

Sudan: WHO and UNICEF estimates of immunization coverage: 2024 revision

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

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

* Burton et al. 2009. Bull World Health Organ. * Burton et al. 2012. PLoS One.
* Brown et al. 2013. Open Pub Health Journal. * Danovaro-Holliday et al. 2021. Gates Open Res.

DATA SOURCES

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

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

SURVEY coverage: Based on estimated coverage from population-based household surveys among children aged 6-11, 12-23 or 24-35 months following a review of survey methods and results. Information is based on the combination of vaccination history from documented evidence or caregiver recall. Survey results are considered for the appropriate birth cohort based on data collection period.

ABBREVIATIONS AND DEFINITIONS

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

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

POL3: percentage of surviving infants who received the 3rd dose of polio containing vaccine. May be either oral or inactivated polio vaccine.

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

Production of IPV coverage estimates, which begins in 2015, results in no change of the estimated coverage levels for the 3rd dose of polio (POL3). For countries recommending routine immunization with a primary series of three doses of IPV alone, WHO and UNICEF estimated POL3 coverage is equivalent to estimated coverage with three doses of IPV. For countries with a sequential schedule, estimated POL3 coverage is based on that for the 3rd dose of polio vaccine regardless of vaccine type.

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

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

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

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

HEPB: percentage of births which received a dose of hepatitis B vaccine within 24 hours of delivery. Estimates of hepatitis B birth dose coverage are produced only for countries with a universal birth dose policy. Estimates are not produced for countries that recommend a birth dose to infants born to HEPB virus-infected mothers only or where there is insufficient information to determine whether vaccination is within 24 hours of birth.

HEPB3: percentage of surviving infants who received the 3rd dose of hepatitis B containing vaccine following the birth dose.

HIB3: percentage of surviving infants who received the 3rd dose of Haemophilus influenzae type b containing vaccine.

ROTAC: percentage of surviving infants who received the final recommended dose of rotavirus vaccine, which can be either the 2nd or the 3rd dose depending on the vaccine.

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

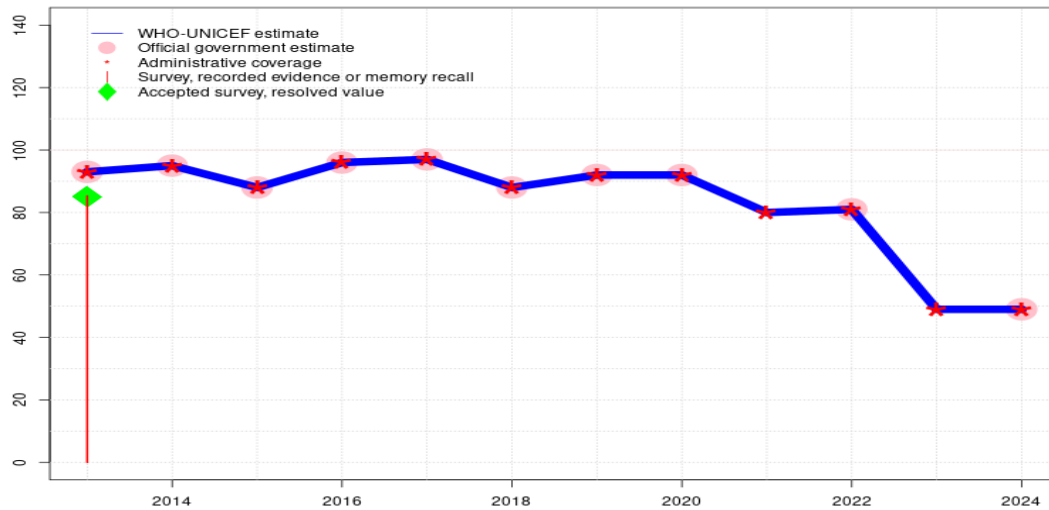
YFV: percentage of surviving infants who received one dose of yellow fever vaccine in countries where YFV is part of the national immunization schedule for children or is recommended in at risk areas; coverage estimates are annualized for the entire cohort of surviving infants.

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

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Sudan - BCG

SDN - BCG



Description:

- 2024: Estimate informed by reported data. Programme reported vaccine stockout at the subnational level. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Declines in coverage consistent with civil unrest in 2024. Estimate challenged by: D-
- 2023: Estimate informed by reported administrative data. Declines in coverage consistent with civil unrest in 2023. Estimate challenged by: D-
- 2022: Estimate informed by reported data. Estimate of 81 percent changed from previous revision value of 65 percent. Estimate challenged by: D-
- 2021: Estimate informed by reported administrative data. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Programme reports vaccine stockout at subnational level. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Estimate challenged by: D-
- 2016: Estimate informed by reported data. Estimate challenged by: 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 85 percent based on 1 survey(s). GoC=R+ S+ D+

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	93	95	88	96	97	88	92	92	80	81	49	49
Estimate GoC	●●●	●●●	●●●	●	●	●	●	●	●	●	●	●
Official	93	95	88	96	97	88	92	92	-	81	-	49
Administrative	93	95	88	96	97	88	92	92	80	81	49	49
Survey	85	-	-	-	-	-	-	-	-	-	-	-

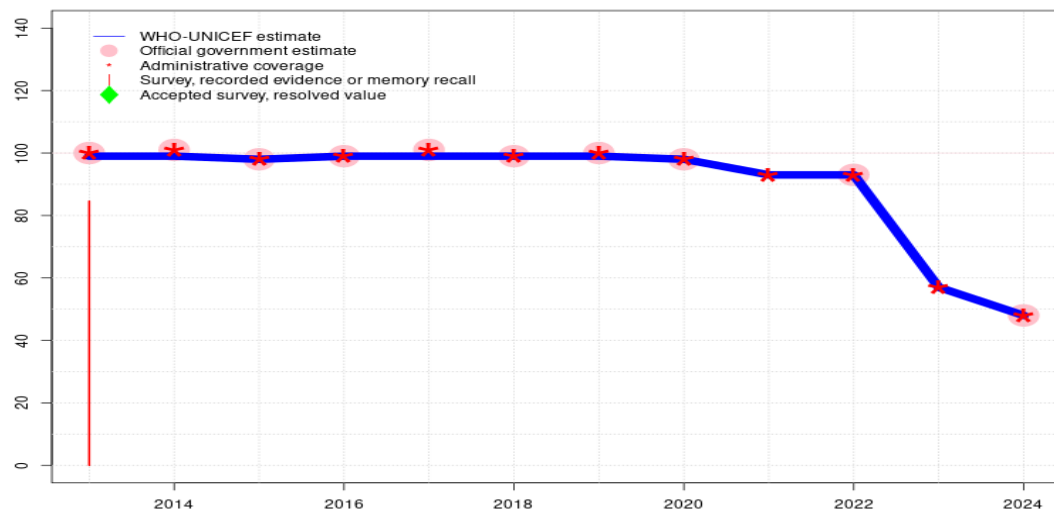
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Sudan - DTP1

SDN - DTP1



Description:

- 2024: Estimate informed by reported data. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Declines in coverage consistent with civil unrest in 2024. GoC=R+ D+
- 2023: Estimate informed by reported administrative data. Declines in coverage consistent with civil unrest in 2023. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate of 93 percent changed from previous revision value of 75 percent. Estimate challenged by: D-
- 2021: Estimate informed by reported administrative data. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Programme reports vaccine stockout at subnational level. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by interpolation between reported data. Reported data excluded because 101 percent greater than 100 percent. 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 interpolation between reported data. Reported data excluded because 101 percent greater than 100 percent. GoC=R+ D+
- 2013: Estimate informed by reported data. Sudan Multiple Indicator Cluster Survey 2014 results ignored by working group. Survey supports for third DTP dose, but not for first dose. GoC=R+ D+

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	99	99	98	99	99	99	99	98	93	93	57	48
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●	●	●●	●●
Official	100	101	98	99	101	99	100	98	-	93	-	48
Administrative	100	101	98	99	101	99	100	98	93	93	57	48
Survey	85	-	-	-	-	-	-	-	-	-	-	-

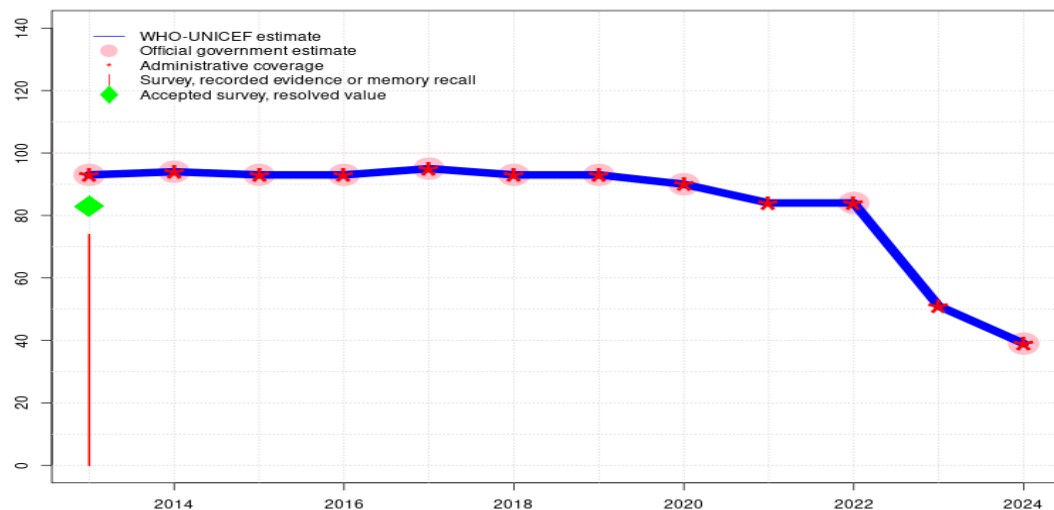
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Sudan - DTP3

SDN - DTP3



Description:

- 2024: Estimate informed by reported data. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Declines in coverage consistent with civil unrest in 2024. GoC=R+ D+
- 2023: Estimate informed by reported administrative data. Declines in coverage consistent with civil unrest in 2023. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate of 84 percent changed from previous revision value of 68 percent. Estimate challenged by: D-
- 2021: Estimate informed by reported administrative data. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports vaccine stockout at subnational level. 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. Estimate challenged by: S-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 83 percent based on 1 survey(s). Sudan Multiple Indicator Cluster Survey 2014 record or recall results of 74 percent modified for recall bias to 83 percent based on 1st dose record or recall coverage of 85 percent, 1st dose record only coverage of 44 percent and 3rd dose record only coverage of 43 percent. GoC=Assigned by working group. In spite of the observed support to reported coverage levels provided by the results of the 2014 Multiple Indicator Cluster Survey, there is concern that less than half of the survey results are derived from documented evidence.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	93	94	93	93	95	93	93	90	84	84	51	39
Estimate GoC	●●	●	●●●	●●	●●	●●	●●	●●	●●	●	●●	●●
Official	93	94	93	93	95	93	93	90	-	84	-	39
Administrative	93	94	93	93	95	93	93	90	84	84	51	39
Survey	74	-	-	-	-	-	-	-	-	-	-	-

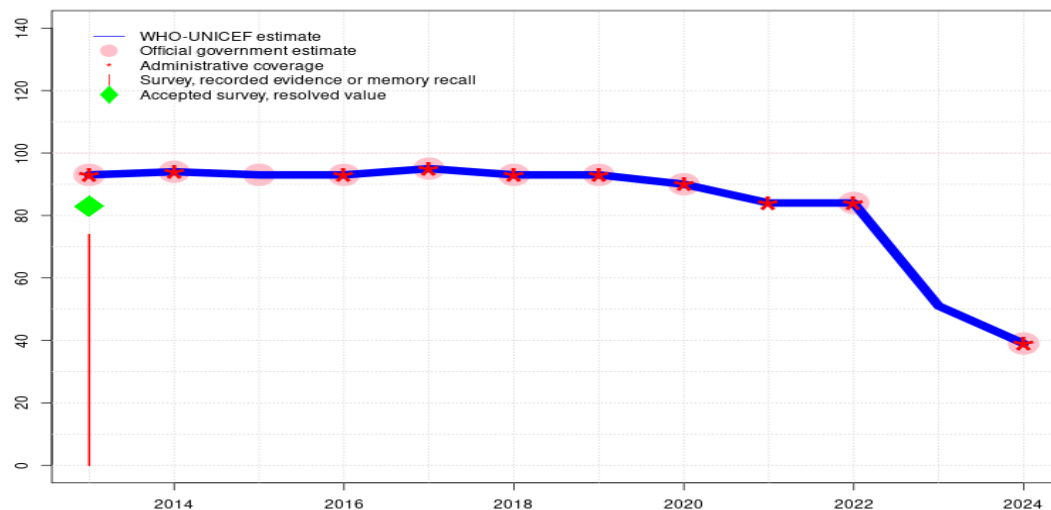
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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Sudan - HEPB3

SDN - HEPB3



Description:

- 2024: Estimate informed by reported data. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Declines in coverage consistent with civil unrest in 2024. GoC=R+ D+
- 2023: Estimate informed by DTP3 estimate. Declines in coverage consistent with civil unrest in 2023. GoC=No accepted empirical data
- 2022: Estimate informed by reported data. Estimate of 84 percent changed from previous revision value of 68 percent. Estimate challenged by: D-
- 2021: Estimate informed by reported administrative data. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports vaccine stockout at subnational level. 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+
- 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). Sudan Multiple Indicator Cluster Survey 2014 record or recall results of 74 percent modified for recall bias to 83 percent based on 1st dose record or recall coverage of 85 percent, 1st dose record only coverage of 44 percent and 3rd dose record only coverage of 43 percent. GoC=Assigned by working group. In spite of the observed support to reported coverage levels provided by the results of the 2014 Multiple Indicator Cluster Survey, there is concern that less than half of the survey results are derived from documented evidence.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	93	94	93	93	95	93	93	90	84	84	51	39
Estimate GoC	●●	●	●●	●●	●●	●●	●●	●●	●●	●	●	●●
Official	93	94	93	93	95	93	93	90	-	84	-	39
Administrative	93	94	-	93	95	93	93	90	84	84	-	39
Survey	74	-	-	-	-	-	-	-	-	-	-	-

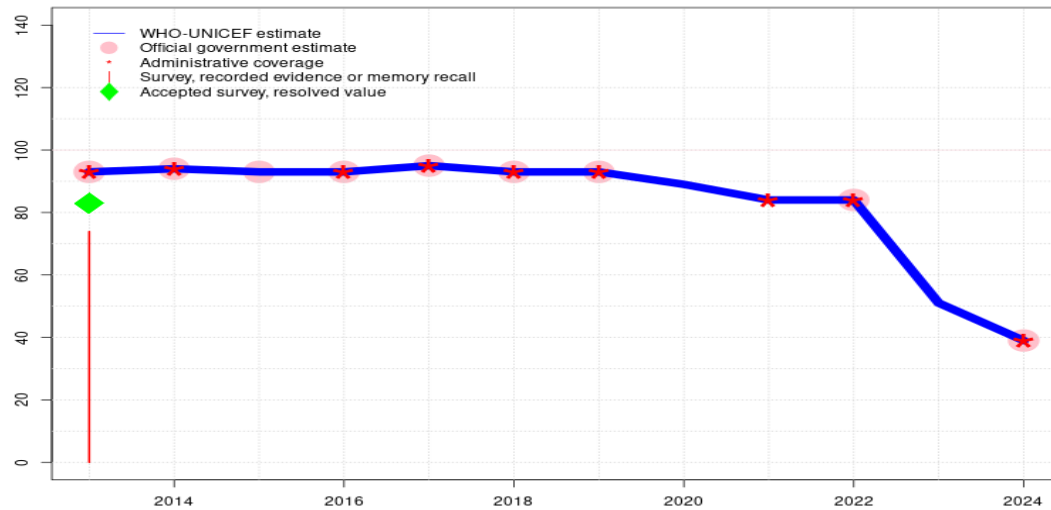
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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Sudan - HIB3

SDN - HIB3



Description:

- 2024: Estimate informed by reported data. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Declines in coverage consistent with civil unrest in 2024. GoC=R+ D+
- 2023: Estimate informed by DTP3 estimate. Declines in coverage consistent with civil unrest in 2023. GoC=No accepted empirical data
- 2022: Estimate informed by reported data. Estimate of 84 percent changed from previous revision value of 68 percent. Estimate challenged by: D-
- 2021: Estimate informed by reported administrative data. GoC=R+ D+
- 2020: Estimate informed by interpolation between reported data. Programme reports vaccine stockout at subnational level. GoC=No accepted empirical data
- 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+
- 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). Sudan Multiple Indicator Cluster Survey 2014 record or recall results of 74 percent modified for recall bias to 83 percent based on 1st dose record or recall coverage of 85 percent, 1st dose record only coverage of 44 percent and 3rd dose record only coverage of 43 percent. GoC=Assigned by working group. In spite of the observed support to reported coverage levels provided by the results of the 2014 Multiple Indicator Cluster Survey, there is concern that less than half of the survey results are derived from documented evidence.

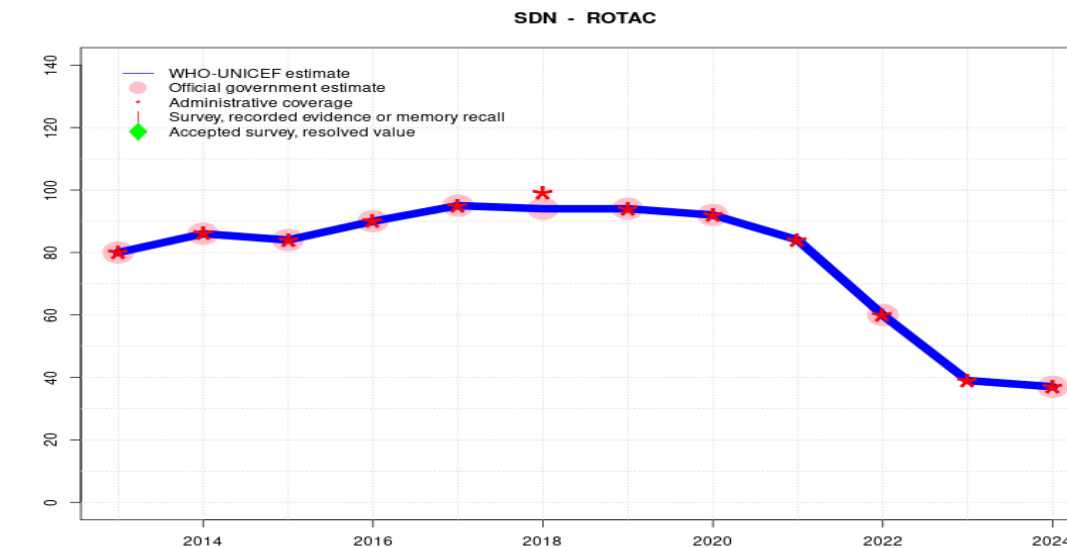
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	93	94	93	93	95	93	93	89	84	84	51	39
Estimate GoC	●●	●	●●	●●	●●	●●	●●	●	●●	●	●	●●
Official	93	94	93	93	95	93	93	-	-	84	-	39
Administrative	93	94	-	93	95	93	93	-	84	84	-	39
Survey	74	-	-	-	-	-	-	-	-	-	-	-

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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Sudan - ROTAC



Description:

- 2024: Estimate informed by reported data. Programme reported vaccine stockout at the subnational level. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Declines in coverage consistent with civil unrest in 2024. GoC=R+ D+
- 2023: Estimate informed by reported administrative data. Declines in coverage consistent with civil unrest in 2023. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate of 60 percent changed from previous revision value of 62 percent. GoC=R+ D+
- 2021: Estimate informed by reported administrative 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. Estimate challenged by: 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+

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	80	86	84	90	95	94	94	92	84	60	39	37
Estimate GoC	●●	●●	●●	●●	●●	●	●●	●●	●●	●●	●●	●●
Official	80	86	84	90	95	94	94	92	-	60	-	37
Administrative	80	86	84	90	95	99	94	92	84	60	39	37
Survey	-	-	-	-	-	-	-	-	-	-	-	-

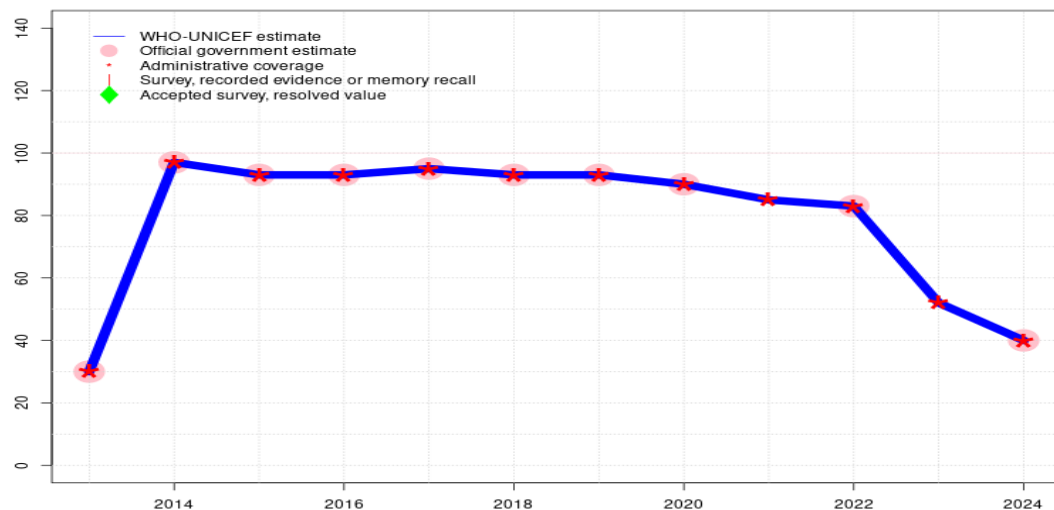
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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Sudan - PCV3

SDN - PCV3



Description:

- 2024: Estimate informed by reported data. Programme reported vaccine stockout at the subnational level. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Declines in coverage consistent with civil unrest in 2024. GoC=R+ D+
- 2023: Estimate informed by reported administrative data. Declines in coverage consistent with civil unrest in 2023. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate of 83 percent changed from previous revision value of 69 percent. GoC=R+ D+
- 2021: Estimate informed by reported administrative data. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports vaccine stockout at subnational level. 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. Pneumococcal conjugate vaccine introduced in August 2013. GoC=R+ D+

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	30	97	93	93	95	93	93	90	85	83	52	40
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	30	97	93	93	95	93	93	90	-	83	-	40
Administrative	30	97	93	93	95	93	93	90	85	83	52	40
Survey	-	-	-	-	-	-	-	-	-	-	-	-

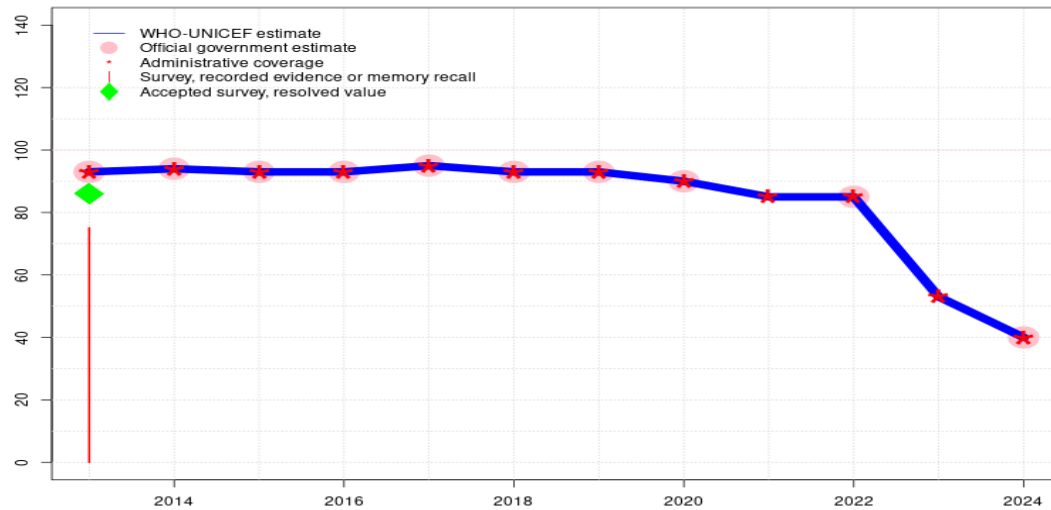
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Sudan - POL3

SDN - POL3



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	93	94	93	93	95	93	93	90	85	85	53	40
Estimate GoC	●●	●	●●●	●●	●●	●●	●●	●●	●●	●	●●	●●
Official	93	94	93	93	95	93	93	90	-	85	-	40
Administrative	93	94	93	93	95	93	93	90	85	85	53	40
Survey	75	-	-	-	-	-	-	-	-	-	-	-

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

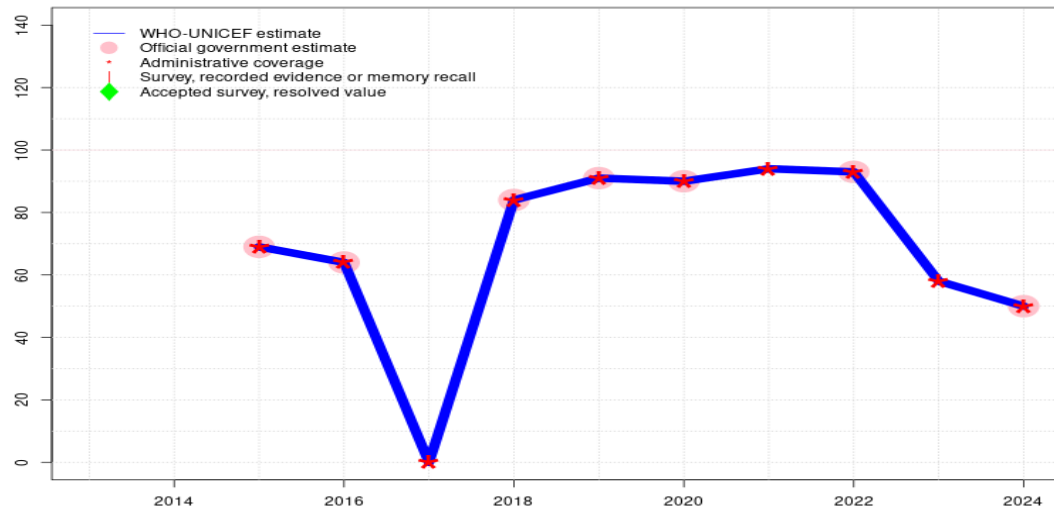
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2024: Estimate informed by reported data. Programme reported vaccine stockout at the subnational level. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Declines in coverage consistent with civil unrest in 2024. GoC=R+ D+
- 2023: Estimate informed by reported administrative data. Declines in coverage consistent with civil unrest in 2023. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate of 85 percent changed from previous revision value of 69 percent. Estimate challenged by: D-
- 2021: Estimate informed by reported administrative data. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports vaccine stockout at subnational level. 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=Assigned by working group. GoC assigned to maintain consistency across vaccines.
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 86 percent based on 1 survey(s). Sudan Multiple Indicator Cluster Survey 2014 record or recall results of 75 percent modified for recall bias to 86 percent based on 1st dose record or recall coverage of 88 percent, 1st dose record only coverage of 44 percent and 3rd dose record only coverage of 43 percent. GoC=Assigned by working group. In spite of the observed support to reported coverage levels provided by the results of the 2014 Multiple Indicator Cluster Survey, there is concern that less than half of the survey results are derived from documented evidence.

Sudan - IPV1

SDN - IPV1



Description:

- 2024: Estimate informed by reported data. Programme reported vaccine stockout at the subnational level. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Declines in coverage consistent with civil unrest in 2024. GoC=R+ D+
- 2023: Estimate informed by reported administrative data. Declines in coverage consistent with civil unrest in 2023. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate of 93 percent changed from previous revision value of 76 percent. Estimate challenged by: D-
- 2021: Estimate informed by reported administrative data. Estimate challenged by: 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. Evidence suggests programme recovered from previous year 12 month vaccine stockout. GoC=R+ D+
- 2017: Estimate informed by reported administrative data. Programme reports 12 months vaccine stockout. GoC=R+ D+
- 2016: Estimate informed by reported data. Programme reports vaccine supply disruption of unknown duration. GoC=R+ D+
- 2015: Estimate informed by reported data. Inactivated polio vaccine during June 2015. GoC=R+ D+

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	-	-	69	64	0	84	91	90	94	93	58	50
Estimate GoC	-	-	●●	●●	●●	●●	●●	●●	●	●	●●	●●
Official	-	-	69	64	-	84	91	90	-	93	-	50
Administrative	-	-	69	64	0	84	91	90	94	93	58	50
Survey	-	-	-	-	-	-	-	-	-	-	-	-

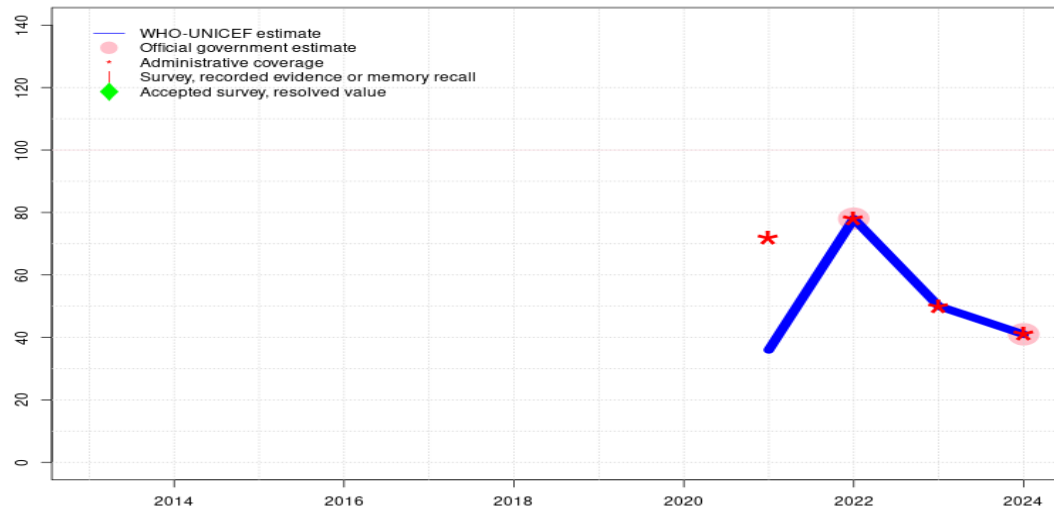
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Sudan - IPV2

SDN - IPV2



Description:

- 2024: Estimate informed by reported data. Programme reported vaccine stockout at the subnational level. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Declines in coverage consistent with civil unrest in 2024. GoC=R+ D+
- 2023: Estimate informed by reported administrative data. Declines in coverage consistent with civil unrest in 2023. GoC=R+ D+
- 2022: Estimate informed by reported coverage. Estimate of 78 percent changed from previous revision value of 43 percent. GoC=R+ D+
- 2021: Estimate of 36 percent assigned by working group. Reported coverage reflects that achieved in 50 percent of the national target population. Estimates reflects coverage for the annual national birth cohort. Second dose of inactivated polio vaccine introduced in 2021. Estimate challenged by: R-

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	-	-	-	-	-	-	-	-	36	78	50	41
Estimate GoC	-	-	-	-	-	-	-	-	•	••	••	••
Official	-	-	-	-	-	-	-	-	-	78	-	41
Administrative	-	-	-	-	-	-	-	-	72	78	50	41
Survey	-	-	-	-	-	-	-	-	-	-	-	-

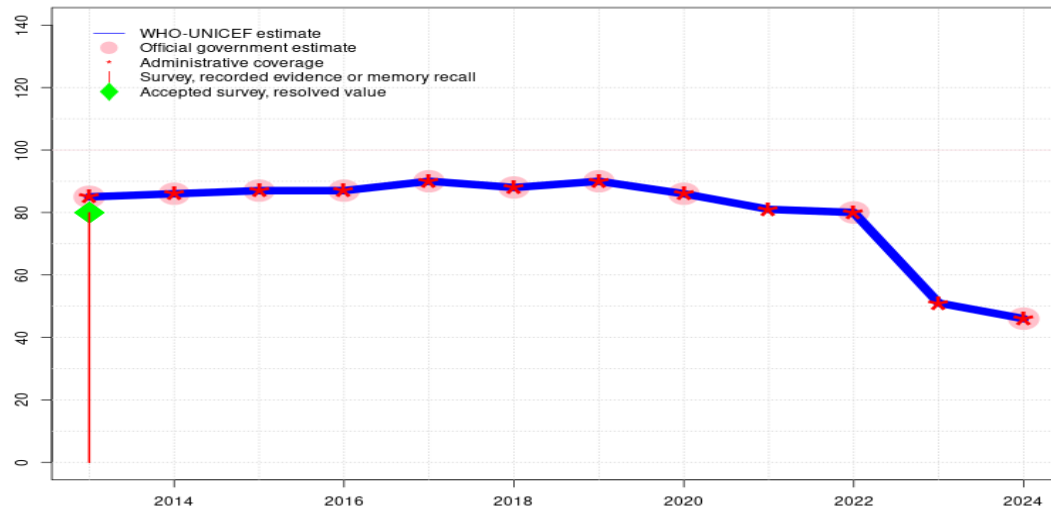
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Sudan - MCV1

SDN - MCV1



Description:

- 2024: Estimate informed by reported data. Programme reported vaccine stockout at the subnational level. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Declines in coverage consistent with civil unrest in 2024. GoC=R+ D+
- 2023: Estimate informed by reported administrative data. Declines in coverage consistent with civil unrest in 2023. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate of 80 percent changed from previous revision value of 66 percent. GoC=R+ D+
- 2021: Estimate informed by reported administrative data. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports vaccine stockout at subnational level. 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. Estimate of 87 percent changed from previous revision value of 86 percent. 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 80 percent based on 1 survey(s). GoC=Assigned by working group. In spite of the observed support to reported coverage levels provided by the results of the 2014 Multiple Indicator Cluster Survey, there is concern that less than half of the survey results are derived from documented evidence.

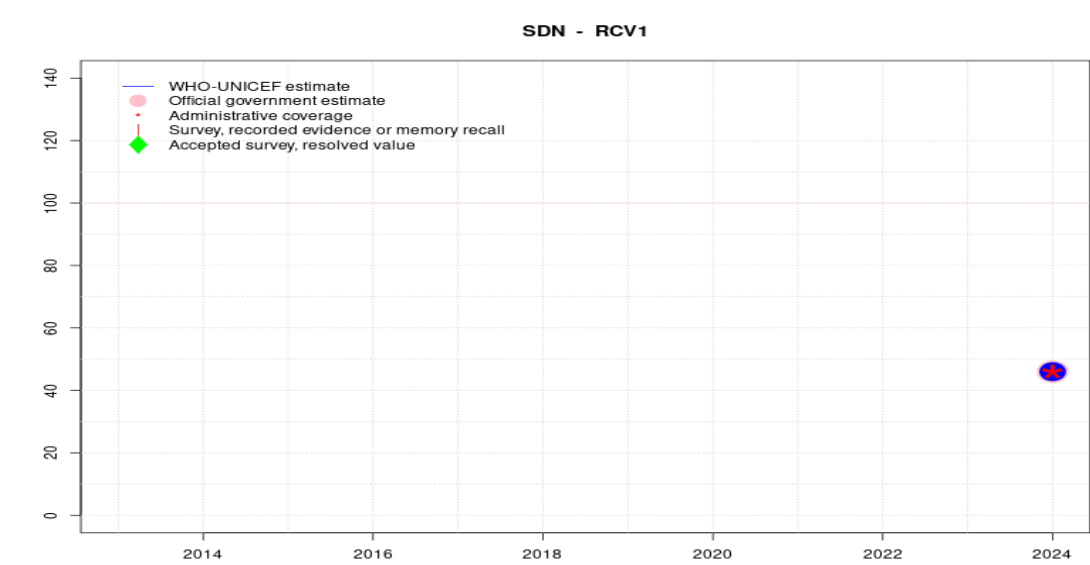
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	85	86	87	87	90	88	90	86	81	80	51	46
Estimate GoC	●●	●●●	●●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	85	86	87	87	90	88	90	86	-	80	-	46
Administrative	85	86	87	87	90	88	90	86	81	80	51	46
Survey	80	-	-	-	-	-	-	-	-	-	-	-

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Sudan - RCV1



Description:

2024: Estimate based on estimated MCV1. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Rubella containing vaccine introduced 2024. Declines in coverage consistent with civil unrest in 2024. GoC=R+ D+

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	-	-	-	-	-	-	-	-	-	-	-	46
Estimate GoC	-	-	-	-	-	-	-	-	-	-	-	●●
Official	-	-	-	-	-	-	-	-	-	-	-	46
Administrative	-	-	-	-	-	-	-	-	-	-	-	46
Survey	-	-	-	-	-	-	-	-	-	-	-	-

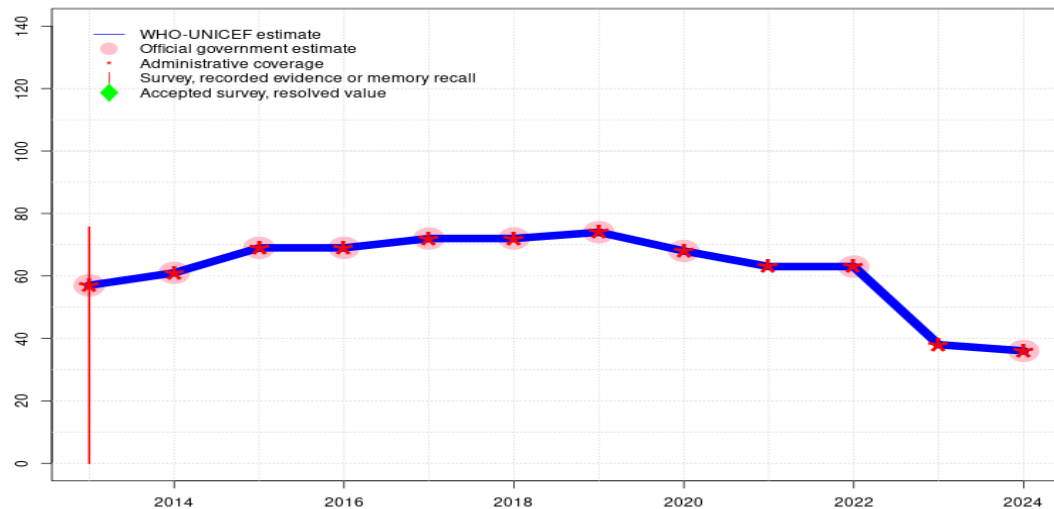
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Sudan - MCV2

SDN - MCV2



Description:

- 2024: Estimate informed by reported data. Programme reported vaccine stockout at the subnational level. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Declines in coverage consistent with civil unrest in 2024. GoC=R+ D+
- 2023: Estimate informed by reported administrative data. Declines in coverage consistent with civil unrest in 2023. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate of 63 percent changed from previous revision value of 51 percent. GoC=R+ D+
- 2021: Estimate informed by reported administrative data. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports vaccine stockout at subnational level. 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. Sudan Multiple Indicator Cluster Survey 2014 results ignored by working group. Survey results likely reflect doses administered in campaigns. GoC=R+ D+

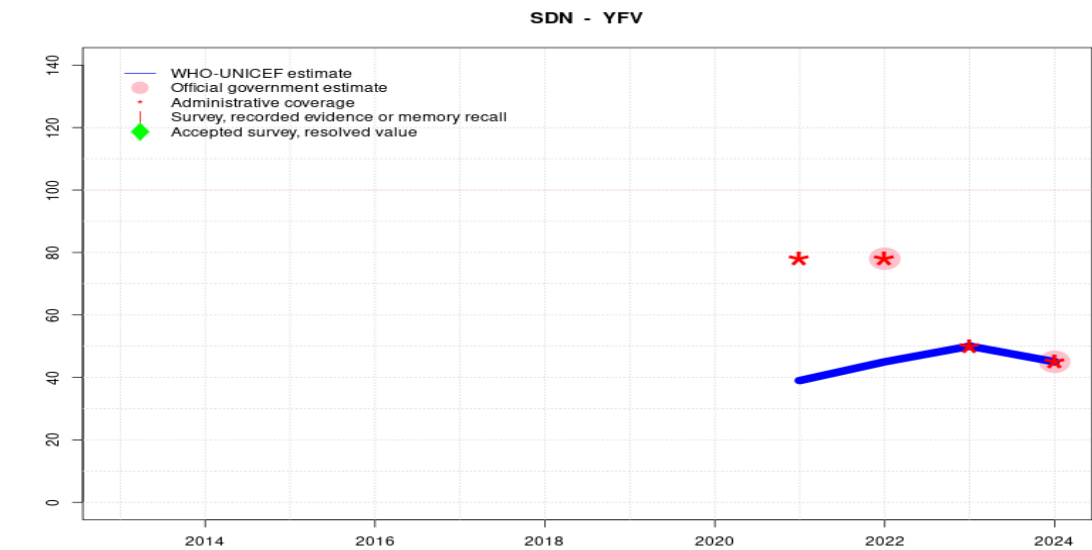
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	57	61	69	69	72	72	74	68	63	63	38	36
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	57	61	69	69	72	72	74	68	-	63	-	36
Administrative	57	61	69	69	72	72	74	68	63	63	38	36
Survey	76	-	-	-	-	-	-	-	-	-	-	-

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Sudan - YFV



Description:

- 2024: Estimate informed by reported data. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Declines in coverage consistent with civil unrest in 2024. GoC=R+ D+
- 2023: Estimate informed by reported administrative data. Declines in coverage consistent with civil unrest in 2023. GoC=R+ D+
- 2022: Estimate based on interpolation. Estimate challenged by: D-R-
- 2021: Yellow fever vaccine introduced in 2021. Reported coverage reflects that achieved in 50 percent of the national target population. Estimated coverage based on annualized coverage for the national target population. Estimate challenged by: R-

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	-	-	-	-	-	-	-	-	39	45	50	45
Estimate GoC	-	-	-	-	-	-	-	-	•	•	••	••
Official	-	-	-	-	-	-	-	-	-	78	-	45
Administrative	-	-	-	-	-	-	-	-	78	78	50	45
Survey	-	-	-	-	-	-	-	-	-	-	-	-

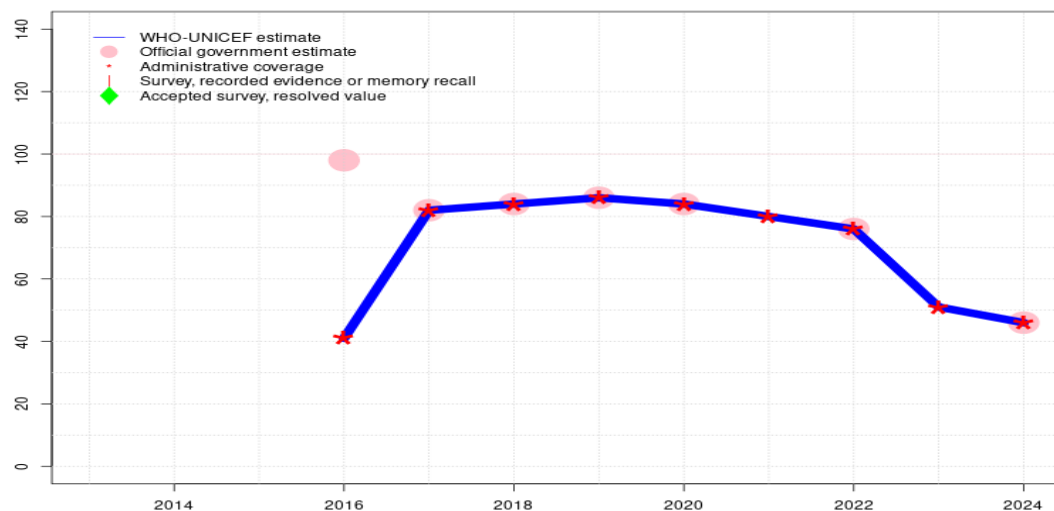
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Sudan - MENGA

SDN - MENGA



Description:

- 2024: Estimate informed by reported data. Reporting completeness of 98 percent. No nationally representative household survey for the most recent 5 annual birth cohorts. WHO and UNICEF recommends considering a high-quality survey to verify reported levels of coverage, when the situation permits. Declines in coverage consistent with civil unrest in 2024. GoC=R+ D+
- 2023: Estimate informed by reported administrative data. Declines in coverage consistent with civil unrest in 2023. GoC=R+ D+
- 2022: Estimate informed by reported data. Estimate of 76 percent changed from previous revision value of 66 percent. GoC=R+ D+
- 2021: Estimate informed by reported administrative 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 administrative data. Meningitis A vaccine introduced in 2016. Estimate is exceptionally based on reported administrative coverage during introduction. GoC=R+ D+

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	-	-	-	41	82	84	86	84	80	76	51	46
Estimate GoC	-	-	-	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	-	-	-	98	82	84	86	84	-	76	-	46
Administrative	-	-	-	41	82	84	86	84	80	76	51	46
Survey	-	-	-	-	-	-	-	-	-	-	-	-

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Sudan - Survey Details

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

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

2013 Sudan Multiple Indicator Cluster Survey 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
BCG	Recall	41.6	12-23 m	2672	44
BCG	Record	43.7	12-23 m	2672	44
BCG	Record or Recall	85.3	12-23 m	2672	44
BCG	Record or Recall<12m	78.5	12-23 m	-	44
DTP1	Recall	40.4	12-23 m	2672	44
DTP1	Record	44.2	12-23 m	2672	44
DTP1	Record or Recall	84.6	12-23 m	2672	44
DTP1	Record or Recall<12m	81.1	12-23 m	-	44
DTP3	Recall	30.5	12-23 m	2672	44
DTP3	Record	43.4	12-23 m	2672	44
DTP3	Record or Recall	73.9	12-23 m	2672	44
DTP3	Record or Recall<12m	63.9	12-23 m	-	44
HEPB1	Recall	40.4	12-23 m	2672	44
HEPB1	Record	44.2	12-23 m	2672	44
HEPB1	Record or Recall	84.6	12-23 m	2672	44
HEPB1	Record or Recall<12m	81.1	12-23 m	-	44
HEPB3	Recall	30.5	12-23 m	2672	44
HEPB3	Record	43.4	12-23 m	2672	44
HEPB3	Record or Recall	73.9	12-23 m	2672	44

HEPB3	Record or Recall<12m	63.9	12-23 m	-	44
HIB1	Recall	40.4	12-23 m	2672	44
HIB1	Record	44.2	12-23 m	2672	44
HIB1	Record or Recall	84.6	12-23 m	2672	44
HIB1	Record or Recall<12m	81.1	12-23 m	-	44
HIB3	Recall	30.5	12-23 m	2672	44
HIB3	Record	43.4	12-23 m	2672	44
HIB3	Record or Recall	73.9	12-23 m	2672	44
HIB3	Record or Recall<12m	63.9	12-23 m	-	44
MCV1	Recall	38.2	12-23 m	2672	44
MCV1	Record	41.7	12-23 m	2672	44
MCV1	Record or Recall	79.9	12-23 m	2672	44
MCV1	Record or Recall<12m	60.9	12-23 m	-	44
MCV2	Recall	39	12-23 m	2672	44
MCV2	Record	36.6	12-23 m	2672	44
MCV2	Record or Recall	75.6	12-23 m	2672	44
MCV2	Record or Recall<12m	8.8	12-23 m	-	44
POL1	Recall	43.7	12-23 m	2672	44
POL1	Record	43.8	12-23 m	2672	44
POL1	Record or Recall	87.5	12-23 m	2672	44
POL1	Record or Recall<12m	83.7	12-23 m	-	44
POL3	Recall	32.2	12-23 m	2672	44
POL3	Record	42.9	12-23 m	2672	44
POL3	Record or Recall	75.1	12-23 m	2672	44
POL3	Record or Recall<12m	65.3	12-23 m	-	44

2009 Sudan Household Health Survey - Second Round SHHS2 2010

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
BCG	Recall	37.4	12-23 m	-	41
BCG	Record	39.4	12-23 m	-	41
BCG	Record or Recall	76.8	12-23 m	2612	41
BCG	Record or Recall<12m	74.6	12-23 m	2612	41
DTP1	Recall	38.2	12-23 m	-	41
DTP1	Record	40.5	12-23 m	-	41
DTP1	Record or Recall	78.7	12-23 m	2612	41
DTP1	Record or Recall<12m	74.8	12-23 m	2612	41
DTP3	Recall	24	12-23 m	-	41
DTP3	Record	37.3	12-23 m	-	41

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DTP3	Record or Recall	61.3	12-23 m	2612	41
DTP3	Record or Recall<12m	58.4	12-23 m	2612	41
HEPB1	Recall	38.2	12-23 m	-	41
HEPB1	Record	40.5	12-23 m	-	41
HEPB1	Record or Recall	78.7	12-23 m	2612	41
HEPB1	Record or Recall<12m	74.8	12-23 m	2612	41
HEPB3	Recall	24	12-23 m	-	41
HEPB3	Record	37.3	12-23 m	-	41
HEPB3	Record or Recall	61.3	12-23 m	2612	41
HEPB3	Record or Recall<12m	58.4	12-23 m	2612	41
HIB1	Recall	38.2	12-23 m	-	41
HIB1	Record	40.5	12-23 m	-	41
HIB1	Record or Recall	78.7	12-23 m	2612	41
HIB1	Record or Recall<12m	74.8	12-23 m	2612	41
HIB3	Recall	24	12-23 m	-	41
HIB3	Record	37.3	12-23 m	-	41
HIB3	Record or Recall	61.3	12-23 m	2612	41
HIB3	Record or Recall<12m	58.4	12-23 m	2612	41
MCV1	Recall	32.5	12-23 m	-	41
MCV1	Record	37.6	12-23 m	-	41
MCV1	Record or Recall	70.1	12-23 m	2612	41
MCV1	Record or Recall<12m	62.3	12-23 m	2612	41
POL1	Recall	45.9	12-23 m	-	41
POL1	Record	40.3	12-23 m	-	41
POL1	Record or Recall	86.2	12-23 m	2612	41
POL1	Record or Recall<12m	83.3	12-23 m	2612	41
POL3	Recall	27.8	12-23 m	-	41
POL3	Record	37	12-23 m	-	41
POL3	Record or Recall	64.8	12-23 m	2612	41
POL3	Record or Recall<12m	62	12-23 m	2612	41

2005 Sudan Household Health Survey 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
BCG	Recall	42.5	12-23 m	1165621	35
BCG	Record	32.4	12-23 m	1165621	35
BCG	Record or Recall	74.9	12-23 m	1165621	35
BCG	Record or Recall<12m	72.9	12-23 m	1165621	35
DTP1	Recall	40.7	12-23 m	1165621	35

DTP1	Record	33.4	12-23 m	1165621	35
DTP1	Record or Recall	74.1	12-23 m	1165621	35
DTP1	Record or Recall<12m	71.2	12-23 m	1165621	35
DTP3	Recall	24.7	12-23 m	1165621	35
DTP3	Record	30	12-23 m	1165621	35
DTP3	Record or Recall	54.8	12-23 m	1165621	35
DTP3	Record or Recall<12m	52.9	12-23 m	1165621	35
MCV1	Recall	37.9	12-23 m	1165621	35
MCV1	Record	28.5	12-23 m	1165621	35
MCV1	Record or Recall	66.4	12-23 m	1165621	35
MCV1	Record or Recall<12m	59.3	12-23 m	1165621	35
POL1	Recall	49.3	12-23 m	1165621	35
POL1	Record	33.4	12-23 m	1165621	35
POL1	Record or Recall	82.7	12-23 m	1165621	35
POL1	Record or Recall<12m	79.7	12-23 m	1165621	35
POL3	Recall	32.5	12-23 m	1165621	35
POL3	Record	29.4	12-23 m	1165621	35
POL3	Record or Recall	61.9	12-23 m	1165621	35
POL3	Record or Recall<12m	59.5	12-23 m	1165621	35

1999 Sudan Multiple Indicator Cluster Survey 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
BCG	Recall	41.5	12-23 m	3720	27
BCG	Record	24.7	12-23 m	3720	27
BCG	Record or Recall	66.2	12-23 m	3720	27
BCG	Record or Recall<12m	65	12-23 m	3720	27
DTP1	Recall	42.2	12-23 m	3720	27
DTP1	Record	24.3	12-23 m	3720	27
DTP1	Record or Recall	66.5	12-23 m	3720	27
DTP1	Record or Recall<12m	64.7	12-23 m	3720	27
DTP3	Recall	24	12-23 m	3720	27
DTP3	Record	20.1	12-23 m	3720	27
DTP3	Record or Recall	44.1	12-23 m	3720	27
DTP3	Record or Recall<12m	42	12-23 m	3720	27
MCV1	Recall	34.4	12-23 m	3720	27
MCV1	Record	18.3	12-23 m	3720	27
MCV1	Record or Recall	50.7	12-23 m	3720	27
MCV1	Record or Recall<12m	45.3	12-23 m	3720	27

POL1	Recall	53.3	12-23 m	3720	27	POL3	Record	18.4	12-23 m	3720	27
POL1	Record	21.4	12-23 m	3720	27	POL3	Record or Recall	47.7	12-23 m	3720	27
POL1	Record or Recall	74.7	12-23 m	3720	27	POL3	Record or Recall<12m	43.7	12-23 m	3720	27
POL1	Record or Recall<12m	72.7	12-23 m	3720	27						
POL3	Recall	27.3	12-23 m	3720	27						

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