

July 1, 2023; page 1

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

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

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

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

DATA SOURCES.

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

ABBREVIATIONS

- 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

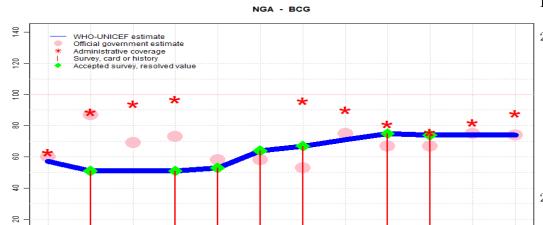
immunization and/or campaign or (ii) a sequential schedule of IPV followed by OPV, WHO and UNICEF estimates for IPV1 reflect coverage with at least one routine dose of IPV among infants <1 year of age among countries. For countries utilizing IPV containing vaccine use only, i.e., no recommended dose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

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2022



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	57	51	51	51	53	64	67	71	75	74	74	74
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	60	87	69	73	58	58	53	75	67	67	75	74
Administrative	63	89	94	97	NA	NA	96	90	81	76	82	88
Survey	NA	51	NA	51	53	64	67	NA	75	74	NA	NA

2016

2018

2020

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:

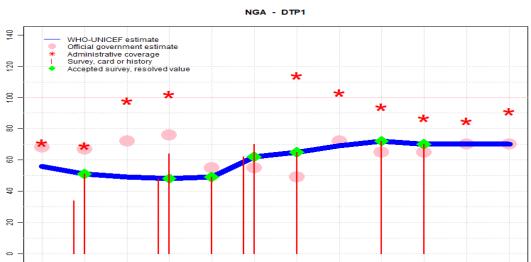
- 2022: Estimated coverage informed by prior year estimate. Official reported coverage informed by the survey result for the youngest annual cohort (the 2020 cohort) from the 2021 MICS/NICS survey. Government has indicated that the 2021 official coverage estimate is also based on survey results, though there are discrepancies with reported coverage for 2022. For antigens with reported administrative data in 2022, there is the appearance of increases in the number of doses administered from levels reported for 2021; however, it remains unclear whether the transition to DHIS2 has matured sufficiently to monitor trends in coverage. Alongside continued implementation of the national data quality improvement plan activities, WHO and UNICEF encourage continued efforts to independently assess the quality of the administrative recording and reporting system at all levels. Estimate challenged by: D-R-
- 2021: Estimated coverage informed by prior year estimate. The appearance of declines in administrative coverage from 2017 to 2021 may reflect transitions from DVDMT to DHIS2 that was fully implemented in 2019 as well as activities to improve data quality rather than true declines in coverage. Estimate of 74 percent changed from previous revision value of 75 percent. GoC=Assigned by working group.
- 2020: Estimate of 74 percent assigned by working group. Estimated coverage informed by 2021 MICS/NICS results for 2020 birth cohort. Reported data excluded. Reported coverage reflects results of a survey for the 2017 birth cohort. Coverage declines were noted mostly between March and May 2020 but immunization activities were enhanced starting in July 2020. Official estimate is based on latest survey results. Estimate of 74 percent changed from previous revision value of 75 percent. Estimate challenged by: D-R-
- 2019: Estimate informed by 2021 MICS/NICS results for the 2019 birth cohort. Reported data excluded. Country notes progress from levels observed in the 2016-17 MICS/NICS. These improvements can be seen in the 2018 NDHS results. During 2015-2019, the Government of Nigeria implemented numerous activities to improve the reach and quality of service delivery, including the Optimized Integrated Routine Immunization Sessions (OIRIS), improvements that tend to be reflected in improved coverage levels that are supported by results of DHS and MICS surveys. Estimate of 75 percent changed from previous revision value of 72 percent. Estimate challenged by: D-
- 2018: Estimate informed by interpolation between 2017 and 2019 levels. . Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Official estimates based on a review of strategic plan targets, 2018 Nutrition and Health Survey results, and routine immunization lot-quality assurance survey results. Estimate of 71 percent changed from previous revision value of 70 percent. Estimate challenged by: D-R-
- 2017: Estimate of 67 percent assigned by working group. Estimate is based on survey result. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Programme reports national level stockout of unspecified duration. Estimate challenged by: D-R-S-
- 2016: Estimate of 64 percent assigned by working group. Estimate is based on survey result. Re-

2012

2014

- ported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Programme reports district level vaccine supply disruptions for all vaccines in the infant immunization series. Reported official government estimate received July 2017 is based on preliminary 2016-17 MICS/NICS results applied to the 2016 birth cohort. Estimate challenged by: D-R-S-
- 2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 53 percent based on 1 survey(s). Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Reported official government estimate received July 2017 is based on preliminary 2016-17 MICS/NICS results applied to the 2015 birth cohort. Estimate challenged by: D-R-S-
- 2014: Estimate of 51 percent assigned by working group. Estimate based on results from the 2016-17 MICS/NICS survey. Reported data excluded. Official government estimate based on an adjustment to the administrative data based on a correction factor of 75 percent that was derived from observation of a community survey showing that 69 percent of infants were fully vaccinated. Nearly three-quarters of community survey respondents were from northern states observed to have lower routine immunization coverage. Estimate challenged by: D-R-S-
- 2013: Reported data calibrated to 2012 and 2014 levels. Reported data excluded. Official government estimate based on administrative data adjusted to the mean using a 2014 DQS verification factor and results from a community survey. Estimate challenged by: D-R-
- 2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 51 percent based on 1 survey(s). Reported data excluded due to an increase from 60 percent to 87 percent with decrease 69 percent. Estimate challenged by: D-R-S-
- 2011: Estimate informed by interpolation between 2010 and 2012 levels. Estimate based on interpolated value between 2010 and 2012 survey values Reported data excluded due to decline in reported coverage from 76 percent to 60 percent with increase to 87 percent. Estimate based on level established by the 2009 survey and follows trend in the reported data. Nigeria cites shortages of some vaccines and injection supplies (stockout of AD syringes for 252 days), repeated health worker strike actions and security challenges in several northern states. The vaccine stockouts were due in part to the late release of funds for routine immunization in July 2012 and reallocation of routine immunization vaccine funds to other priorities (measles and polio campaigns) (2012 Nigeria GAVI progress report for 2011). Estimate challenged by: R-S-

2022



		2012	2010	201.1	2015	2010	2015	2010	2010	2020	2021	2000
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	56	51	49	48	49	62	65	69	72	70	70	70
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	68	67	72	76	55	55	49	72	65	65	70	70
Administrative	71	69	98	102	NA	NA	114	103	94	87	85	91
Survey	NA	*	NA	*	49	*	65	NA	72	70	NA	NA

2016

2018

2020

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

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

Description:

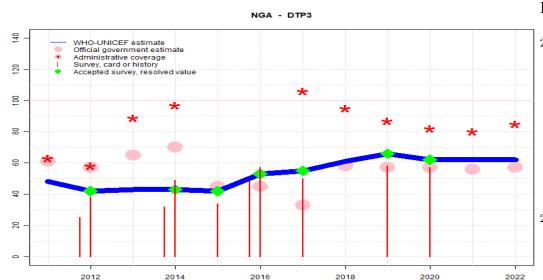
- 2022: Estimate informed by reported data. Official reported coverage informed by the survey result for the youngest annual cohort (the 2020 cohort) from the 2021 MICS/NICS survey. Government has indicated that the 2021 official coverage estimate is also based on survey results. For antigens with reported administrative data in 2022, there is the appearance of increases in the number of doses administered from levels reported for 2021; however, it remains unclear whether the transition to DHIS2 has matured sufficiently to monitor trends in coverage. Alongside continued implementation of the national data quality improvement plan activities, WHO and UNICEF encourage continued efforts to independently assess the quality of the administrative recording and reporting system at all levels. Estimate challenged by: D-
- 2021: Estimate informed by reported data. The appearance of declines in administrative coverage from 2017 to 2021 may reflect transitions from DVDMT to DHIS2 that was fully implemented in 2019 as well as activities to improve data quality rather than true declines in coverage. Estimate challenged by: D-
- 2020: Estimated coverage informed by 2021 MICS/NICS results for 2020 birth cohort. Reported data excluded. Reported coverage reflects results of a survey for the 2017 birth cohort. Coverage declines were noted mostly between March and May 2020 but immunization activities were enhanced starting in July 2020. Official estimate is based on latest survey results. Estimate challenged by: D-
- 2019: Estimate of 72 percent assigned by working group. Estimate informed by 2021 MICS/NICS results for the 2019 birth cohort. Reported data excluded. Country notes progress from levels observed in the 2016-17 MICS/NICS. These improvements can be seen in the 2018 NDHS results. During 2015-2019, the Government of Nigeria implemented numerous activities to improve the reach and quality of service delivery, including the Optimized Integrated Routine Immunization Sessions (OIRIS), improvements that tend to be reflected in improved coverage levels that are supported by results of DHS and MICS surveys. Estimate of 72 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-
- 2018: Estimate informed by interpolation between 2017 and 2019 levels. . Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Official estimates based on a review of strategic plan targets, 2018 Nutrition and Health Survey results, and routine immunization lot-quality assurance survey results. Sharp increases between 2015 and 2016-18 period may be partially explained by the timing of survey fieldwork vis-a-vis investments and activity to improve routine immunization. Estimate of 69 percent changed from previous revision value of 67 percent. Estimate challenged by: D-R-
- 2017: Estimate of 65 percent assigned by working group. Estimate is based on survey result. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: D-R-S-
- 2016: Estimate of 62 percent assigned by working group. Estimate is based on survey result.

2012

2014

Nigeria - DTP1

- Nigeria National Nutrition and Health Survey (NNHS) 2018 results ignored by working group. Results from the National Nutrition and Health Survey are ignored because of differences in sampling methods when compared with those used by the Demographic and Health Survey in neighbouring years. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Programme reports district level vaccine supply disruptions for all vaccines in the infant immunization series. Estimate challenged by: D-R-S-
- 2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 49 percent based on 1 survey(s). Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: D-R-S-
- 2014: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 48 percent based on 1 survey(s). Nigeria National Nutrition and Health Survey, 2015 results ignored by working group. The results of the 2015 Nigeria National Nutrition and Health Survey are presented such that coverage by card and by recall cannot be assessed and thus are not considered. Reported data excluded. Official government estimate based on an adjustment to the administrative data based on a correction factor of 75 percent that was derived from observation of a community survey showing that 69 percent of infants were fully vaccinated. Nearly three-quarters of community survey respondents were from northern states observed to have lower routine immunization coverage. Estimate challenged by: D-R-S-
- 2013: Reported data calibrated to 2012 and 2014 levels. Reported data excluded. Official government estimate based on administrative data adjusted to the mean using a 2014 DQS verification factor and results from a community survey. Administrative data documents recovery from pentavalent DTP-HepB-Hib and MCV stockout. Estimate of 49 percent changed from previous revision value of 50 percent. Estimate challenged by: D-R-
- 2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 51 percent based on 1 survey(s). Summary Findings of Cross-Sectional Health and Nutrition Survey, Nigeria 2013 results ignored by working group. Survey is ignored because it is a sub-national survey conducted in twenty-four states, accounting for approximately sixty-four percent of national target population. DTP-HepB-Hib pentavalent vaccine introduced in 2012. Estimate challenged by: D-R-
- 2011: Reported data calibrated to 2010 and 2012 levels. Reported data excluded. . Estimate based on level established by the 2009 survey and follows trend in the reported data. Nigeria cites shortages of some vaccines and injection supplies (stockout of AD syringes for 252 days), repeated health worker strike actions and security challenges in several northern states. The vaccine stockouts were due in part to the late release of funds for routine immunization in July 2012 and reallocation of routine immunization vaccine funds to other priorities (measles and polio campaigns) (2012 Nigeria GAVI progress report for 2011). Estimate challenged by: D-R-S-



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	48	42	43	43	42	53	55	61	66	62	62	62
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	61	57	65	70	45	45	33	58	57	57	56	57
Administrative	63	58	89	97	NA	NA	106	95	87	82	80	85
Survey	NA	*	NA	*	34	*	50	NA	58	57	NA	NA

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

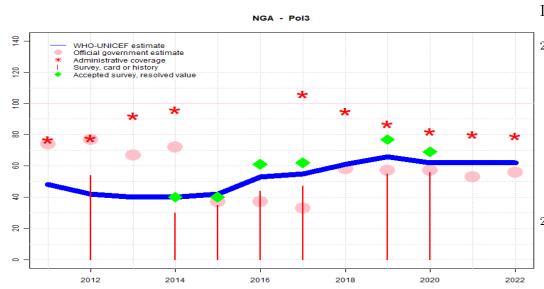
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

- 2022: Estimated coverage informed by prior year estimate. Official reported coverage informed by the survey result for the youngest annual cohort (the 2020 cohort) from the 2021 MICS/NICS survey. Government has indicated that the 2021 official coverage estimate is also based on survey results. Note that reported official coverage reflects crude survey results for the 3rd dose that do not account for recall bias in the absence of documented evidence of vaccination. For antigens with reported administrative data in 2022, there is the appearance of increases in the number of doses administered from levels reported for 2021; however, it remains unclear whether the transition to DHIS2 has matured sufficiently to monitor trends in coverage. Alongside continued implementation of the national data quality improvement plan activities, WHO and UNICEF encourage continued efforts to independently assess the quality of the administrative recording and reporting system at all levels. Estimate challenged by: D-R-
- 021: Estimated coverage informed by prior year estimate. The appearance of declines in administrative coverage from 2017 to 2021 may reflect transitions from DVDMT to DHIS2 that was fully implemented in 2019 as well as activities to improve data quality rather than true declines in coverage. Estimate of 62 percent changed from previous revision value of 56 percent. Estimate challenged by: D-R-
- 2020: Estimate of 62 percent assigned by working group. Estimated coverage informed by 2021 MICS/NICS results adjusted for recall bias for 2020 birth cohort. Nigeria Multiple Indicator Cluster Survey 2021 card or history results of 57 percent modified for recall bias to 62 percent based on 1st dose card or history coverage of 70 percent, 1st dose card only coverage of 53 percent and 3rd dose card only coverage of 47 percent. Reported data excluded. Reported coverage reflects results of a survey for the 2017 birth cohort. Coverage declines were noted mostly between March and May 2020 but immunization activities were enhanced starting in July 2020. Official estimate is based on latest survey results. Estimate of 62 percent changed from previous revision value of 56 percent. Estimate challenged by: D-R-
- 2019: Estimate of 66 percent assigned by working group. Estimate informed by 2021 MICS/NICS results adjusted for recall for the 2019 birth cohort. Nigeria Multiple Indicator Cluster Survey 2021 card or history results of 58 percent modified for recall bias to 66 percent based on 1st dose card or history coverage of 72 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 41 percent. Reported data excluded. Country notes progress from levels observed in the 2016-17 MICS/NICS. These improvements can be seen in the 2018 NDHS results. During 2015-2019, the Government of Nigeria implemented numerous activities to improve the reach and quality of service delivery, including the Optimized Integrated Routine Immunization Sessions (OIRIS), improvements that tend to be reflected in improved coverage levels that are supported by results of DHS and MICS surveys. Estimate of 66 percent changed from previous revision value of 56 percent. Estimate challenged by: D-R-S-
- 2018: Estimate informed by interpolation between 2017 and 2019 levels. . Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative

Nigeria - DTP3

- coverage levels, including delays and incomplete reporting. Official estimates based on a review of strategic plan targets, 2018 Nutrition and Health Survey results, and routine immunization lot-quality assurance survey results. Sharp increases between 2015 and 2016 may be partially explained by the timing of survey fieldwork vis-a-vis investments and activity to improve routine immunization. Estimate of 61 percent changed from previous revision value of 55 percent. Estimate challenged by: D-R-
- 2017: Estimate of 55 percent assigned by working group. Estimate is based on survey result. Nigeria Demographic and Health Survey 2018 card or history results of 50 percent modified for recall bias to 55 percent based on 1st dose card or history coverage of 65 percent, 1st dose card only coverage of 38 percent and 3rd dose card only coverage of 32 percent. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Reported data excluded due to decline in reported coverage from 45 percent to 33 percent with increase to 58 percent. Estimate challenged by: D-R-S-
- 2016: Estimate of 53 percent assigned by working group. Estimate is based on survey result. Nigeria National Nutrition and Health Survey (NNHS) 2018 results ignored by working group. Results from the National Nutrition and Health Survey are ignored because of differences in sampling methods when compared with those used by the Demographic and Health Survey in neighbouring years. Nigeria Demographic and Health Survey 2018 card or history results of 48 percent modifed for recall bias to 53 percent based on 1st dose card or history coverage of 62 percent, 1st dose card only coverage of 28 percent and 3rd dose card only coverage of 24 percent. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Programme reports district level vaccine supply disruptions for all vaccines in the infant immunization series. Estimate challenged by: D-R-S-
- 2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 42 percent based on 1 survey(s). Nigeria Multiple Indicator Cluster Survey 2016-2017 card or history results of 34 percent modified for recall bias to 42 percent based on 1st dose card or history coverage of 49 percent, 1st dose card only coverage of 27 percent and 3rd dose card only coverage of 23 percent. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: D-R-S-
- 2014: Estimate of 43 percent assigned by working group. Estimate is based on survey coverage level. Nigeria National Nutrition and Health Survey, 2015 results ignored by working group. The results of the 2015 Nigeria National Nutrition and Health Survey are presented such that recall bias cannot be assessed and thus are not considered. Nigeria Multiple Indicator Cluster Survey 2016-2017 card or history results of 32 percent modifed for recall bias to 43 percent based on 1st dose card or history coverage of 48 percent, 1st dose card only coverage of 18 percent and 3rd dose card only coverage of 16 percent. Reported data excluded. Official government estimate based on an adjustment to the administrative data based on a correction factor of 75 percent that was derived from observation of a community survey showing that 69 percent of infants were fully vaccinated. Nearly three-quarters of community survey respondents were from northern states observed to

- have lower routine immunization coverage. Estimate challenged by: D-R-
- 2013: Reported data calibrated to 2012 and 2014 levels. Reported data excluded. Official government estimate based on administrative data adjusted to the mean using a 2014 DQS verification factor and results from a community survey. Administrative data documents recovery from pentavalent DTP-HepB-Hib and MCV stockout. Estimate challenged by: D-R-
- 2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 42 percent based on 1 survey(s). Summary Findings of Cross-Sectional Health and Nutrition Survey, Nigeria 2013 results ignored by working group. Survey is ignored because it is a sub-national survey conducted in twenty-four states, accounting for approximately sixty-four percent of national target population. Nigeria Demographic and Health Survey 2013 card or history results of 38 percent modified for recall bias to 42 percent based on 1st dose card or history coverage of 51 percent, 1st dose card only coverage of 27 percent and 3rd dose card only coverage of 22 percent. DTP-HepB-Hib pentavalent vaccine introduced in 2012. Estimate challenged by: D-R-S-
- 2011: Estimate informed by interpolation between 2010 and 2012 levels. Estimate based on interpolated value between 2010 and 2012 survey values Estimate based on level established by the 2009 survey and follows trend in the reported data. Nigeria cites shortages of some vaccines and injection supplies (stockout of AD syringes for 252 days), repeated health worker strike actions and security challenges in several northern states. The vaccine stockouts were due in part to the late release of funds for routine immunization in July 2012 and reallocation of routine immunization vaccine funds to other priorities (measles and polio campaigns) (2012 Nigeria GAVI progress report for 2011). Estimate challenged by: D-R-S-



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	48	42	40	40	42	53	55	61	66	62	62	62
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	74	77	67	72	37	37	33	58	57	57	53	56
Administrative	77	78	92	96	NA	NA	106	95	87	82	80	79
Survey	NA	54	NA	30	35	44	47	NA	55	56	NA	NA

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

2022: Estimated coverage informed by prior year estimate. Official reported coverage informed by the survey result for the youngest annual cohort (the 2020 cohort) from the 2021 MICS/NICS survey. Government has indicated that the 2021 official coverage estimate is also based on survey results. Note that reported official coverage reflects crude survey results for the 3rd dose that do not account for recall bias in the absence of documented evidence of vaccination. For antigens with reported administrative data in 2022, there is the appearance of increases in the number of doses administered from levels reported for 2021; however, it remains unclear whether the transition to DHIS2 has matured sufficiently to monitor trends in coverage. Alongside continued implementation of the national data quality improvement plan activities, WHO and UNICEF encourage continued efforts to independently assess the quality of the administrative recording and reporting system at all levels. Estimate challenged by: D-R-

2021: Estimated coverage informed by prior year estimate. The appearance of declines in administrative coverage from 2017 to 2021 may reflect transitions from DVDMT to DHIS2 that was fully implemented in 2019 as well as activities to improve data quality rather than true declines in coverage. Difference in trend in estimated coverage since 2017 for DTP3 and Polio3 reflects differences in recent survey coverage values for these vaccine-dose combinations, which are typically administered at the same visit. Estimated coverage levels for polio reflect those achieved through routine service delivery. The number of children protected from polio is likely higher than that suggested by routine coverage due to the frequent numbers of vaccination campaigns conducted in the country. Nonetheless, efforts to increase the reach of routine services are important. Estimate of 62 percent changed from previous revision value of 53 percent. Estimate challenged by: D-R-S-

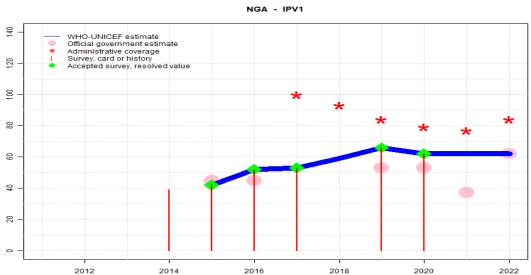
2020: Estimate of 62 percent assigned by working group. Estimated coverage informed by estimated DTP3 adjusted for recall bias. Nigeria Multiple Indicator Cluster Survey 2021 card or history results of 56 percent modified for recall bias to 69 percent based on 1st dose card or history coverage of 78 percent, 1st dose card only coverage of 54 percent and 3rd dose card only coverage of 48 percent. Reported data excluded. Reported coverage reflects results of a survey for the 2017 birth cohort. Coverage declines were noted mostly between March and May 2020 but immunization activities were enhanced starting in July 2020. Official estimate is based on latest survey results. Estimate of 62 percent changed from previous revision value of 53 percent. Estimate challenged by: D-R-S-

2019: Estimate of 66 percent assigned by working group. Estimate informed by survey results for DTP3 adjusted for recall. Nigeria Multiple Indicator Cluster Survey 2021 card or history results of 55 percent modified for recall bias to 77 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 42 percent. Reported data excluded. Country notes progress from levels observed in the 2016-17 MICS/NICS. These improvements can be seen in the 2018 NDHS results. During 2015-2019, the Government of Nigeria implemented numerous activities to improve the reach and quality of service delivery, including the Optimized Integrated Routine Immunization Sessions (OIRIS), improvements that tend to be reflected in im-

Nigeria - Pol3

- proved coverage levels that are supported by results of DHS and MICS surveys. Estimate of 66 percent changed from previous revision value of 54 percent. Estimate challenged by: D-R-S-
- 2018: Estimate informed by interpolation between 2017 and 2019 levels. . Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate of 61 percent changed from previous revision value of 54 percent. Estimate challenged by: D-R-S-
- 2017: Estimate of 55 percent assigned by working group. Estimate based on estimated DTP3 level. Nigeria Demographic and Health Survey 2018 card or history results of 47 percent modified for recall bias to 62 percent based on 1st dose card or history coverage of 74 percent, 1st dose card only coverage of 38 percent and 3rd dose card only coverage of 32 percent. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: D-R-S-
- 2016: Estimate of 53 percent assigned by working group. Estimate based on estimated DTP3 level. Nigeria Demographic and Health Survey 2018 card or history results of 44 percent modified for recall bias to 61 percent based on 1st dose card or history coverage of 71 percent, 1st dose card only coverage of 28 percent and 3rd dose card only coverage of 24 percent. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Programme reports district level vaccine supply disruptions for all vaccines in the infant immunization series. Estimate challenged by: D-R-S-
- 2015: Estimate of 42 percent assigned by working group. Estimate based on estimated DTP3 level. Nigeria Multiple Indicator Cluster Survey 2016-2017 card or history results of 35 percent modified for recall bias to 40 percent based on 1st dose card or history coverage of 50 percent, 1st dose card only coverage of 26 percent and 3rd dose card only coverage of 21 percent. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: D-R-S-
- 2014: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 40 percent based on 1 survey(s). Nigeria Multiple Indicator Cluster Survey 2016-2017 card or history results of 30 percent modified for recall bias to 40 percent based on 1st dose card or history coverage of 48 percent, 1st dose card only coverage of 17 percent and 3rd dose card only coverage of 14 percent. Reported data excluded. Official government estimate based on an adjustment to the administrative data based on a correction factor of 75 percent that was derived from observation of a community survey showing that 69 percent of infants were fully vaccinated. Nearly three-quarters of community survey respondents were from northern states observed to have lower routine immunization coverage. Estimate challenged by: D-R-S-
- 2013: Reported data calibrated to 2012 and 2014 levels. Reported data excluded. Official government estimate based on administrative data adjusted to the mean using a 2014 DQS verification factor and results from a community survey. Estimate of 40 percent changed from previous revision value of 41 percent. Estimate challenged by: D-R-
- 2012: Estimate of 42 percent assigned by working group. Estimate based on survey result ad-

- justed for recall bias for third dose of DTP containing vaccine. Survey result for polio for 2010 birth cohort ignored due to likely inclusion of campaign doses. Nigeria Demographic and Health Survey 2013 results ignored by working group. Survey result for polio vaccine likely includes campaign doses due to reliance on caregiver recall in face of low retention of home-based records. Nigeria Demographic and Health Survey 2013 card or history results of 54 percent modified for recall bias to 65 percent based on 1st dose card or history coverage of 76 percent, 1st dose card only coverage of 27 percent and 3rd dose card only coverage of 23 percent. Estimate challenged by: D-R-
- 2011: Estimate informed by interpolation between 2010 and 2012 levels. Estimate is based on estimated DTP3 coverage. Estimate based on level established by the 2009 survey and follows trend in the reported data. Nigeria cites shortages of some vaccines and injection supplies (stockout of AD syringes for 252 days), repeated health worker strike actions and security challenges in several northern states. The vaccine stockouts were due in part to the late release of funds for routine immunization in July 2012 and reallocation of routine immunization vaccine funds to other priorities (measles and polio campaigns) (2012 Nigeria GAVI progress report for 2011). Estimate challenged by: D-R-S-



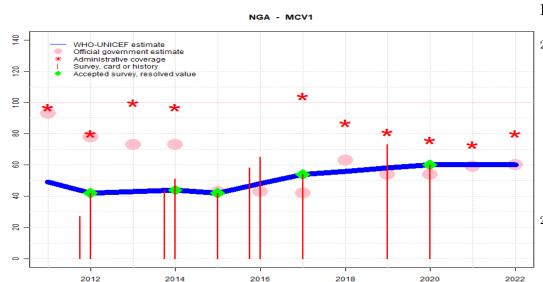
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	42	52	53	59	66	62	62	62
Estimate GoC	NA	NA	NA	NA	•	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	45	45	NA	NA	53	53	37	62
Administrative	NA	NA	NA	NA	NA	NA	100	93	84	79	77	84
Survey	NA	NA	NA	39	42	52	53	NA	66	62	NA	NA

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

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

- Estimates for a dose of inactivated polio vaccine (IPV) begin in 2015 following the Global Polio Eradication Initiative's Polio Eradication and Endgame Strategic Plan: 2013-2018 which recommended at least one full dose or two fractional doses of IPV into routine immunization schedules as a strategy to mitigate the potential consequences should any re-emergence of type 2 poliovirus occur following the planned withdrawal of Sabin type 2 strains from oral polio vaccine (OPV).
- 2022: Estimate is informed by prior year estimated coverage. Reported data excluded due to sudden change in coverage from 37 level to 62 percent. Estimate challenged by: D-R-
- 2021: Estimate is informed by prior year estimated coverage. Reported data excluded due to decline in reported coverage from 53 percent to 37 percent with increase to 62 percent. The appearance of declines in administrative coverage from 2017 to 2021 may reflect transitions from DVDMT to DHIS2 that was fully implemented in 2019 as well as activities to improve data quality rather than true declines in coverage. Estimate of 62 percent changed from previous revision value of 56 percent. Estimate challenged by: D-R-
- 2020: Estimate is informed by 2021 MICS/NICS results for 2020 birth cohort. Reported data excluded. Reported coverage reflects results of a survey for the 2017 birth cohort. Coverage declines were noted mostly between March and May 2020 but immunization activities were enhanced starting in July 2020. Official estimate is based on latest survey results. Estimate of 62 percent changed from previous revision value of 56 percent. Estimate challenged by: D-R-
- 2019: Estimate is informed by 2021 MICS/NICS results for 2019 birth cohort. Reported data excluded. Country notes progress from levels observed in the 2016-17 MICS/NICS. These improvements can be seen in the 2018 NDHS results. During 2015-2019, the Government of Nigeria implemented numerous activities to improve the reach and quality of service delivery, including the Optimized Integrated Routine Immunization Sessions (OIRIS), improvements that tend to be reflected in improved coverage levels that are supported by results of DHS and MICS surveys. Estimate of 66 percent changed from previous revision value of 55 percent. Estimate challenged by: D-R-S-
- 2018: Estimate is informed by interpolation between estimated coverage levels in 2017 and 2019. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate of 59 percent changed from previous revision value of 54 percent. Estimate challenged by: D-R-
- 2017: Estimate is informed by survey result. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: D-R-S-
- 2016: Estimate is informed by survey result. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Programme reports district level vaccine supply disruptions for all vaccines in the infant immunization series. Estimate challenged by: D-R-

2015: Estimate is informed by survey result. Inactivated polio vaccine introduced in early 2015. Government reports an exceptionally high year-to-year increase in the number of surviving infants compared to the UN Population Division. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: D-R-S-



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	49	42	43	44	42	48	54	56	58	60	60	60
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	93	78	73	73	43	43	42	63	54	54	59	60
Administrative	97	80	100	97	NA	NA	104	87	81	76	73	80
Survey	NA	*	NA	*	42	*	54	NA	73	60	NA	NA

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

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

- 2022: Estimated coverage informed by prior year estimate. Official reported coverage informed by the survey result for the youngest annual cohort (the 2020 cohort) from the 2021 MICS/NICS survey. Government has indicated that the 2021 official coverage estimate is also based on survey results, though there are discrepancies with their reported coverage for 2021 and 2022 vis-a-vis survey results. For antigens with reported administrative data in 2022, there is the appearance of increases in the number of doses administered from levels reported for 2021; however, it remains unclear whether the transition to DHIS2 has matured sufficiently to monitor trends in coverage. Alongside continued implementation of the national data quality improvement plan activities, WHO and UNICEF encourage continued efforts to independently assess the quality of the administrative recording and reporting system at all levels. Programme reports one month vaccine stockout at national and subnational levels. Estimate challenged by: D-R-
- 2021: Estimated coverage informed by prior year estimate. The appearance of declines in administrative coverage from 2017 to 2021 may reflect transitions from DVDMT to DHIS2 that was fully implemented in 2019 as well as activities to improve data quality rather than true declines in coverage. Estimate of 60 percent changed from previous revision value of 59 percent. Estimate challenged by: D-R-
- 2020: Estimate of 60 percent assigned by working group. Estimated coverage informed by 2021 MICS/NICS results for 2020 birth cohort. Reported data excluded. Reported coverage reflects results of a survey for the 2017 birth cohort. Coverage declines were noted mostly between March and May 2020 but immunization activities were enhanced starting in July 2020. Official estimate is based on latest survey results. Estimate of 60 percent changed from previous revision value of 59 percent. Estimate challenged by: D-R-
- 2019: Estimate informed by interpolation between 2017 and 2020 levels. Nigeria Multiple Indicator Cluster Survey 2021 results ignored by working group. Survey results for 2019 birth cohort likely reflect the contribution of a large measles-yellow fever-meningitis campaign conducted in the northern states rather than routine vaccination coverage. Reported data excluded. Country notes progress from levels observed in the 2016-17 MICS/NICS. These improvements can be seen in the 2018 NDHS results. During 2015-2019, the Government of Nigeria implemented numerous activities to improve the reach and quality of service delivery, including the Optimized Integrated Routine Immunization Sessions (OIRIS), improvements that tend to be reflected in improved coverage levels that are supported by results of DHS and MICS surveys. Estimate of 58 percent changed from previous revision value of 57 percent. Estimate challenged by: D-R-
- 2018: Estimate informed by interpolation between 2017 and 2020 levels. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Official estimates based on a review of strategic plan targets, 2018 Nutrition and Health Survey results, and routine immunization lot-quality assurance survey results. Sharp increases between 2015 and 2016-18 period may be partially explained by the timing of survey fieldwork visavis investments and activity to improve routine immunization. Estimate challenged by:

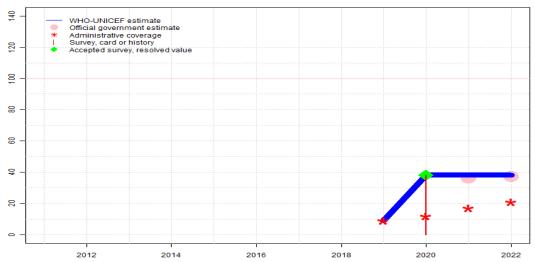
Nigeria - MCV1

D-R-

- 2017: Estimate of 54 percent assigned by working group. Estimate is based on survey result. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: D-R-S-
- 2016: Reported data calibrated to 2015 and 2017 levels. Nigeria National Nutrition and Health Survey (NNHS) 2018 results ignored by working group. Results from the National Nutrition and Health Survey are ignored because of differences in sampling methods when compared with those used by the Demographic and Health Survey in neighbouring years. Nigeria Demographic and Health Survey 2018 results ignored by working group. Survey results likely include campaign doses. Nigeria National Nutrition and Health Survey (NNHS) 2018 results ignored by working group. Survey results likely include campaign doses. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Programme reports district level vaccine supply disruptions for all vaccines in the infant immunization series. Estimate of 48 percent changed from previous revision value of 47 percent. Estimate challenged by: D-R-
- 2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 42 percent based on 1 survey(s). Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: D-R-S-
- 2014: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 44 percent based on 1 survey(s). Nigeria National Nutrition and Health Survey, 2015 results ignored by working group. The results of the 2015 Nigeria National Nutrition and Health Survey are presented such that coverage by card and by recall cannot be assessed and thus are not considered. Reported data excluded. Official government estimate based on an adjustment to the administrative data based on a correction factor of 75 percent that was derived from observation of a community survey showing that 69 percent of infants were fully vaccinated. Nearly three-quarters of community survey respondents were from northern states observed to have lower routine immunization coverage. Estimate challenged by: D-R-
- 2013: Reported data calibrated to 2012 and 2014 levels. Reported data excluded. Official government estimate based on administrative data adjusted to the mean using a 2014 DQS verification factor and results from a community survey. Administrative data documents recovery from pentavalent DTP-HepB-Hib and MCV stockout. Estimate challenged by: D-R-
- 2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 42 percent based on 1 survey(s). Summary Findings of Cross-Sectional Health and Nutrition Survey, Nigeria 2013 results ignored by working group. Survey is ignored because it is a sub-national survey conducted in twenty-four states, accounting for approximately sixty-four percent of national target population. Estimate challenged by: D-R-S-
- 2011: Estimate informed by interpolation between 2010 and 2012 levels. Estimate based on interpolated value between 2010 and 2012 survey values. Estimate based on level establishment.

lished by the 2009 survey and follows trend in the reported data. Nigeria cites shortages of some vaccines and injection supplies (stockout of AD syringes for 252 days), repeated health worker strike actions and security challenges in several northern states. The vaccine stockouts were due in part to the late release of funds for routine immunization in July 2012 and reallocation of routine immunization vaccine funds to other priorities (measles and polio campaigns) (2012 Nigeria GAVI progress report for 2011). Estimate challenged by: D-R-S-





	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	9	38	38	38							
Estimate GoC	NA	•	•	•	•							
Official	NA	36	37									
Administrative	NA	9	12	17	21							
Survey	NA	38	NA	NA								

- ••• 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.

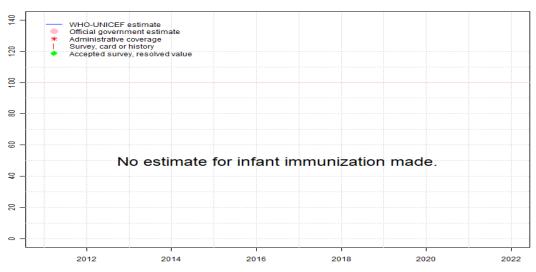
2022: Estimated coverage informed by prior year estimate. Official reported coverage informed by the survey result for the youngest annual cohort (the 2020 cohort) from the 2021 MICS/NICS survey. Government has indicated that the 2021 official coverage estimate is also based on survey results, though there are discrepancies with their reported coverage for 2021 and 2022 vis-a-vis survey results. For antigens with reported administrative data in 2022, there is the appearance of increases in the number of doses administered from levels reported for 2021; however, it remains unclear whether the transition to DHIS2 has matured sufficiently to monitor trends in coverage. Alongside continued implementation of the national data quality improvement plan activities, WHO and UNICEF encourage continued efforts to independently assess the quality of the administrative recording and reporting system at all levels. Programme reports one month vaccine stockout at national and subnational levels. Estimate challenged by: D-R-

21: Estimate of 38 percent assigned by working group. Estimate informed by survey. The appearance of declines in administrative coverage from 2017 to 2021 may reflect transitions from DVDMT to DHIS2 that was fully implemented in 2019 as well as activities to improve data quality rather than true declines in coverage. Estimate of 38 percent changed from previous revision value of 36 percent. Estimate challenged by: D-R-

2020: Estimate of 38 percent assigned by working group. The country official 2021 reported coverage informed by the 2021 MICS NICS survey, which largely reflects coverage achieved in the 2020 birth cohort. Reported data excluded. Reported coverage reflects results of a survey for the 2017 birth cohort. Coverage declines were noted mostly between March and May 2020 but immunization activities were enhanced starting in July 2020. Official estimate is based on latest survey results. Estimate of 38 percent changed from previous revision value of 36 percent. Estimate challenged by: D-R-

2019: Second dose of measles containing vaccine introduced during October 2019. Reported data excluded. Country notes progress from levels observed in the 2016-17 MICS/NICS. These improvements can be seen in the 2018 NDHS results. During 2015-2019, the Government of Nigeria implemented numerous activities to improve the reach and quality of service delivery, including the Optimized Integrated Routine Immunization Sessions (OIRIS), improvements that tend to be reflected in improved coverage levels that are supported by results of DHS and MICS surveys. GoC=Assigned by working group. Consistency with other antigens.



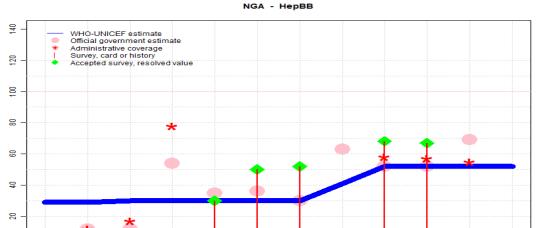


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	NA											

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

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

2022



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	29	29	30	30	30	30	30	41	52	52	52	52
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	NA	12	12	54	35	36	30	63	52	52	69	NA
Administrative	1	12	17	78	NA	NA	NA	NA	58	57	55	NA
Survey	NA	NA	NA	NA	30	50	52	NA	68	67	NA	NA

2016

2018

2020

2014

2012

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

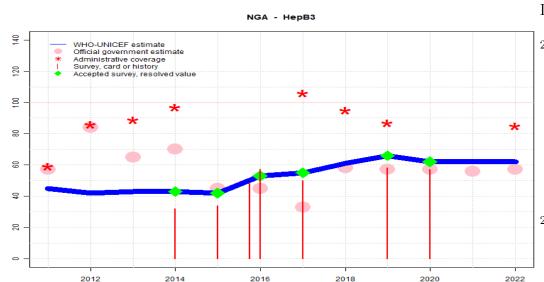
- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a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

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

- 2022: Estimated coverage informed by prior year estimate. Estimate challenged by: S-
- 2021: The country official 2021 reported coverage is based on the 2021 MICS NICS survey, which largely reflects coverage achieved in the 2020 birth cohort. Estimated coverage is informed by an extrapolation from the estimated value for 2020. Reported administrative coverage reflects doses delivered in health facilities. Reported data excluded due to sudden change in coverage from 52 level to 69 percent. The appearance of declines in administrative coverage from 2017 to 2021 may reflect transitions from DVDMT to DHIS2 that was fully implemented in 2019 as well as activities to improve data quality rather than true declines in coverage. Estimate challenged by: R-S-
- 2020: Reported official coverage is based on survey results while administrative coverage reflects doses delivered in health facilities.. Estimated coverage is informed by reported official. Reported data excluded. Reported coverage reflects results of a survey for the 2017 birth cohort. Coverage declines were noted mostly between March and May 2020 but immunization activities were enhanced starting in July 2020. Official estimate is based on latest survey results. Estimate challenged by: D-R-S-
- 2019: Estimate of 52 percent assigned by working group. Estimate is exceptionally based on reported official coverage. Official coverage informed by results of a 2017 survey and may reflect doses administered after 24 hours. Reported administrative coverage reflects doses delivered in health facilities. Reported data excluded. Country notes progress from levels observed in the 2016-17 MICS/NICS. These improvements can be seen in the 2018 NDHS results. During 2015-2019, the Government of Nigeria implemented numerous activities to improve the reach and quality of service delivery, including the Optimized Integrated Routine Immunization Sessions (OIRIS), improvements that tend to be reflected in improved coverage levels that are supported by results of DHS and MICS surveys. Estimate challenged by: D-R-S-
- 2018: Estimate informed by interpolation between 2017 and 2019 levels. . Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Reported data excluded due to an increase from 30 percent to 63 percent with decrease 52 percent. Estimate challenged by: R-S-
- 2017: Estimate of 30 percent assigned by working group. Estimate based on results of the 2016-17 MICS/NICS survey. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: R-S-
- 2016: Estimate of 30 percent assigned by working group. Estimate based on results of the 2016-17 MICS/NICS survey. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Programme reports district level vaccine supply disruptions for all vaccines in the infant immunization series. Estimate challenged by: D-R-S-
- 2015: Estimate of 30 percent assigned by working group. Estimate based on results of the 2016–17 MICS/NICS survey. Reported data excluded. Programme acknowledges challenges in

Nigeria - HepBB

- data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: D-R-S-
- 2014: Estimate informed by interpolation between 2010 and 2015 levels. Estimate is based on interpolation between survey results. Reported data excluded. Official government estimate based on an adjustment to the administrative data based on a correction factor of 75 percent that was derived from observation of a community survey showing that 69 percent of infants were fully vaccinated. Nearly three-quarters of community survey respondents were from northern states observed to have lower routine immunization coverage. Reported data excluded. Reported data excluded due to an increase from 12 percent to 54 percent with decrease 35 percent. Estimate challenged by: D-R-S-
- 2013: Estimate informed by interpolation between 2010 and 2015 levels. Estimate is based on interpolation between survey results. Reported data excluded. Official government estimate based on administrative data adjusted to the mean using a 2014 DQS verification factor and results from a community survey. Reported data excluded. Estimate challenged by: D-R-
- 2012: Estimate informed by interpolation between 2010 and 2015 levels. Estimate is based on interpolation between survey results. Reported data excluded. . Estimate challenged by: D-R-
- 2011: Estimate informed by interpolation between 2010 and 2015 levels. Estimate is based on interpolation between survey results. Reported data excluded. . Estimate based on level established by the 2009 survey and follows trend in the reported data. Nigeria cites shortages of some vaccines and injection supplies (stockout of AD syringes for 252 days), repeated health worker strike actions and security challenges in several northern states. The vaccine stockouts were due in part to the late release of funds for routine immunization in July 2012 and reallocation of routine immunization vaccine funds to other priorities (measles and polio campaigns) (2012 Nigeria GAVI progress report for 2011). Estimate challenged by: D-R-



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	45	42	43	43	42	53	55	61	66	62	62	62
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	57	84	65	70	45	45	33	58	57	57	56	57
Administrative	59	86	89	97	NA	NA	106	95	87	NA	NA	85
Survey	NA	NA	NA	32	34	*	50	NA	58	57	NA	NA

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

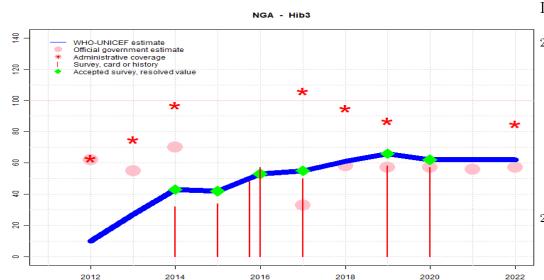
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

- 2022: Estimated coverage informed by prior year estimate. Official reported coverage informed by the survey result for the youngest annual cohort (the 2020 cohort) from the 2021 MICS/NICS survey. Government has indicated that the 2021 official coverage estimate is also based on survey results. Note that reported official coverage reflects crude survey results for the 3rd dose that do not account for recall bias in the absence of documented evidence of vaccination. For antigens with reported administrative data in 2022, there is the appearance of increases in the number of doses administered from levels reported for 2021; however, it remains unclear whether the transition to DHIS2 has matured sufficiently to monitor trends in coverage. Alongside continued implementation of the national data quality improvement plan activities, WHO and UNICEF encourage continued efforts to independently assess the quality of the administrative recording and reporting system at all levels. Estimate challenged by: D-R-
- 2021: Estimated coverage informed by prior year estimate. The appearance of declines in administrative coverage from 2017 to 2021 may reflect transitions from DVDMT to DHIS2 that was fully implemented in 2019 as well as activities to improve data quality rather than true declines in coverage. Estimate of 62 percent changed from previous revision value of 56 percent. Estimate challenged by: R-
- 2020: Estimate of 62 percent assigned by working group. Estimated coverage informed by 2021 MICS/NICS results adjusted for recall bias for 2020 birth cohort. Nigeria Multiple Indicator Cluster Survey 2021 card or history results of 57 percent modified for recall bias to 62 percent based on 1st dose card or history coverage of 70 percent, 1st dose card only coverage of 53 percent and 3rd dose card only coverage of 47 percent. Reported data excluded. Reported coverage reflects results of a survey for the 2017 birth cohort. Coverage declines were noted mostly between March and May 2020 but immunization activities were enhanced starting in July 2020. Official estimate is based on latest survey results. Estimate of 62 percent changed from previous revision value of 56 percent. Estimate challenged by: R-
- 2019: Estimate of 66 percent assigned by working group. Estimate informed by 2021 MICS/NICS results adjusted for recall for the 2019 birth cohort. Nigeria Multiple Indicator Cluster Survey 2021 card or history results of 58 percent modified for recall bias to 66 percent based on 1st dose card or history coverage of 72 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 41 percent. Reported data excluded. Country notes progress from levels observed in the 2016-17 MICS/NICS. These improvements can be seen in the 2018 NDHS results. During 2015-2019, the Government of Nigeria implemented numerous activities to improve the reach and quality of service delivery, including the Optimized Integrated Routine Immunization Sessions (OIRIS), improvements that tend to be reflected in improved coverage levels that are supported by results of DHS and MICS surveys. Estimate of 66 percent changed from previous revision value of 56 percent. Estimate challenged by: D-R-S-
- 2018: Estimate informed by interpolation between 2017 and 2019 levels. . Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative

Nigeria - HepB3

- coverage levels, including delays and incomplete reporting. Official estimates based on a review of strategic plan targets, 2018 Nutrition and Health Survey results, and routine immunization lot-quality assurance survey results. Sharp increases between 2015 and 2016-18 period may be partially explained by the timing of survey fieldwork vis-a-vis investments and activity to improve routine immunization. Estimate of 61 percent changed from previous revision value of 55 percent. Estimate challenged by: D-R-
- 2017: Estimate of 55 percent assigned by working group. Estimate is based on survey result. Nigeria Demographic and Health Survey 2018 card or history results of 50 percent modified for recall bias to 55 percent based on 1st dose card or history coverage of 65 percent, 1st dose card only coverage of 38 percent and 3rd dose card only coverage of 32 percent. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Reported data excluded due to decline in reported coverage from 45 percent to 33 percent with increase to 58 percent. Estimate challenged by: D-R-S-
- 2016: Estimate of 53 percent assigned by working group. Estimate is based on survey result. Nigeria National Nutrition and Health Survey (NNHS) 2018 results ignored by working group. Results from the National Nutrition and Health Survey are ignored because of differences in sampling methods when compared with those used by the Demographic and Health Survey in neighbouring years. Nigeria Demographic and Health Survey 2018 card or history results of 48 percent modifed for recall bias to 53 percent based on 1st dose card or history coverage of 62 percent, 1st dose card only coverage of 28 percent and 3rd dose card only coverage of 24 percent. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Programme reports district level vaccine supply disruptions for all vaccines in the infant immunization series. Estimate challenged by: D-R-S-
- 2015: Estimate of 42 percent assigned by working group. Estimate is based on survey results. Nigeria Multiple Indicator Cluster Survey 2016-2017 card or history results of 34 percent modifed for recall bias to 42 percent based on 1st dose card or history coverage of 49 percent, 1st dose card only coverage of 27 percent and 3rd dose card only coverage of 23 percent. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: D-R-S-
- 2014: Estimate of 43 percent assigned by working group. Estimate is based on survey coverage level. Nigeria Multiple Indicator Cluster Survey 2016-2017 card or history results of 32 percent modifed for recall bias to 43 percent based on 1st dose card or history coverage of 48 percent, 1st dose card only coverage of 18 percent and 3rd dose card only coverage of 16 percent. Reported data excluded. Official government estimate based on an adjustment to the administrative data based on a correction factor of 75 percent that was derived from observation of a community survey showing that 69 percent of infants were fully vaccinated. Nearly three-quarters of community survey respondents were from northern states observed to have lower routine immunization coverage. Estimate challenged by: D-R-
- 2013: Reported data calibrated to 2012 and 2014 levels. Reported data excluded. Official gov-

- ernment estimate based on administrative data adjusted to the mean using a 2014 DQS verification factor and results from a community survey. Administrative data documents recovery from pentavalent DTP-HepB-Hib and MCV stockout. Estimate challenged by: D-R-
- 2012: Estimate of 42 percent assigned by working group. Estimate is based on survey result for DTP3. Inconsistent reporting for the third dose of HepB vaccine compared to other antigens. Reported data excluded. Sudden unexplained change from the previous year.Reported data excluded due to an increase from 57 percent to 84 percent with decrease 65 percent. DTP-HepB-Hib pentavalent vaccine introduced in 2012. Estimate challenged by: D-R-
- 2011: Reported data calibrated to 2010 and 2012 levels. Reported data excluded due to decline in reported coverage from 75 percent to 57 percent with increase to 84 percent. Estimate based on level established by the 2009 survey and follows trend in the reported data. Nigeria cites shortages of some vaccines and injection supplies (stockout of AD syringes for 252 days), repeated health worker strike actions and security challenges in several northern states. The vaccine stockouts were due in part to the late release of funds for routine immunization in July 2012 and reallocation of routine immunization vaccine funds to other priorities (measles and polio campaigns) (2012 Nigeria GAVI progress report for 2011). Estimate of 45 percent changed from previous revision value of 46 percent. Estimate challenged by: D-R-



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	10	27	43	42	53	55	61	66	62	62	62
Estimate GoC	NA	•	•	•	•	•	•	•	•	•	•	•
Official	NA	62	55	70	NA	NA	33	58	57	57	56	57
Administrative	NA	63	75	97	NA	NA	106	95	87	NA	NA	85
Survey	NA	NA	NA	32	34	*	50	NA	58	57	NA	NA

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

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

- 2022: Estimated coverage informed by prior year estimate. Official reported coverage informed by the survey result for the youngest annual cohort (the 2020 cohort) from the 2021 MICS/NICS survey. Government has indicated that the 2021 official coverage estimate is also based on survey results. Note that reported official coverage reflects crude survey results for the 3rd dose that do not account for recall bias in the absence of documented evidence of vaccination. For antigens with reported administrative data in 2022, there is the appearance of increases in the number of doses administered from levels reported for 2021; however, it remains unclear whether the transition to DHIS2 has matured sufficiently to monitor trends in coverage. Alongside continued implementation of the national data quality improvement plan activities, WHO and UNICEF encourage continued efforts to independently assess the quality of the administrative recording and reporting system at all levels. Estimate challenged by: D-R-
- 021: Estimated coverage informed by prior year estimate. The appearance of declines in administrative coverage from 2017 to 2021 may reflect transitions from DVDMT to DHIS2 that was fully implemented in 2019 as well as activities to improve data quality rather than true declines in coverage. Estimate of 62 percent changed from previous revision value of 56 percent. Estimate challenged by: R-
- 2020: Estimate of 62 percent assigned by working group. Estimated coverage informed by 2021 MICS/NICS results adjusted for recall bias for 2020 birth cohort. Nigeria Multiple Indicator Cluster Survey 2021 card or history results of 57 percent modified for recall bias to 62 percent based on 1st dose card or history coverage of 70 percent, 1st dose card only coverage of 53 percent and 3rd dose card only coverage of 47 percent. Reported data excluded. Reported coverage reflects results of a survey for the 2017 birth cohort. Coverage declines were noted mostly between March and May 2020 but immunization activities were enhanced starting in July 2020. Official estimate is based on latest survey results. Estimate of 62 percent changed from previous revision value of 56 percent. Estimate challenged by: R-
- 2019: Estimate of 66 percent assigned by working group. Estimate informed by 2021 MICS/NICS results adjusted for recall for the 2019 birth cohort. Nigeria Multiple Indicator Cluster Survey 2021 card or history results of 58 percent modified for recall bias to 66 percent based on 1st dose card or history coverage of 72 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 41 percent. Reported data excluded. Country notes progress from levels observed in the 2016-17 MICS/NICS. These improvements can be seen in the 2018 NDHS results. During 2015-2019, the Government of Nigeria implemented numerous activities to improve the reach and quality of service delivery, including the Optimized Integrated Routine Immunization Sessions (OIRIS), improvements that tend to be reflected in improved coverage levels that are supported by results of DHS and MICS surveys. Estimate of 66 percent changed from previous revision value of 56 percent. Estimate challenged by: D-R-S-
- 2018: Estimate informed by interpolation between 2017 and 2019 levels. . Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative

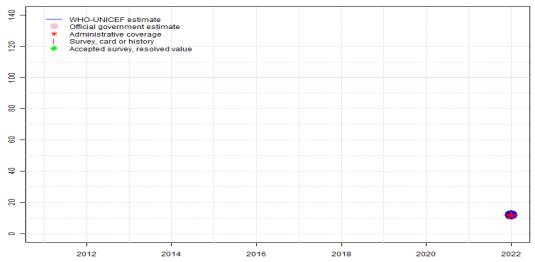
Nigeria - Hib3

- coverage levels, including delays and incomplete reporting. Official estimates based on a review of strategic plan targets, 2018 Nutrition and Health Survey results, and routine immunization lot-quality assurance survey results. Sharp increases between 2015 and 2016-18 period may be partially explained by the timing of survey fieldwork vis-a-vis investments and activity to improve routine immunization. Estimate of 61 percent changed from previous revision value of 55 percent. Estimate challenged by: D-R-
- 2017: Estimate of 55 percent assigned by working group. Estimate is based on survey result. Nigeria Demographic and Health Survey 2018 card or history results of 50 percent modifed for recall bias to 55 percent based on 1st dose card or history coverage of 65 percent, 1st dose card only coverage of 38 percent and 3rd dose card only coverage of 32 percent. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: D-R-S-
- 2016: Estimate of 53 percent assigned by working group. Estimate is based on survey result. Nigeria National Nutrition and Health Survey (NNHS) 2018 results ignored by working group. Results from the National Nutrition and Health Survey are ignored because of differences in sampling methods when compared with those used by the Demographic and Health Survey in neighbouring years. Nigeria Demographic and Health Survey 2018 card or history results of 48 percent modified for recall bias to 53 percent based on 1st dose card or history coverage of 62 percent, 1st dose card only coverage of 28 percent and 3rd dose card only coverage of 24 percent. Programme reports district level vaccine supply disruptions for all vaccines in the infant immunization series. Estimate challenged by: D-S-
- 2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 42 percent based on 1 survey(s). Nigeria Multiple Indicator Cluster Survey 2016-2017 card or history results of 34 percent modified for recall bias to 42 percent based on 1st dose card or history coverage of 49 percent, 1st dose card only coverage of 27 percent and 3rd dose card only coverage of 23 percent. Estimate challenged by: D-S-
- 2014: Estimate of 43 percent assigned by working group. Estimate is based on survey coverage level. Nigeria Multiple Indicator Cluster Survey 2016-2017 card or history results of 32 percent modified for recall bias to 43 percent based on 1st dose card or history coverage of 48 percent, 1st dose card only coverage of 18 percent and 3rd dose card only coverage of 16 percent. Reported data excluded. Official government estimate based on an adjustment to the administrative data based on a correction factor of 75 percent that was derived from observation of a community survey showing that 69 percent of infants were fully vaccinated. Nearly three-quarters of community survey respondents were from northern states observed to have lower routine immunization coverage. Estimate challenged by: D-R-
- 2013: Estimate informed by interpolation between 2012 and 2014 levels. . Reported data excluded. Official government estimate based on administrative data adjusted to the mean using a 2014 DQS verification factor and results from a community survey. Administrative data documents recovery from pentavalent DTP-HepB-Hib and MCV stockout. Estimate may overestimate coverage as DTP-HepB-Hib continued to be introduced across the country during the year but was not nationally available in all areas until 2014. Es-

- timate challenged by: D-R-S-
- 2012: Estimate of 10 percent assigned by working group. Sixty three percent coverage achieved in 16 percent of the national target population. Hib vaccine introduced in May 2012 at subnational level as part of the DTP-HepB-Hib presentation. Estimate challenged by: R-S-

Nigeria - RotaC





	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	12										
Estimate GoC	NA	•										
Official	NA											
Administrative	NA	12										
Survey	NA											

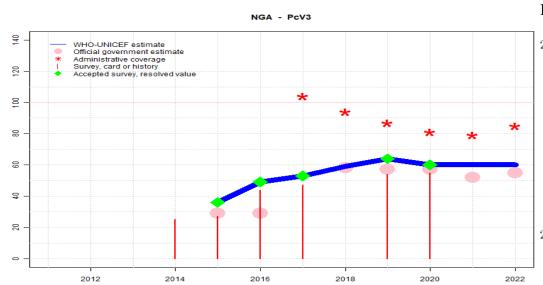
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

Description:

2022: Estimate informed by reported administrative data. Rotavirus vaccine introduced in June 2022. Reporting began in 2022. GoC=Assigned by working group. Consistency with other antigens during introduction period.



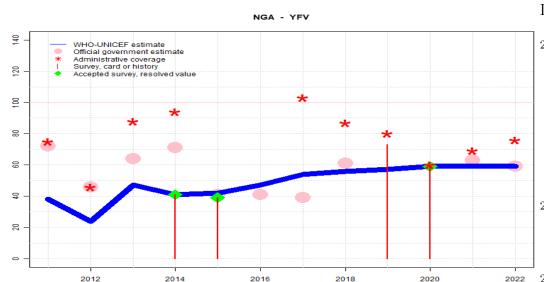
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	36	49	53	59	64	60	60	60
Estimate GoC	NA	NA	NA	NA	•	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	29	29	NA	58	57	57	52	55
Administrative	NA	NA	NA	NA	NA	NA	104	94	87	81	79	85
Survey	NA	NA	NA	25	27	44	47	NA	54	55	NA	NA

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

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

- 2022: Estimated coverage informed by prior year estimate. Official reported coverage informed by the survey result for the youngest annual cohort (the 2020 cohort) from the 2021 MICS/NICS survey. Government has indicated that the 2021 official coverage estimate is also based on survey results, though there are discrepancies with reported coverage for 2022. Note that reported official coverage reflects crude survey results for the 3rd dose that do not account for recall bias in the absence of documented evidence of vaccination. For antigens with reported administrative data in 2022, there is the appearance of increases in the number of doses administered from levels reported for 2021; however, it remains unclear whether the transition to DHIS2 has matured sufficiently to monitor trends in coverage. Alongside continued implementation of the national data quality improvement plan activities, WHO and UNICEF encourage continued efforts to independently assess the quality of the administrative recording and reporting system at all levels. Estimate challenged by: D-R-
- 2021: Estimated coverage informed by prior year estimate. The appearance of declines in administrative coverage from 2017 to 2021 may reflect transitions from DVDMT to DHIS2 that was fully implemented in 2019 as well as activities to improve data quality rather than true declines in coverage. Estimate of 60 percent changed from previous revision value of 52 percent. Estimate challenged by: D-R-
- 2020: Estimate of 60 percent assigned by working group. Estimated coverage informed by 2021 MICS/NICS results adjusted for recall bias for 2020 birth cohort. Nigeria Multiple Indicator Cluster Survey 2021 card or history results of 55 percent modified for recall bias to 60 percent based on 1st dose card or history coverage of 69 percent, 1st dose card only coverage of 54 percent and 3rd dose card only coverage of 47 percent. Reported data excluded. Reported coverage reflects results of a survey for the 2017 birth cohort. Coverage declines were noted mostly between March and May 2020 but immunization activities were enhanced starting in July 2020. Official estimate is based on latest survey results. Estimate of 60 percent changed from previous revision value of 52 percent. Estimate challenged by: D-R-
- 2019: Estimate of 64 percent assigned by working group. Estimate informed by 2021 MICS/NICS results adjusted for recall for the 2019 birth cohort. Nigeria Multiple Indicator Cluster Survey 2021 card or history results of 54 percent modified for recall bias to 64 percent based on 1st dose card or history coverage of 70 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 41 percent. Reported data excluded. Country notes progress from levels observed in the 2016-17 MICS/NICS. These improvements can be seen in the 2018 NDHS results. During 2015-2019, the Government of Nigeria implemented numerous activities to improve the reach and quality of service delivery, including the Optimized Integrated Routine Immunization Sessions (OIRIS), improvements that tend to be reflected in improved coverage levels that are supported by results of DHS and MICS surveys. Estimate of 64 percent changed from previous revision value of 52 percent. Estimate challenged by: D-R-S-
- 2018: Estimate informed by interpolation between 2017 and 2019 levels. . Reported data ex-

- cluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Official estimates based on a review of strategic plan targets, 2018 Nutrition and Health Survey results, and routine immunization lot-quality assurance survey results. Estimate of 59 percent changed from previous revision value of 53 percent. Estimate challenged by: D-R-
- 2017: Estimate of 53 percent assigned by working group. Estimate is based on survey result. Nigeria Demographic and Health Survey 2018 card or history results of 47 percent modifed for recall bias to 53 percent based on 1st dose card or history coverage of 62 percent, 1st dose card only coverage of 36 percent and 3rd dose card only coverage of 31 percent. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Reported data excluded because 104 percent greater than 100 percent. Reported data excluded due to an increase from 29 percent to 104 percent with decrease 58 percent. Estimate challenged by: D-R-S-
- 2016: Estimate of 49 percent assigned by working group. Estimate is based on survey result. Nigeria Demographic and Health Survey 2018 card or history results of 44 percent modifed for recall bias to 49 percent based on 1st dose card or history coverage of 58 percent, 1st dose card only coverage of 26 percent and 3rd dose card only coverage of 22 percent. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Programme reports district level vaccine supply disruptions for all vaccines in the infant immunization series. Reported official government estimate received June 2017 is based on preliminary 2016-17 MICS/NICS results applied to the 2015 birth cohort. Estimate challenged by: R-S-
- 2015: Estimate based on results of the 2016-17 MICS/NICS survey adjusted for recall bias. Nigeria Multiple Indicator Cluster Survey 2016-2017 card or history results of 27 percent modifed for recall bias to 36 percent based on 1st dose card or history coverage of 40 percent, 1st dose card only coverage of 19 percent and 3rd dose card only coverage of 17 percent. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Pneumococcal conjugate vaccine introduced in 2015. Estimate challenged by: D-R-S-



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	38	24	47	41	42	47	54	56	57	59	59	59
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	72	46	64	71	41	41	39	61	NA	NA	63	59
Administrative	75	46	88	94	NA	NA	103	87	80	60	69	76
Survey	NA	NA	NA	41	39	NA	NA	NA	73	59	NA	NA

- ••• 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: Estimated coverage informed by prior year estimate. Official reported coverage informed by the survey result for the youngest annual cohort (the 2020 cohort) from the 2021 MICS/NICS survey. Government has indicated that the 2021 official coverage estimate is also based on survey results, though there are discrepancies with their reported coverage for 2021 and 2022 vis-a-vis survey results. For antigens with reported administrative data in 2022, there is the appearance of increases in the number of doses administered from levels reported for 2021; however, it remains unclear whether the transition to DHIS2 has matured sufficiently to monitor trends in coverage. Alongside continued implementation of the national data quality improvement plan activities, WHO and UNICEF encourage continued efforts to independently assess the quality of the administrative recording and reporting system at all levels. Estimate challenged by: D-R-

2021: Estimated coverage informed by prior year estimate. The appearance of declines in administrative coverage from 2017 to 2021 may reflect transitions from DVDMT to DHIS2 that was fully implemented in 2019 as well as activities to improve data quality rather than true declines in coverage. Estimate of 59 percent changed from previous revision value of 63 percent. Estimate challenged by: D-R-

2020: Estimate of 59 percent assigned by working group. Estimated coverage informed by 2021 MICS/NICS results for 2020 birth cohort. Reported data excluded. Reported coverage reflects results of a survey for the 2017 birth cohort. Coverage declines were noted mostly between March and May 2020 but immunization activities were enhanced starting in July 2020. Official estimate is based on latest survey results. Estimate of 59 percent changed from previous revision value of 63 percent. GoC=Assigned by working group. Consistency with other antigens.

2019: Estimate informed by interpolation between 2017 and 2020 levels. Nigeria Multiple Indicator Cluster Survey 2021 results ignored by working group. Survey results for 2019 birth cohort likely reflect the contribution of a large measles-yellow fever-meningitis campaign conducted in the northern states rather than routine vaccination coverage. Reported data excluded. Country notes progress from levels observed in the 2016-17 MICS/NICS. These improvements can be seen in the 2018 NDHS results. Reported data excluded due to an increase from 61 percent to 80 percent with decrease 60 percent. During 2015-2019, the Government of Nigeria implemented numerous activities to improve the reach and quality of service delivery, including the Optimized Integrated Routine Immunization Sessions (OIRIS), improvements that tend to be reflected in improved coverage levels that are supported by results of DHS and MICS surveys. Estimate of 57 percent changed from previous revision value of 60 percent. Estimate challenged by: D-R-

2018: Estimate informed by interpolation between 2017 and 2020 levels. . Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Official estimates based on a review of strategic plan targets, 2018 Nutrition and Health Survey results, and routine immunization lot-quality assurance survey results. Estimate of 56 percent changed from previous revision value of 57 percent. Estimate challenged by: D-R-

- 2017: Estimate of 54 percent assigned by working group. Estimate is based on estimated MCV1. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: D-R-S-
- 2016: Estimate of 47 percent assigned by working group. Estimate is based on estimated MCV1 level. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Programme reports district level vaccine supply disruptions for all vaccines in the infant immunization series. Estimate challenged by: D-R-
- 2015: Estimate is based on estimated MCV1. Reported data excluded. Programme acknowledges challenges in data quality impacting on administrative coverage levels, including delays and incomplete reporting. Estimate challenged by: D-R-
- 2014: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 41 percent based on 1 survey(s). Reported data excluded. Official government estimate based on an adjustment to the administrative data based on a correction factor of 75 percent that was derived from observation of a community survey showing that 69 percent of infants were fully vaccinated. Nearly three-quarters of community survey respondents were from northern states observed to have lower routine immunization coverage. Estimate challenged by: D-R-
- 2013: Estimate of 47 percent assigned by working group. Estimate is based on estimated MCV1 coverage level. Reported data excluded. Official government estimate based on administrative data adjusted to the mean using a 2014 DQS verification factor and results from a community survey. Estimate challenged by: D-R-
- 2012: Estimate of 24 percent assigned by working group. Five-month vaccine stockout reported at the national level. Estimate is based on survey result for MCV1 adjusted based on the relative relationship between reported admin coverage for MCV1 and YFV to include the YFV stockout during 2012. Reported data excluded due to decline in reported coverage from 72 percent to 46 percent with increase to 64 percent. Estimate challenged by: D-R-S-
- 2011: Estimated coverage informed by prior year estimate. Estimate based on level established by the 2009 survey and follows trend in the reported data. Nigeria cites shortages of some vaccines and injection supplies (stockout of AD syringes for 252 days), repeated health worker strike actions and security challenges in several northern states. The vaccine stockouts were due in part to the late release of funds for routine immunization in July 2012 and reallocation of routine immunization vaccine funds to other priorities (measles and polio campaigns) (2012 Nigeria GAVI progress report for 2011). Estimate challenged by: D-R-S-

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.

2020 Nigeria Multiple Indicator Cluster Survey 2021

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	73.2	$12\text{-}23~\mathrm{m}$	-	56
BCG	Card	55.1	$12\text{-}23~\mathrm{m}$	3163	56
BCG	Card or History	74.1	$12\text{-}23~\mathrm{m}$	5652	56
BCG	History	18.9	$12\text{-}23~\mathrm{m}$	2489	56
DTP1	C or H $<$ 12 months	68	$12\text{-}23~\mathrm{m}$	-	56
DTP1	Card	53.4	$12\text{-}23~\mathrm{m}$	3163	56
DTP1	Card or History	70.3	$12\text{-}23~\mathrm{m}$	5652	56
DTP1	History	16.9	$12\text{-}23~\mathrm{m}$	2489	56
DTP3	C or H $<$ 12 months	54.3	$12\text{-}23~\mathrm{m}$	-	56
DTP3	Card	47.4	$12\text{-}23~\mathrm{m}$	3163	56
DTP3	Card or History	56.6	$12\text{-}23~\mathrm{m}$	5652	56
DTP3	History	9.2	$12\text{-}23~\mathrm{m}$	2489	56
HepB1	C or H $<$ 12 months	68	$12\text{-}23~\mathrm{m}$	-	56
HepB1	Card	53.4	$12\text{-}23~\mathrm{m}$	3163	56
HepB1	Card or History	70.3	$12\text{-}23~\mathrm{m}$	5652	56
HepB1	History	16.9	$12\text{-}23~\mathrm{m}$	2489	56
HepB3	C or H < 12 months	54.3	$12\text{-}23~\mathrm{m}$	-	56
HepB3	Card	47.4	$12\text{-}23~\mathrm{m}$	3163	56
HepB3	Card or History	56.6	$12\text{-}23~\mathrm{m}$	5652	56
HepB3	History	9.2	$12\text{-}23~\mathrm{m}$	2489	56
HepBB	Card	49.9	$12\text{-}23~\mathrm{m}$	3163	56
HepBB	Card or History	67.2	$12\text{-}23~\mathrm{m}$	5652	56
HepBB		17.3	$12\text{-}23~\mathrm{m}$	2489	56
Hib1	C or H $<$ 12 months	68	$12\text{-}23~\mathrm{m}$	-	56

Hib1	Card	53.4	12-23 m	3163	56
Hib1	Card or History	70.3	12-23 m	5652	56
Hib1	History	16.9	12-23 m	2489	56
Hib3	C or $H < 12$ months	54.3	12-23 m	_	56
Hib3	Card	47.4	12-23 m	3163	56
Hib3	Card or History	56.6	12-23 m	5652	56
Hib3	History	9.2	12-23 m	2489	56
IPV1	C or H <12 months	60.6	12-23 m	_	56
IPV1	Card	44.7	12-23 m	3163	56
IPV1	Card or History	62.2	12-23 m	5652	56
IPV1	History	17.5	12-23 m	2489	56
MCV1	C or H <12 months	54	12-23 m	_	56
MCV1	Card	41.6	12-23 m	3163	56
MCV1	Card or History	60.3	12-23 m	5652	56
MCV1	History	18.8	12-23 m	2489	56
MCV2	C or H <12 months	4.1	24-35 m	_	56
MCV2	Card	18.6	24-35 m	2877	56
MCV2	Card or History	37.5	24-35 m	6100	56
MCV2	History	18.9	24-35 m	3223	56
PCV1	C or $H < 12$ months	67.2	12-23 m	_	56
PCV1	Card	53.5	12-23 m	3163	56
PCV1	Card or History	69.1	12-23 m	5652	56
PCV1	History	15.6	12-23 m	2489	56
PCV3	C or $H < 12$ months	52.8	12-23 m	_	56
PCV3	Card	47.4	12-23 m	3163	56
PCV3	Card or History	54.7	12-23 m	5652	56
PCV3	History	7.3	12-23 m	2489	56
Pol1	C or H <12 months	75	12-23 m	-	56
Pol1	Card	53.6	12-23 m	3163	56
Pol1	Card or History	78	12-23 m	5652	56
Pol1	History	24.4	12-23 m	2489	56
Pol3	C or $H < 12$ months	53.8	12-23 m	_	56
Pol3	Card	47.7	12-23 m	3163	56
Pol3	Card or History	56.2	$12\text{-}23 \mathrm{\ m}$	5652	56
Pol3	History	8.5	12-23 m	2489	56
YFV	C or $H < 12$ months	53.9	12-23 m	_	56
YFV	Card	40.8	12-23 m	3163	56
YFV	Card or History	58.9	12-23 m	5652	56
YFV	History	18.1	12-23 m	2489	56
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2019 Nigeria Multiple Indicator Cluster Survey 2021

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	72.8	$24-35 \mathrm{\ m}$	-	56
BCG	Card	45.8	$24-35 \mathrm{\ m}$	2877	56
BCG	Card or History	75.3	$24-35 \mathrm{\ m}$	6100	56
BCG	History	29.4	$24-35 \mathrm{\ m}$	3223	56
DTP1	C or H $<$ 12 months	68.5	$24-35 \mathrm{\ m}$	-	56
DTP1	Card	45.3	$24-35~\mathrm{m}$	2877	56
DTP1	Card or History	72.3	$24-35~\mathrm{m}$	6100	56
DTP1	History	27	$24-35~\mathrm{m}$	3223	56
DTP3	C or H <12 months	54	$24-35~\mathrm{m}$	-	56
DTP3	Card	41.2	$24-35~\mathrm{m}$	2877	56
DTP3	Card or History	57.9	$24-35~\mathrm{m}$	6100	56
DTP3	History	16.6	$24-35~\mathrm{m}$	3223	56
HepB1	C or H <12 months	68.5	$24-35~\mathrm{m}$	_	56
HepB1	Card	45.3	$24-35~\mathrm{m}$	2877	56
HepB1	Card or History	72.3	$24\text{-}35~\mathrm{m}$	6100	56
HepB1	History	27	$24-35~\mathrm{m}$	3223	56
HepB3	C or H <12 months	54	$24-35 \mathrm{m}$	-	56
HepB3	Card	41.2	$24-35 \mathrm{m}$	2877	56
HepB3	Card or History	57.9	$24\text{-}35~\mathrm{m}$	6100	56
HepB3	History	16.6	$24-35~\mathrm{m}$	3223	56
HepBB	Card	41.5	$24-35~\mathrm{m}$	2877	56
HepBB	Card or History	67.9	$24\text{-}35~\mathrm{m}$	6100	56
HepBB	History	26.4	$24-35~\mathrm{m}$	3223	56
Hib1	C or H <12 months	68.5	$24-35~\mathrm{m}$	_	56
Hib1	Card	45.3	$24-35 \mathrm{\ m}$	2877	56
Hib1	Card or History	72.3	$24\text{-}35~\mathrm{m}$	6100	56
Hib1	History	27	$24-35~\mathrm{m}$	3223	56
Hib3	C or H <12 months	54	$24-35 \mathrm{\ m}$	-	56
Hib3	Card	41.2	$24-35 \mathrm{\ m}$	2877	56
Hib3	Card or History	57.9	$24\text{-}35~\mathrm{m}$	6100	56
Hib3	History	16.6	$24-35~\mathrm{m}$	3223	56
IPV1	C or H <12 months	61.5	$24-35 \mathrm{\ m}$	_	56
IPV1	Card	39.3	$24-35~\mathrm{m}$	2877	56
IPV1	Card or History	66.2	$24-35 \mathrm{\ m}$	6100	56
IPV1	History	26.8	$24-35~\mathrm{m}$	3223	56
MCV1	C or $H < 12$ months	59.9	$24-35 \mathrm{\ m}$	-	56
MCV1	Card	37.8	$24\text{-}35~\mathrm{m}$	2877	56

MCV1	Card or History	73.2	$24-35 \mathrm{\ m}$	6100	56
MCV1	History	35.5	$24-35~\mathrm{m}$	3223	56
PCV1	C or H $<$ 12 months	66.3	$24-35~\mathrm{m}$	-	56
PCV1	Card	45.3	$24-35~\mathrm{m}$	2877	56
PCV1	Card or History	70.1	$24\text{-}35~\mathrm{m}$	6100	56
PCV1	History	24.8	$24-35~\mathrm{m}$	3223	56
PCV3	C or H < 12 months	50.4	$24-35 \mathrm{\ m}$	-	56
PCV3	Card	41.3	$24-35 \mathrm{\ m}$	2877	56
PCV3	Card or History	54.1	$24\text{-}35~\mathrm{m}$	6100	56
PCV3	History	12.8	$24\text{-}35~\mathrm{m}$	3223	56
Pol1	C or H $<$ 12 months	77.5	$24\text{-}35~\mathrm{m}$	-	56
Pol1	Card	45.4	$24-35 \mathrm{m}$	2877	56
Pol1	Card or History	83.3	$24\text{-}35~\mathrm{m}$	6100	56
Pol1	History	37.9	$24\text{-}35~\mathrm{m}$	3223	56
Pol3	C or H $<$ 12 months	51.1	$24\text{-}35~\mathrm{m}$	-	56
Pol3	Card	41.5	$24\text{-}35~\mathrm{m}$	2877	56
Pol3	Card or History	55.1	$24\text{-}35~\mathrm{m}$	6100	56
Pol3	History	13.6	$24\text{-}35~\mathrm{m}$	3223	56
YFV	C or H $<$ 12 months	61	$24-35 \mathrm{\ m}$	-	56
YFV	Card	36.9	$24-35 \mathrm{\ m}$	2877	56
YFV	Card or History	72.9	$24\text{-}35~\mathrm{m}$	6100	56
YFV	History	36	$24\text{-}35~\mathrm{m}$	3223	56

2017 Nigeria Demographic and Health Survey 2018

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	66	12-23 m	6143	40
BCG	Card	37.7	$12\text{-}23~\mathrm{m}$	2459	40
BCG	Card or History	66.7	$12\text{-}23~\mathrm{m}$	6143	40
BCG	History	28.9	$12\text{-}23~\mathrm{m}$	3684	40
DTP1	C or H < 12 months	64.5	$12\text{-}23 \mathrm{\ m}$	6143	40
DTP1	Card	37.9	$12-23 \mathrm{m}$	2459	40
DTP1	Card or History	65.3	$12-23 \mathrm{\ m}$	6143	40
DTP1	History	27.4	$12-23 \mathrm{m}$	3684	40
DTP3	C or H < 12 months	48.3	$12-23 \mathrm{\ m}$	6143	40
DTP3	Card	32.2	$12\text{-}23 \mathrm{\ m}$	2459	40
DTP3	Card or History	50.1	$12\text{-}23 \mathrm{\ m}$	6143	40
DTP3	History	17.8	$12\text{-}23 \mathrm{\ m}$	3684	40
HepB1	C or H $<$ 12 months	64.5	$12\text{-}23~\mathrm{m}$	6143	40

HepB1	Card	37.9	12-23 m	2459	40	Pol3 Card 32.2 12-23 m 2459 40
HepB1	Card or History	65.3	12-23 m	6143	40	Pol3 Card or History 47.2 12-23 m 6143 40
HepB1	History	27.4	12-23 m	3684	40	Pol3 History 15 12-23 m 3684 40
НерВ3	C or $H < 12$ months	48.3	12-23 m	6143	40	·
HepB3	Card	32.2	$12-23 \mathrm{m}$	2459	40	
НерВ3	Card or History	50.1	12-23 m	6143	40	2016 Nigeria Demographic and Health Survey 2018
НерВ3	History	17.8	12-23 m	3684	40	
	C or $H < 12$ months	52.2	12-23 m	6143	40	Vaccine Confirmation method Coverage Age cohort Sample Cards seen
НерВВ		29.8	12-23 m	2459	40	BCG C or H $<$ 12 months 63.2 24-35 m 5835 40
НерВВ		52.4	12-23 m	6143	40	BCG Card 27.9 24-35 m 1715 40
НерВВ		22.6	12-23 m	3684	40	BCG Card or History 64.4 24-35 m 5835 40
Hib1	C or $H < 12$ months	64.5	12-23 m	6143	40	BCG History 36.5 24-35 m 4120 40
Hib1	Card	37.9	12-23 m	2459	40	DTP1 C or H <12 months 60.4 24-35 m 5835 40
Hib1	Card or History	65.3	12-23 m	6143	40	DTP1 Card 27.5 24-35 m 1715 40
Hib1	History	27.4	12-23 m	3684	40	DTP1 Card or History 61.8 24-35 m 5835 40
Hib3	C or $H < 12$ months	48.3	12-23 m	6143	40	DTP1 History 34.3 24-35 m 4120 40
Hib3	Card	32.2	12-23 m	2459	40	DTP3 C or H <12 months 45.4 24-35 m 5835 40
Hib3	Card or History	50.1	12-23 m	6143	40	DTP3 Card 24.4 24-35 m 1715 40
Hib3	History	17.8	12-23 m	3684	40	DTP3 Card or History 47.5 24-35 m 5835 40
IPV1	C or $H < 12$ months	51	12-23 m	6143	40	DTP3 History 23.2 24-35 m 4120 40
IPV1	Card	29.1	$12-23 \mathrm{m}$	2459	40	HepB1 C or H <12 months 60.4 24-35 m 5835 40
IPV1	Card or History	52.9	12-23 m	6143	40	HepB1 Card 27.5 24-35 m 1715 40
IPV1	History	23.7	12-23 m	3684	40	HepB1 Card or History 61.8 24-35 m 5835 40
MCV1	C or $H < 12$ months	48.5	$12-23 \mathrm{m}$	6143	40	HepB1 History 34.3 24-35 m 4120 40
MCV1	Card	28.7	12-23 m	2459	40	HepB3 C or H <12 months 45.4 24-35 m 5835 40
MCV1	Card or History	54	12-23 m	6143	40	HepB3 Card 24.4 24-35 m 1715 40
MCV1	History	25.3	12-23 m	3684	40	HepB3 Card or History 47.5 24-35 m 5835 40
PCV1	C or \dot{H} <12 months	60.4	12-23 m	6143	40	HepB3 History 23.2 24-35 m 4120 40
PCV1	Card	36.3	12-23 m	2459	40	HepBB C or H <12 months 48.8 24-35 m 5835 40
PCV1	Card or History	61.5	12-23 m	6143	40	HepBB Card 21.5 24-35 m 1715 40
PCV1	History	25.1	12-23 m	3684	40	HepBB Card or History 49.9 24-35 m 5835 40
PCV3	C or $H < 12$ months	45.5	12-23 m	6143	40	HepBB History 28.5 24-35 m 4120 40
PCV3	Card	30.7	12-23 m	2459	40	Hib1 C or H $<$ 12 months 60.4 24-35 m 5835 40
PCV3	Card or History	47.3	12-23 m	6143	40	Hib1 Card 27.5 24-35 m 1715 40
PCV3	History	16.7	12-23 m	3684	40	Hib1 Card or History 61.8 24-35 m 5835 40
Pol1	C or $H < 12$ months	72.7	12-23 m	6143	40	Hib1 History 34.3 24-35 m 4120 40
Pol1	Card	38.4	$12\text{-}23~\mathrm{m}$	2459	40	Hib3 C or H $<$ 12 months 45.4 $24-35$ m 5835 40
Pol1	Card or History	73.6	$12\text{-}23~\mathrm{m}$	6143	40	Hib3 Card 24.4 24-35 m 1715 40
Pol1	History	35.2	$12\text{-}23~\mathrm{m}$	3684	40	Hib3 Card or History 47.5 24-35 m 5835 40
Pol3	C or $H < 12$ months	45.6	$12\text{-}23~\mathrm{m}$	6143	40	Hib3 History 23.2 24-35 m 4120 40
						2002 2100 II 1120 IV

	IPV1	C or H $<$ 12 months	49.1	$24\text{-}35~\mathrm{m}$	5835	40						
	IPV1	Card	21.7	$24-35 \mathrm{\ m}$	1715	40	Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
	IPV1	Card or History	52.3	$24-35 \mathrm{\ m}$	5835	40	BCG	C or H < 12 months	52.8	$12\text{-}23 \mathrm{\ m}$	5535	29
	IPV1	History	30.7	$24-35 \mathrm{\ m}$	4120	40	BCG	Card	27.8	$12\text{-}23~\mathrm{m}$	5535	29
	MCV1	$\rm C~or~H < 12~months$	49.2	$24\text{-}35~\mathrm{m}$	5835	40	BCG	Card or History	53.1	$12\text{-}23~\mathrm{m}$	5535	29
	MCV1	Card	22.6	$24\text{-}35~\mathrm{m}$	1715	40	BCG	History	25.3	$12\text{-}23~\mathrm{m}$	5535	29
	MCV1	Card or History	57.7	$24\text{-}35~\mathrm{m}$	5835	40	DTP1	C or H $<$ 12 months	48.8	$12\text{-}23~\mathrm{m}$	5535	29
	MCV1	History	35.1	$24\text{-}35~\mathrm{m}$	4120	40	DTP1	Card	26.9	$12\text{-}23 \mathrm{\ m}$	5535	29
	PCV1	C or H <12 months	56.3	$24\text{-}35~\mathrm{m}$	5835	40	DTP1	Card or History	49.3	12-23 m	5535	29
	PCV1	Card	25.8	$24\text{-}35~\mathrm{m}$	1715	40	DTP1	History	22.3	$12-23 \mathrm{m}$	5535	29
	PCV1	Card or History	57.8	$24\text{-}35~\mathrm{m}$	5835	40	DTP3	C or H < 12 months	33.6	12-23 m	5535	29
	PCV1	History	32	$24-35 \mathrm{\ m}$	4120	40	DTP3	Card	23	12-23 m	5535	29
	PCV3	C or H <12 months	41.1	$24-35 \mathrm{\ m}$	5835	40	DTP3	Card or History	34.4	12-23 m	5535	29
	PCV3	Card	21.7	$24-35 \mathrm{\ m}$	1715	40	DTP3	History	11.4	$12-23 \mathrm{m}$	5535	29
	PCV3	Card or History	43.5	$24-35 \mathrm{\ m}$	5835	40	HepB1	C or $H < 12$ months	48.8	12-23 m	5535	29
	PCV3	History	21.8	$24-35 \mathrm{\ m}$	4120	40	HepB1	Card	26.9	12-23 m	5535	29
	Pol1	C or H <12 months	69.5	$24-35 \mathrm{\ m}$	5835	40	HepB1	Card or History	49.3	12-23 m	5535	29
	Pol1	Card	27.9	$24-35 \mathrm{\ m}$	1715	40	HepB1	History	22.3	$12-23 \mathrm{m}$	5535	29
	Pol1	Card or History	71.2	$24-35 \mathrm{\ m}$	5835	40	HepB3	C or $H < 12$ months		12-23 m		29
	Pol1	History	43.3	$24-35 \mathrm{\ m}$	4120	40	HepB3	Card	23	12-23 m	5535	29
	Pol3	C or H <12 months	41.6	$24-35 \mathrm{\ m}$	5835	40	HepB3	Card or History	34.4	12-23 m	5535	29
	Pol3	Card	23.7	$24-35 \mathrm{\ m}$	1715	40	НерВ3	History	11.4	$12-23 \mathrm{m}$	5535	29
	Pol3	Card or History	43.6	$24-35 \mathrm{\ m}$	5835	40	HepBB	C or $H < 12$ months		12-23 m	5535	29
	Pol3	History	19.9	$24-35 \mathrm{\ m}$	4120	40	HepBB		20.3	12-23 m	5535	29
		v					HepBB	Card or History	30.1	12-23 m	5535	29
							_		9.7	12-23 m	5535	29
-	2016 Nig	geria National Nutr	ition and	l Health S	Survey (NNHS) 2018	Hib1	C or $H < 12$ months	48.8	12-23 m	5535	29
						,	Hib1	Card	26.9	12-23 m	5535	29
							Hib1	Card or History	49.3	12-23 m	5535	29
	Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen	Hib1	History	22.3	$12-23 \mathrm{m}$	5535	29
	DTP1	Card or History	69.9	$12\text{-}23~\mathrm{m}$	3976	40	Hib3	C or $H < 12$ months		12-23 m		29
	DTP3	Card or History	57.2	$12\text{-}23~\mathrm{m}$	3976	40	Hib3	Card		12-23 m	5535	29
	HepB1	Card or History	69.9	$12\text{-}23 \mathrm{\ m}$	3976	40	Hib3	Card or History		12-23 m		29
	HepB3	Card or History	57.2	$12\text{-}23 \mathrm{\ m}$	3976	40	Hib3	History		12-23 m		29
	Hib1	Card or History	69.9	$12\text{-}23~\mathrm{m}$	3976	40	IPV1	C or $H < 12$ months		12-23 m		29
	Hib3	Card or History	57.2	$12\text{-}23 \mathrm{\ m}$	3976	40	IPV1	Card		12-23 m		29
	MCV1	Card or History	64.7	12-23 m	3976	40	IPV1	Card or History				29
		•					IPV1	History		12-23 m		29
							MCV1	C or H <12 months		12-23 m	5535	29
4	2015 Nig	geria Multiple Indic	ator Clu	ster Surve	ey 2016-	2017	MCV1	Card	20.4	12-23 m		29

MCV1	Card or History	41.8	12-23 m	5535	29
MCV1	History	21.4	$12\text{-}23~\mathrm{m}$	5535	29
PCV1	C or H < 12 months	38.8	$12\text{-}23~\mathrm{m}$	5535	29
PCV1	Card	19.3	12-23 m	5535	29
PCV1	Card or History	39.6	$12\text{-}23 \mathrm{\ m}$	5535	29
PCV1	History	20.4	12-23 m	5535	29
PCV3	C or H <12 months	26.2	12-23 m	5535	29
PCV3	Card	16.6	12-23 m	5535	29
PCV3	Card or History	27.2	12-23 m	5535	29
PCV3	History	10.7	$12\text{-}23~\mathrm{m}$	5535	29
Pol1	C or H <12 months	49.8	12-23 m	5535	29
Pol1	Card	25.5	12-23 m	5535	29
Pol1	Card or History	50.4	12-23 m	5535	29
Pol1	History	25	12-23 m	5535	29
Pol3	C or H <12 months	34	12-23 m	5535	29
Pol3	Card	21.4	12-23 m	5535	29
Pol3	Card or History	34.7	12-23 m	5535	29
Pol3	History	13.3	12-23 m	5535	29
YFV	C or $H < 12$ months	36	12-23 m	5535	29
YFV	Card	19.6	12-23 m	5535	29
YFV	Card or History	39	12-23 m	5535	29
YFV	History	19.3	12-23 m	5535	29
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2014Nigeria Multiple Indicator Cluster Survey $2016\mbox{-}2017$

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	49.1	$24-35 \mathrm{\ m}$	5514	29
BCG	Card	18.4	$24-35 \mathrm{\ m}$	5514	29
BCG	Card or History	50.9	$24\text{-}35~\mathrm{m}$	5514	29
BCG	History	32.5	$24\text{-}35~\mathrm{m}$	5514	29
DTP1	C or H $<$ 12 months	44.7	$24-35 \mathrm{\ m}$	5514	29
DTP1	Card	18.4	$24-35 \mathrm{\ m}$	5514	29
DTP1	Card or History	47.8	$24-35~\mathrm{m}$	5514	29
DTP1	History	29.4	$24\text{-}35~\mathrm{m}$	5514	29
DTP3	C or H $<$ 12 months	28.3	$24-35 \mathrm{\ m}$	5514	29
DTP3	Card	15.5	$24-35 \mathrm{\ m}$	5514	29
DTP3	Card or History	32.3	$24-35~\mathrm{m}$	5514	29
DTP3	History	16.8	$24\text{-}35~\mathrm{m}$	5514	29
HepB1	C or H <12 months	44.7	24-35 m	5514	29

HepB1	Card	18.4	24-35 m	5514	29
HepB1	Card or History	47.8	$24-35 \mathrm{\ m}$	5514	29
HepB1	History	29.4	$24-35 \mathrm{\ m}$	5514	29
HepB3	C or H <12 months	28.3	$24-35 \mathrm{\ m}$	5514	29
HepB3	Card	15.5	$24-35 \mathrm{\ m}$	5514	29
HepB3	Card or History	32.3	$24-35 \mathrm{\ m}$	5514	29
HepB3	History	16.8	$24-35 \mathrm{\ m}$	5514	29
HepBB	Card	16.3	$24-35 \mathrm{m}$	5514	29
HepBB	History	14.1	$24-35 \mathrm{\ m}$	5514	29
Hib1	C or $H < 12$ months	44.7	$24-35 \mathrm{m}$	5514	29
Hib1	Card	18.4	24-35 m	5514	29
Hib1	Card or History	47.8	24-35 m	5514	29
Hib1	History	29.4	24-35 m	5514	29
Hib3	C or $H < 12$ months	28.3	24-35 m	5514	29
Hib3	Card	15.5	24-35 m	5514	29
Hib3	Card or History	32.3	24-35 m	5514	29
Hib3	History	16.8	24-35 m	5514	29
IPV1	C or H <12 months	29.7	24-35 m	5514	29
IPV1	Card	8.2	24-35 m	5514	29
IPV1	Card or History	38.7	24-35 m	5514	29
IPV1	History	30.4	24-35 m	5514	29
MCV1	C or H <12 months	36.5	24-35 m	5514	29
MCV1	Card	15	24-35 m	5514	29
MCV1	Card or History	44.3	24-35 m	5514	29
MCV1	History	29.4	24-35 m	5514	29
PCV1	C or H <12 months	36.3	24-35 m	5514	29
PCV1	Card	12.3	24-35 m	5514	29
PCV1	Card or History	39.9	24-35 m	5514	29
PCV1	History	27.6	24-35 m	5514	29
PCV3	C or H <12 months	21.1	24-35 m	5514	29
PCV3	Card	10.2	24-35 m	5514	29
PCV3	Card or History	25.1	24-35 m	5514	29
PCV3	History	15	24-35 m	5514	29
Pol1	C or H <12 months	45.2	24-35 m	5514	29
Pol1	Card	17.2	24-35 m	5514	29
Pol1	Card or History	48.3	24-35 m	5514	29
Pol1	History	31.1	24-35 m	5514	29
Pol3	C or H <12 months	26.5	24-35 m	5514	29
Pol3	Card	14.5	24-35 m	5514	29
Pol3	Card or History	30.2	24-35 m	5514	29
1 010	Card of History	50.4	24-99 III	9914	∠3

Pol3	History	15.7	$24\text{-}35~\mathrm{m}$	5514	29
YFV	C or H $<$ 12 months	33.4	$24\text{-}35~\mathrm{m}$	5514	29
YFV	Card	14.1	$24\text{-}35~\mathrm{m}$	5514	29
YFV	Card or History	41.3	$24\text{-}35~\mathrm{m}$	5514	29
YFV	History	27.1	$24\text{-}35 \mathrm{\ m}$	5514	29

2014 Nigeria National Nutrition and Health Survey, 2015

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
DTP1	Card or History	63.5	$12\text{-}23~\mathrm{m}$	4205	34
DTP3	Card or History	48.8	$12\text{-}23~\mathrm{m}$	4205	34
MCV1	Card or History	50.6	$12\text{-}23~\mathrm{m}$	4205	34

2012 Nigeria Demographic and Health Survey 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	50.3	$12\text{-}23~\mathrm{m}$	5900	28
BCG	Card	27	$12\text{-}23~\mathrm{m}$	1650	28
BCG	Card or History	51.2	$12\text{-}23 \mathrm{\ m}$	5900	28
BCG	History	24.1	$12\text{-}23 \mathrm{\ m}$	4250	28
DTP1	C or H <12 months	49.6	$12\text{-}23~\mathrm{m}$	5900	28
DTP1	Card	26.7	$12\text{-}23~\mathrm{m}$	1650	28
DTP1	Card or History	50.6	$12\text{-}23~\mathrm{m}$	5900	28
DTP1	History	23.9	$12\text{-}23 \mathrm{\ m}$	4250	28
DTP3	C or H $<$ 12 months	36.2	$12\text{-}23~\mathrm{m}$	5900	28
DTP3	Card	22.2	$12\text{-}23~\mathrm{m}$	1650	28
DTP3	Card or History	38.2	$12\text{-}23 \mathrm{\ m}$	5900	28
DTP3	History	16	$12\text{-}23 \mathrm{\ m}$	4250	28
MCV1	C or H $<$ 12 months	35.1	$12\text{-}23~\mathrm{m}$	5900	28
MCV1	Card	21.1	$12\text{-}23~\mathrm{m}$	1650	28
MCV1	Card or History	42.1	$12\text{-}23~\mathrm{m}$	5900	28
MCV1	History	21	$12\text{-}23~\mathrm{m}$	4250	28
Pol1	C or H <12 months	75	$12\text{-}23~\mathrm{m}$	5900	28
Pol1	Card	26.8	$12\text{-}23~\mathrm{m}$	1650	28
Pol1	Card or History	76.5	$12\text{-}23 \mathrm{\ m}$	5900	28
Pol1	History	49.7	$12\text{-}23~\mathrm{m}$	4250	28
Pol3	C or H <12 months	51.2	12-23 m	5900	28

Pol3	Card	22.7	12-23 m	1650	28
Pol3	Card or History	53.6	$12\text{-}23 \mathrm{\ m}$	5900	28
Pol3	History	30.8	12-23 m	4250	28

2012 Summary Findings of Cross-Sectional Health and Nutrition Survey, Nigeria 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
DTP1	Card or History	33.7	$12\text{-}23~\mathrm{m}$	3625	-
DTP3	Card or History	25	$12\text{-}23~\mathrm{m}$	3625	-
MCV1	Card or History	26.9	12-23 m	3625	-

2010 Nigeria Multiple Indicator Cluster Survey 2011

Vaccine	$Confirmation\ method$	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	61.7	$12\text{-}23 \mathrm{\ m}$	-	24
BCG	Card	28.5	$12\text{-}23 \mathrm{\ m}$	-	24
BCG	Card or History	62.4	$12\text{-}23 \mathrm{\ m}$	4986	24
BCG	History	33.9	$12-23 \mathrm{m}$	-	24
DTP1	C or H < 12 months	59.3	$12-23 \mathrm{m}$	-	24
DTP1	Card	29.3	$12\text{-}23 \mathrm{\ m}$	-	24
DTP1	Card or History	60.4	$12\text{-}23 \mathrm{\ m}$	4986	24
DTP1	History	31.1	$12\text{-}23 \mathrm{\ m}$	-	24
DTP3	C or H $<$ 12 months	42.6	$12\text{-}23 \mathrm{\ m}$	4986	24
DTP3	Card	26.5	$12\text{-}23 \mathrm{\ m}$	-	24
DTP3	Card or History	44.7	$12\text{-}23 \mathrm{\ m}$	4986	24
DTP3	History	18.2	$12\text{-}23 \mathrm{\ m}$	-	24
HepB1	C or H $<$ 12 months	54.1	$12\text{-}23 \mathrm{\ m}$	4986	24
HepB1	Card	28.8	$12\text{-}23 \mathrm{\ m}$	-	24
HepB1	Card or History	55.1	$12\text{-}23~\mathrm{m}$	4986	24
HepB1	History	26.3	$12\text{-}23~\mathrm{m}$	-	24
HepB3	C or H $<$ 12 months	34	$12\text{-}23~\mathrm{m}$	4986	24
HepB3	Card	26.1	$12\text{-}23 \mathrm{\ m}$	-	24
HepB3	Card or History	35.9	$12\text{-}23~\mathrm{m}$	4986	24
HepB3	History	9.8	$12\text{-}23 \mathrm{\ m}$	-	24
HepBB	C or H $<$ 12 months	29	$12\text{-}23~\mathrm{m}$	4986	24
HepBB	Card	17.7	12-23 m	_	24

HepBB	Card or History	29.3	$12\text{-}23~\mathrm{m}$	4986	24
HepBB	History	11.6	$12\text{-}23~\mathrm{m}$	-	24
MCV1	C or H $<$ 12 months	49.2	$12\text{-}23~\mathrm{m}$	4986	24
MCV1	Card	23.8	$12\text{-}23~\mathrm{m}$	-	24
MCV1	Card or History	55.6	$12\text{-}23~\mathrm{m}$	4986	24
MCV1	History	31.7	$12\text{-}23~\mathrm{m}$	-	24
Pol1	C or H $<$ 12 months	74.8	$12\text{-}23~\mathrm{m}$	4986	24
Pol1	Card	28.3	$12\text{-}23~\mathrm{m}$	-	24
Pol1	Card or History	76.4	12-23 m	4986	24
Pol1	History	48.1	$12\text{-}23~\mathrm{m}$	-	24
Pol3	C or H $<$ 12 months	46.1	$12\text{-}23~\mathrm{m}$	4986	24
Pol3	Card	25.3	$12\text{-}23~\mathrm{m}$	-	24
Pol3	Card or History	48.8	$12\text{-}23~\mathrm{m}$	4986	24
Pol3	History	23.5	$12\text{-}23~\mathrm{m}$	-	24
YFV	C or H $<$ 12 months	40.4	12-23 m	4986	24
YFV	Card	22.9	$12\text{-}23~\mathrm{m}$	-	24
YFV	Card or History	50.1	12-23 m	4986	24
YFV	History	27.1	$12\text{-}23~\mathrm{m}$	-	24

2009 Nigeria 2010 National Immunization Coverage Survey

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	32.7	$12\text{-}23~\mathrm{m}$	19551	40
BCG	Card or History	76.4	$12\text{-}23~\mathrm{m}$	19551	40
DTP1	Card	28.9	$12\text{-}23~\mathrm{m}$	19551	40
DTP1	Card or History	73.4	$12\text{-}23~\mathrm{m}$	19551	40
DTP3	Card	24.7	$12\text{-}23~\mathrm{m}$	19551	40
DTP3	Card or History	67.7	$12\text{-}23~\mathrm{m}$	19551	40
MCV1	Card	21.5	$12\text{-}23~\mathrm{m}$	19551	40
MCV1	Card or History	63.6	$12\text{-}23~\mathrm{m}$	19551	40
Pol1	Card	27.3	$12\text{-}23~\mathrm{m}$	19551	40
Pol1	Card or History	78.1	$12\text{-}23~\mathrm{m}$	19551	40
Pol3	Card	23.4	$12\text{-}23~\mathrm{m}$	19551	40
Pol3	Card or History	74	$12\text{-}23~\mathrm{m}$	19551	40
YFV	Card	20.5	$12\text{-}23~\mathrm{m}$	19551	40
YFV	Card or History	60.1	$12\text{-}23~\mathrm{m}$	19551	40

2007 Nigeria Demographic and Health Survey 2008

Vaccine	$Confirmation\ method$	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	47.9	$12\text{-}23~\mathrm{m}$	4945	26
BCG	Card	23.7	$12\text{-}23~\mathrm{m}$	4945	26
BCG	Card or History	49.7	$12\text{-}23~\mathrm{m}$	4945	26
BCG	History	25.9	$12\text{-}23~\mathrm{m}$	4945	26
DTP1	C or H $<$ 12 months	49.4	$12\text{-}23~\mathrm{m}$	4945	26
DTP1	Card	24.9	$12\text{-}23~\mathrm{m}$	4945	26
DTP1	Card or History	52	$12\text{-}23~\mathrm{m}$	4945	26
DTP1	History	27.1	$12\text{-}23~\mathrm{m}$	4945	26
DTP3	C or H < 12 months	32.8	$12\text{-}23~\mathrm{m}$	4945	26
DTP3	Card	20.2	$12\text{-}23~\mathrm{m}$	4945	26
DTP3	Card or History	35.4	$12\text{-}23 \mathrm{\ m}$	4945	26
DTP3	History	15.2	$12\text{-}23~\mathrm{m}$	4945	26
MCV1	C or H $<$ 12 months	33.6	$12\text{-}23~\mathrm{m}$	4945	26
MCV1	Card	19.4	$12\text{-}23~\mathrm{m}$	4945	26
MCV1	Card or History	41.4	$12\text{-}23~\mathrm{m}$	4945	26
MCV1	History	22.1	$12\text{-}23~\mathrm{m}$	4945	26
Pol1	C or H < 12 months	64.1	$12\text{-}23~\mathrm{m}$	4945	26
Pol1	Card	24.4	$12\text{-}23~\mathrm{m}$	4945	26
Pol1	Card or History	67.8	$12\text{-}23~\mathrm{m}$	4945	26
Pol1	History	43.4	$12\text{-}23~\mathrm{m}$	4945	26
Pol3	C or H $<$ 12 months	36	$12\text{-}23~\mathrm{m}$	4945	26
Pol3	Card	19.2	$12\text{-}23~\mathrm{m}$	4945	26
Pol3	Card or History	38.7	$12\text{-}23~\mathrm{m}$	4945	26
Pol3	History	19.5	$12\text{-}23~\mathrm{m}$	4945	26

2006 Nigeria Multiple Indicator Cluster Survey 2007

Vaccine	$Confirmation\ method$	Coverage	Age cohort	Sample	${\bf Cards\ seen}$
BCG	C or H $<$ 12 months	50.5	$12\text{-}23~\mathrm{m}$	3187	18
BCG	Card	16.9	$12\text{-}23~\mathrm{m}$	3187	18
BCG	Card or History	51.5	$12\text{-}23~\mathrm{m}$	3187	18
BCG	History	34.6	$12\text{-}23 \mathrm{\ m}$	3187	18
DTP1	C or H $<$ 12 months	46.4	$12\text{-}23 \mathrm{\ m}$	3187	18
DTP1	Card	17	$12\text{-}23 \mathrm{\ m}$	3187	18
DTP1	Card or History	48.6	$12\text{-}23 \mathrm{\ m}$	3187	18
DTP1	History	31.6	$12\text{-}23 \mathrm{\ m}$	3187	18
DTP3	C or H $<$ 12 months	28.1	$12\text{-}23 \mathrm{\ m}$	3187	18

DTP3	Card	14.1	$12\text{-}23~\mathrm{m}$	3187	18
DTP3	Card or History	29.6	12-23 m	3187	18
DTP3	History	15.6	12-23 m	3187	18
MCV1	C or H $<$ 12 months	38.3	12-23 m	3187	18
MCV1	Card	13.9	12-23 m	3187	18
MCV1	Card or History	44	12-23 m	3187	18
MCV1	History	30.1	12-23 m	3187	18
Pol1	C or H $<$ 12 months	52.5	12-23 m	3187	18
Pol1	Card	15.6	12-23 m	3187	18
Pol1	Card or History	55.6	12-23 m	3187	18
Pol1	History	39.9	12-23 m	3187	18
Pol3	C or $H < 12$ months	27.5	12-23 m	3187	18
Pol3	Card	12.9	12-23 m	3187	18
Pol3	Card or History	29.4	12-23 m	3187	18
Pol3	History	16.5	12-23 m	3187	18

2005 Nigeria National Immunization Coverage Survey (2006)

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	54.5	$12\text{-}23~\mathrm{m}$	23414	50
BCG	Card or History	68.6	$12\text{-}23 \mathrm{\ m}$	23414	50
DTP1	Card	36.1	$12\text{-}23~\mathrm{m}$	23414	50
DTP1	Card or History	71.7	$12\text{-}23~\mathrm{m}$	23414	50
DTP3	Card	25.7	$12\text{-}23~\mathrm{m}$	23414	50
DTP3	Card or History	53.5	$12\text{-}23~\mathrm{m}$	23414	50
HepB1	Card	29.6	$12\text{-}23~\mathrm{m}$	23414	50
HepB1	Card or History	56	$12\text{-}23~\mathrm{m}$	23414	50
HepB3	Card	19.5	$12\text{-}23~\mathrm{m}$	23414	50
HepB3	Card or History	41.2	$12\text{-}23~\mathrm{m}$	23414	50
MCV1	Card	25.8	$12\text{-}23~\mathrm{m}$	23414	50
MCV1	Card or History	62.4	$12\text{-}23~\mathrm{m}$	23414	50
Pol1	Card	31.7	$12\text{-}23~\mathrm{m}$	23414	50
Pol1	Card or History	78.5	$12\text{-}23~\mathrm{m}$	23414	50
Pol3	Card	22	$12\text{-}23~\mathrm{m}$	23414	50
Pol3	Card or History	60.7	$12\text{-}23~\mathrm{m}$	23414	50
YFV	Card	20.3	$12\text{-}23~\mathrm{m}$	23414	50
YFV	Card or History	42.9	12-23 m	23414	50

2002 Nigeria Demographic and Health Survey 2003

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	_	12-23 m	999	21
BCG	Card	20.2	$12-23~\mathrm{m}$	999	21
BCG	Card or History	48.3	$12\text{-}23 \mathrm{\ m}$	999	21
BCG	History	28.1	$12\text{-}23 \mathrm{\ m}$	999	21
DTP1	C or H $<$ 12 months	38.7	$12-23~\mathrm{m}$	999	21
DTP1	Card	18	$12\text{-}23~\mathrm{m}$	999	21
DTP1	Card or History	42.6	$12\text{-}23~\mathrm{m}$	999	21
DTP1	History	24.6	$12\text{-}23~\mathrm{m}$	999	21
DTP3	C or H $<$ 12 months	20.1	$12\text{-}23~\mathrm{m}$	999	21
DTP3	Card	10.4	$12\text{-}23~\mathrm{m}$	999	21
DTP3	Card or History	21.4	$12\text{-}23 \mathrm{\ m}$	999	21
DTP3	History	11	$12\text{-}23 \mathrm{\ m}$	999	21
MCV1	C or H < 12 months	31.4	$12\text{-}23~\mathrm{m}$	999	21
MCV1	Card	13.5	$12\text{-}23~\mathrm{m}$	999	21
MCV1	Card or History	35.9	$12\text{-}23~\mathrm{m}$	999	21
MCV1	History	22.4	$12\text{-}23~\mathrm{m}$	999	21
Pol1	C or H $<$ 12 months	63.7	$12\text{-}23~\mathrm{m}$	999	21
Pol1	Card	17.8	$12\text{-}23~\mathrm{m}$	999	21
Pol1	Card or History	67.2	$12\text{-}23 \mathrm{\ m}$	999	21
Pol1	History	49.4	$12\text{-}23~\mathrm{m}$	999	21
Pol3	C or H < 12 months	26.8	$12\text{-}23~\mathrm{m}$	999	21
Pol3	Card	10.7	$12\text{-}23~\mathrm{m}$	999	21
Pol3	Card or History	29.4	$12\text{-}23~\mathrm{m}$	999	21
Pol3	History	18.7	$12\text{-}23~\mathrm{m}$	999	21

2002Nigeria National Immunization Coverage Survey 2003

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	29.3	$12\text{-}23~\mathrm{m}$	40777	28
DTP1	Card or History	43.2	$12\text{-}23~\mathrm{m}$	40777	28
DTP3	Card or History	24.8	$12\text{-}23 \mathrm{\ m}$	40777	28
MCV1	Card or History	25.3	$12\text{-}23 \mathrm{\ m}$	40777	28
Pol1	Card or History	63	$12\text{-}23 \mathrm{\ m}$	40777	28
Pol3	Card or History	38.6	$12\text{-}23~\mathrm{m}$	40777	28

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	17.2	$12\text{-}23~\mathrm{m}$	2841	25
BCG	Card or History	43	$12\text{-}23~\mathrm{m}$	2841	25
BCG	History	25.8	$12\text{-}23~\mathrm{m}$	2841	25
DTP1	Card	16.5	$12\text{-}23~\mathrm{m}$	2841	25
DTP1	Card or History	41.1	$12\text{-}23~\mathrm{m}$	2841	25
DTP1	History	25.1	$12\text{-}23~\mathrm{m}$	2841	25
DTP3	Card	12.4	$12\text{-}23~\mathrm{m}$	2841	25
DTP3	Card or History	23.4	$12\text{-}23~\mathrm{m}$	2841	25
DTP3	History	11.1	$12\text{-}23~\mathrm{m}$	2841	25
MCV1	Card	15.9	$12\text{-}23~\mathrm{m}$	2841	25
MCV1	Card or History	35	$12\text{-}23~\mathrm{m}$	2841	25
Pol1	Card	11.8	$12\text{-}23~\mathrm{m}$	2841	25
Pol1	Card or History	37.4	$12\text{-}23~\mathrm{m}$	2841	25
Pol3	Card or History	18.8	$12\text{-}23 \mathrm{\ m}$	2841	25

1998 Nigeria	Demographic	and Health	Survey	1999,	2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H < 12 months	52	12-23 m	1161	_

BCG	Card	18.7	12-23 m	1161	_
BCG	Card or History	53.8	$12\text{-}23~\mathrm{m}$	1161	-
BCG	History	35.1	$12\text{-}23~\mathrm{m}$	1161	-
DTP1	C or H < 12 months	45.7	$12\text{-}23~\mathrm{m}$	1161	-
DTP1	Card	16.4	$12\text{-}23~\mathrm{m}$	1161	-
DTP1	Card or History	47.4	$12\text{-}23~\mathrm{m}$	1161	-
DTP1	History	31	$12\text{-}23~\mathrm{m}$	1161	-
DTP3	C or H $<$ 12 months	24.8	$12\text{-}23~\mathrm{m}$	1161	-
DTP3	Card	10.6	$12\text{-}23~\mathrm{m}$	1161	-
DTP3	Card or History	26.3	$12\text{-}23~\mathrm{m}$	1161	-
DTP3	History	15.7	$12\text{-}23~\mathrm{m}$	1161	-
MCV1	C or H $<$ 12 months	32.1	$12\text{-}23~\mathrm{m}$	1161	-
MCV1	Card	13.1	$12\text{-}23~\mathrm{m}$	1161	-
MCV1	Card or History	40.5	$12\text{-}23~\mathrm{m}$	1161	-
MCV1	History	27.4	$12\text{-}23~\mathrm{m}$	1161	-
Pol1	C or H $<$ 12 months	54.3	$12\text{-}23~\mathrm{m}$	1161	-
Pol1	Card	17.5	$12\text{-}23~\mathrm{m}$	1161	-
Pol1	Card or History	56.8	$12\text{-}23~\mathrm{m}$	1161	-
Pol1	History	39.2	12-23 m	1161	-
Pol3	C or H $<$ 12 months	23	12-23 m	1161	-
Pol3	Card	10	12-23 m	1161	-
Pol3	Card or History	24.8	$12\text{-}23~\mathrm{m}$	1161	-
Pol3	History	14.8	$12\text{-}23~\mathrm{m}$	1161	-

Further information and estimates for previous years are available at:

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

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