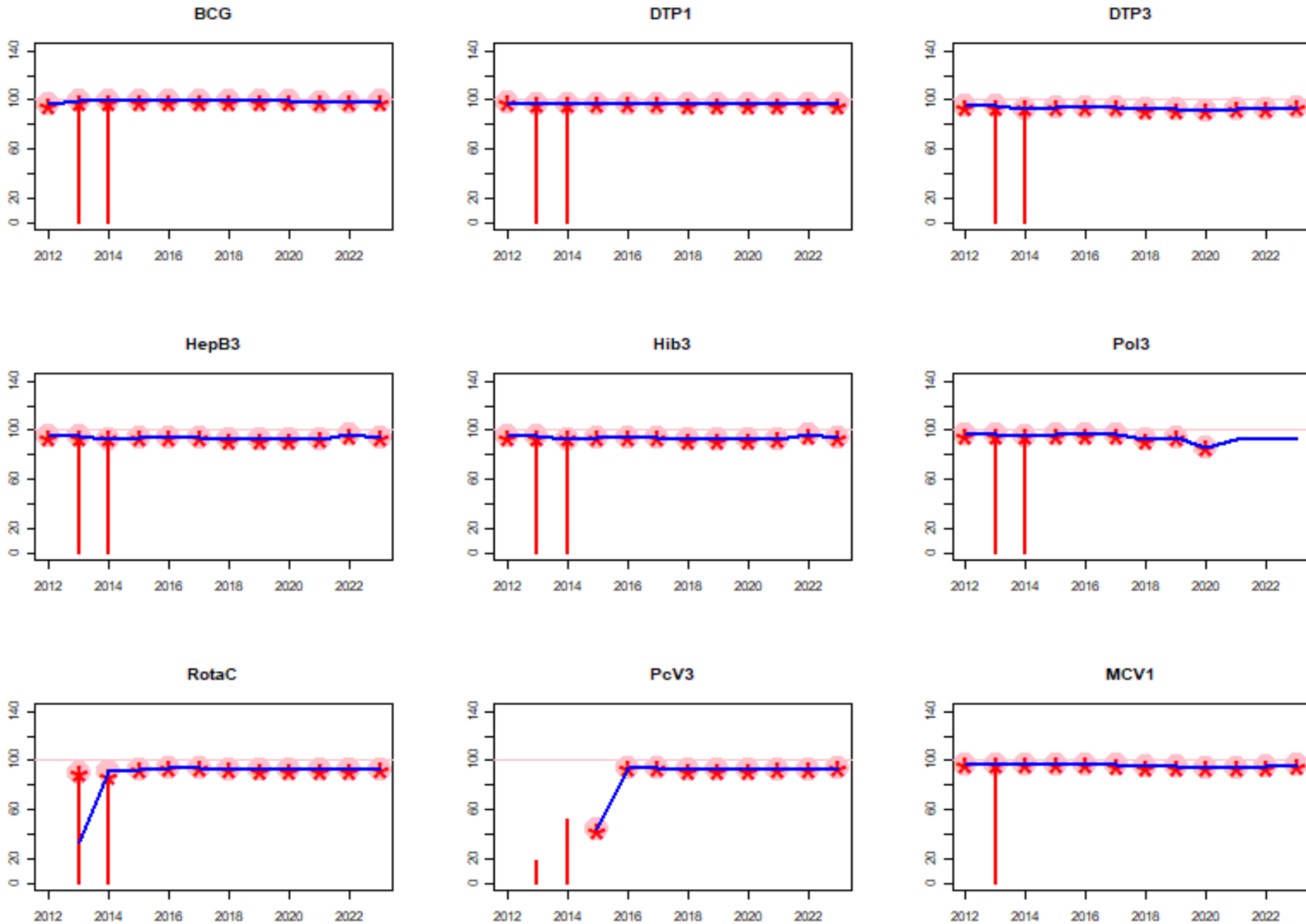


Armenia: WHO and UNICEF estimates of immunization coverage: 2023 revision



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

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

\*Burton et al. 2009. Bull World Health Organ.

\*Burton et al. 2012. PLoS One.

\*Danovaro-Holliday et al. 2021. Gates Open Res.

## DATA SOURCES.

**ADMINISTRATIVE coverage:** Reported by national authorities and based on aggregated administrative reports from health service providers on the number of vaccinations administered during a given period (numerator data) and reported target population data (denominator data). May be biased by inaccurate numerator and/or denominator data.

**OFFICIAL coverage:** Estimated coverage reported by national authorities that reflects their assessment of the most likely coverage based on any combination of administrative coverage, survey-based estimates or other data sources or adjustments. Approaches to determine OFFICIAL coverage may differ across countries.

**SURVEY coverage:** Based on estimated coverage from population-based household surveys among children aged 12-23 or 24-35 months following a review of survey methods and results. Information is based on the combination of vaccination history from documented evidence or caregiver recall. Survey results are considered for the appropriate birth cohort based on data collection period.

## ABBREVIATIONS

**BCG:** percentage of births who received one dose of Bacillus Calmette Guerin vaccine.

**DTP1 / DTP3:** percentage of surviving infants who received the 1st / 3rd dose, respectively, of diphtheria and tetanus toxoid with pertussis containing vaccine.

**Pol3:** percentage of surviving infants who received the 3rd dose of polio containing vaccine. May be either oral or inactivated polio vaccine.

**IPV1:** percentage of surviving infants who received at least one dose of inactivated polio vaccine. In countries utilizing an immunization schedule recommending either (i) a primary series of three doses of oral polio vaccine (OPV) plus at least one dose of IPV where OPV is included in routine immunization and/or campaign or (ii) a sequential schedule of IPV followed by OPV, WHO and UNICEF estimates for IPV1 reflect coverage with at least one routine dose of IPV among infants <1 year of age. For countries utilizing IPV containing vaccine only, i.e., no recommended dose of OPV, WHO and UNICEF estimate for IPV1 corresponds to coverage for the 1st dose of IPV.

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

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

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

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

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

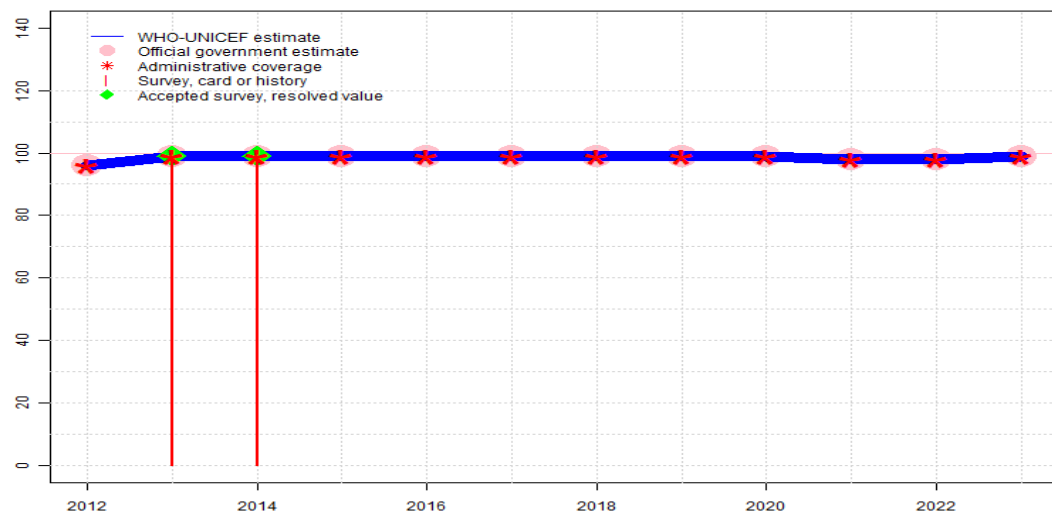
**YFV:** percentage of surviving infants who received one dose of yellow fever vaccine in countries where YFV is part of the national immunization schedule for children or is recommended in at risk areas; coverage estimates are annualized for the entire cohort of surviving infants.

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

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# Armenia - BCG

ARM - BCG



## Description:

- 2023: Estimate informed by reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. 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+ S+ D+
- 2015: Estimate informed by reported data. GoC=R+ S+ D+
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 99 percent based on 1 survey(s). GoC=R+ S+ D+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 99 percent based on 1 survey(s). Estimate challenged by: D-
- 2012: Estimate informed by reported data. Estimate challenged by: D-

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	96	99	99	99	99	99	99	99	99	98	98	99
Estimate GoC	•	•	•••	•••	•••	••	••	••	••	••	••	••
Official	96	99	99	99	99	99	99	99	99	98	98	99
Administrative	96	99	99	99	99	99	99	99	99	98	98	99
Survey	NA	99	99	NA	NA	NA	NA	NA	NA	NA	NA	NA

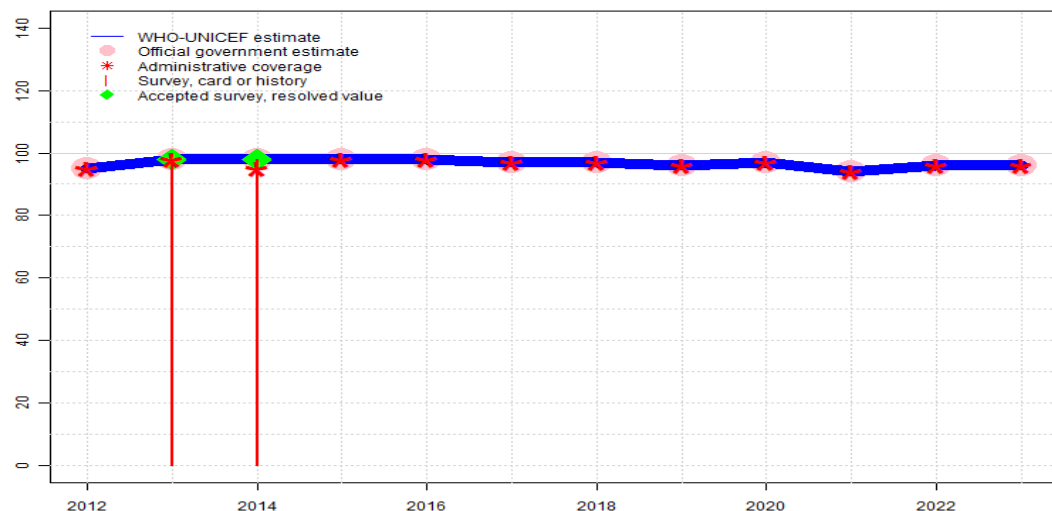
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Armenia - HepBB

ARM - HepBB



## Description:

- 2023: Estimate informed by reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. 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+ S+ D+
- 2015: Estimate informed by reported data. GoC=R+ S+ D+
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 98 percent based on 1 survey(s). GoC=R+ S+ D+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 98 percent based on 1 survey(s). Estimate challenged by: D-
- 2012: Estimate informed by reported data. Estimate challenged by: D-

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	95	98	98	98	98	97	97	96	97	94	96	96
Estimate GoC	•	•	•••	•••	•••	••	••	••	••	••	••	••
Official	95	98	98	98	98	97	97	96	97	94	96	96
Administrative	95	98	95	98	98	97	97	96	97	94	96	96
Survey	NA	98	98	NA	NA	NA	NA	NA	NA	NA	NA	NA

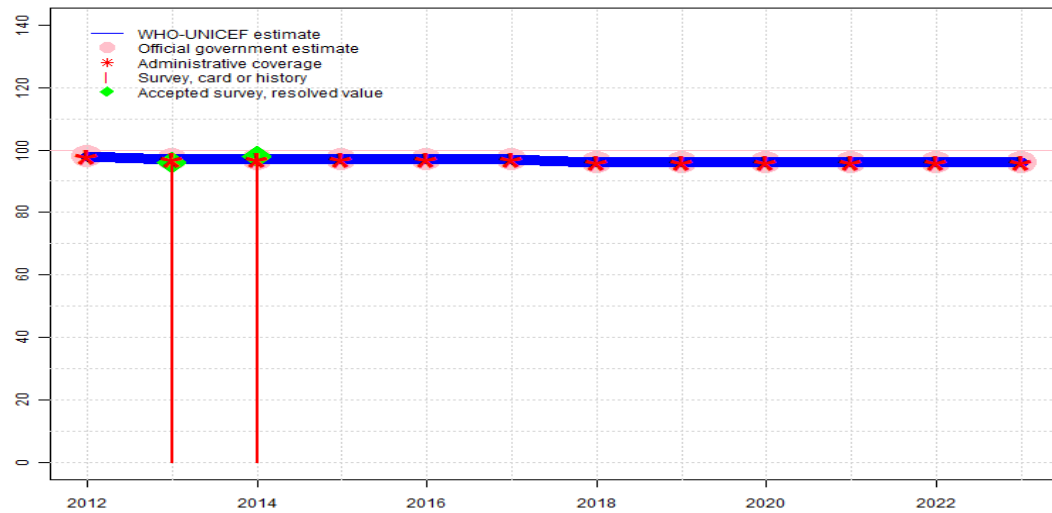
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Armenia - DTP1

ARM - DTP1



## Description:

- 2023: Estimate informed by reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. 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+ S+ D+
- 2015: Estimate informed by reported data. GoC=R+ S+ D+
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 98 percent based on 1 survey(s). GoC=R+ S+ D+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 1 survey(s). GoC=R+ S+ D+
- 2012: Estimate informed by reported data. GoC=R+ S+ D+

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	98	97	97	97	97	97	96	96	96	96	96	96
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●●	●●	●●	●●	●●	●●	●●
Official	98	97	97	97	97	97	96	96	96	96	96	96
Administrative	98	97	97	97	97	97	96	96	96	96	96	96
Survey	NA	96	98	NA	NA	NA	NA	NA	NA	NA	NA	NA

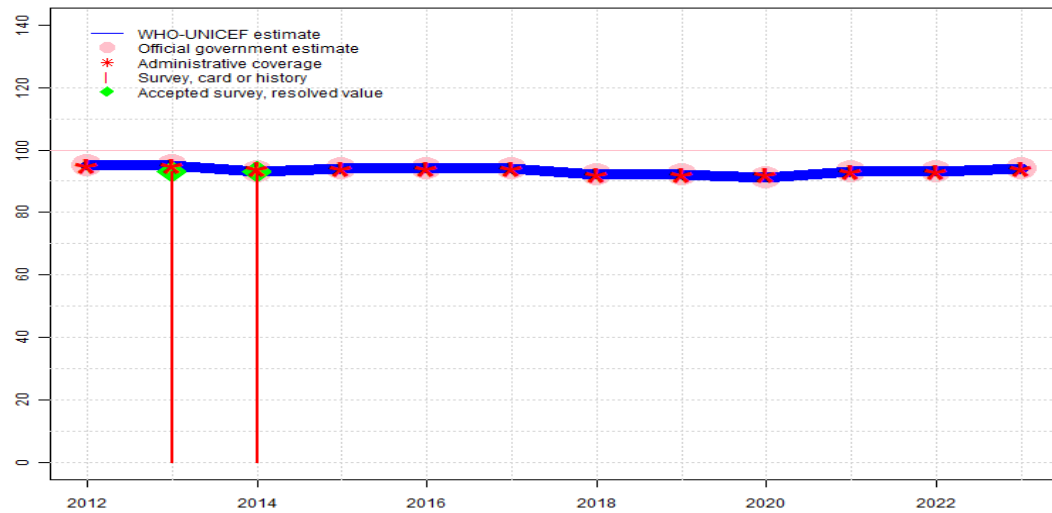
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Armenia - DTP3

ARM - DTP3



## Description:

- 2023: Estimate informed by reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. 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+ S+ D+
- 2015: Estimate informed by reported data. GoC=R+ S+ D+
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+ S+ D+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Estimate challenged by: D-
- 2012: Estimate informed by reported data. GoC=R+ S+ D+

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	95	95	93	94	94	94	92	92	91	93	93	94
Estimate GoC	●●●	●	●●●	●●●	●●●	●●	●●	●●	●●	●●	●●	●●
Official	95	95	93	94	94	94	92	92	91	93	93	94
Administrative	95	95	94	94	94	94	92	92	92	93	93	94
Survey	NA	93	93	NA	NA	NA	NA	NA	NA	NA	NA	NA

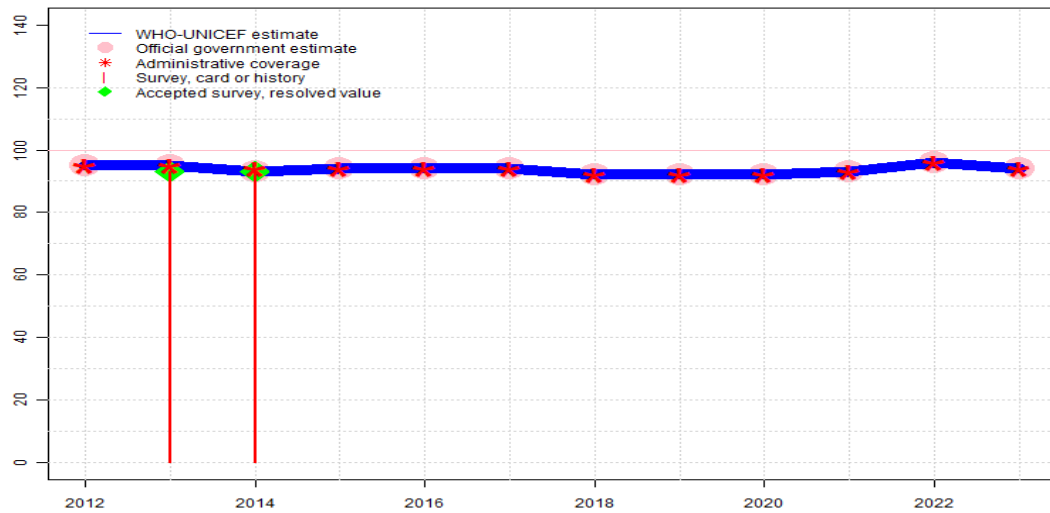
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Armenia - HepB3

ARM - HepB3



## Description:

- 2023: Estimate informed by reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. 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+ S+ D+
- 2015: Estimate informed by reported data. GoC=R+ S+ D+
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+ S+ D+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Estimate challenged by: D-
- 2012: Estimate informed by reported data. GoC=R+ S+ D+

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	95	95	93	94	94	94	92	92	92	93	96	94
Estimate GoC	●●●	●	●●●	●●●	●●●	●●	●●	●●	●●	●●	●●	●●
Official	95	95	93	94	94	94	92	92	92	93	96	94
Administrative	95	95	94	94	94	94	92	92	92	93	96	94
Survey	NA	93	93	NA	NA	NA	NA	NA	NA	NA	NA	NA

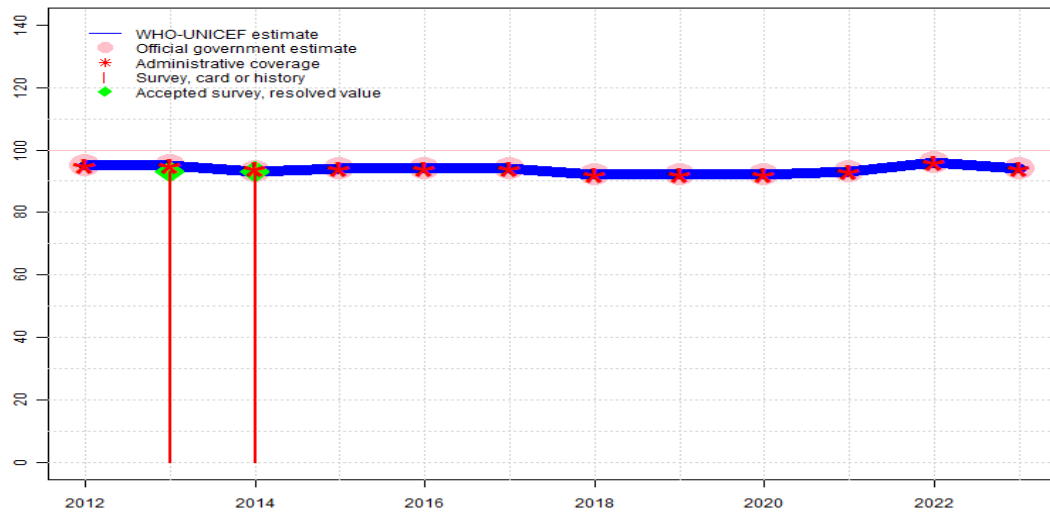
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Armenia - Hib3

ARM - Hib3



## Description:

- 2023: Estimate informed by reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. 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+ S+ D+
- 2015: Estimate informed by reported data. GoC=R+ S+ D+
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+ S+ D+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Estimate challenged by: D-
- 2012: Estimate informed by reported data. GoC=R+ S+ D+

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	95	95	93	94	94	94	92	92	92	93	96	94
Estimate GoC	●●●	●	●●●	●●●	●●●	●●	●●	●●	●●	●●	●●	●●
Official	95	95	93	94	94	94	92	92	92	93	96	94
Administrative	95	95	94	94	94	94	92	92	92	93	96	94
Survey	NA	93	93	NA	NA	NA	NA	NA	NA	NA	NA	NA

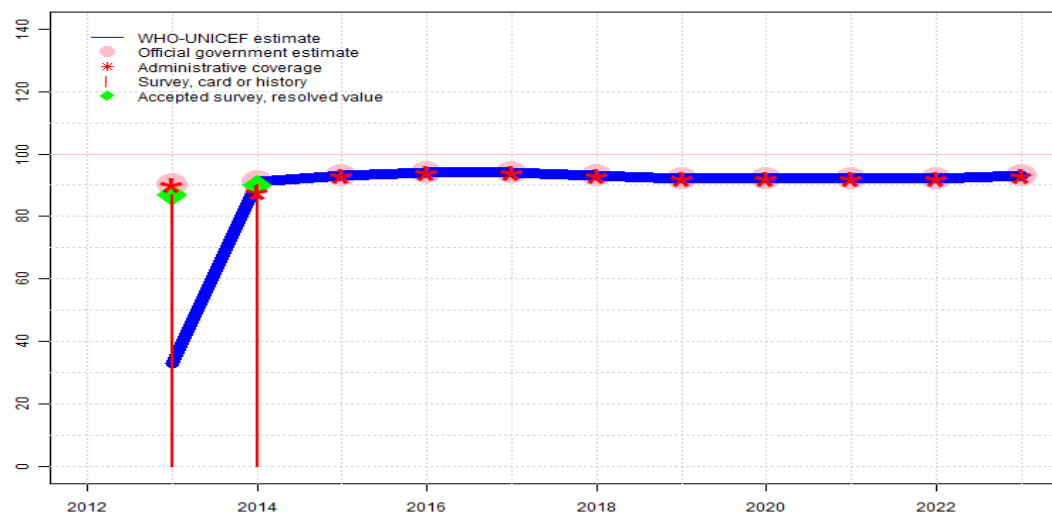
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Armenia - RotaC

ARM - RotaC



## Description:

- 2023: Estimate informed by reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. 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+ S+ D+
- 2015: Estimate informed by reported data. GoC=R+ S+ D+
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 90 percent based on 1 survey(s). GoC=R+ S+ D+
- 2013: Rotavirus vaccine introduced in 2013. Ninety percent coverage attained in 36 percent of the national target population. Estimate is based on annualized coverage among national birth cohort. Estimate challenged by: R-S-

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	33	91	93	94	94	93	92	92	92	92	93
Estimate GoC	NA	●	●●●	●●●	●●●	●●	●●	●●	●●	●●	●●	●●
Official	NA	90	91	93	94	94	93	92	92	92	92	93
Administrative	NA	90	88	93	94	94	93	92	92	92	92	93
Survey	NA	87	90	NA	NA	NA	NA	NA	NA	NA	NA	NA

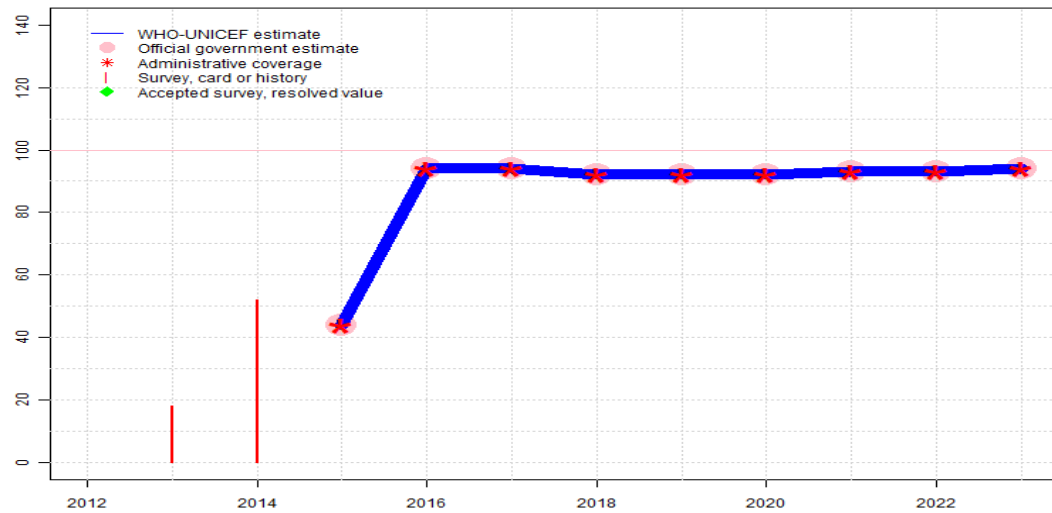
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Armenia - PcV3

ARM - PcV3



## Description:

2023: Estimate informed by reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=R+ D+

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

2021: Estimate informed by reported data. GoC=R+ D+

2020: Estimate informed by reported data. 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. Pneumococcal conjugate vaccine introduced during 2014. Reporting started during 2015. GoC=R+ D+

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	44	94	94	92	92	92	93	93	94
Estimate GoC	NA	NA	NA	••	••	••	••	••	••	••	••	••
Official	NA	NA	NA	44	94	94	92	92	92	93	93	94
Administrative	NA	NA	NA	44	94	94	92	92	92	93	93	94
Survey	NA	18	52	NA	NA	NA	NA	NA	NA	NA	NA	NA

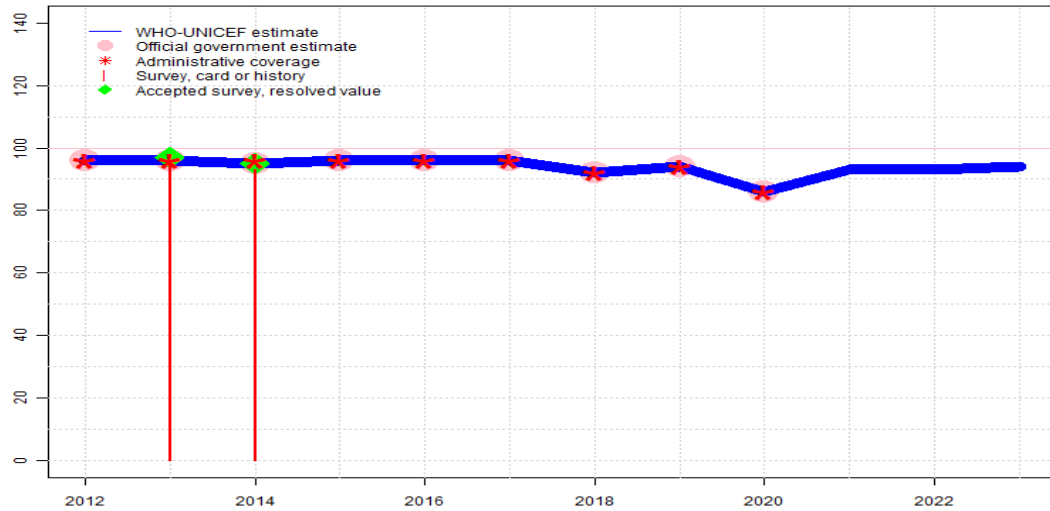
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Armenia - Pol3

ARM - Pol3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	96	96	95	96	96	96	92	94	86	93	93	94
Estimate GoC	●●●	●	●●●	●●●	●●●	●●	●●	●●	●●	●	●	●
Official	96	96	95	96	96	96	92	94	86	NA	NA	NA
Administrative	96	96	96	96	96	96	92	94	86	NA	NA	NA
Survey	NA	96	93	NA	NA	NA	NA	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.

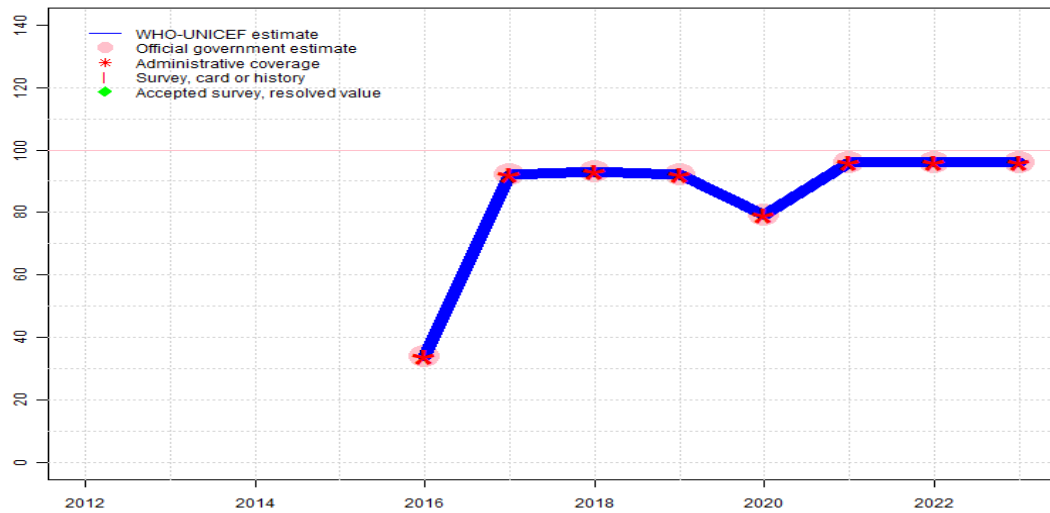
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2023: Estimate informed by reported DTP3 coverage. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=No accepted empirical data
- 2022: Estimate informed by reported DTP3 coverage following transition to use of hexavalent DTP-HepB-Hib-IPV vaccine. GoC=No accepted empirical data
- 2021: Estimate is based on reported DTP3 coverage following transition to use of hexavalent DTP-HepB-Hib-IPV vaccine. GoC=No accepted empirical data
- 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+ S+ D+
- 2015: Estimate informed by reported data. GoC=R+ S+ D+
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 1 survey(s). Armenia Demographic and Health Survey 2015-2016 card or history results of 93 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 94 percent and 3rd dose card only coverage of 91 percent. GoC=R+ S+ D+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 1 survey(s). Armenia Demographic and Health Survey 2015-2016 card or history results of 96 percent modified for recall bias to 97 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 92 percent and 3rd dose card only coverage of 90 percent. Estimate challenged by: D-
- 2012: Estimate informed by reported data. GoC=R+ S+ D+

# Armenia - IPV1

ARM - IPV1



## Description:

Estimates for a dose of inactivated polio vaccine (IPV) begin in 2015 following the Global Polio Eradication Initiative's Polio Eradication and Endgame Strategic Plan: 2013-2018 which recommended at least one full dose or two fractional doses of IPV into routine immunization schedules as a strategy to mitigate the potential consequences should any re-emergence of type 2 poliovirus occur following the planned withdrawal of Sabin type 2 strains from oral polio vaccine (OPV).

2023: Estimate informed by reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=R+ D+

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

2021: Estimate informed by reported data. Increase in coverage reflects transition to hexavalent DTP-HepB-Hib-IPV vaccine. GoC=R+ D+

2020: Estimate informed by reported data. Decline in coverage is unexplained. 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. National roll out after introduction. GoC=R+ D+

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

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	NA	34	92	93	92	79	96	96	96
Estimate GoC	NA	NA	NA	NA	●●	●●	●●	●●	●●	●●	●●	●●
Official	NA	NA	NA	NA	34	92	93	92	79	96	96	96
Administrative	NA	NA	NA	NA	34	92	93	92	79	96	96	96
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

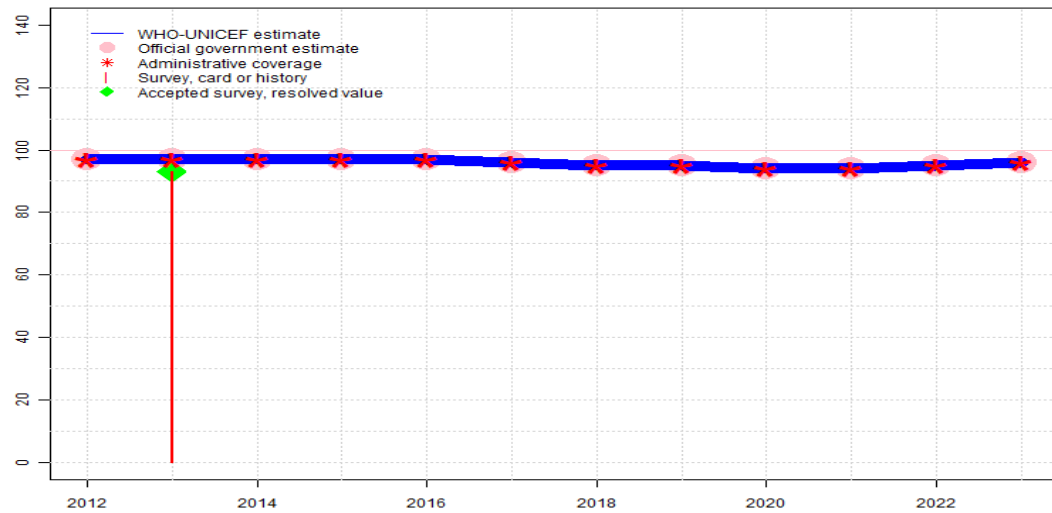
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Armenia - MCV1

ARM - MCV1



## Description:

- 2023: Estimate informed by reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=R+ D+
- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. 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+ S+ D+
- 2014: Estimate informed by reported data. GoC=R+ S+ D+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Estimate challenged by: D-
- 2012: Estimate informed by reported data. GoC=R+ S+ D+

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	97	97	97	97	97	96	95	95	94	94	95	96
Estimate GoC	●●●	●	●●●	●●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	97	97	97	97	97	96	95	95	94	94	95	96
Administrative	97	97	97	97	97	96	95	95	94	94	95	96
Survey	NA	93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

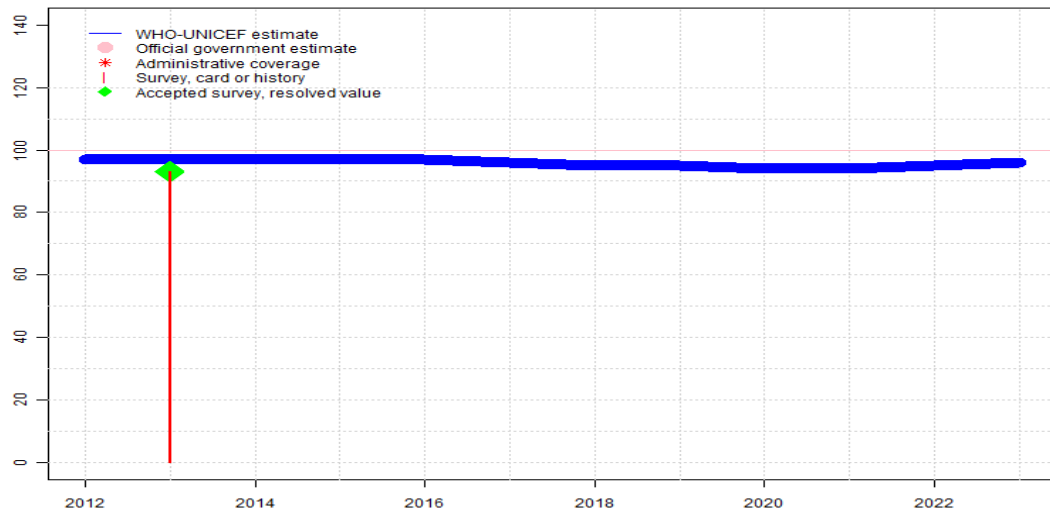
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Armenia - RCV1

ARM - RCV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	97	97	97	97	97	96	95	95	94	94	95	96
Estimate GoC	●●●	●	●●●	●●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	93	NA	NA	NA	NA	NA	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.

## Description:

For this revision, coverage estimates for the first dose of rubella containing vaccine are based on WHO and UNICEF estimates of coverage of measles containing vaccine. Nationally reported coverage of rubella containing vaccine is not taken into consideration nor are they represented in the the accompanying graph and data table.

2023: Estimate based on estimated MCV1. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=R+ D+

2022: Estimate based on estimated MCV1. GoC=R+ D+

2021: Estimate based on estimated MCV1. GoC=R+ D+

2020: Estimate based on estimated MCV1. GoC=R+ D+

2019: Estimate based on estimated MCV1. GoC=R+ D+

2018: Estimate based on estimated MCV1. GoC=R+ D+

2017: Estimate based on estimated MCV1. GoC=R+ D+

2016: Estimate based on estimated MCV1. GoC=R+ D+

2015: Estimate based on estimated MCV1. GoC=R+ S+ D+

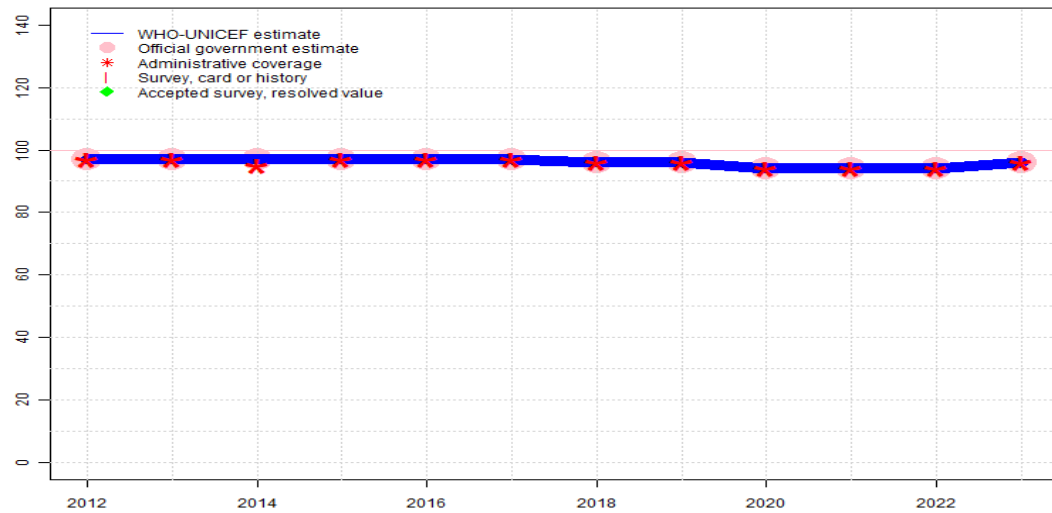
2014: Estimate based on estimated MCV1. GoC=R+ S+ D+

2013: Estimate based on estimated MCV1. Estimate challenged by: D-

2012: Estimate based on estimated MCV1. GoC=R+ S+ D+

# Armenia - MCV2

ARM - MCV2



## Description:

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

2023: Estimate informed by reported data. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality survey to verify reported levels of coverage. GoC=R+ D+

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

2021: Estimate informed by reported data. GoC=R+ D+

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

2012: Estimate informed by reported data. Estimate challenged by: D-

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	97	97	97	97	97	97	96	96	94	94	94	96
Estimate GoC	•	•	••	••	••	••	••	••	••	••	••	••
Official	97	97	97	97	97	97	96	96	94	94	94	96
Administrative	97	97	95	97	97	97	96	96	94	94	94	96
Survey	NA	NA	NA	NA	NA	NA	NA	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.

# Armenia - survey details

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

## 2014 Armenia Demographic and Health Survey 2015-2016

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	99	12-23 m	338	96
BCG	Card	95.5	12-23 m	325	96
BCG	Card or History	99	12-23 m	338	96
BCG	History	3.5	12-23 m	13	96
DTP1	C or H <12 months	97.7	12-23 m	338	96
DTP1	Card	95	12-23 m	325	96
DTP1	Card or History	98.5	12-23 m	338	96
DTP1	History	3.5	12-23 m	13	96
DTP3	C or H <12 months	90.4	12-23 m	338	96
DTP3	Card	90.1	12-23 m	325	96
DTP3	Card or History	92.7	12-23 m	338	96
DTP3	History	2.6	12-23 m	13	96
HepB1	C or H <12 months	97.7	12-23 m	338	96
HepB1	Card	95	12-23 m	325	96
HepB1	Card or History	98.5	12-23 m	338	96
HepB1	History	3.5	12-23 m	13	96
HepB3	C or H <12 months	90.4	12-23 m	338	96
HepB3	Card	90.1	12-23 m	325	96
HepB3	Card or History	92.7	12-23 m	338	96
HepB3	History	2.6	12-23 m	13	96
HepBB	C or H <12 months	97.9	12-23 m	338	96
HepBB	Card	94.4	12-23 m	325	96
HepBB	Card or History	97.9	12-23 m	338	96
HepBB	History	3.5	12-23 m	13	96

Hib1	C or H <12 months	97.7	12-23 m	338	96
Hib1	Card	95	12-23 m	325	96
Hib1	Card or History	98.5	12-23 m	338	96
Hib1	History	3.5	12-23 m	13	96
Hib3	C or H <12 months	90.4	12-23 m	338	96
Hib3	Card	90.1	12-23 m	325	96
Hib3	Card or History	92.7	12-23 m	338	96
Hib3	History	2.6	12-23 m	13	96
PcV1	C or H <12 months	61.2	12-23 m	338	96
PcV1	Card	59.1	12-23 m	325	96
PcV1	Card or History	61.6	12-23 m	338	96
PcV1	History	2.6	12-23 m	13	96
PcV3	C or H <12 months	50.5	12-23 m	338	96
PcV3	Card	50.3	12-23 m	325	96
PcV3	Card or History	51.5	12-23 m	338	96
PcV3	History	1.2	12-23 m	13	96
Pol1	C or H <12 months	97.8	12-23 m	338	96
Pol1	Card	94.3	12-23 m	325	96
Pol1	Card or History	97.8	12-23 m	338	96
Pol1	History	3.5	12-23 m	13	96
Pol3	C or H <12 months	92	12-23 m	338	96
Pol3	Card	90.6	12-23 m	325	96
Pol3	Card or History	93.2	12-23 m	338	96
Pol3	History	2.6	12-23 m	13	96
RotaC	C or H <12 months	89.2	12-23 m	338	96
RotaC	Card	87.7	12-23 m	325	96
RotaC	Card or History	90.2	12-23 m	338	96
RotaC	History	2.4	12-23 m	13	96

## 2013 Armenia Demographic and Health Survey 2015-2016

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	99.2	24-35 m	335	-
BCG	Card	92.4	24-35 m	310	-
BCG	Card or History	99.2	24-35 m	335	-
BCG	History	6.8	24-35 m	25	-
DTP1	C or H <12 months	94.5	24-35 m	335	-
DTP1	Card	91.1	24-35 m	310	-
DTP1	Card or History	96.4	24-35 m	335	-



# Armenia - survey details

Pol1	Card or History	99.4	18-29 m	306	-
Pol1	History	7.3	18-29 m	306	-
Pol3	C or H <18 months	93.3	18-29 m	306	-
Pol3	Card	90.3	18-29 m	306	-
Pol3	Card or History	95.3	18-29 m	306	-
Pol3	History	5	18-29 m	306	-

## 2004 Armenia Demographic and Health Survey 2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	97.9	12-23 m	302	92
BCG	Card	90.4	12-23 m	302	92
BCG	Card or History	98.1	12-23 m	302	92
BCG	History	7.7	12-23 m	302	92
DTP1	C or H <12 months	86.7	12-23 m	302	92
DTP1	Card	87.4	12-23 m	302	92
DTP1	Card or History	94.5	12-23 m	302	92
DTP1	History	7.1	12-23 m	302	92
DTP3	C or H <12 months	44.8	12-23 m	302	92
DTP3	Card	68.2	12-23 m	302	92
DTP3	Card or History	71.4	12-23 m	302	92
DTP3	History	3.2	12-23 m	302	92
HepB1	C or H <12 months	97.3	12-23 m	302	92
HepB1	Card	90.3	12-23 m	302	92
HepB1	Card or History	97.5	12-23 m	302	92
HepB1	History	7.1	12-23 m	302	92
HepB3	C or H <12 months	66.5	12-23 m	302	92
HepB3	Card	71.9	12-23 m	302	92
HepB3	Card or History	75.4	12-23 m	302	92
HepB3	History	3.5	12-23 m	302	92
MCV1	C or H <12 months	2.9	12-23 m	302	92
MCV1	Card	69.2	12-23 m	302	92

MCV1	Card or History	72.3	12-23 m	302	92
MCV1	History	3.1	12-23 m	302	92
Pol1	C or H <12 months	92.8	12-23 m	302	92
Pol1	Card	89.9	12-23 m	302	92
Pol1	Card or History	97.5	12-23 m	302	92
Pol1	History	7.5	12-23 m	302	92
Pol3	C or H <12 months	41.6	12-23 m	302	92
Pol3	Card	72.5	12-23 m	302	92
Pol3	Card or History	76.9	12-23 m	302	92
Pol3	History	4.3	12-23 m	302	92

## 1999 Armenia Demographic and Health Survey 2000, 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	89.2	12-23 m	283	-
DTP1	Card	91.8	12-23 m	283	-
DTP3	Card	88.4	12-23 m	283	-
MCV1	Card	73.2	12-23 m	283	-
Pol1	Card	92.6	12-23 m	283	-
Pol3	Card	90.7	12-23 m	283	-

## 1998 Evaluation of the National Immunization Program of the Republic of Armenia 1999

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	95.7	15-26 m	2145	-
DTP3	Card or History	97.7	15-26 m	2145	-
MCV1	Card or History	87.2	15-26 m	2145	-
Pol3	Card or History	99.4	15-26 m	2145	-

# Armenia - survey details

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Further information and estimates for previous years are available at:

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

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