Angola: WHO and UNICEF estimates of immunization coverage: 2022 revision

BCG

DTP1

DTP3

Pol3

MCV1

HepB3

Hib3

RotaC

PcV3

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

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

*Burton et al. 2009. WHO and UNICEF estimates of national infant immunization coverage: methods and processes.
*Burton et al. 2012. A formal representation of the WHO and UNICEF estimates of national immunization coverage: a computational logic approach.
*Brown et al. 2013. An introduction to the grade of confidence used to characterize uncertainty around the WHO and UNICEF estimates of national immunization coverage.

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

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

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

ABBREVIATIONS
BCG: percentage of births who received one dose of Bacillus Calmette Guerin vaccine.
DTP1 / DTP3: percentage of surviving infants who received the 1st / 3rd dose, respectively, of diphtheria and tetanus toxoid with pertussis containing vaccine.
Pol3: percentage of surviving infants who received the 3rd dose of polio containing vaccine. May be either oral or inactivated polio vaccine.
IPV1: percentage of surviving infants who received at least one dose of inactivated polio vaccine. In countries utilizing an immunization schedule recommending either (i) a primary series of three doses of oral polio vaccine (OPV) plus at least one dose of IPV where OPV is included in routine immunization and/or campaign or (ii) a sequential schedule of IPV followed by OPV, WHO and UNICEF estimates for IPV1 reflect coverage with at least one routine dose of IPV among infants <1 year of age among countries. For countries utilizing IPV containing vaccine use only, i.e., no recommended dose of OPV, the WHO and UNICEF estimate for IPV1 corresponds to coverage for the 1st dose of IPV.

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

MCV1: percentage of surviving infants who received the 1st dose of measles containing vaccine. In countries where the national schedule recommends the 1st dose of MCV at 12 months or later based on the epidemiology of disease in the country, coverage estimates reflect the percentage of children who received the 1st dose of MCV as recommended.
MCV2: percentage of children who received the 2nd dose of measles containing vaccine according to the nationally recommended schedule.
RCV1: percentage of surviving infants who received the 1st dose of rubella containing vaccine. Co verage 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.
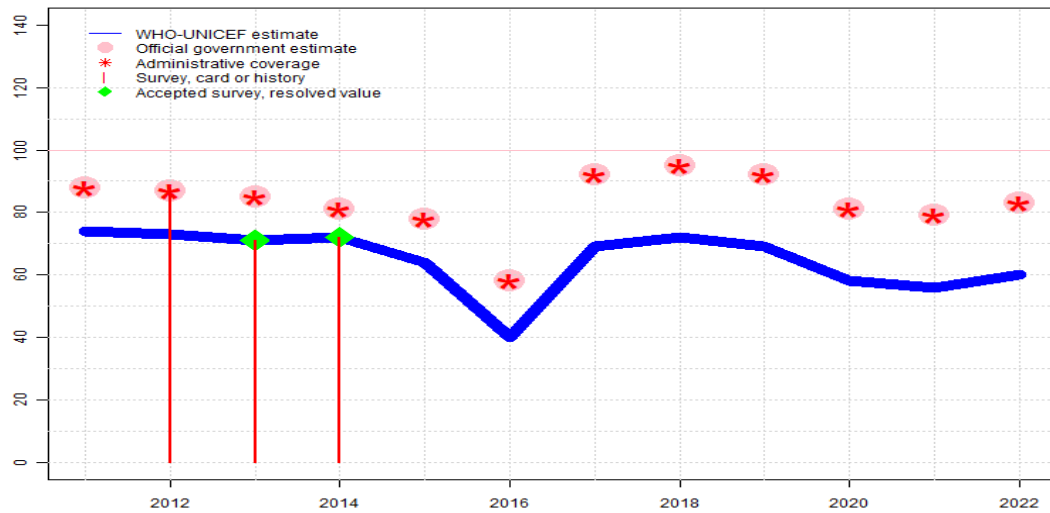**PcV3:** percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect 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.

Angola - BCG

AGO - BCG

Legend:
- WHO-UNICEF estimate
- Official government estimate
- Administrative coverage
- Survey, card or history
- Accepted survey, resolved value

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	74	73	71	72	64	40	69	72	69	58	56	60
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	88	87	85	81	78	58	92	95	92	81	79	83
Administrative	88	87	85	81	78	58	92	95	92	81	79	83
Survey	NA	88	71	72	NA	NA	NA	NA	NA	NA	NA	NA

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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 reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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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.
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Description:

2022: Reported data calibrated to 2017 levels. Programme reports vaccine supply disruptions for all antigens at subnational levels. WHO and UNICEF recommend assessment of the routine monitoring system. WHO and UNICEF are aware of a 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-R-

2021: Reported data calibrated to 2017 levels. Country reports resources redirected to Covid-19 may have contributed to the decline in coverage seen in 2021. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for most antigens. Estimate challenged by: D-R-

2020: Reported data calibrated to 2017 levels. Country indicates that due to Covid-19 restrictions most health facilities were only partially operational between March and July 2020. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens.. Estimate challenged by: D-R-

2019: Reported data calibrated to 2017 levels. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate challenged by: D-R-

2018: Reported data calibrated to 2017 levels. Estimate challenged by: D-R-

2017: Estimate of 69 percent assigned by working group. Estimate is based on estimated coverage during 2015 prior to the stockout. Although reported coverage for 2017 suggests recovery from the vaccine supply disruption, the reported coverage level is greater than that observed in 2015 by a magnitude that requires independent verification. Estimate challenged by: R-

2016: Reported data calibrated to 2014 and 2017 levels. Revised target population based on projections from the 2014 census. Decline of twelve percent in 2016 compared with 2015. Programme reports BCG stockout.. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2015: Reported data calibrated to 2014 and 2017 levels. Programme reports one month national stockout due to financial short-falls. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2014: Estimate of 72 percent assigned by working group. Estimate based on survey for consistency with other antigens. Decline in reported administrative coverage due in part to change in target population following release of 2014 census results. As such, data suggest coverage levels in prior years are overestimated. DQA conducted during 2014 suggests problems with recording and monitoring of vaccination services. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 71 percent based on 1 survey(s). Programme reports a one month stockout at national level. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2012: Reported data calibrated to 2007 and 2013 levels. EPI Coverage Evaluation Survey, Angola 2013 results ignored by working group. Summary results from the survey available in PowerPoint format only. Full survey report not available. GoC=Assigned by working
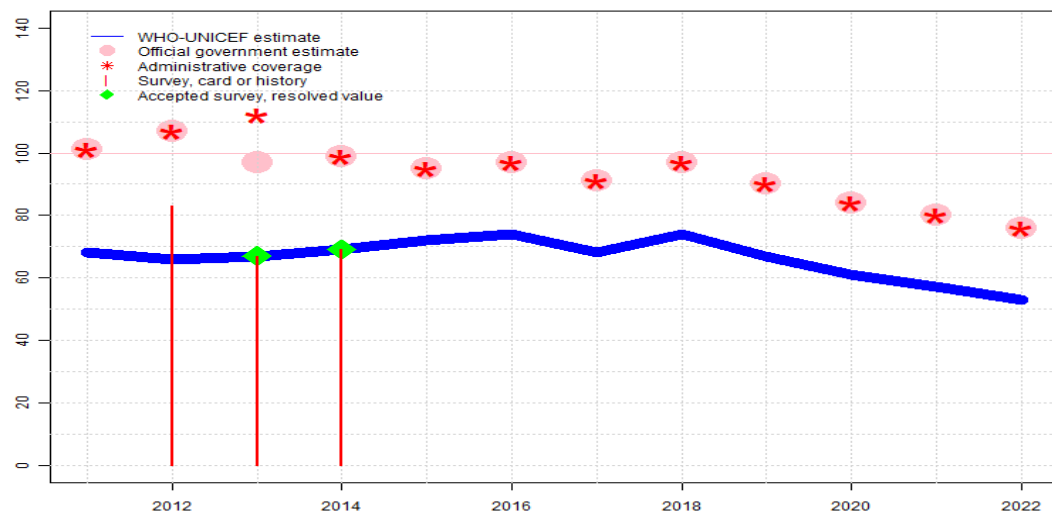
group. GoC assigned to maintain consistency across vaccines.

2011: Reported data calibrated to 2007 and 2013 levels. GoC=Assigned by working group. Consistency across antigens given available information.

Angola - DTP1

AGO - DTP1

Legend:
- WHO-UNICEF estimate
- Official government estimate
- Administrative coverage
- Survey, card or history
- Accepted survey, resolved value

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	68	66	67	69	72	74	68	74	67	61	57	53
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	101	107	97	99	95	97	91	97	90	84	80	76
Administrative	101	107	112	99	95	97	91	97	90	84	80	76
Survey	NA	83	67	69	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.
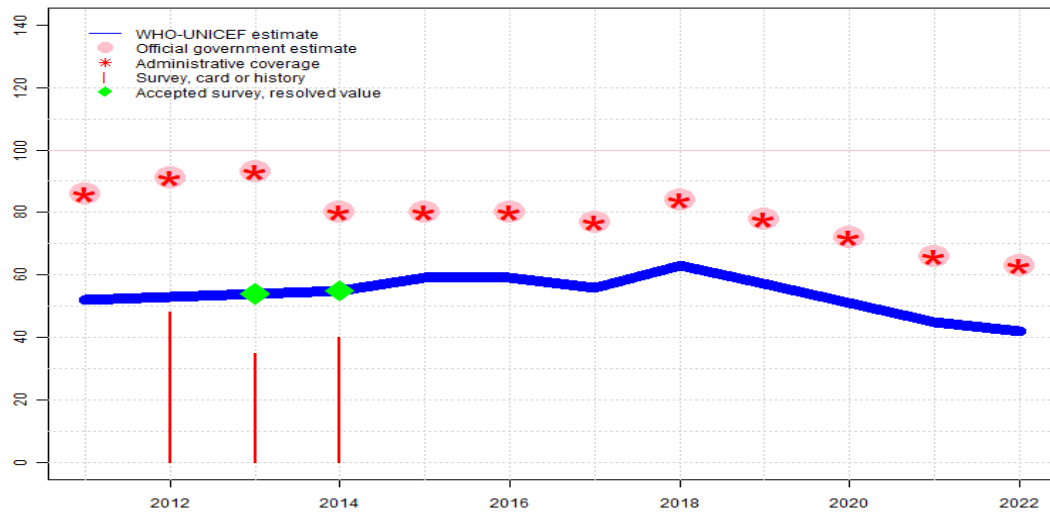
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2022: Reported data calibrated to 2014 levels. Programme reports vaccine supply disruptions for all antigens at subnational levels. WHO and UNICEF recommend assessment of the routine monitoring system. WHO and UNICEF are aware of a 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-R-

2021: Reported data calibrated to 2014 levels. Country reports resources redirected to Covid-19 may have contributed to the decline in coverage seen in 2021. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for most antigens. Estimate challenged by: D-R-

2020: Reported data calibrated to 2014 levels. Country indicates that due to Covid-19 restrictions most health facilities were only partially operational between March and July 2020. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate challenged by: D-R-

2019: Reported data calibrated to 2014 levels. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate challenged by: D-R-

2018: Reported data calibrated to 2014 levels. Estimate challenged by: R-

2017: Reported data calibrated to 2014 levels. Programme reports vaccine supply disruptions at district level in 2017. Estimate challenged by: R-

2016: Reported data calibrated to 2014 levels. Revised target population based on projections from the 2014 census. Decline of twelve percent in 2016 compared with 2015. Estimate challenged by: R-

2015: Reported data calibrated to 2014 levels. Programme reports one month national stockout due to financial short-falls. Estimate challenged by: D-R-

2014: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 69 percent based on 1 survey(s). Reported data excluded. . Decline in reported administrative coverage due in part to change in target population following release of 2014 census results. As such, data suggest coverage levels in prior years are overestimated. DQA conducted during 2014 suggests problems with recording and monitoring of vaccination services. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 67 percent based on 1 survey(s). Reported data excluded. . Estimate challenged by: D-R-

2012: Reported data calibrated to 2007 and 2013 levels. EPI Coverage Evaluation Survey, Angola 2013 results ignored by working group. Summary results from the survey available in PowerPoint format only. Full survey report not available.Reported data excluded. .Reported data excluded because 107 percent greater than 100 percent. Estimate challenged by: D-R-

2011: Reported data calibrated to 2007 and 2013 levels. Reported data excluded. .Reported data excluded because 101 percent greater than 100 percent. GoC=Assigned by working group. Consistency across antigens given available information.

Angola - DTP3

AGO - DTP3

- —— WHO-UNICEF estimate
- ● Official government estimate
- ✳ Administrative coverage
- | Survey, card or history
- ◆ Accepted survey, resolved value

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	52	53	54	55	59	59	56	63	57	51	45	42
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	86	91	93	80	80	80	77	84	78	72	66	63
Administrative	86	91	93	80	80	80	77	84	78	72	66	63
Survey	NA	48	35	40	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:

2022: Reported data calibrated to 2014 levels. Programme reports vaccine supply disruptions for all antigens at subnational levels. WHO and UNICEF recommend assessment of the routine monitoring system. WHO and UNICEF are aware of a 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-R-

2021: Reported data calibrated to 2014 levels. Country reports resources redirected to Covid-19 may have contributed to the decline in coverage seen in 2021. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for most antigens. Estimate challenged by: D-R-

2020: Reported data calibrated to 2014 levels. Country indicates that due to Covid-19 restrictions most health facilities were only partially operational between March and July 2020. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate challenged by: D-R-

2019: Reported data calibrated to 2014 levels. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate challenged by: D-R-

2018: Reported data calibrated to 2014 levels. Estimate challenged by: R-

2017: Reported data calibrated to 2014 levels. Programme reports vaccine supply disruptions at district level in 2017. Estimate challenged by: R-

2016: Reported data calibrated to 2014 levels. Revised target population based on projections from the 2014 census. Decline of twelve percent in 2016 compared with 2015. Estimate challenged by: R-

2015: Reported data calibrated to 2014 levels. Programme reports one month national stockout due to financial short-falls. Estimate challenged by: D-R-

2014: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 55 percent based on 1 survey(s). Angola Demographic and Health Survey 2015-2016 card or history results of 40 percent modifed for recall bias to 55 percent based on 1st dose card or history coverage of 69 percent, 1st dose card only coverage of 43 percent and 3rd dose card only coverage of 34 percent. Reported data excluded. . Decline in reported administrative coverage due in part to change in target population following release of 2014 census results. As such, data suggest coverage levels in prior years are overestimated. DQA conducted during 2014 suggests problems with recording and monitoring of vaccination services. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 54 percent based on 1 survey(s). Angola Demographic and Health Survey 2015-2016 card or history results of 35 percent modifed for recall bias to 54 percent based on 1st dose card or history coverage of 67 percent, 1st dose card only coverage of 32 percent and 3rd dose card only coverage of 26 percent. Reported data excluded. . Estimate challenged by: D-R-

2012: Reported data calibrated to 2007 and 2013 levels. EPI Coverage Evaluation Survey, Angola 2013 results ignored by working group. Summary results from the survey available in PowerPoint format only. Full survey report not available.EPI Coverage Evaluation

Survey, Angola 2013 card or history results of 48 percent modifed for recall bias to 75 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 30 percent and 3rd dose card only coverage of 27 percent. Reported data excluded. . Estimate challenged by: D-R-

2011:   Reported data calibrated to 2007 and 2013 levels. Reported data excluded. . GoC=Assigned by working group. Consistency across antigens given available information.

Angola - Pol3

AGO - Pol3

Legend:
- WHO-UNICEF estimate
- Official government estimate
- Administrative coverage
- Survey, card or history
- Accepted survey, resolved value

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	50	54	48	55	62	58	52	61	56	51	43	41
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	85	88	80	81	83	79	73	82	77	72	64	62
Administrative	85	88	80	81	83	79	73	82	77	72	64	62
Survey	NA	42	37	42	NA	NA	NA	NA	NA	NA	NA	NA

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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 reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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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.
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Description:

2022: Reported data calibrated to 2015 levels. Programme reports vaccine supply disruptions for all antigens at subnational levels. WHO and UNICEF recommend assessment of the routine monitoring system. WHO and UNICEF are aware of a 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-R-

2021: Reported data calibrated to 2015 levels. Country reports resources redirected to Covid-19 may have contributed to the decline in coverage seen in 2021. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for most antigens. Estimate challenged by: D-R-

2020: Reported data calibrated to 2015 levels. Country indicates that due to Covid-19 restrictions most health facilities were only partially operational between March and July 2020. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate challenged by: D-R-

2019: Reported data calibrated to 2015 levels. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate challenged by: R-

2018: Reported data calibrated to 2015 levels. Estimate challenged by: R-

2017: Reported data calibrated to 2015 levels. Programme reports vaccine supply disruptions at district level in 2017. Estimate challenged by: R-

2016: Reported data calibrated to 2015 levels. Revised target population based on projections from the 2014 census. Decline of twelve percent in 2016 compared with 2015. Estimate challenged by: R-

2015: Estimate of 62 percent assigned by working group. Estimate is based on the difference in reported coverage between DTP3 and OPV3 applied to the estimated coverage. Estimate challenged by: D-R-S-

2014: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 55 percent based on 1 survey(s). Angola Demographic and Health Survey 2015-2016 card or history results of 42 percent modifed for recall bias to 55 percent based on 1st dose card or history coverage of 68 percent, 1st dose card only coverage of 43 percent and 3rd dose card only coverage of 35 percent. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 48 percent based on 1 survey(s). Angola Demographic and Health Survey 2015-2016 card or history results of 37 percent modifed for recall bias to 48 percent based on 1st dose card or history coverage of 61 percent, 1st dose card only coverage of 32 percent and 3rd dose card only coverage of 25 percent. Programme reports a two months stockout at national level. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2012: Reported data calibrated to 2007 and 2013 levels. EPI Coverage Evaluation Survey, Angola 2013 results ignored by working group. Summary results from the survey available in PowerPoint format on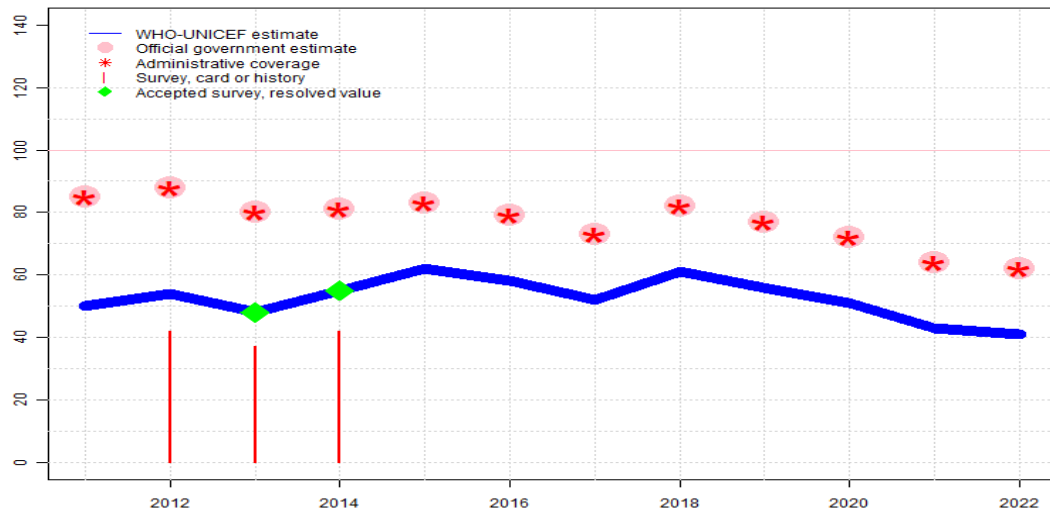ly. Full survey report not available.EPI Coverage Evaluation Survey, Angola 2013 card or history results of 42 percent modifed for recall bias to 75 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only cov-
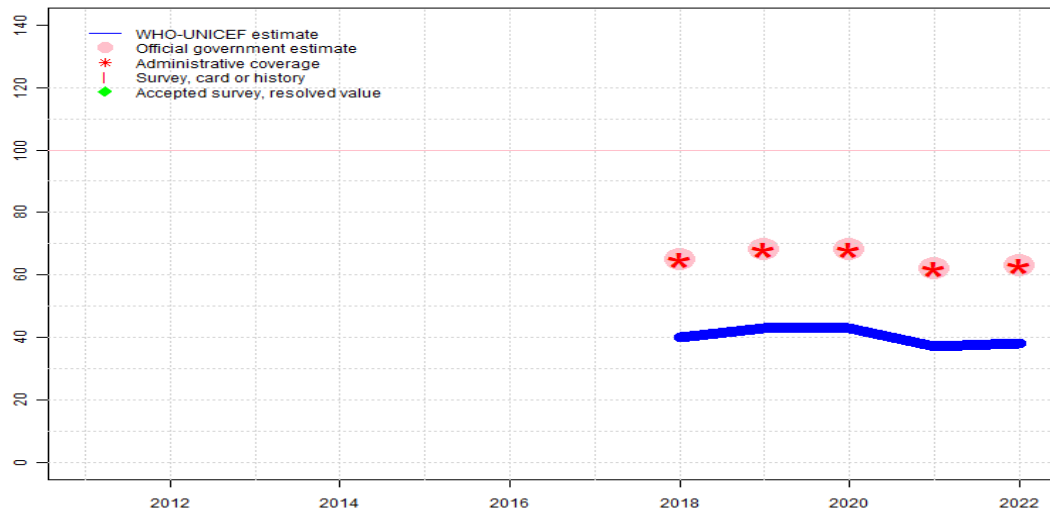
erage of 30 percent and 3rd dose card only coverage of 27 percent. Estimate challenged
by: D-R-

2011: Reported data calibrated to 2007 and 2013 levels. GoC=Assigned by working group.
Consistency across antigens given available information.

Angola - IPV1

Legend:
- WHO-UNICEF estimate
- Official government estimate
- Administrative coverage
- Survey, card or history
- Accepted survey, resolved value

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	NA	NA	40	43	43	37	38
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	●	●	●	●	●
Official	NA	NA	NA	NA	NA	NA	NA	65	68	68	62	63
Administrative	NA	NA	NA	NA	NA	NA	NA	65	68	68	62	63
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.

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).

2022: Reported data calibrated to 2018 levels. Programme reports vaccine supply disruptions for all antigens at subnational levels. WHO and UNICEF recommend assessment of the routine monitoring system. WHO and UNICEF are aware of a 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-R-

2021: Reported data calibrated to 2018 levels. Country reports resources redirected to Covid-19 may have contributed to the decline in coverage seen in 2021. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for most antigens. Estimate challenged by: D-R-

2020: Reported data calibrated to 2018 levels. Country indicates that due to Covid-19 restrictions most health facilities were only partially operational between March and July 2020. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate challenged by: D-R-

2019: Reported data calibrated to 2018 levels. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Programme reports one month vaccine stockout at national and district levels. Estimate challenged by: D-R-

2018: Estimate of 40 percent assigned by working group. Programme reports one month vaccine stockout at national level. Vaccine introduced in December 2017 with reporting started in 2018. Estimate based on relationship between estimated and reported DTP3. GoC=Assigned by working group. Consistency with other antigens.

Angola - MCV1

AGO - MCV1

Legend:
- WHO-UNICEF estimate
- Official government estimate
- Administrative coverage
- Survey, card or history
- Accepted survey, resolved value

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	57	65	59	56	51	45	42	50	51	44	36	37
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	88	97	91	85	80	74	71	79	80	73	65	66
Administrative	88	97	105	85	80	74	71	79	80	73	65	66
Survey	NA	72	59	56	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:

2022: Reported data calibrated to 2014 levels. Programme reports vaccine supply disruptions for all antigens at subnational levels. WHO and UNICEF recommend assessment of the routine monitoring system. WHO and UNICEF are aware of a 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-R-

2021: Reported data calibrated to 2014 levels. Country reports resources redirected to Covid-19 may have contributed to the decline in coverage seen in 2021. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for most antigens. Estimate challenged by: D-R-
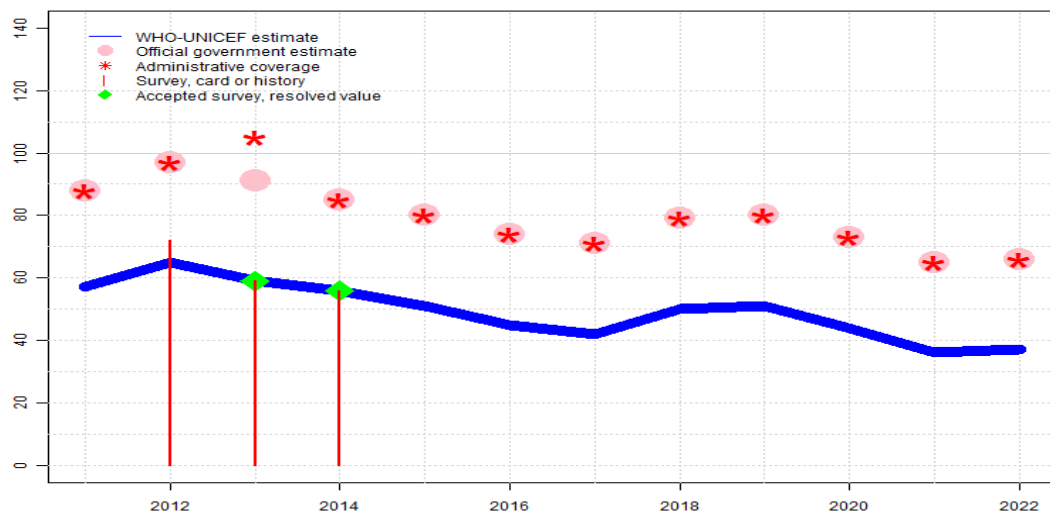
2020: Reported data calibrated to 2014 levels. Country indicates that due to Covid-19 restrictions most health facilities were only partially operational between March and July 2020. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate challenged by: D-R-

2019: Reported data calibrated to 2014 levels. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate challenged by: D-R-

2018: Reported data calibrated to 2014 levels. Estimate challenged by: D-R-

2017: Reported data calibrated to 2014 levels. Programme reports vaccine supply disruptions at district level in 2017. Estimate challenged by: D-R-

2016: Reported data calibrated to 2014 levels. Revised target population based on projections from the 2014 census. Decline of twelve percent in 2016 compared with 2015. Estimate challenged by: D-R-S-

2015: Reported data calibrated to 2014 levels. Estimate challenged by: D-R-

2014: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 56 percent based on 1 survey(s). Decline in reported administrative coverage due in part to change in target population following release of 2014 census results. As such, data suggest coverage levels in prior years are overestimated. DQA conducted during 2014 suggests problems with recording and monitoring of vaccination services. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 59 percent based on 1 survey(s). Programme reports a one month stockout at national level. Estimate challenged by: D-R-

2012: Reported data calibrated to 2007 and 2013 levels. EPI Coverage Evaluation Survey, Angola 2013 results ignored by working group. Summary results from the survey available in PowerPoint format only. Full survey report not available. Estimate challenged by: D-R-

2011: Reported data calibrated to 2007 and 2013 levels. GoC=Assigned by working group. Consistency across antigens given available information.

Angola - MCV2
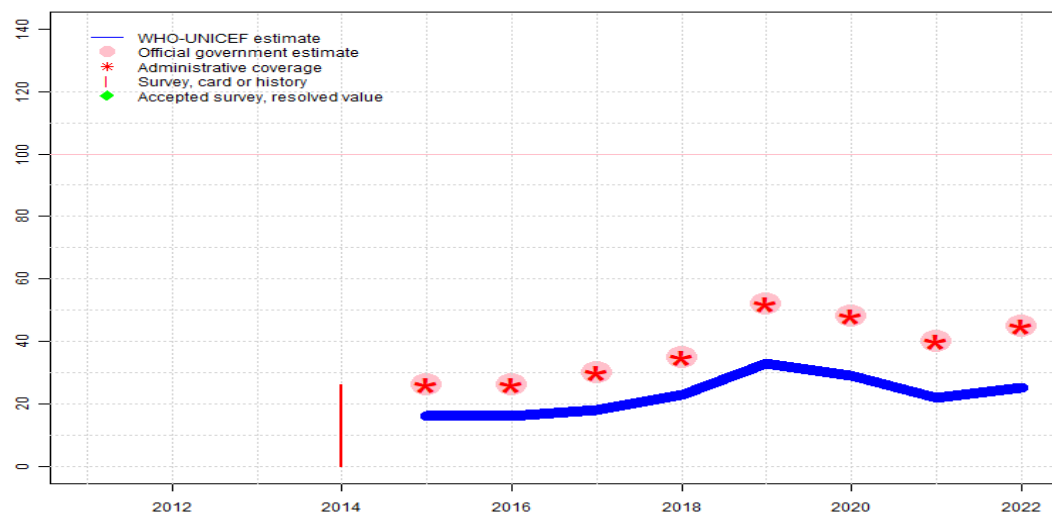
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	16	16	18	23	33	29	22	25
Estimate GoC	NA	NA	NA	NA	●	●	●	●	●	●	●	●
Official	NA	NA	NA	NA	26	26	30	35	52	48	40	45
Administrative	NA	NA	NA	NA	26	26	30	35	52	48	40	45
Survey	NA	NA	NA	26	NA	NA	NA	NA	NA	NA	NA	NA

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:

Coverage estimates for the second dose of measles containing vaccine are for children by the nationally recommended age.
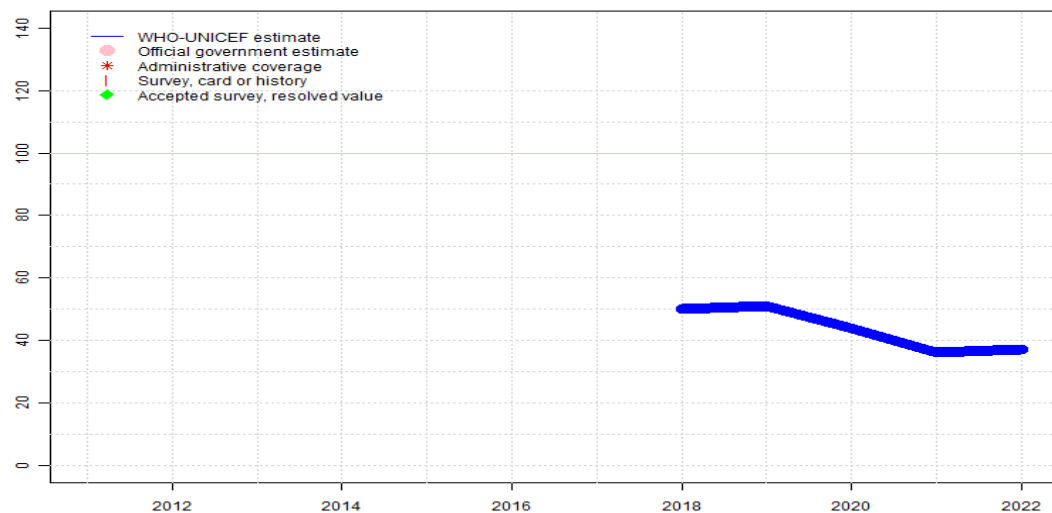
2022: Estimate informed by the ratio of reported MCV2:MCV1 doses applied to the estimated MCV1 coverage level consistent with prior year. Programme reports vaccine supply disruptions for all antigens at subnational levels. WHO and UNICEF recommend assessment of the routine monitoring system. WHO and UNICEF are aware of a 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-R-

2021: Estimate informed by the ratio of reported MCV2:MCV1 doses applied to the estimated MCV1 coverage level consistent with prior year. Country reports resources redirected to Covid-19 may have contributed to the decline in coverage seen in 2021. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for most antigens. Estimate of 22 percent changed from previous revision value of 32 percent. Estimate challenged by: D-R-

2020: Estimate informed by the ratio of reported MCV2:MCV1 doses applied to the estimated MCV1 coverage level consistent with prior year. Country indicates that due to Covid-19 restrictions most health facilities were only partially operational between March and July 2020. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate of 29 percent changed from previous revision value of 41 percent. Estimate challenged by: D-R-

2019: Year-to-year increase in reported coverage from 35 percent to 52 percent requires independent assessment. Estimate informed by the ratio of reported MCV2:MCV1 doses applied to the estimated MCV1 coverage level consistent with prior year. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate of 33 percent changed from previous revision value of 45 percent. Estimate challenged by: D-R-

2018: Estimate informed by the ratio of reported MCV2:MCV1 doses applied to the estimated MCV1 coverage level consistent with prior year. Estimate of 23 percent changed from previous revision value of 35 percent. Estimate challenged by: R-

2017: Estimate informed by the ratio of reported MCV2:MCV1 doses applied to the estimated MCV1 coverage level consistent with prior year. Estimate of 18 percent changed from previous revision value of 30 percent. Estimate challenged by: R-

2016: Estimate informed by the ratio of reported MCV2:MCV1 doses applied to the estimated MCV1 coverage level consistent with prior year. Revised target population based on projections from the 2014 census. Decline of twelve percent in 2016 compared with 2015. Estimate of 16 percent changed from previous revision value of 26 percent. Estimate challenged by: R-

2015: Estimate informed by the ratio of reported MCV2:MCV1 doses applied to the estimated MCV1 coverage level during the introduction period of the 2nd dose of measles vaccine and evidence that the administrative recording system may overestimate coverage. Sec-

ond dose of measles containing vaccine introduced in 2014. Reporting began in 2015. Estimate of 16 percent changed from previous revision value of 26 percent. Estimate challenged by: R-

AGO - RCV1

Legend:
- WHO-UNICEF estimate
- Official government estimate
- Administrative coverage
- Survey, card or history
- Accepted survey, resolved value

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	NA	NA	50	51	44	36	37
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	●	●	●	●	●
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	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.

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.

2022: Estimate based on estimated MCV1. Programme reports vaccine supply disruptions for all antigens at subnational levels. WHO and UNICEF recommend assessment of the routine monitoring system. WHO and UNICEF are aware of a 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-R-

2021: Estimate based on estimated MCV1. Country reports resources redirected to Covid-19 may have contributed to the decline in coverage seen in 2021. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for most antigens. Estimate challenged by: D-R-

2020: Estimate based on estimated MCV1. Country indicates that due to Covid-19 restrictions most health facilities were only partially operational between March and July 2020. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate challenged by: D-R-

2019: Estimate based on estimated MCV1. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate challenged by: D-R-

2018: Estimate based on estimated MCV1. Rubella containing vaccine introduced during 2018 as MR combination. Estimate challenged by: D-R-

AGO - HepBB

Legend:
- WHO-UNICEF estimate
- Official government estimate
- Administrative coverage
- Survey, card or history
- Accepted survey, resolved value

No estimate for infant immunization made.

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.

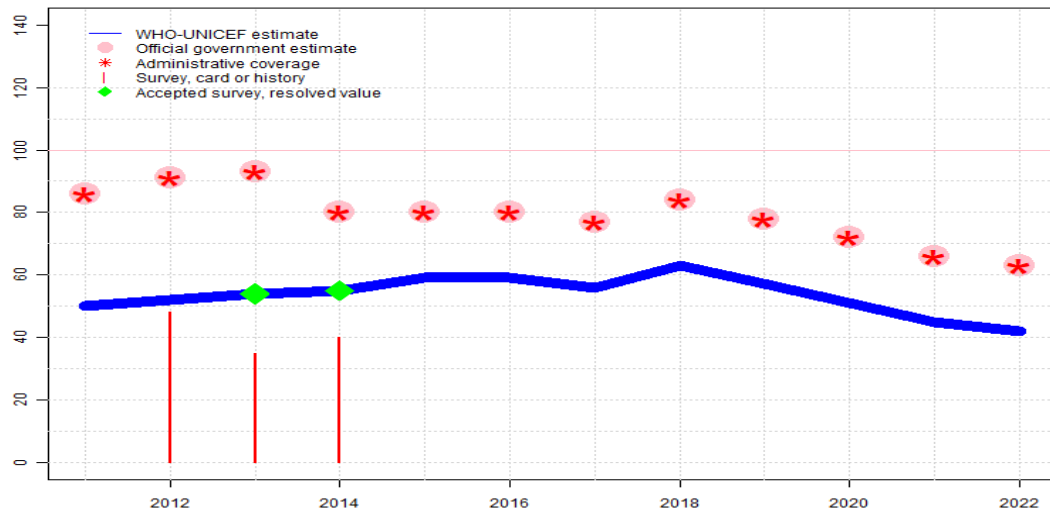|	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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.

Angola - HepB3

AGO - HepB3

Legend:
- WHO-UNICEF estimate
- Official government estimate
- Administrative coverage
- Survey, card or history
- Accepted survey, resolved value

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	50	52	54	55	59	59	56	63	57	51	45	42
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	86	91	93	80	80	80	77	84	78	72	66	63
Administrative	86	91	93	80	80	80	77	84	78	72	66	63
Survey	NA	48	35	40	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:

2022: Reported data calibrated to 2015 levels. Programme reports vaccine supply disruptions for all antigens at subnational levels. WHO and UNICEF recommend assessment of the routine monitoring system. WHO and UNICEF are aware of a 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-R-

2021: Reported data calibrated to 2015 levels. Country reports resources redirected to Covid-19 may have contributed to the decline in coverage seen in 2021. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for most antigens. Estimate of 45 percent changed from previous revision value of 41 percent. Estimate challenged by: D-R-

2020: Reported data calibrated to 2015 levels. Country indicates that due to Covid-19 restrictions most health facilities were only partially operational between March and July 2020. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate of 51 percent changed from previous revision value of 47 percent. Estimate challenged by: D-R-

2019: Reported data calibrated to 2015 levels. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate of 57 percent changed from previous revision value of 53 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2015 levels. Estimate of 63 percent changed from previous revision value of 59 percent. Estimate challenged by: R-

2017: Reported data calibrated to 2015 levels. Programme reports vaccine supply disruptions at district level in 2017. Estimate of 56 percent changed from previous revision value of 52 percent. Estimate challenged by: R-

2016: Reported data calibrated to 2015 levels. Revised target population based on projections from the 2014 census. Decline of twelve percent in 2016 compared with 2015. Estimate of 59 percent changed from previous revision value of 55 percent. Estimate challenged by: R-

2015: Estimate of 59 percent assigned by working group. Estimate informed by estimated DTP3 coverage. Programme reports one month national stockout due to financial short-falls. Estimate of 59 percent changed from previous revision value of 55 percent. Estimate challenged by: D-R-

2014: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 55 percent based on 1 survey(s). Angola Demographic and Health Survey 2015-2016 card or history results of 40 percent modifed for recall bias to 55 percent based on 1st dose card or history coverage of 69 percent, 1st dose card only coverage of 43 percent and 3rd dose card only coverage of 34 percent. Reported data excluded. . Decline in reported administrative coverage due in part to change in target population following release of 2014 census results. As such, data suggest coverage levels in prior years are overestimated. DQA conducted during 2014 suggests problems with recording and monitoring of vaccination services. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey

WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2024   data received as of June 26, 2023

evidence of 54 percent based on 1 survey(s). Angola Demographic and Health Survey 2015-2016 card or history results of 35 percent modifed for recall bias to 54 percent based on 1st dose card or history coverage of 67 percent, 1st dose card only coverage of 32 percent and 3rd dose card only coverage of 26 percent. Reported data excluded. . Estimate challenged by: D-R-

2012: Reported data calibrated to 2007 and 2013 levels. EPI Coverage Evaluation Survey, Angola 2013 results ignored by working group. Summary results from the survey available in PowerPoint format only. Full survey report not available.EPI Coverage Evaluation Survey, Angola 2013 card or history results of 48 percent modifed for recall bias to 75 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 30 percent and 3rd dose card only coverage of 27 percent. Reported data excluded. . Estimate challenged by: D-R-

2011: Reported data calibrated to 2007 and 2013 levels. Reported data excluded. . GoC=Assigned by working group. Consistency across antigens given available information.

Angola - Hib3

AGO - Hib3

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	50	52	54	55	59	59	56	63	57	51	45	42
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	86	91	93	80	80	80	77	84	78	72	66	63
Administrative	86	91	93	80	80	80	77	84	78	72	66	63
Survey	NA	48	35	40	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:

2022: Reported data calibrated to 2015 levels. Programme reports vaccine supply disruptions for all antigens at subnational levels. WHO and UNICEF recommend assessment of the routine monitoring system. WHO and UNICEF are aware of a 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-R-

2021: Reported data calibrated to 2015 levels. Country reports resources redirected to Covid-19 may have contributed to the decline in coverage seen in 2021. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for most antigens. Estimate of 45 percent changed from previous revision value of 41 percent. Estimate challenged by: D-R-

2020: Reported data calibrated to 2015 levels. Country indicates that due to Covid-19 restrictions most health facilities were only partially operational between March and July 2020. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate of 51 percent changed from previous revision value of 47 percent. Estimate challenged by: D-R-

2019: Reported data calibrated to 2015 levels. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate of 57 percent changed from previous revision value of 53 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2015 levels. Estimate of 63 percent changed from previous revision value of 59 percent. Estimate challenged by: R-

2017: Reported data calibrated to 2015 levels. Programme reports vaccine supply disruptions at district level in 2017. Estimate of 56 percent changed from previous revision value of 52 percent. Estimate challenged by: R-

2016: Reported data calibrated to 2015 levels. Revised target population based on projections from the 2014 census. Decline of twelve percent in 2016 compared with 2015. Estimate of 59 percent changed from previous revision value of 55 percent. Estimate challenged by: R-

2015: Estimate of 59 percent assigned by working group. Estimate informed by estimated DTP3 coverage. Programme reports one month national stockout due to financial short-falls. Estimate of 59 percent changed from previous revision value of 55 percent. Estimate challenged by: D-R-

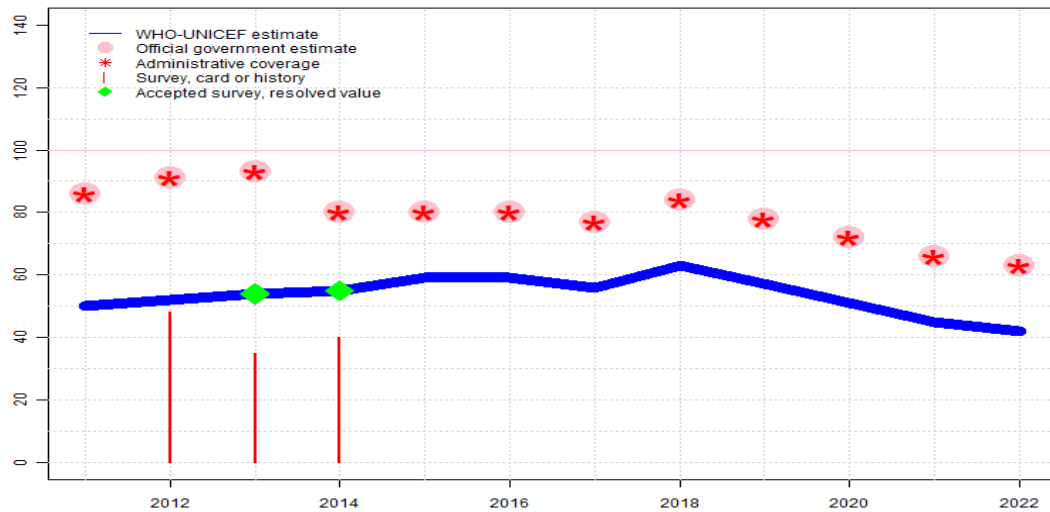2014: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 55 percent based on 1 survey(s). Angola Demographic and Health Survey 2015-2016 card or history results of 40 percent modifed for recall bias to 55 percent based on 1st dose card or history coverage of 69 percent, 1st dose card only coverage of 43 percent and 3rd dose card only coverage of 34 percent. Reported data excluded. . Decline in reported administrative coverage due in part to change in target population following release of 2014 census results. As such, data suggest coverage levels in prior years are overestimated. DQA conducted during 2014 suggests problems with recording and monitoring of vaccination services. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey

evidence of 54 percent based on 1 survey(s). Angola Demographic and Health Survey 2015-2016 card or history results of 35 percent modifed for recall bias to 54 percent based on 1st dose card or history coverage of 67 percent, 1st dose card only coverage of 32 percent and 3rd dose card only coverage of 26 percent. Reported data excluded. . Estimate challenged by: D-R-

2012: Reported data calibrated to 2007 and 2013 levels. EPI Coverage Evaluation Survey, Angola 2013 results ignored by working group. Summary results from the survey available in PowerPoint format only. Full survey report not available.EPI Coverage Evaluation Survey, Angola 2013 card or history results of 48 percent modifed for recall bias to 75 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 30 percent and 3rd dose card only coverage of 27 percent. Reported data excluded. . Estimate challenged by: D-R-

2011: Reported data calibrated to 2007 and 2013 levels. Reported data excluded. . GoC=Assigned by working group. Consistency across antigens given available information.

Angola - RotaC

AGO - RotaC

Legend:
- WHO-UNICEF estimate
- Official government estimate
- Administrative coverage
- Survey, card or history
- Accepted survey, resolved value
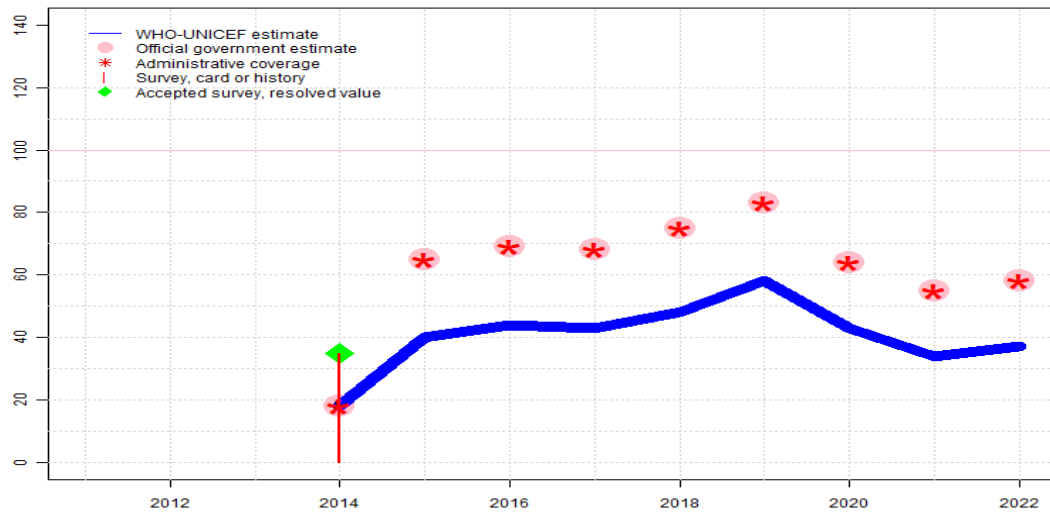
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	18	40	44	43	48	58	43	34	37
Estimate GoC	NA	NA	NA	●	●	●	●	●	●	●	●	●
Official	NA	NA	NA	18	65	69	68	75	83	64	55	58
Administrative	NA	NA	NA	18	65	69	68	75	83	64	55	58
Survey	NA	NA	NA	35	NA	NA	NA	NA	NA	NA	NA	NA

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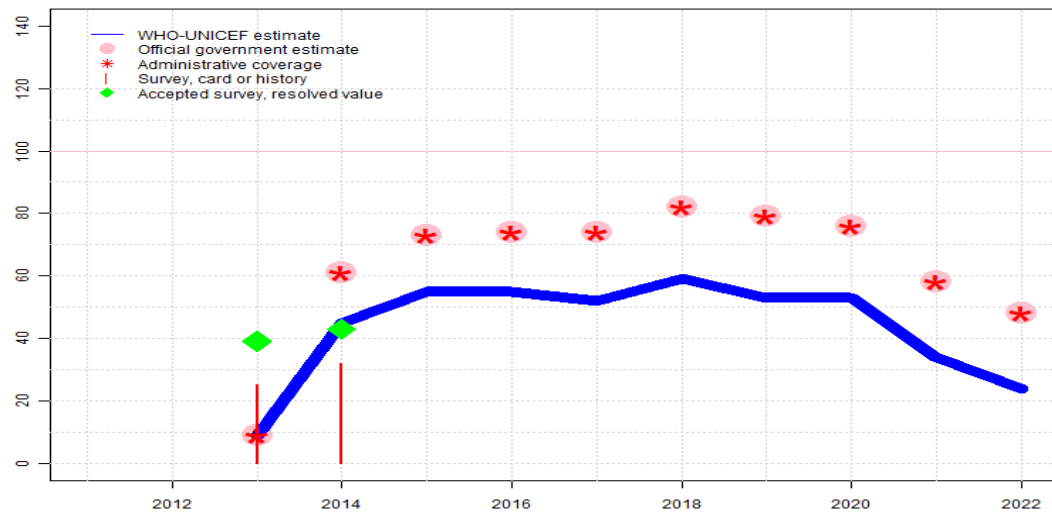
In all cases these estimates should be used with caution and should be assessed in light
of the objective for which they are being used.

Description:

2022: Estimate is based on difference between reported coverage for DTP3 and RotaC applied
to the estimated DTP3 coverage. Programme reports vaccine supply disruptions for all
antigens at subnational levels. WHO and UNICEF recommend assessment of the routine
monitoring system. WHO and UNICEF are aware of a 2023 Demographic and Health
Survey and await the final results. Estimate challenged by: D-R-

2021: Estimate is based on difference between reported coverage for DTP3 and RotaC applied
to the estimated DTP3 coverage. Country reports resources redirected to Covid-19 may
have contributed to the decline in coverage seen in 2021. Reported administrative data
reflect incomplete reporting. Programme reports subnational vaccine supply disruptions
for most antigens. Estimate of 34 percent changed from previous revision value of 36
percent. Estimate challenged by: D-R-

2020: Estimate is based on difference between reported coverage for DTP3 and RotaC applied to
the estimated DTP3 coverage. Country indicates that due to Covid-19 restrictions most
health facilities were only partially operational between March and July 2020. Reported
administrative data reflect incomplete reporting. Programme reports subnational vac-
cine supply disruptions for all antigens. Estimate of 43 percent changed from previous
revision value of 39 percent. Estimate challenged by: D-R-

2019: Estimate is based on relationship between estimated and reported DTP3 applied to re-
ported data for RotaC. Reported administrative data reflect incomplete reporting. Pro-
gramme reports subnational vaccine supply disruptions for all antigens. Estimate chal-
lenged by: D-R-

2018: Estimate is based on relationship between estimated and reported DTP3 applied to re-
ported data for RotaC. Estimate challenged by: D-R-

2017: Estimate is based on relationship between estimated and reported DTP3 applied to re-
ported data for RotaC. Estimate challenged by: D-R-

2016: Estimate is based on relationship between estimated and reported DTP3 applied to re-
ported data for RotaC. Revised target population based on projections from the 2014
census. Decline of twelve percent in 2016 compared with 2015. Programme reports two
months national level vaccine stockout. Estimate challenged by: D-R-

2015: Estimate is based on relationship between estimated and reported DTP3 applied to re-
ported data for RotaC. Estimate challenged by: D-R-

2014: Rotavirus vaccine introduced during April 2014. GoC=Assigned by working group. GoC
assigned to maintain consistency across vaccines.

Angola - PcV3

AGO - PcV3

Legend:
- WHO-UNICEF estimate
- Official government estimate
- Administrative coverage
- Survey, card or history
- Accepted survey, resolved value

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	9	45	55	55	52	59	53	53	34	24
Estimate GoC	NA	NA	•	•	•	•	•	•	•	•	•	•
Official	NA	NA	9	61	73	74	74	82	79	76	58	48
Administrative	NA	NA	9	61	73	74	74	82	79	76	58	48
Survey	NA	NA	25	32	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:

2022: Estimate is based on the difference in reported coverage data from the prior year. Programme reports vaccine supply disruptions for all antigens at subnational levels. WHO and UNICEF recommend assessment of the routine monitoring system. WHO and UNICEF are aware of a 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-R-

2021: Estimate is based on the difference in the number of administered doses of PCV3 and DTP3 applied to the estimated DTP3 coverage. Country reports resources redirected to Covid-19 may have contributed to the decline in coverage seen in 2021. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for most antigens. Estimate challenged by: D-R-

2020: Estimate is based on the difference in the number of administered doses of PCV3 and DTP3 applied to the estimated DTP3 coverage. Country indicates that due to Covid-19 restrictions most health facilities were only partially operational between March and July 2020. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate challenged by: D-R-

2019: Estimate is based on estimated DTP3. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. Estimate challenged by: D-R-

2018: Estimate is based on estimated DTP3. Estimate challenged by: D-R-

2017: Estimate is based on estimated DTP3. Programme reports vaccine supply disruptions at district level in 2017. Estimate challenged by: D-R-

2016: Estimate is based on estimated DTP3. Revised target population based on projections from the 2014 census. Decline of twelve percent in 2016 compared with 2015. Programme reports PCV stockout for 0.5 month. Estimate challenged by: R-S-

2015: Estimate is based on estimated DTP3. Estimate challenged by: D-R-S-

2014: Estimate of 45 percent assigned by working group. Estimate is based on estimated DTP3 coverage level. Angola Demographic and Health Survey 2015-2016 card or history results of 32 percent modifed for recall bias to 43 percent based on 1st dose card or history coverage of 62 percent, 1st dose card only coverage of 40 percent and 3rd dose card only coverage of 28 percent. Estimate challenged by: D-R-

2013: Pneumococcal conjugate vaccine introduced in June 2013. Angola Demographic and Health Survey 2015-2016 card or history results of 25 percent modifed for recall bias to 39 percent based on 1st dose card or history coverage of 55 percent, 1st dose card only coverage of 27 percent and 3rd dose card only coverage of 19 percent. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

Angola - YFV
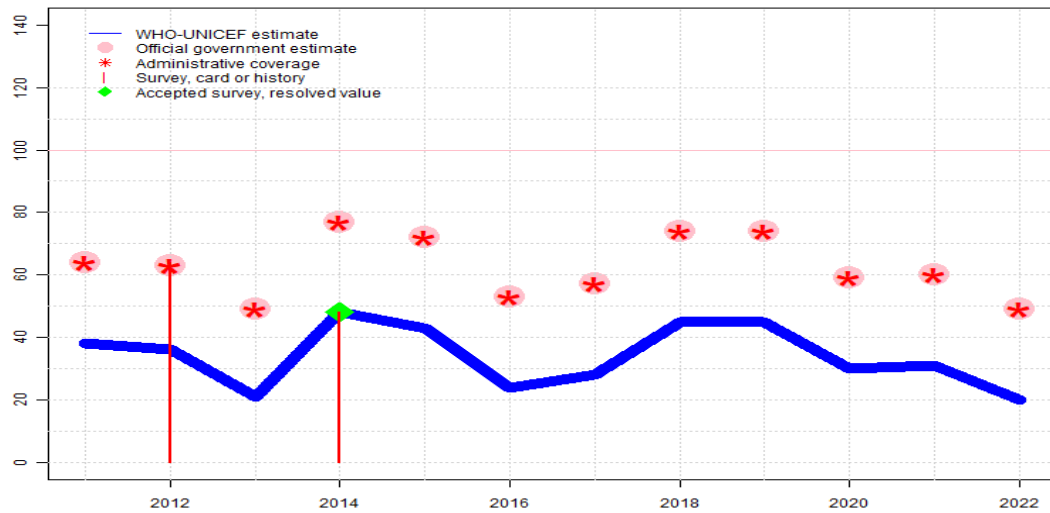
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	38	36	21	48	43	24	28	45	45	30	31	20
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	64	63	49	77	72	53	57	74	74	59	60	49
Administrative	64	63	49	77	72	53	57	74	74	59	60	49
Survey	NA	64	NA	48	NA	NA	NA	NA	NA	NA	NA	NA

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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 reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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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.
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Description:

2022: Estimate is based on difference in reported coverage from prior year. Reported data excluded due to sudden change in coverage from 60 level to 49 percent. Programme reports vaccine supply disruptions for all antigens at subnational levels. WHO and UNICEF recommend assessment of the routine monitoring system. WHO and UNICEF are aware of a 2023 Demographic and Health Survey and await the final results. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2021: Reported data calibrated to 2014 levels. Country reports resources redirected to Covid-19 may have contributed to the decline in coverage seen in 2021. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for most antigens. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2020: Reported data calibrated to 2014 levels. Country indicates that due to Covid-19 restrictions most health facilities were only partially operational between March and July 2020. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens.. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2019: Reported data calibrated to 2014 levels. Reported administrative data reflect incomplete reporting. Programme reports subnational vaccine supply disruptions for all antigens. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2018: Reported data calibrated to 2014 levels. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2017: Reported data calibrated to 2014 levels. Programme reports vaccine supply disruptions at district level in 2017. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2016: Reported data calibrated to 2014 levels. Revised target population based on projections from the 2014 census. Decline of twelve percent in 2016 compared with 2015. Programme reports Yellow Fever vaccine stockout for 12 months in 2016. Estimates exceptionally based on reported data for the time period shown in the graph.. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2015: Reported data calibrated to 2014 levels. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2014: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 48 percent based on 1 survey(s). Recovery from 2013 stockout. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2013: Reported data calibrated to 2007 and 2014 levels. Decline in coverage due in part to a national stockout of three months. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2012: Reported data calibrated to 2007 and 2014 levels. EPI Coverage Evaluation Survey, Angola 2013 results ignored by working group. Summary results from the survey available in PowerPoint format only. Full survey report not available. GoC=Assigned by working

group. GoC assigned to maintain consistency across vaccines.

2011: Reported data calibrated to 2007 and 2014 levels. Decline result of vaccine stockout in 138 districts. GoC=Assigned by working group. Consistency across antigens given available information.

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

2014 Angola Demographic and Health Survey 2015-2016

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	70.4	12-23 m	2595	47
BCG	Card	42.1	12-23 m	1228	47
BCG	Card or History	71.9	12-23 m	2595	47
BCG	History	29.9	12-23 m	1366	47
DTP1	C or H <12 months	67.1	12-23 m	2595	47
DTP1	Card	42.9	12-23 m	1228	47
DTP1	Card or History	68.8	12-23 m	2595	47
DTP1	History	25.9	12-23 m	1366	47
DTP3	C or H <12 months	38.1	12-23 m	2595	47
DTP3	Card	33.8	12-23 m	1228	47
DTP3	Card or History	39.6	12-23 m	2595	47
DTP3	History	5.8	12-23 m	1366	47
HepB1	C or H <12 months	67.1	12-23 m	2595	47
HepB1	Card	42.9	12-23 m	1228	47
HepB1	Card or History	68.8	12-23 m	2595	47
HepB1	History	25.9	12-23 m	1366	47
HepB3	C or H <12 months	38.1	12-23 m	2595	47
HepB3	Card	33.8	12-23 m	1228	47
HepB3	Card or History	39.6	12-23 m	2595	47
HepB3	History	5.8	12-23 m	1366	47
Hib1	C or H <12 months	67.1	12-23 m	2595	47
Hib1	Card	42.9	12-23 m	1228	47
Hib1	Card or History	68.8	12-23 m	2595	47
Hib1	History	25.9	12-23 m	1366	47
Hib3	C or H <12 months	38.1	12-23 m	2595	47
Hib3	Card	33.8	12-23 m	1228	47
Hib3	Card or History	39.6	12-23 m	2595	47
Hib3	History	5.8	12-23 m	1366	47
MCV1	C or H <12 months	51.2	12-23 m	2595	47
MCV1	Card	31.9	12-23 m	1228	47
MCV1	Card or History	56.1	12-23 m	2595	47
MCV1	History	24.2	12-23 m	1366	47
MCV2	C or H <12 months	25.2	24-35 m	2495	47
MCV2	Card	14.9	24-35 m	862	47
MCV2	Card or History	26.4	24-35 m	2495	47
MCV2	History	11.5	24-35 m	1633	47
PCV1	C or H <12 months	60.6	12-23 m	2595	47
PCV1	Card	39.8	12-23 m	1228	47
PCV1	Card or History	62	12-23 m	2595	47
PCV1	History	22.2	12-23 m	1366	47
PCV3	C or H <12 months	31	12-23 m	2595	47
PCV3	Card	28.2	12-23 m	1228	47
PCV3	Card or History	32.5	12-23 m	2595	47
PCV3	History	4.3	12-23 m	1366	47
Pol1	C or H <12 months	65.8	12-23 m	2595	47
Pol1	Card	43.4	12-23 m	1228	47
Pol1	Card or History	67.6	12-23 m	2595	47
Pol1	History	24.2	12-23 m	1366	47
Pol3	C or H <12 months	39.9	12-23 m	2595	47
Pol3	Card	34.6	12-23 m	1228	47
Pol3	Card or History	41.8	12-23 m	2595	47
Pol3	History	7.2	12-23 m	1366	47
RotaC	C or H <12 months	34.3	12-23 m	2595	47
RotaC	Card	24.8	12-23 m	1228	47
RotaC	Card or History	34.9	12-23 m	2595	47
RotaC	History	10.1	12-23 m	1366	47
YFV	Card or History	48.5	12-23 m	2595	47

2013 Angola Demographic and Health Survey 2015-2016

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	65.9	24-35 m	2495	47
BCG	Card	31.1	24-35 m	862	47

BCG	Card or History	70.6	24-35 m	2495	47
BCG	History	39.5	24-35 m	1633	47
DTP1	C or H <12 months	62.1	24-35 m	2495	47
DTP1	Card	32.2	24-35 m	862	47
DTP1	Card or History	66.7	24-35 m	2495	47
DTP1	History	34.5	24-35 m	1633	47
DTP3	C or H <12 months	31.9	24-35 m	2495	47
DTP3	Card	25.5	24-35 m	862	47
DTP3	Card or History	34.9	24-35 m	2495	47
DTP3	History	9.3	24-35 m	1633	47
HepB1	C or H <12 months	62.1	24-35 m	2495	47
HepB1	Card	32.2	24-35 m	862	47
HepB1	Card or History	66.7	24-35 m	2495	47
HepB1	History	34.5	24-35 m	1633	47
HepB3	C or H <12 months	31.9	24-35 m	2495	47
HepB3	Card	25.5	24-35 m	862	47
HepB3	Card or History	34.9	24-35 m	2495	47
HepB3	History	9.3	24-35 m	1633	47
Hib1	C or H <12 months	62.1	24-35 m	2495	47
Hib1	Card	32.2	24-35 m	862	47
Hib1	Card or History	66.7	24-35 m	2495	47
Hib1	History	34.5	24-35 m	1633	47
Hib3	C or H <12 months	31.9	24-35 m	2495	47
Hib3	Card	25.5	24-35 m	862	47
Hib3	Card or History	34.9	24-35 m	2495	47
Hib3	History	9.3	24-35 m	1633	47
MCV1	C or H <12 months	49.1	24-35 m	2495	47
MCV1	Card	25.6	24-35 m	862	47
MCV1	Card or History	58.7	24-35 m	2495	47
MCV1	History	33.1	24-35 m	1633	47
PCV1	C or H <12 months	51	24-35 m	2495	47
PCV1	Card	26.6	24-35 m	862	47
PCV1	Card or History	55.4	24-35 m	2495	47
PCV1	History	28.8	24-35 m	1633	47
PCV3	C or H <12 months	22.5	24-35 m	2495	47
PCV3	Card	18.7	24-35 m	862	47
PCV3	Card or History	25	24-35 m	2495	47
PCV3	History	6.3	24-35 m	1633	47
Pol1	C or H <12 months	56.7	24-35 m	2495	47
Pol1	Card	32.5	24-35 m	862	47
Pol1	Card or History	61.3	24-35 m	2495	47
Pol1	History	28.8	24-35 m	1633	47
Pol3	C or H <12 months	33.5	24-35 m	2495	47
Pol3	Card	25.2	24-35 m	862	47
Pol3	Card or History	37	24-35 m	2495	47
Pol3	History	11.8	24-35 m	1633	47

2012 Inquérito de Cobertura Vacinal das Crianças de 12 a 23 meses de Idade, Angola 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	32	12-23 m	3764	33
BCG	Card or History	88	12-23 m	3764	33
DTP1	Card	30	12-23 m	3764	33
DTP1	Card or History	83	12-23 m	3764	33
DTP3	Card	27	12-23 m	3764	33
DTP3	Card or History	48	12-23 m	3764	33
HepB1	Card	30	12-23 m	3764	33
HepB1	Card or History	83	12-23 m	3764	33
HepB3	Card	27	12-23 m	3764	33
HepB3	Card or History	48	12-23 m	3764	33
Hib1	Card	30	12-23 m	3764	33
Hib1	Card or History	83	12-23 m	3764	33
Hib3	Card	27	12-23 m	3764	33
Hib3	Card or History	48	12-23 m	3764	33
MCV1	Card	26	12-23 m	3764	33
MCV1	Card or History	72	12-23 m	3764	33
Pol1	Card	30	12-23 m	3764	33
Pol1	Card or History	83	12-23 m	3764	33
Pol3	Card	27	12-23 m	3764	33
Pol3	Card or History	42	12-23 m	3764	33
YFV	Card	22	12-23 m	3764	33
YFV	Card or History	64	12-23 m	3764	33

2007 Angola Inquérito Integrado sobre o Bem-Estar da População (IBEP) 2008-2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	29.6	12-23 m	880	57
BCG	Card	41.3	12-23 m	2132	57
BCG	Card or History	74.6	12-23 m	2132	57
BCG	History	33.3	12-23 m	2132	57
DTP1	Card	40.6	12-23 m	2132	57
DTP1	Card or History	66.5	12-23 m	2132	57
DTP1	History	25.9	12-23 m	2132	57
DTP3	C or H <12 months	35	12-23 m	880	57
DTP3	Card	27.1	12-23 m	2132	57
DTP3	Card or History	37.6	12-23 m	2132	57
DTP3	History	10.5	12-23 m	2132	57
HepB1	Card	40.6	12-23 m	2132	57
HepB1	Card or History	66.5	12-23 m	2132	57
HepB1	History	25.9	12-23 m	2132	57
HepB3	C or H <12 months	35	12-23 m	880	57
HepB3	Card	27.1	12-23 m	2132	57
HepB3	Card or History	37.6	12-23 m	2132	57
HepB3	History	10.5	12-23 m	2132	57
Hib1	Card	40.6	12-23 m	2132	57
Hib1	Card or History	66.5	12-23 m	2132	57
Hib1	History	25.9	12-23 m	2132	57
Hib3	C or H <12 months	35	12-23 m	880	57
Hib3	Card	27.1	12-23 m	2132	57
Hib3	Card or History	37.6	12-23 m	2132	57
Hib3	History	10.5	12-23 m	2132	57
MCV1	C or H <12 months	52.5	12-23 m	880	57
MCV1	Card	31.2	12-23 m	2132	57
MCV1	Card or History	57.8	12-23 m	2132	57
MCV1	History	26.5	12-23 m	2132	57
Pol1	Card	45.5	12-23 m	2132	57
Pol1	Card or History	98	12-23 m	2132	57
Pol1	History	52.5	12-23 m	2132	57
Pol3	Card	33.1	12-23 m	2132	57
Pol3	Card or History	62.7	12-23 m	2132	57
Pol3	History	29.6	12-23 m	2132	57
YFV	C or H <12 months	45.4	12-23 m	880	57
YFV	Card	28.5	12-23 m	2132	57
YFV	Card or History	50.6	12-23 m	2132	57
YFV	History	22.1	12-23 m	2132	57

2000 Angola Multiple Indicator Cluster Survey 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	32.6	12-23 m	1102	34
BCG	Card <12 months	63	12-23 m	1102	34
BCG	Card or History	68.8	12-23 m	1102	34
BCG	History	36.2	12-23 m	1102	34
DTP1	Card	29.1	12-23 m	1102	34
DTP1	Card <12 months	49.8	12-23 m	1102	34
DTP1	Card or History	55.8	12-23 m	1102	34
DTP1	History	26.7	12-23 m	1102	34
DTP3	Card	23.1	12-23 m	1102	34
DTP3	Card <12 months	27.6	12-23 m	1102	34
DTP3	Card or History	33.9	12-23 m	1102	34
DTP3	History	10.9	12-23 m	1102	34
MCV1	Card	24.9	12-23 m	1102	34
MCV1	Card <12 months	42.4	12-23 m	1102	34
MCV1	Card or History	53.4	12-23 m	1102	34
MCV1	History	28.5	12-23 m	1102	34
Pol1	Card	30.1	12-23 m	1102	34
Pol1	Card <12 months	73.7	12-23 m	1102	34
Pol1	Card or History	82.4	12-23 m	1102	34
Pol1	History	52.3	12-23 m	1102	34
Pol3	Card	23.7	12-23 m	1102	34
Pol3	Card <12 months	51.4	12-23 m	1102	34
Pol3	Card or History	63.2	12-23 m	1102	34
Pol3	History	39.5	12-23 m	1102	34

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