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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

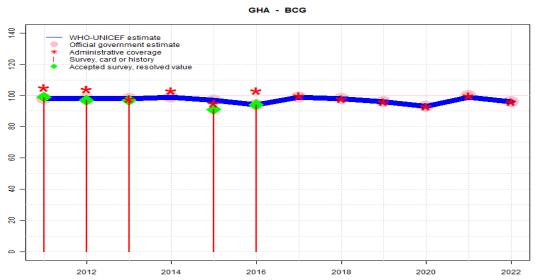
- $\mathbf{BCG:}\,$ percentage of births who received one dose of Bacillus Calmette Guerin vaccine.
- DTP1 / DTP3: percentage of surviving infants who received the 1st / 3rd dose, respectively, of diphtheria and tetanus toxoid with pertussis containing vaccine.
- Pol3: percentage of surviving infants 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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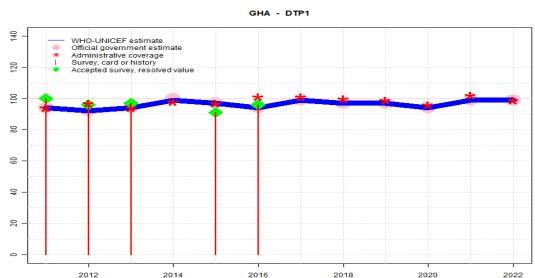
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	98	98	98	99	97	94	99	98	96	93	99	96
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	98	98	98	99	97	94	99	98	96	93	100	96
Administrative	105	104	98	103	95	103	100	98	96	93	100	96
Survey	99	97	97	NA	91	94	NA	NA	NA	NA	NA	NA

- ••• 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: Estimate informed by reported data. WHO and UNICEF await the final results of the 2022

 Demographic and Health Survey. Programme reports three months vaccine stockout at
 national and subnational levels. Preliminary results from the 2022 Ghana Demographic
 and Health Survey suggest 95 percent coverage. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Programme notes use of new target population estimates from 2021 Population and Housing Census, which suggest lower values than those indicated by projections from the prior census. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Estimate challenged by: D-
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). Official estimate based on 2017 EPI coverage survey results. Estimate challenged by: D-
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 91 percent based on 1 survey(s). Reported official government coverage based on 2014 DHS results. Estimate challenged by: D-
- 2014: Estimate informed by reported data. Estimate challenged by: D-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 1 survey(s). Estimate challenged by: D-
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 1 survey(s). Estimate challenged by: D-
- 2011: Estimate informed by reported data supported by survey. Survey evidence of 99 percent based on 1 survey(s). Estimate challenged by: D-



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	94	92	94	99	97	94	99	97	97	94	99	99
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	94	92	94	100	97	94	99	97	97	94	99	99
Administrative	94	97	94	98	97	101	101	100	99	96	102	99
Survey	100	96	97	NA	91	96	NA	NA	NA	NA	NA	NA

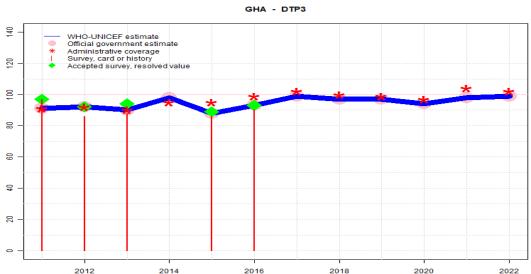
- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a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

 Demographic and Health Survey. Preliminary results from the 2022 Ghana Demographic
 and Health Survey suggest 97 percent coverage. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Programme notes use of new target population estimates from 2021 Population and Housing Census, which suggest lower values than those indicated by projections from the prior census. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Estimate challenged by: D-
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 1 survey(s). Official estimate based on 2017 EPI coverage survey results. Estimate challenged by: D-
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 91 percent based on 1 survey(s). Reported official government coverage based on 2014 DHS results. Estimate challenged by: D-
- 2014: Estimate informed by reported data. Estimate challenged by: D-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 1 survey(s). Estimate challenged by: D-
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 1 survey(s). Estimate challenged by: D-
- 2011: Estimate informed by reported data supported by survey. Survey evidence of 100 percent based on 1 survey(s). Estimate challenged by: D-

2020



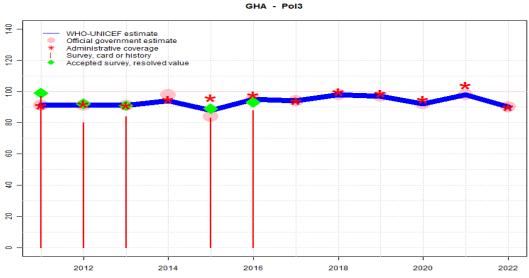
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	91	92	90	98	88	93	99	97	97	94	98	99
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	91	92	90	98	88	93	99	97	97	94	98	99
Administrative	91	92	90	95	95	99	102	100	99	97	104	102
Survey	97	86	88	NA	86	90	NA	NA	NA	NA	NA	NA

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

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

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

- 2022: Estimate informed by reported data. WHO and UNICEF await the final results of the 2022 Demographic and Health Survey. Preliminary results from the 2022 Ghana Demographic and Health Survey suggest 89 percent coverage. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Programme notes use of new target population estimates from 2021 Population and Housing Census, which suggest lower values than those indicated by projections from the prior census. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Estimate challenged by: D-
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Ghana Multiple Indicator Cluster Survey 2017-18 card or history results of 90 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 88 percent and 3rd dose card only coverage of 85 percent. Official estimate based on 2017 EPI coverage survey results. Estimate challenged by: D-
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 89 percent based on 1 survey(s). Ghana Multiple Indicator Cluster Survey 2017-18 card or history results of 86 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 80 percent and 3rd dose card only coverage of 78 percent. Reported official government coverage based on 2014 DHS results. Estimate challenged by: D-
- 2014: Estimate informed by reported data. Estimate challenged by: D-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). Ghana Demographic and Health Survey, 2014 card or history results of 88 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 87 percent and 3rd dose card only coverage of 84 percent. Estimate challenged by: D-
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). Ghana Demographic and Health Survey, 2014 card or history results of 86 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 79 percent and 3rd dose card only coverage of 76 percent. Estimate challenged by: D-
- 2011: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 1 survey(s). Estimate challenged by: D-

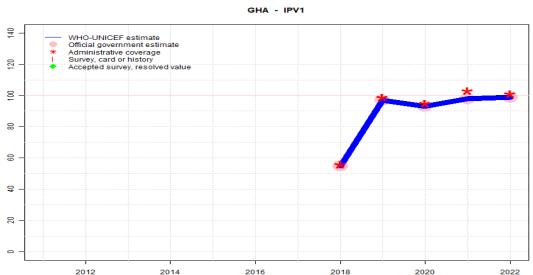


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	91	91	91	94	88	95	94	98	97	92	98	90
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	91	91	91	98	84	95	94	98	97	92	98	90
Administrative	91	92	91	95	96	98	94	100	99	95	104	90
Survey	97	80	84	NA	83	88	NA	NA	NA	NA	NA	NA

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

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

- 2022: Estimate informed by reported data. WHO and UNICEF await the final results of the 2022 Demographic and Health Survey. Preliminary results from the 2022 Ghana Demographic and Health Survey suggest 84 percent coverage. Programme reports four months vaccine stockout at national and subnational level. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Programme notes use of new target population estimates from 2021 Population and Housing Census, which suggest lower values than those indicated by projections from the prior census. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Programme reports stockout of three months. Estimate challenged by: D-
- 2016: Estimate based on reported data. Ghana Multiple Indicator Cluster Survey 2017-18 card or history results of 88 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 87 percent and 3rd dose card only coverage of 85 percent. Official estimate based on 2017 EPI coverage survey results. Estimate challenged by: D-
- 2015: Estimate of 88 percent assigned by working group. Estimate based on reported DTP3 coverage level. Ghana Multiple Indicator Cluster Survey 2017-18 card or history results of 83 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 90 percent, 1st dose card only coverage of 79 percent and 3rd dose card only coverage of 78 percent. Reported data excluded due to decline in reported coverage from 98 percent to 84 percent with increase to 95 percent. Reported official government coverage based on 2014 DHS results. Estimate challenged by: D-R-
- 2014: Reported data calibrated to 2013 and 2015 levels. Estimate challenged by: D-R-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 91 percent based on 1 survey(s). Ghana Demographic and Health Survey, 2014 card or history results of 84 percent modified for recall bias to 91 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 88 percent and 3rd dose card only coverage of 83 percent. Estimate challenged by: D-
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). Ghana Demographic and Health Survey, 2014 card or history results of 80 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 79 percent and 3rd dose card only coverage of 76 percent. Estimate challenged by: D-
- 2011: Estimate informed by reported data supported by survey. Survey evidence of 99 percent based on 1 survey(s). Ghana EPI Cluster Survey 2012 card or history results of 97 percent modified for recall bias to 99 percent based on 1st dose card or history coverage of 100 percent, 1st dose card only coverage of 98 percent and 3rd dose card only coverage of 97 percent. Estimate challenged by: D-



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	55	97	93	98	99						
Estimate GoC	NA	•	•	•	•	•						
Official	NA	55	97	93	98	99						
Administrative	NA	56	99	95	103	101						
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.

Description:

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

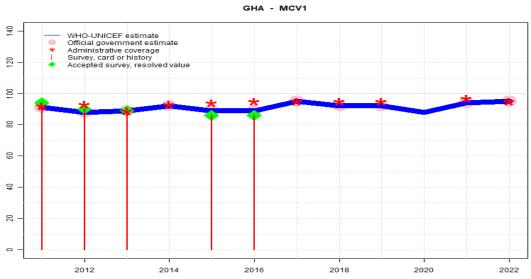
2022: Estimate informed by reported data. WHO and UNICEF await the final results of the 2022 Demographic and Health Survey. Preliminary results from the 2022 Ghana Demographic and Health Survey suggest 92 percent coverage. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme notes use of new target population estimates from 2021 Population and Housing Census, which suggest lower values than those indicated by projections from the prior census. Estimate challenged by: D-

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

2019: Estimate informed by reported data. . Estimate challenged by: D-

2018: Estimate informed by reported data. Inactivated polio vaccine introduced during 2018. Estimate challenged by: D-



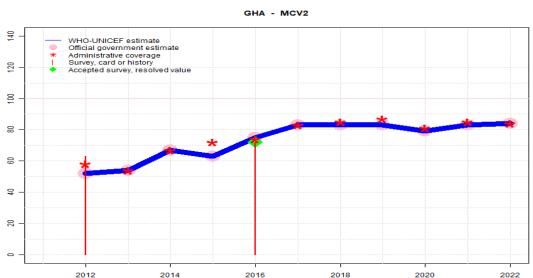
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	91	88	89	92	89	89	95	92	92	88	94	95
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	91	88	89	92	89	89	95	92	92	NA	94	95
Administrative	92	93	89	93	94	95	95	95	95	NA	97	95
Survey	94	90	89	NA	86	86	NA	NA	NA	NA	NA	NA

- ••• 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: Estimate informed by reported data. WHO and UNICEF await the final results of the 2022

 Demographic and Health Survey. Programme reports four months vaccine stockout at
 national and subnational levels. Preliminary results from the 2022 Ghana Demographic
 and Health Survey suggest 87 percent coverage. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Programme notes use of new target population estimates from 2021 Population and Housing Census, which suggest lower values than those indicated by projections from the prior census. Estimate challenged by: D-
- 2020: Estimate is based on estimated coverage for YFV. While MCV1 data are not reported, MCV1 and YFV reported coverage has previously tracked closely. GoC=No accepted empirical data
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Estimate challenged by: D-
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 86 percent based on 1 survey(s). Official estimate based on 2017 EPI coverage survey results. Estimate challenged by: D-
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 86 percent based on 1 survey(s). Reported official government coverage based on 2014 DHS results. Estimate challenged by: D-
- 2014: Estimate informed by reported data. Estimate challenged by: D-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 89 percent based on 1 survey(s). Measles rubella vaccine introduced in September 2013. Estimate challenged by: D-
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 90 percent based on 1 survey(s). Estimate challenged by: D-
- 2011: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). Estimate challenged by: D-



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	52	54	67	63	75	83	83	83	79	83	84
Estimate GoC	NA	••	••	•	•	•	•	•	•	•	•	•
Official	NA	52	54	67	63	75	83	83	83	79	83	84
Administrative	NA	58	54	67	72	74	83	85	87	81	85	84
Survey	NA	63	NA	NA	NA	72	NA	NA	NA	NA	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: Estimate informed by reported data. WHO and UNICEF await the final results of the 2022

Demographic and Health Survey. Programme reports four months vaccine stockout at
national and subnational levels. Preliminary results from the 2022 Ghana Demographic
and Health Survey suggest 73 percent coverage. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme notes use of new target population estimates from 2021 Population and Housing Census, which suggest lower values than those indicated by projections from the prior census. Estimate challenged by: D-

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

2019: Estimate informed by reported data. Estimate challenged by: D-

2018: Estimate informed by reported data. Estimate challenged by: D-S-

2017: Estimate informed by reported data. Estimate challenged by: D-S-

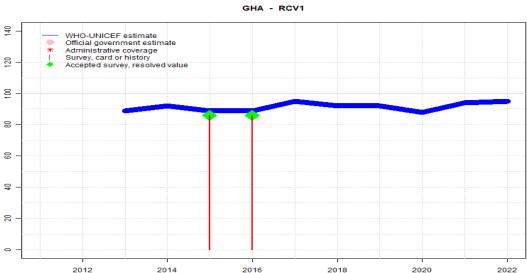
2016: Estimate informed by reported data supported by survey. Survey evidence of 72 percent based on 1 survey(s). Official estimate based on 2017 EPI coverage survey results. Estimate is based on reported data during introduction period. Estimate challenged by: D-

2015: Estimate informed by reported data. Reported official government coverage based on 2014 DHS results. Estimate challenged by: D-

2014: Estimate informed by reported data. . Estimate challenged by: D-

2013: Estimate informed by reported data. Measles rubella vaccine introduced in September 2013. GoC=R+ D+

2012: Estimate informed by reported data. Ghana Demographic and Health Survey, 2014 results ignored by working group. Measles second dose introduced in 2012. Recommended at 18 months. Survey may not reflect data for vaccine introduction period. GoC=R+ D+



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	89	92	89	89	95	92	92	88	94	95
Estimate GoC	NA	NA	•	•	•	•	•	•	•	•	•	•
Official	NA											
Administrative	NA											
Survey	NA	NA	NA	NA	86	86	NA	NA	NA	NA	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.

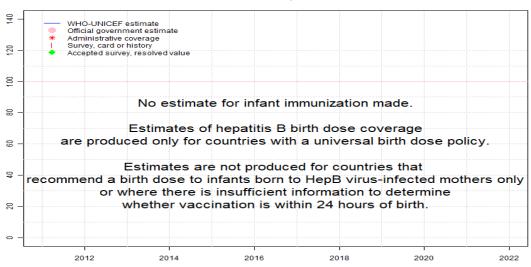
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

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

- 2022: Estimate based on estimated MCV1. WHO and UNICEF await the final results of the 2022 Demographic and Health Survey. Estimate challenged by: D-
- 2021: Estimate based on estimated MCV1. Programme notes use of new target population estimates from 2021 Population and Housing Census, which suggest lower values than those indicated by projections from the prior census. Estimate challenged by: D-
- 2020: Estimate is based on estimated coverage for MCV1. GoC=No accepted empirical data
- 2019: Estimate based on estimated MCV1. Estimate challenged by: D-
- 2018: Estimate based on estimated MCV1. Estimate challenged by: D-
- 2017: Estimate based on estimated MCV1. Estimate challenged by: D-
- 2016: Estimate based on estimated MCV1. Official estimate based on 2017 EPI coverage survey results. Estimate challenged by: D-
- 2015: Estimate based on estimated MCV1. Reported official government coverage based on 2014 DHS results. Estimate challenged by: D-
- 2014: Estimate based on estimated MCV1. Estimate challenged by: D-
- 2013: Estimate based on estimated MCV1. Estimate challenged by: D-



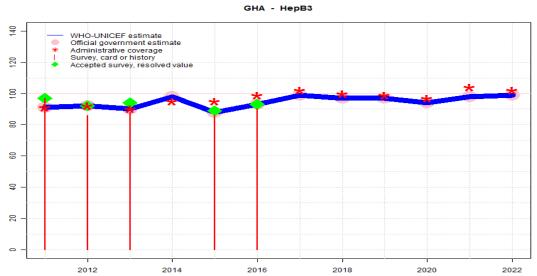


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	NA											

- ••• 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.

Ghana - HepB3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	91	92	90	98	88	93	99	97	97	94	98	99
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	91	92	90	98	88	93	99	97	97	94	98	99
Administrative	91	92	90	95	95	99	102	100	99	97	104	102
Survey	97	86	88	NA	86	90	NA	NA	NA	NA	NA	NA

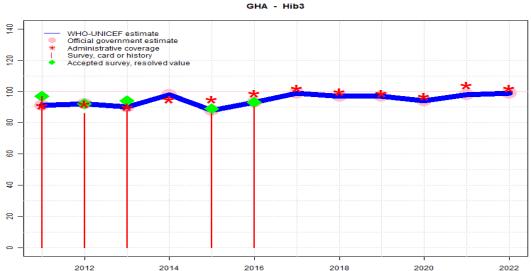
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

- 2022: Estimate informed by reported data. WHO and UNICEF await the final results of the 2022

 Demographic and Health Survey. Preliminary results from the 2022 Ghana Demographic
 and Health Survey suggest 89 percent coverage. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Programme notes use of new target population estimates from 2021 Population and Housing Census, which suggest lower values than those indicated by projections from the prior census. Estimate challenged by: D-
- $2020{:}$ Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Estimate challenged by: D-
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Ghana Multiple Indicator Cluster Survey 2017-18 card or history results of 90 percent modifed for recall bias to 93 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 88 percent and 3rd dose card only coverage of 85 percent. Official estimate based on 2017 EPI coverage survey results. Estimate challenged by: D-
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 89 percent based on 1 survey(s). Ghana Multiple Indicator Cluster Survey 2017-18 card or history results of 86 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 80 percent and 3rd dose card only coverage of 78 percent. Reported official government coverage based on 2014 DHS results. Estimate challenged by: D-
- 2014: Estimate informed by reported data. Estimate challenged by: D-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). Ghana Demographic and Health Survey, 2014 card or history results of 88 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 87 percent and 3rd dose card only coverage of 84 percent. Estimate challenged by: D-
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). Ghana Demographic and Health Survey, 2014 card or history results of 86 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 79 percent and 3rd dose card only coverage of 76 percent. Estimate challenged by: D-
- 2011: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 1 survey(s). Estimate challenged by: D-



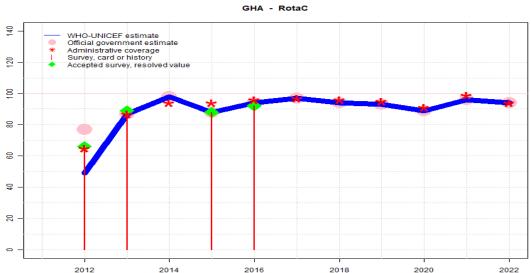
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	91	92	90	98	88	93	99	97	97	94	98	99
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	91	92	90	98	88	93	99	97	97	94	98	99
Administrative	91	92	90	95	95	99	102	100	99	97	104	102
Survey	97	86	88	NA	86	90	NA	NA	NA	NA	NA	NA

- ••• 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: Estimate informed by reported data. WHO and UNICEF await the final results of the 2022

 Demographic and Health Survey. Preliminary results from the 2022 Ghana Demographic
 and Health Survey suggest 89 percent coverage. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Programme notes use of new target population estimates from 2021 Population and Housing Census, which suggest lower values than those indicated by projections from the prior census. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Estimate challenged by: D-
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Ghana Multiple Indicator Cluster Survey 2017-18 card or history results of 90 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 88 percent and 3rd dose card only coverage of 85 percent. Official estimate based on 2017 EPI coverage survey results. Estimate challenged by: D-
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 89 percent based on 1 survey(s). Ghana Multiple Indicator Cluster Survey 2017-18 card or history results of 86 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 80 percent and 3rd dose card only coverage of 78 percent. Reported official government coverage based on 2014 DHS results. Estimate challenged by: D-
- 2014: Estimate informed by reported data. Estimate challenged by: D-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). Ghana Demographic and Health Survey, 2014 card or history results of 88 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 87 percent and 3rd dose card only coverage of 84 percent. Estimate challenged by: D-
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). Ghana Demographic and Health Survey, 2014 card or history results of 86 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 79 percent and 3rd dose card only coverage of 76 percent. Estimate challenged by: D-
- 2011: Estimate informed by reported data supported by survey. Survey evidence of 97 percent based on 1 survey(s). Estimate challenged by: D-



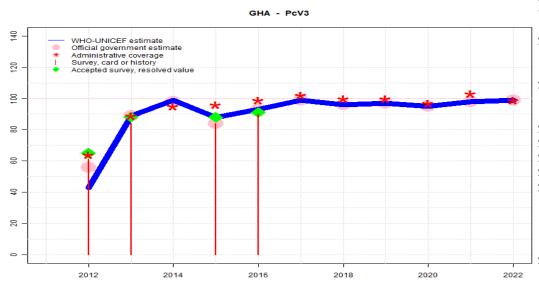
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	49	87	98	88	94	97	94	93	89	96	94
Estimate GoC	NA	•	•	•	•	•	•	•	•	•	•	•
Official	NA	77	87	98	88	94	97	94	93	89	96	94
Administrative	NA	65	87	94	94	96	97	96	95	91	99	94
Survey	NA	66	89	NA	88	92	NA	NA	NA	NA	NA	NA

- ••• 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: Estimate informed by reported data. WHO and UNICEF await the final results of the 2022

 Demographic and Health Survey. Preliminary results from the 2022 Ghana Demographic
 and Health Survey suggest 93 percent coverage. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Programme notes use of new target population estimates from 2021 Population and Housing Census, which suggest lower values than those indicated by projections from the prior census. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Estimate challenged by: D-
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). Official estimate based on 2017 EPI coverage survey results. Estimate challenged by: D-
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 88 percent based on 1 survey(s). Reported official government coverage based on 2014 DHS results. Estimate challenged by: D-
- 2014: Estimate informed by reported data. Estimate challenged by: D-S-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 89 percent based on 1 survey(s). Estimate challenged by: D-S-
- 2012: Rotavirus vaccine was introduced in 2012. 65 percent coverage in 75 percent of national target population. Estimate challenged by: R-S-



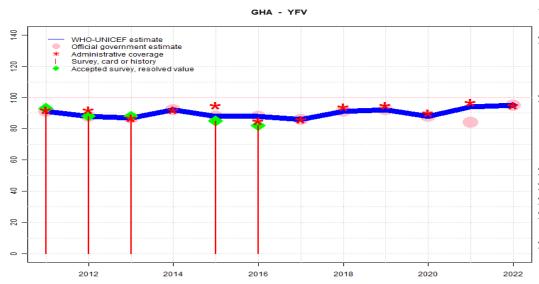
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	43	89	99	88	93	99	96	97	95	98	99
Estimate GoC	NA	•	•	•	•	•	•	•	•	•	•	•
Official	NA	56	89	98	84	93	99	96	97	95	98	99
Administrative	NA	64	89	95	96	99	102	100	100	97	103	99
Survey	NA	61	84	NA	84	90	NA	NA	NA	NA	NA	NA

- ••• 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: Estimate informed by reported data. WHO and UNICEF await the final results of the 2022

 Demographic and Health Survey. Preliminary results from the 2022 Ghana Demographic
 and Health Survey suggest 88 percent coverage. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Programme notes use of new target population estimates from 2021 Population and Housing Census, which suggest lower values than those indicated by projections from the prior census. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Estimate challenged by: D-S-
- 2016: Estimate is based on reported official coverage. Ghana Multiple Indicator Cluster Survey 2017-18 card or history results of 90 percent modified for recall bias to 91 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 87 percent and 3rd dose card only coverage of 84 percent. Official estimate based on 2017 EPI coverage survey results. Estimate challenged by: D-
- 2015: Estimate of 88 percent assigned by working group. Estimate is based on reported DTP3 coverage level. Ghana Multiple Indicator Cluster Survey 2017-18 card or history results of 84 percent modifed for recall bias to 88 percent based on 1st dose card or history coverage of 90 percent, 1st dose card only coverage of 80 percent and 3rd dose card only coverage of 78 percent. Reported official government coverage based on 2014 DHS results. Estimate challenged by: D-R-
- 2014: Reported data calibrated to 2013 and 2015 levels. Estimate challenged by: D-R-S-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 88 percent based on 1 survey(s). Ghana Demographic and Health Survey, 2014 card or history results of 84 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 85 percent and 3rd dose card only coverage of 80 percent. Estimate challenged by: D-S-
- 2012: Pneumococcal conjugate vaccine introduced in 2012. 64 percent coverage in 66 percent of national target population. Ghana Demographic and Health Survey, 2014 card or history results of 61 percent modified for recall bias to 65 percent based on 1st dose card or history coverage of 75 percent, 1st dose card only coverage of 61 percent and 3rd dose card only coverage of 53 percent. Estimate challenged by: R-S-



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	91	88	87	92	88	88	86	91	92	88	94	95
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	91	88	87	92	88	88	86	91	92	88	84	95
Administrative	92	92	87	92	95	85	86	94	95	90	97	95
Survey	93	88	88	NA	85	82	NA	NA	NA	NA	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: Estimate informed by reported data. WHO and UNICEF await the final results of the 2022 Demographic and Health Survey. Preliminary results from the 2022 Ghana Demographic and Health Survey suggest 84 percent coverage. Vaccine to vaccine consistency. Estimate challenged by: D-
- 2021: Estimate is based on estimated coverage for MCV1. Adjustment used to derive reported official coverage differs from that used for MCV1. Programme notes use of new target population estimates from 2021 Population and Housing Census, which suggest lower values than those indicated by projections from the prior census. Estimate challenged by: D-R-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Estimate challenged by: D-
- 2017: Estimate informed by reported data. Programme reports stockout of 4 months. Estimate challenged by: D-
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 82 percent based on 1 survey(s). Official estimate based on 2017 EPI coverage survey results. Programme reports a two months vaccine stockout at national level. Decrease in admin data may be at least in part due to the stockout. Estimate challenged by: D-
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 85 percent based on 1 survey(s). Reported official government coverage based on 2014 DHS results. Estimate challenged by: D-
- 2014: Estimate informed by reported data. Estimate challenged by: D-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 88 percent based on 1 survey(s). Estimate challenged by: D-
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 88 percent based on 1 survey(s). Estimate challenged by: D-
- 2011: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Estimate challenged by: D-

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.

2016 Ghana Multiple Indicator Cluster Survey 2017-18

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	93.5	$12\text{-}23~\mathrm{m}$	1694	88
BCG	Card	84.3	$12\text{-}23~\mathrm{m}$	1694	88
BCG	Card or History	93.6	$12\text{-}23~\mathrm{m}$	1694	88
BCG	History	9.3	$12\text{-}23~\mathrm{m}$	1694	88
DTP1	C or H $<$ 12 months	95.6	$12\text{-}23~\mathrm{m}$	1694	88
DTP1	Card	87.6	$12\text{-}23~\mathrm{m}$	1694	88
DTP1	Card or History	95.8	$12\text{-}23~\mathrm{m}$	1694	88
DTP1	History	8.2	$12\text{-}23~\mathrm{m}$	1694	88
DTP3	C or H $<$ 12 months	89.3	$12\text{-}23~\mathrm{m}$	1694	88
DTP3	Card	85	$12\text{-}23~\mathrm{m}$	1694	88
DTP3	Card or History	90.5	$12\text{-}23~\mathrm{m}$	1694	88
DTP3	History	5.6	$12\text{-}23~\mathrm{m}$	1694	88
HepB1	C or H $<$ 12 months	95.6	$12\text{-}23~\mathrm{m}$	1694	88
HepB1	Card	87.6	$12\text{-}23~\mathrm{m}$	1694	88
HepB1	Card or History	95.8	$12\text{-}23~\mathrm{m}$	1694	88
HepB1	History	8.2	$12\text{-}23~\mathrm{m}$	1694	88
HepB3	C or H $<$ 12 months	89.3	$12\text{-}23~\mathrm{m}$	1694	88
HepB3	Card	85	$12\text{-}23~\mathrm{m}$	1694	88
HepB3	Card or History	90.5	$12\text{-}23~\mathrm{m}$	1694	88
HepB3	History	5.6	$12\text{-}23~\mathrm{m}$	1694	88
Hib1	C or H $<$ 12 months	95.6	$12\text{-}23~\mathrm{m}$	1694	88
Hib1	Card	87.6	$12\text{-}23~\mathrm{m}$	1694	88
Hib1	Card or History	95.8	$12\text{-}23~\mathrm{m}$	1694	88
Hib1	History	8.2	$12\text{-}23~\mathrm{m}$	1694	88

Hib3	C or H <12 months	89.3	12-23 m	1694	88
Hib3	Card	85	12-23 m	1694	88
Hib3	Card or History	90.5	12-23 m	1694	88
Hib3	History	5.6	12-23 m	1694	88
MCV1	C or H <12 months	81.6	12-23 m	1694	88
MCV1	Card	79.4	12-23 m	1694	88
MCV1	Card or History	86.5	12-23 m	1694	88
MCV1	History	7.1	12-23 m	1694	88
MCV2	C or $H < 12$ months	71.9	$24-35 \mathrm{\ m}$	1754	88
MCV2	Card	63.3	$24-35 \mathrm{\ m}$	1754	88
MCV2	Card or History	72	$24-35 \mathrm{\ m}$	1754	88
MCV2	History	8.6	$24-35 \mathrm{\ m}$	1754	88
PCV1	C or \dot{H} <12 months	94.3	12-23 m	1694	88
PCV1	Card	87	12-23 m	1694	88
PCV1	Card or History	94.5	12-23 m	1694	88
PCV1	History	7.5	12-23 m	1694	88
PCV3	C or $H < 12$ months	88.9	12-23 m	1694	88
PCV3	Card	84.5	$12\text{-}23~\mathrm{m}$	1694	88
PCV3	Card or History	90.2	$12\text{-}23~\mathrm{m}$	1694	88
PCV3	History	5.7	$12\text{-}23~\mathrm{m}$	1694	88
Pol1	C or H $<$ 12 months	94.3	$12\text{-}23~\mathrm{m}$	1694	88
Pol1	Card	86.7	$12\text{-}23~\mathrm{m}$	1694	88
Pol1	Card or History	94.6	12-23 m	1694	88
Pol1	History	8	12-23 m	1694	88
Pol3	C or H $<$ 12 months	87.3	$12\text{-}23~\mathrm{m}$	1694	88
Pol3	Card	84.6	$12\text{-}23~\mathrm{m}$	1694	88
Pol3	Card or History	88.3	12-23 m	1694	88
Pol3	History	3.7	$12\text{-}23~\mathrm{m}$	1694	88
RotaC	C or H $<$ 12 months	91.7	$12\text{-}23~\mathrm{m}$	1694	88
RotaC	Card	85	$12\text{-}23~\mathrm{m}$	1694	88
RotaC	Card or History	91.9	$12\text{-}23~\mathrm{m}$	1694	88
RotaC	History	6.8	$12\text{-}23~\mathrm{m}$	1694	88
YFV	C or H $<$ 12 months	82.3	$12\text{-}23~\mathrm{m}$	1694	88
YFV	Card	76	$12\text{-}23~\mathrm{m}$	1694	88
YFV	Card or History	82.3	$12\text{-}23~\mathrm{m}$	1694	88
YFV	History	6.4	$12\text{-}23~\mathrm{m}$	1694	88

2015 Ghana Multiple Indicator Cluster Survey 2017-18

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen	PCV3	History	6.4	24-35 m	1754	88
BCG	C or H $<$ 12 months	90.6	24-35 m	1754	88	Pol1	C or \dot{H} <12 months	90.2	$24-35 \mathrm{\ m}$	1754	88
BCG	Card	78.4	$24-35 \mathrm{m}$	1754	88	Pol1	Card	79.1	$24-35 \mathrm{\ m}$	1754	88
BCG	Card or History	91	$24\text{-}35 \mathrm{\ m}$	1754	88	Pol1	Card or History	90.5	$24-35 \mathrm{\ m}$	1754	88
BCG	History	12.6	$24\text{-}35 \mathrm{\ m}$	1754	88	Pol1	History	11.3	$24-35 \mathrm{\ m}$	1754	88
DTP1	C or $H < 12$ months	90.9	$24-35 \mathrm{m}$	1754	88	Pol3	C or $H < 12$ months	82.1	$24-35 \mathrm{\ m}$	1754	88
DTP1	Card	79.6	$24-35 \mathrm{m}$	1754	88	Pol3	Card	77.9	$24-35 \mathrm{\ m}$	1754	88
DTP1	Card or History	91.3	$24-35 \mathrm{\ m}$	1754	88	Pol3	Card or History	83.3	$24-35 \mathrm{\ m}$	1754	88
DTP1	History	11.7	$24\text{-}35 \mathrm{\ m}$	1754	88	Pol3	History	5.3	$24-35 \mathrm{\ m}$	1754	88
DTP3	C or $H < 12$ months	84.8	$24\text{-}35~\mathrm{m}$	1754	88	RotaC	C or \dot{H} <12 months	87.5	$24\text{-}35~\mathrm{m}$	1754	88
DTP3	Card	78.4	$24-35 \mathrm{\ m}$	1754	88	RotaC	Card	78.8	$24-35 \mathrm{\ m}$	1754	88
DTP3	Card or History	85.9	$24\text{-}35~\mathrm{m}$	1754	88	RotaC	Card or History	88.1	$24-35 \mathrm{\ m}$	1754	88
DTP3	History	7.5	$24\text{-}35~\mathrm{m}$	1754	88	RotaC	History	9.3	$24\text{-}35~\mathrm{m}$	1754	88
HepB1	C or H <12 months	90.9	$24-35~\mathrm{m}$	1754	88	YFV	C or H <12 months	78.6	$24\text{-}35~\mathrm{m}$	1754	88
HepB1	Card	79.6	$24-35~\mathrm{m}$	1754	88	YFV	Card	74.1	$24\text{-}35~\mathrm{m}$	1754	88
HepB1	Card or History	91.3	$24\text{-}35~\mathrm{m}$	1754	88	YFV	Card or History	84.6	$24\text{-}35~\mathrm{m}$	1754	88
HepB1	History	11.7	$24\text{-}35~\mathrm{m}$	1754	88	YFV	History	10.5	$24\text{-}35~\mathrm{m}$	1754	88
HepB3	C or H < 12 months	84.8	$24\text{-}35~\mathrm{m}$	1754	88						
HepB3	Card	78.4	$24\text{-}35~\mathrm{m}$	1754	88	2012 (1	D 1:	1 77 1	41 G	0014	
HepB3	Card or History	85.9	$24\text{-}35~\mathrm{m}$	1754	88	2013 Gr	nana Demographic a	and Heal	th Survey,	2014	
HepB3	History	7.5	$24\text{-}35~\mathrm{m}$	1754	88						
Hib1	C or H $<$ 12 months	90.9	$24\text{-}35~\mathrm{m}$	1754	88	Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
Hib1	Card	79.6	$24\text{-}35~\mathrm{m}$	1754	88	BCG	C or H $<$ 12 months	96.6	12-23 m	1113	88
Hib1	Card or History	91.3	$24\text{-}35~\mathrm{m}$	1754	88	BCG	Card	86.8	12-23 m	982	88
Hib1	History	11.7	$24\text{-}35~\mathrm{m}$	1754	88	BCG	Card or History	96.8	12-23 m	1113	88
Hib3	C or H $<$ 12 months	84.8	$24\text{-}35~\mathrm{m}$	1754	88	BCG	History	10	12-23 m	132	88
Hib3	Card	78.4	$24\text{-}35~\mathrm{m}$	1754	88	DTP1	C or $H < 12$ months	96.5	12-23 m	1113	88
Hib3	Card or History	85.9	$24\text{-}35~\mathrm{m}$	1754	88	DTP1	Card	87.2	12-23 m	982	88
Hib3	History	7.5	$24\text{-}35~\mathrm{m}$	1754	88	DTP1	Card or History	96.6	12-23 m	1113	88
MCV1	C or H $<$ 12 months	80.3	$24\text{-}35~\mathrm{m}$	1754	88	DTP1	History	9.4	12-23 m	132	88
MCV1	Card	74.6	$24\text{-}35~\mathrm{m}$	1754	88	DTP3	C or $H < 12$ months	87.7	12-23 m	1113	88
MCV1	Card or History	85.8	$24\text{-}35~\mathrm{m}$	1754	88	DTP3	Card	84.4	12-23 m	982	88
MCV1	History	11.2	$24\text{-}35~\mathrm{m}$	1754	88	DTP3	Card or History	88.5	12-23 m	1113	88
PCV1	C or H < 12 months	89.8	$24\text{-}35~\mathrm{m}$	1754	88	DTP3	History	4.1	12-23 m	132	88
PCV1	Card	79.7	$24\text{-}35~\mathrm{m}$	1754	88	HepB1	C or \dot{H} <12 months	96.5	12-23 m	1113	88
PCV1	Card or History	90.1	$24\text{-}35~\mathrm{m}$	1754	88	HepB1	Card	87.2	12-23 m	982	88
PCV1	History	10.4	$24\text{-}35~\mathrm{m}$	1754	88	HepB1	Card or History	96.6	12-23 m	1113	88
PCV3	C or H $<$ 12 months	83	$24\text{-}35~\mathrm{m}$	1754	88	HepB1	History	9.4	$12\text{-}23~\mathrm{m}$	132	88
PCV3	Card	77.8	$24\text{-}35~\mathrm{m}$	1754	88	HepB3	C or $H < 12$ months	87.7	$12\text{-}23~\mathrm{m}$	1113	88
PCV3	Card or History	84.2	$24\text{-}35~\mathrm{m}$	1754	88	HepB3		84.4	$12\text{-}23~\mathrm{m}$	982	88
						-					

НерВ3	Card or History	88.5	12-23 m	1113	88
НерВ3	History	4.1	12-23 m 12-23 m	132	88
Hib1	C or H <12 months	96.5	12-23 m 12-23 m	1113	88
Hib1	Card	90.3 87.2	12-23 m	982	88
Hib1	Card or History	96.6	12-23 m 12-23 m	1113	88
Hib1	History	90.0	12-23 m	132	88
Hib3	C or H <12 months	9.4 87.7	12-23 m 12-23 m	$\frac{132}{1113}$	88
Hib3	C of 11 < 12 months Card	84.4	12-23 m 12-23 m	982	88
Hib3	0 0.12 0.7	88.5	12-23 m 12-23 m		
Hib3	Card or History History	66.5 4.1	12-23 m 12-23 m	$\frac{1113}{132}$	88 88
MCV1	C or H <12 months	82.5	12-23 m 12-23 m	1113	88
MCV1 MCV1	C or n <12 months Card	80.5	12-23 m 12-23 m	982	88
MCV1 MCV1	0 012 02		12-23 m 12-23 m		
	Card or History	89.3	12-23 m 12-23 m	$\frac{1113}{132}$	88
MCV1	History	8.8			88
MCV2	C or H <24 months	59.5	24-35 m	1090	88
PcV1	C or H <12 months	93.2	12-23 m	1113	88
PcV1	Card	85.1	12-23 m	982	88
PcV1	Card or History	93.3	12-23 m	1113	88
PcV1	History	8.2	12-23 m	132	88
PcV3	C or H <12 months	83	12-23 m	1113	88
PcV3	Card	80.3	12-23 m	982	88
PcV3	Card or History	84.2	12-23 m	1113	88
PcV3	History	3.9	12-23 m	132	88
Pol1	C or H <12 months	97	$12-23 \mathrm{m}$	1113	88
Pol1	Card	87.9	$12-23 \mathrm{m}$	982	88
Pol1	Card or History	97.1	12-23 m	1113	88
Pol1	History	9.2	12-23 m	132	88
Pol3	C or H $<$ 12 months	83.3	$12-23 \mathrm{m}$	1113	88
Pol3	Card	82.7	12-23 m	982	88
Pol3	Card or History	84	12-23 m	1113	88
Pol3	History	1.4	12-23 m	132	88
RotaC	C or H < 12 months	88.5	12-23 m	1113	88
RotaC	Card	82.5	12-23 m	982	88
RotaC	Card or History	88.7	$12\text{-}23 \mathrm{\ m}$	1113	88
RotaC	History	6.2	$12\text{-}23 \mathrm{\ m}$	132	88
YFV	C or H $<$ 12 months	79.1	$12\text{-}23~\mathrm{m}$	1113	88
YFV	Card	79.4	$12\text{-}23~\mathrm{m}$	982	88
YFV	Card or History	88	$12\text{-}23~\mathrm{m}$	1113	88
YFV	History	8.6	$12\text{-}23~\mathrm{m}$	132	88

2012 Ghana Demographic and Health Survey, 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	96.6	24-35 m	1090	88
BCG	Card	78.7	$24-35 \mathrm{m}$	872	88
BCG	Card or History	96.6	$24-35 \mathrm{m}$	1090	88
BCG	History	17.9	$24-35 \mathrm{m}$	218	88
DTP1	C or H <12 months	96.2	$24-35 \mathrm{\ m}$	1090	88
DTP1	Card	78.6	$24-35~\mathrm{m}$	872	88
DTP1	Card or History	96.4	$24\text{-}35~\mathrm{m}$	1090	88
DTP1	History	17.8	$24\text{-}35~\mathrm{m}$	218	88
DTP3	C or H $<$ 12 months	85.6	$24\text{-}35~\mathrm{m}$	1090	88
DTP3	Card	76.1	$24\text{-}35~\mathrm{m}$	872	88
DTP3	Card or History	85.8	$24\text{-}35~\mathrm{m}$	1090	88
DTP3	History	9.7	$24\text{-}35~\mathrm{m}$	218	88
HepB1	C or H $<$ 12 months	96.2	$24\text{-}35~\mathrm{m}$	1090	88
HepB1	Card	78.6	$24\text{-}35~\mathrm{m}$	872	88
HepB1	Card or History	96.4	$24\text{-}35~\mathrm{m}$	1090	88
HepB1	History	17.8	$24\text{-}35~\mathrm{m}$	218	88
HepB3	C or H $<$ 12 months	85.6	$24\text{-}35~\mathrm{m}$	1090	88
HepB3	Card	76.1	$24\text{-}35~\mathrm{m}$	872	88
HepB3	Card or History	85.8	$24\text{-}35~\mathrm{m}$	1090	88
HepB3	History	9.7	$24-35 \mathrm{m}$	218	88
Hib1	C or H $<$ 12 months	96.2	$24-35 \mathrm{m}$	1090	88
Hib1	Card	78.6	$24-35 \mathrm{m}$	872	88
Hib1	Card or History	96.4	$24-35 \mathrm{m}$	1090	88
Hib1	History	17.8	$24-35 \mathrm{m}$	218	88
Hib3	C or H < 12 months	85.6	$24-35 \mathrm{m}$	1090	88
Hib3	Card	76.1	$24-35 \mathrm{m}$	872	88
Hib3	Card or History	85.8	$24-35 \mathrm{m}$	1090	88
Hib3	History	9.7	$24-35 \mathrm{m}$	218	88
MCV1	C or H < 12 months	89.5	24-35 m	1090	88
MCV1	Card	72.8	24-35 m	872	88
MCV1	Card or History	90	$24-35 \mathrm{m}$	1090	88
MCV1	History	17.2	$24-35 \mathrm{m}$	218	88
MCV2	Card	51.5	24-35 m	872	88
MCV2	Card or History	63.2	$24-35 \mathrm{m}$	1090	88
MCV2	History	11.6	$24\text{-}35~\mathrm{m}$	218	88
PcV1	C or H $<$ 12 months	74.7	$24-35 \mathrm{m}$	1090	88
PcV1	Card	60.8	24-35 m	872	88

PcV1	Card or History	75	$24\text{-}35~\mathrm{m}$	1090	88
PcV1	History	14.3	$24\text{-}35~\mathrm{m}$	218	88
PcV3	C or H $<$ 12 months	60.8	$24\text{-}35~\mathrm{m}$	1090	88
PcV3	Card	52.9	$24\text{-}35~\mathrm{m}$	872	88
PcV3	Card or History	61.3	$24\text{-}35~\mathrm{m}$	1090	88
PcV3	History	8.3	$24\text{-}35~\mathrm{m}$	218	88
Pol1	C or H $<$ 12 months	96.2	$24\text{-}35~\mathrm{m}$	1090	88
Pol1	Card	79.3	$24\text{-}35~\mathrm{m}$	872	88
Pol1	Card or History	96.3	$24\text{-}35~\mathrm{m}$	1090	88
Pol1	History	17	$24\text{-}35~\mathrm{m}$	218	88
Pol3	C or H $<$ 12 months	79.9	$24\text{-}35~\mathrm{m}$	1090	88
Pol3	Card	75.8	$24\text{-}35~\mathrm{m}$	872	88
Pol3	Card or History	79.8	$24\text{-}35~\mathrm{m}$	1090	88
Pol3	History	3.9	$24\text{-}35~\mathrm{m}$	218	88
RotaC	C or H $<$ 12 months	65.6	$24\text{-}35~\mathrm{m}$	1090	88
RotaC	Card	54.9	$24\text{-}35~\mathrm{m}$	872	88
RotaC	Card or History	66.2	$24\text{-}35~\mathrm{m}$	1090	88
RotaC	History	11.3	$24\text{-}35~\mathrm{m}$	218	88
YFV	C or H $<$ 12 months	87	$24\text{-}35~\mathrm{m}$	1090	88
YFV	Card	71.8	$24\text{-}35~\mathrm{m}$	872	88
YFV	Card or History	87.7	$24\text{-}35~\mathrm{m}$	1090	88
YFV	History	15.9	$24\text{-}35~\mathrm{m}$	218	88

2011 Ghana EPI Cluster Survey 2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	96.3	12-23 m	300	98
BCG	Card or History	99.3	$12\text{-}23 \mathrm{\ m}$	300	98
DTP1	Card	97.8	$12\text{-}23~\mathrm{m}$	300	98
DTP1	Card or History	99.7	$12\text{-}23~\mathrm{m}$	300	98
DTP3	Card	95.3	$12\text{-}23~\mathrm{m}$	300	98
DTP3	Card or History	97	$12\text{-}23~\mathrm{m}$	300	98
HepB1	Card	97.8	$12\text{-}23~\mathrm{m}$	300	98
HepB1	Card or History	99.7	$12\text{-}23~\mathrm{m}$	300	98
HepB3	Card	95.3	$12\text{-}23~\mathrm{m}$	300	98
HepB3	Card or History	97	$12\text{-}23~\mathrm{m}$	300	98
Hib1	Card	97.8	$12\text{-}23~\mathrm{m}$	300	98
Hib1	Card or History	99.7	$12\text{-}23~\mathrm{m}$	300	98
Hib3	Card	95.3	12-23 m	300	98

Card or History	97	$12\text{-}23~\mathrm{m}$	300	98
Card	92	$12\text{-}23~\mathrm{m}$	300	98
Card or History	94	$12\text{-}23~\mathrm{m}$	300	98
Card	97.8	$12\text{-}23~\mathrm{m}$	300	98
Card or History	99.7	$12\text{-}23~\mathrm{m}$	300	98
Card	97	$12\text{-}23~\mathrm{m}$	300	98
Card or History	97	$12\text{-}23~\mathrm{m}$	300	98
Card	91.3	$12\text{-}23~\mathrm{m}$	300	98
Card or History	93.3	$12\text{-}23~\mathrm{m}$	300	98
	Card Card or History Card Card or History Card Card or History Card Card or History	Card 92 Card or History 94 Card 97.8 Card or History 99.7 Card 97 Card or History 97 Card 91.3	Card 92 12-23 m Card or History 94 12-23 m Card 97.8 12-23 m Card or History 99.7 12-23 m Card 97 12-23 m Card or History 97 12-23 m Card 91.3 12-23 m	Card 92 12-23 m 300 Card or History 94 12-23 m 300 Card 97.8 12-23 m 300 Card or History 99.7 12-23 m 300 Card 97 12-23 m 300 Card or History 97 12-23 m 300 Card 91.3 12-23 m 300

2010 Ghana Multiple Indicator Cluster Survey with an Enhanced Malaria Module and Biomarker 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	_	12-23 m	1453	89
BCG	Card	86.4	$12\text{-}23~\mathrm{m}$	_	89
BCG	Card or History	98.1	$12\text{-}23~\mathrm{m}$	1453	89
BCG	History	11.7	$12\text{-}23~\mathrm{m}$	-	89
DTP1	C or H $<$ 12 months	97.7	$12\text{-}23~\mathrm{m}$	1453	89
DTP1	Card	87.6	$12\text{-}23~\mathrm{m}$	-	89
DTP1	Card or History	98.4	$12\text{-}23~\mathrm{m}$	1453	89
DTP1	History	10.8	$12\text{-}23~\mathrm{m}$	-	89
DTP3	C or H <12 months	92.1	$12\text{-}23~\mathrm{m}$	1453	89
DTP3	Card	85.3	$12\text{-}23~\mathrm{m}$	-	89
DTP3	Card or History	92.9	$12\text{-}23~\mathrm{m}$	1453	89
DTP3	History	7.6	$12\text{-}23~\mathrm{m}$	-	89
HepB1	C or H $<$ 12 months	97.7	$12\text{-}23~\mathrm{m}$	1453	89
HepB1	Card	87.6	$12\text{-}23~\mathrm{m}$	-	89
HepB1	Card or History	98.4	$12\text{-}23~\mathrm{m}$	1453	89
HepB1	History	10.8	$12\text{-}23~\mathrm{m}$	-	89
HepB3	C or H $<$ 12 months	92.1	$12\text{-}23~\mathrm{m}$	1453	89
HepB3	Card	85.3	$12\text{-}23~\mathrm{m}$	-	89
HepB3	Card or History	92.9	$12\text{-}23~\mathrm{m}$	1453	89
HepB3	History	7.6	$12\text{-}23~\mathrm{m}$	-	89
Hib1	C or H $<$ 12 months	97.7	$12\text{-}23~\mathrm{m}$	1453	89
Hib1	Card	87.6	$12\text{-}23~\mathrm{m}$	-	89
Hib1	Card or History	98.4	$12\text{-}23 \mathrm{\ m}$	1453	89
Hib1	History	10.8	$12\text{-}23~\mathrm{m}$	-	89
Hib3	C or H <12 months	92.1	$12\text{-}23~\mathrm{m}$	1453	89

Hib3	Card	85.3	12-23 m	_	89
Hib3	Card or History	92.9	12-23 m	1453	89
Hib3	History	7.6	12-23 m	_	89
MCV1	C or $H < 12$ months	88.5	$12\text{-}23~\mathrm{m}$	1453	89
MCV1	Card	80.7	12-23 m	_	89
MCV1	Card or History	93.7	12-23 m	1453	89
MCV1	History	13.1	$12\text{-}23~\mathrm{m}$	-	89
Pol1	C or H < 12 months	98	$12\text{-}23~\mathrm{m}$	1453	89
Pol1	Card	87.1	$12\text{-}23~\mathrm{m}$	-	89
Pol1	Card or History	98.6	$12\text{-}23~\mathrm{m}$	1453	89
Pol1	History	11.5	$12\text{-}23~\mathrm{m}$	-	89
Pol3	C or H $<$ 12 months	90.7	$12\text{-}23~\mathrm{m}$	1453	89
Pol3	Card	84.9	$12\text{-}23~\mathrm{m}$	-	89
Pol3	Card or History	91.2	$12\text{-}23~\mathrm{m}$	1453	89
Pol3	History	6.4	$12\text{-}23~\mathrm{m}$	-	89
YFV	C or H $<$ 12 months	88.3	$12\text{-}23~\mathrm{m}$	1453	89
YFV	Card	81.2	$12\text{-}23~\mathrm{m}$	-	89
YFV	Card or History	93.8	$12\text{-}23~\mathrm{m}$	1453	89
YFV	History	12.5	$12\text{-}23~\mathrm{m}$	-	89

2007Ghana Demographic and Health Survey 2008

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	95.6	12-23 m	552	86
BCG	Card	83	$12\text{-}23~\mathrm{m}$	552	86
BCG	Card or History	95.8	$12\text{-}23~\mathrm{m}$	552	86
BCG	History	12.8	$12\text{-}23~\mathrm{m}$	552	86
DTP1	C or H $<$ 12 months	97.6	$12\text{-}23~\mathrm{m}$	552	86
DTP1	Card	85.1	$12\text{-}23~\mathrm{m}$	552	86
DTP1	Card or History	98	$12\text{-}23~\mathrm{m}$	552	86
DTP1	History	13	$12\text{-}23 \mathrm{\ m}$	552	86
DTP3	C or H $<$ 12 months	87.7	$12\text{-}23~\mathrm{m}$	552	86
DTP3	Card	82	$12\text{-}23~\mathrm{m}$	552	86
DTP3	Card or History	88.8	$12\text{-}23~\mathrm{m}$	552	86
DTP3	History	6.8	$12\text{-}23 \mathrm{\ m}$	552	86
MCV1	C or H $<$ 12 months	79.9	$12\text{-}23~\mathrm{m}$	552	86
MCV1	Card	79.3	$12\text{-}23~\mathrm{m}$	552	86
MCV1	Card or History	90.2	$12\text{-}23 \mathrm{\ m}$	552	86
MCV1	History	10.9	12-23 m	552	86

Pol1	C or H $<$ 12 months	96.8	12-23 m	552	86
Pol1	Card	85.1	$12\text{-}23~\mathrm{m}$	552	86
Pol1	Card or History	97.2	$12\text{-}23~\mathrm{m}$	552	86
Pol1	History	12.2	$12\text{-}23~\mathrm{m}$	552	86
Pol3	C or H $<$ 12 months	84.7	$12\text{-}23~\mathrm{m}$	552	86
Pol3	Card	81.4	$12\text{-}23~\mathrm{m}$	552	86
Pol3	Card or History	86.4	12-23 m	552	86
Pol3	History	5.1	$12\text{-}23~\mathrm{m}$	552	86
YFV	C or H $<$ 12 months	77.8	12-23 m	552	86
YFV	Card	78.9	12-23 m	552	86
YFV	Card or History	89.1	12-23 m	552	86
YFV	History	10.2	12-23 m	552	86

2005 Ghana Multiple Indicator Cluster Survey 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	94.2	$12\text{-}23 \mathrm{\ m}$	706	85
BCG	Card	83.4	$12\text{-}23 \mathrm{\ m}$	706	85
BCG	Card or History	94.3	$12\text{-}23 \mathrm{\ m}$	706	85
BCG	History	10.8	$12\text{-}23 \mathrm{\ m}$	706	85
DTP1	C or H $<$ 12 months	93.8	$12\text{-}23 \mathrm{\ m}$	706	85
DTP1	Card	84	$12\text{-}23 \mathrm{\ m}$	706	85
DTP1	Card or History	94.2	$12\text{-}23~\mathrm{m}$	706	85
DTP1	History	10.2	$12\text{-}23~\mathrm{m}$	706	85
DTP3	C or H $<$ 12 months	81.4	$12\text{-}23~\mathrm{m}$	706	85
DTP3	Card	77.8	$12\text{-}23~\mathrm{m}$	706	85
DTP3	Card or History	83.5	$12\text{-}23~\mathrm{m}$	706	85
DTP3	History	5.7	$12\text{-}23~\mathrm{m}$	706	85
HepB1	C or H $<$ 12 months	93.8	$12\text{-}23~\mathrm{m}$	706	85
HepB1	Card	84	$12\text{-}23~\mathrm{m}$	706	85
HepB1	Card or History	94.2	$12\text{-}23~\mathrm{m}$	706	85
HepB1	History	10.2	$12\text{-}23~\mathrm{m}$	706	85
HepB3	C or H < 12 months	81.4	$12\text{-}23~\mathrm{m}$	706	85
HepB3	Card	77.8	$12\text{-}23~\mathrm{m}$	706	85
HepB3	Card or History	83.5	$12\text{-}23~\mathrm{m}$	706	85
HepB3	History	5.7	$12\text{-}23~\mathrm{m}$	706	85
Hib1	C or H $<$ 12 months	93.8	$12\text{-}23~\mathrm{m}$	706	85
Hib1	Card	84	$12\text{-}23~\mathrm{m}$	706	85
Hib1	Card or History	94.2	$12\text{-}23~\mathrm{m}$	706	85

Hib1	History	10.2	$12\text{-}23~\mathrm{m}$	706	85
Hib3	C or H $<$ 12 months	81.4	$12\text{-}23~\mathrm{m}$	706	85
Hib3	Card	77.8	$12\text{-}23~\mathrm{m}$	706	85
Hib3	Card or History	83.5	12-23 m	706	85
Hib3	History	5.7	$12\text{-}23~\mathrm{m}$	706	85
MCV1	C or H $<$ 12 months	77.7	12-23 m	706	85
MCV1	Card	74.5	12-23 m	706	85
MCV1	Card or History	85.4	12-23 m	706	85
MCV1	History	10.9	$12\text{-}23~\mathrm{m}$	706	85
Pol1	C or H $<$ 12 months	95.8	$12\text{-}23~\mathrm{m}$	706	85
Pol1	Card	83.9	$12\text{-}23~\mathrm{m}$	706	85
Pol1	Card or History	96.2	12-23 m	706	85
Pol1	History	12.3	$12\text{-}23 \mathrm{\ m}$	706	85
Pol3	C or H $<$ 12 months	80.1	$12\text{-}23~\mathrm{m}$	706	85
Pol3	Card	76.4	$12\text{-}23~\mathrm{m}$	706	85
Pol3	Card or History	82.4	12-23 m	706	85
Pol3	History	6.1	$12\text{-}23~\mathrm{m}$	706	85
YFV	C or H $<$ 12 months	76.7	$12\text{-}23~\mathrm{m}$	706	85
YFV	Card	73.9	$12\text{-}23~\mathrm{m}$	706	85
YFV	Card or History	84.4	12-23 m	706	85
YFV	History	10.5	$12\text{-}23~\mathrm{m}$	706	85

2002 Ghana National Demographic and Health Survey 2003

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	90	$12\text{-}23~\mathrm{m}$	695	83
BCG	Card	79.2	$12\text{-}23 \mathrm{\ m}$	695	83
BCG	Card or history	91.1	$12\text{-}23~\mathrm{m}$	695	83
BCG	History	12	$12\text{-}23~\mathrm{m}$	695	83
DTP1	C or H $<$ 12 months	90	$12\text{-}23~\mathrm{m}$	695	83
DTP1	Card	80.5	$12\text{-}23~\mathrm{m}$	695	83
DTP1	Card or history	90.8	$12\text{-}23~\mathrm{m}$	695	83
DTP1	History	10.4	$12\text{-}23 \mathrm{\ m}$	695	83
DTP3	C or H <12 months	76.9	$12\text{-}23~\mathrm{m}$	695	83
DTP3	Card	74.5	$12\text{-}23~\mathrm{m}$	695	83
DTP3	Card or history	79.5	12-23 m	695	83

DTP3	History	5	12-23 m	695	83
MCV1	C or $H < 12$ months	68.8	$12\text{-}23~\mathrm{m}$	695	83
MCV1	Card	74	$12\text{-}23~\mathrm{m}$	695	83
MCV1	Card or history	83.2	$12\text{-}23 \mathrm{\ m}$	695	83
MCV1	History	9.2	$12\text{-}23~\mathrm{m}$	695	83
Pol1	C or H < 12 months	92.2	$12\text{-}23~\mathrm{m}$	695	83
Pol1	Card	81.5	$12\text{-}23~\mathrm{m}$	695	83
Pol1	Card or history	93	$12\text{-}23 \mathrm{\ m}$	695	83
Pol1	History	11.5	$12\text{-}23~\mathrm{m}$	695	83
Pol3	C or H $<$ 12 months	75.9	$12\text{-}23~\mathrm{m}$	695	83
Pol3	Card	74.3	$12\text{-}23~\mathrm{m}$	695	83
Pol3	Card or history	79.2	$12\text{-}23~\mathrm{m}$	695	83
Pol3	History	4.9	$12\text{-}23~\mathrm{m}$	695	83
YFV	C or H $<$ 12 months	58.5	$12\text{-}23~\mathrm{m}$	695	83
YFV	Card	68.6	$12\text{-}23~\mathrm{m}$	695	83
YFV	Card or history	76.6	$12\text{-}23~\mathrm{m}$	695	83
YFV	History	8	$12\text{-}23~\mathrm{m}$	695	83

1997 Ghana Demographic and Health Survey 1998

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	85.9	$12\text{-}23 \mathrm{\ m}$	1193	76
BCG	Card or History	84.4	$12\text{-}23 \mathrm{\ m}$	1193	76
DTP1	C or H $<$ 12 months	87.7	$12\text{-}23 \mathrm{\ m}$	1193	76
DTP1	Card or History	82.4	$12\text{-}23 \mathrm{\ m}$	1193	76
DTP3	C or H $<$ 12 months	67.6	$12\text{-}23 \mathrm{\ m}$	1193	76
DTP3	Card or History	59.3	$12\text{-}23~\mathrm{m}$	1193	76
MCV1	C or H $<$ 12 months	60.9	$12\text{-}23~\mathrm{m}$	1193	76
MCV1	Card or History	57.5	$12\text{-}23~\mathrm{m}$	1193	76
Pol1	C or H $<$ 12 months	89.8	$12\text{-}23~\mathrm{m}$	1193	76
Pol1	Card or History	85.2	$12\text{-}23~\mathrm{m}$	1193	76
Pol3	C or H $<$ 12 months	67.1	$12\text{-}23~\mathrm{m}$	1193	76
Pol3	Card or History	58.3	$12\text{-}23~\mathrm{m}$	1193	76
YFV	C or H $<$ 12 months	38.9	$12\text{-}23~\mathrm{m}$	1193	76
YFV	Card or History	39.5	$12\text{-}23~\mathrm{m}$	1193	76

Further information and estimates for previous years are available at:

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

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