	Card	84	$24\text{-}35~\mathrm{m}$	384	68
DTP3	Card or History	94.7	$24\text{-}35~\mathrm{m}$	384	68

DTP3	History	10.7	$24\text{-}35~\mathrm{m}$	384	68
HepB1	C or H ${<}12$ months	97.4	$24\text{-}35~\mathrm{m}$	384	68
HepB1	Card	85.2	$24\text{-}35~\mathrm{m}$	384	68
HepB1	Card or History	97.4	$24\text{-}35~\mathrm{m}$	384	68
HepB1	History	12.2	$24\text{-}35~\mathrm{m}$	384	68
HepBB	C or H ${<}12$ months	97.1	$24\text{-}35~\mathrm{m}$	384	68
HepBB	Card	85.4	$24\text{-}35~\mathrm{m}$	384	68
HepBB	Card or History	97.4	$24\text{-}35~\mathrm{m}$	384	68
HepBB	History	12	$24\text{-}35~\mathrm{m}$	384	68
Hib1	C or H ${<}12$ months	95.4	$24\text{-}35~\mathrm{m}$	384	68
Hib1	Card	85.2	$24\text{-}35~\mathrm{m}$	384	68
Hib1	Card or History	96	$24\text{-}35~\mathrm{m}$	384	68
Hib1	History	10.9	$24\text{-}35~\mathrm{m}$	384	68
Hib3	C or H ${<}12$ months	89.8	$24\text{-}35~\mathrm{m}$	384	68
Hib3	Card	84	$24\text{-}35~\mathrm{m}$	384	68
Hib3	Card or History	94.7	$24\text{-}35~\mathrm{m}$	384	68
Hib3	History	10.7	$24\text{-}35~\mathrm{m}$	384	68
IPV1	C or H $< 12$ months	95.3	$24\text{-}35~\mathrm{m}$	384	68
IPV1	Card	85.3	$24\text{-}35~\mathrm{m}$	384	68
IPV1	Card or History	95.9	$24\text{-}35~\mathrm{m}$	384	68
IPV1	History	10.6	$24\text{-}35~\mathrm{m}$	384	68
MCV1	C or H $< 12$ months	83.6	$24\text{-}35~\mathrm{m}$	384	68
MCV1	Card	77.2	$24\text{-}35~\mathrm{m}$	384	68
MCV1	Card or History	87.2	$24\text{-}35~\mathrm{m}$	384	68
MCV1	History	10.1	$24\text{-}35~\mathrm{m}$	384	68
PCV1	C or H $< 12$ months	8.3	$24\text{-}35~\mathrm{m}$	384	68
PCV1	Card	10.2	$24\text{-}35~\mathrm{m}$	384	68
PCV1	Card or History	18.1	$24\text{-}35~\mathrm{m}$	384	68
PCV1	History	7.9	$24\text{-}35~\mathrm{m}$	384	68
PCV3	C or H ${<}12$ months	11.8	$24\text{-}35~\mathrm{m}$	384	68
PCV3	Card	3.6	$24\text{-}35~\mathrm{m}$	384	68
PCV3	Card or History	11.8	$24\text{-}35~\mathrm{m}$	384	68
PCV3	History	8.3	$24\text{-}35~\mathrm{m}$	384	68
Pol1	C or H $< 12$ months	95.3	$24\text{-}35~\mathrm{m}$	384	68
Pol1	Card	85.3	$24\text{-}35~\mathrm{m}$	384	68
Pol1	Card or History	95.9	$24\text{-}35~\mathrm{m}$	384	68
Pol1	History	10.6	$24\text{-}35~\mathrm{m}$	384	68
Pol3	C or H $< 12$ months	89.6	$24\text{-}35~\mathrm{m}$	384	68
Pol3	Card	84	$24\text{-}35~\mathrm{m}$	384	68
Pol3	Card or History	94.5	$24\text{-}35~\mathrm{m}$	384	68

Pol3	History	10.5	24-35 m	384	68			
2013 Serbia Multiple Indicator Cluster Survey 2014								
Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen			
BCG	C or H ${<}12$ months	98	12-23 m	489	87			
BCG	Card	80.3	$12-23 \mathrm{m}$	-	87			
BCG	Card or History	98	$12\text{-}23~\mathrm{m}$	489	87			
BCG	History	17.6	$12\text{-}23~\mathrm{m}$	-	87			
DTP1	C or H $< 12$ months	92.9	$12\text{-}23~\mathrm{m}$	489	87			
DTP1	Card	86.6	$12-23 \mathrm{m}$	-	87			
DTP1	Card or History	93.1	$12\text{-}23~\mathrm{m}$	489	87			
DTP1	History	6.4	$12\text{-}23~\mathrm{m}$	-	87			
DTP3	C or H ${<}12$ months	87.4	$12\text{-}23~\mathrm{m}$	489	87			
DTP3	Card	83.9	$12\text{-}23~\mathrm{m}$	-	87			
DTP3	Card or History	89	$12\text{-}23~\mathrm{m}$	489	87			
DTP3	History	5.1	$12\text{-}23~\mathrm{m}$	-	87			
HepB1	C or H ${<}12$ months	98.2	$12\text{-}23~\mathrm{m}$	489	87			
HepB1	Card	86.2	$12\text{-}23~\mathrm{m}$	-	87			
HepB1	Card or History	98.5	$12\text{-}23~\mathrm{m}$	489	87			
HepB1	History	12.3	$12\text{-}23~\mathrm{m}$	-	87			
HepB3	C or H ${<}12$ months	91.3	$12\text{-}23~\mathrm{m}$	489	87			
HepB3	Card	82.2	$12\text{-}23~\mathrm{m}$	-	87			
HepB3	Card or History	93.2	$12\text{-}23~\mathrm{m}$	489	87			
HepB3	History	11	$12\text{-}23~\mathrm{m}$	-	87			
HepBB	C or H ${<}12$ months	98.2	$12\text{-}23~\mathrm{m}$	489	87			
HepBB	Card	86.2	$12\text{-}23~\mathrm{m}$	-	87			
HepBB	Card or History	98.5	$12\text{-}23~\mathrm{m}$	489	87			
HepBB	History	12.3	$12\text{-}23~\mathrm{m}$	-	87			
Hib1	C or H ${<}12$ months	91.5	$12\text{-}23~\mathrm{m}$	489	87			
Hib1	Card	85.3	$12\text{-}23~\mathrm{m}$	-	87			
Hib1	Card or History	92	$12\text{-}23~\mathrm{m}$	489	87			
Hib1	History	6.7	$12\text{-}23~\mathrm{m}$	-	87			
Hib3	C or H ${<}12$ months	80.4	$12\text{-}23~\mathrm{m}$	489	87			
Hib3	Card	77.1	$12\text{-}23~\mathrm{m}$	-	87			
Hib3	Card or History	82.7	$12\text{-}23~\mathrm{m}$	489	87			
Hib3	History	5.6	$12\text{-}23~\mathrm{m}$	-	87			
MCV1	Card	82.3	$24\text{-}35~\mathrm{m}$	-	87			
MCV1	Card or History	94.4	$24\text{-}35~\mathrm{m}$	465	87			

### Serbia - survey details

MCV1	History	12.2	$24\text{-}35~\mathrm{m}$	-	87
Pol1	C or H ${<}12$ months	92.8	$12\text{-}23~\mathrm{m}$	489	87
Pol1	Card	86.5	$12\text{-}23~\mathrm{m}$	-	87
Pol1	Card or History	92.9	$12-23 \mathrm{m}$	489	87
Pol1	History	6.4	$12\text{-}23~\mathrm{m}$	-	87
Pol3	C or H ${<}12$ months	86.4	$12\text{-}23~\mathrm{m}$	489	87
Pol3	Card	83.3	$12\text{-}23~\mathrm{m}$	-	87
Pol3	Card or History	88.4	$12-23 \mathrm{m}$	489	87
Pol3	History	5.1	$12\text{-}23~\mathrm{m}$	-	87

2012 Serbia Multiple Indicator Cluster Survey 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H ${<}12$ months	99	$24\text{-}35~\mathrm{m}$	465	87
DTP1	C or H ${<}12$ months	90.5	$24\text{-}35~\mathrm{m}$	465	87
DTP3	C or H ${<}12$ months	85.9	$24\text{-}35~\mathrm{m}$	465	87
HepB1	C or H ${<}12$ months	98.6	$24\text{-}35~\mathrm{m}$	465	87
HepBB	C or H ${<}12$ months	99	$24\text{-}35~\mathrm{m}$	465	87
Hib1	C or H ${<}12$ months	90.6	$24\text{-}35~\mathrm{m}$	465	87
Hib3	C or H ${<}12$ months	82.4	$24\text{-}35~\mathrm{m}$	465	87
MCV1	C or H ${<}24$ months	93.4	$24\text{-}35~\mathrm{m}$	465	87
Pol1	C or H ${<}12$ months	90.9	$24\text{-}35~\mathrm{m}$	465	87
Pol3	C or H ${<}12$ months	85.6	$24\text{-}35~\mathrm{m}$	465	87

2004 Serbia Multiple Indicator Cluster Survey 2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H ${<}12$ months	74.1	$18\text{-}29~\mathrm{m}$	782	71
BCG	Card	44.2	$18\text{-}29~\mathrm{m}$	782	71
BCG	Card or History	74.5	$18\text{-}29~\mathrm{m}$	782	71
BCG	History	30.4	$18\text{-}29~\mathrm{m}$	782	71
DTP1	C or H ${<}12$ months	97.1	18-29 m	782	71
DTP1	Card	72.7	18-29 m	782	71
DTP1	Card or History	98.5	$18\text{-}29~\mathrm{m}$	782	71

DTP1	History	25.8	18-29 m	782	71
DTP3	C or H $< 12$ months	89.7	$18-29 \mathrm{~m}$	782	71
DTP3	Card	77.8	$18-29 \mathrm{~m}$	782	71
DTP3	Card or History	95.6	$18\text{-}29~\mathrm{m}$	782	71
DTP3	History	17.8	$18\text{-}29~\mathrm{m}$	782	71
MCV1	C or H ${<}12$ months	84.1	$18\text{-}29~\mathrm{m}$	782	71
MCV1	Card	64.1	$18\text{-}29~\mathrm{m}$	782	71
MCV1	Card or History	86.6	$18\text{-}29~\mathrm{m}$	782	71
MCV1	History	22.5	$18\text{-}29~\mathrm{m}$	782	71
Pol1	C or H ${<}12$ months	95	$18\text{-}29~\mathrm{m}$	782	71
Pol1	Card	70	$18\text{-}29~\mathrm{m}$	782	71
Pol1	Card or History	96.9	$18\text{-}29~\mathrm{m}$	782	71
Pol1	History	26.9	$18\text{-}29~\mathrm{m}$	782	71
Pol3	C or H $< 12$ months	88.2	$18\text{-}29~\mathrm{m}$	782	71
Pol3	Card	75.1	$18\text{-}29~\mathrm{m}$	782	71
Pol3	Card or History	93.8	$18\text{-}29~\mathrm{m}$	782	71
Pol3	History	18.7	18-29 m	782	71

1999 Federal Republic of Yugoslavia, Multiple Indicator Cluster Survey II 2000 (excluding Kosovo)

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H ${<}12$ months	100	$12\text{-}23~\mathrm{m}$	341	76
DTP1	C or H ${<}12$ months	97.6	$12\text{-}23~\mathrm{m}$	341	76
DTP3	C or H ${<}12$ months	94.9	$12\text{-}23~\mathrm{m}$	341	76
Pol1	C or H ${<}12$ months	98.4	$12\text{-}23~\mathrm{m}$	341	76
Pol3	C or H ${<}12$ months	98	$12\text{-}23~\mathrm{m}$	341	76

- 1998 Federal Republic of Yugoslavia, Multiple Indicator Cluster Survey II 2000 (excluding Kosovo)
- VaccineConfirmation methodCoverage Age cohortSampleCards seenMCV1Card or History89.224-35 m34176

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