

**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. Coverage estimates are based on WHO and UNICEF estimates of coverage for the dose of measles containing vaccine that corresponds to the first measles-rubella combination vaccine. Nationally reported coverage of RCV is not taken into consideration nor are the data represented in the accompanying graph and data table.

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

**HepB3:** percentage of surviving infants who received the 3rd dose of hepatitis B containing vaccine following the birth dose.

**Hib3:** percentage of surviving infants who received the 3rd dose of Haemophilus influenzae type b containing vaccine.

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

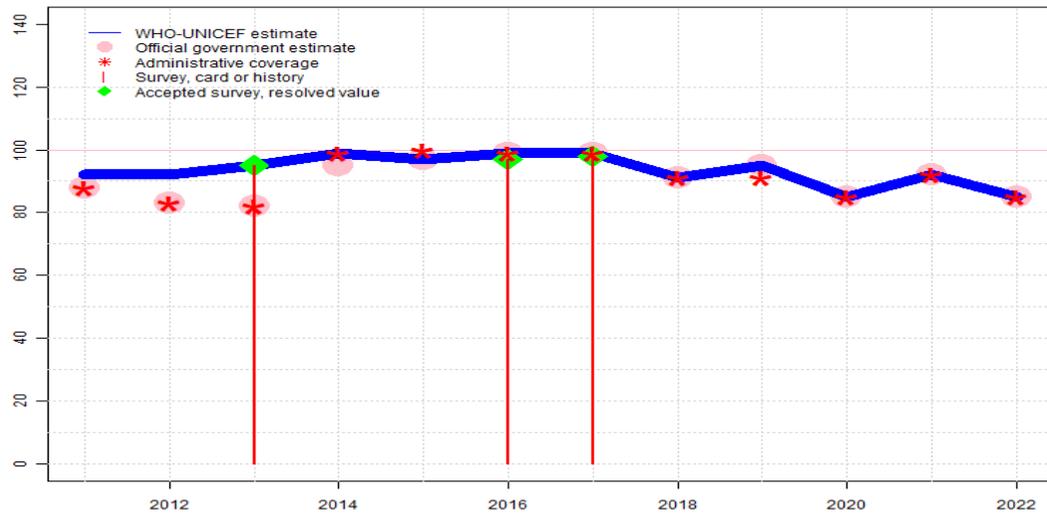
**PcV3:** percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect the percentage of surviving infants who received two doses of PcV prior to the 1st birthday.

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

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# Zambia - BCG

ZMB - BCG



## Description:

- 2022: Estimate informed by reported data. Decline in reported coverage partially explained by a 7.9 percent increase in reported target population from 2021 to 2022. Programme notes that the target population is extrapolated from the 2010 census. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Programme reports a one and one-half month vaccine stockout at national and subnational levels. Estimated coverage may overestimate actual coverage. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Programme reports vaccine stockout of half a month. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. GoC=Assigned by working group. Consistency with GoC for other vaccine doses.
- 2018: Estimate informed by reported data. GoC=R+ S+ D+
- 2017: Estimate informed by reported data supported by survey. Survey evidence of 98 percent based on 1 survey(s). GoC=R+ S+ D+
- 2016: Estimate informed by reported administrative data supported by survey. Survey evidence of 97 percent based on 1 survey(s). Reported official government estimates are based on unexplained adjustments to the administrative coverage. GoC=R+ S+ D+
- 2015: Estimate based on reported data. Estimate challenged by: D-
- 2014: Reported data calibrated to 2013 and 2015 levels. Official reported estimate is based on the results of the 2014 Demographic and Health Survey. Estimate challenged by: R-
- 2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 95 percent based on 1 survey(s). Estimate challenged by: R-
- 2012: Reported data calibrated to 2010 and 2013 levels. Estimate challenged by: R-
- 2011: Reported data calibrated to 2010 and 2013 levels. Estimate challenged by: R-

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	92	92	95	99	97	99	99	91	95	85	92	85
Estimate GoC	•	•	•	•	•	•••	•••	•••	•	•	•	•
Official	88	83	82	95	97	99	99	91	95	85	92	85
Administrative	88	83	82	99	100	99	99	91	91	85	92	85
Survey	NA	NA	95	NA	NA	97	98	NA	NA	NA	NA	NA

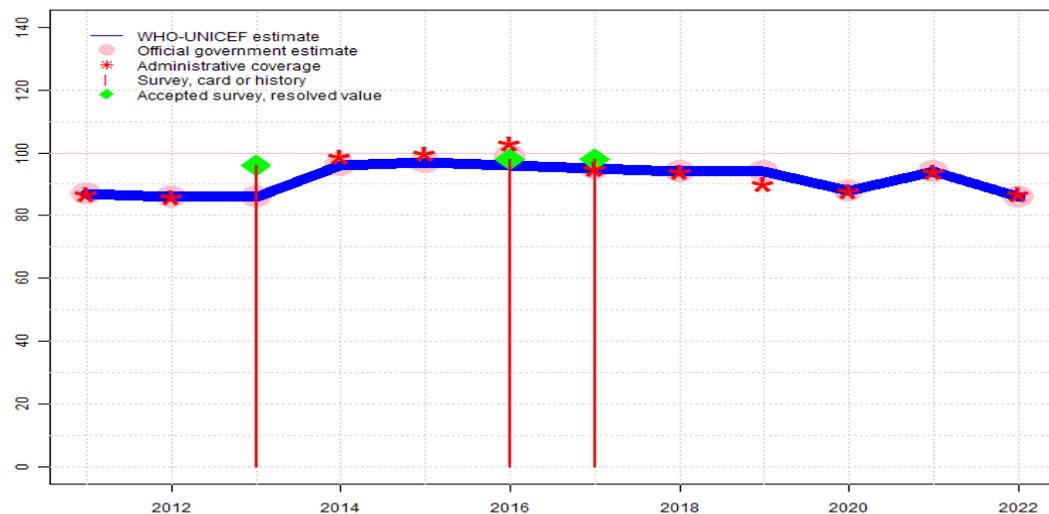
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Zambia - DTP1

ZMB - DTP1



## Description:

- 2022: Estimate informed by reported data. Decline in reported coverage partially explained by a 7.9 percent increase in reported target population from 2021 to 2022. Programme notes that the target population is extrapolated from the 2010 census. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. GoC=R+ S+ D+
- 2018: Estimate informed by reported data. GoC=R+ S+ D+
- 2017: Estimate based on reported data. Estimate challenged by: D-
- 2016: Estimate informed by interpolation between reported data supported by survey. Survey evidence of 98 percent based on 1 survey(s). Reported data excluded because 103 percent greater than 100 percent. Reported official government estimates are based on unexplained adjustments to the administrative coverage. Estimate challenged by: D-
- 2015: Estimate based on reported data. Estimate challenged by: D-
- 2014: Estimate informed by reported data. Official reported estimate is based on the results of the 2014 Demographic and Health Survey. GoC=R+ S+ D+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 96 percent based on 1 survey(s). GoC=R+ S+
- 2012: Estimate informed by reported data. Estimate challenged by: S-
- 2011: Estimate informed by reported data. Estimate challenged by: S-

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	87	86	86	96	97	96	95	94	94	88	94	86
Estimate GoC	•	•	••	•••	•	•	•	•••	•••	•	•	•
Official	87	86	86	96	97	99	95	94	94	88	94	86
Administrative	87	86	NA	99	100	103	95	94	90	88	94	87
Survey	NA	NA	96	NA	NA	98	98	NA	NA	NA	NA	NA

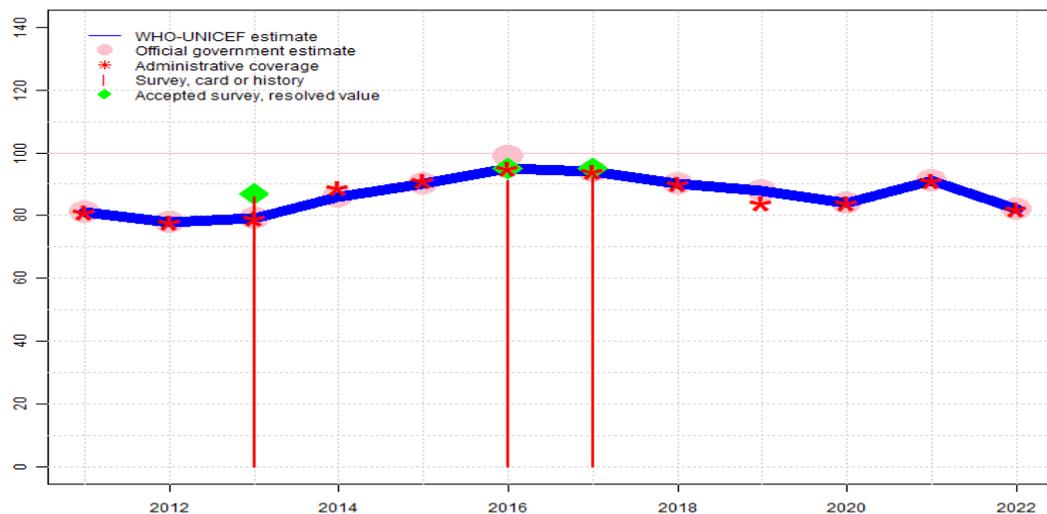
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Zambia - DTP3

ZMB - DTP3



## Description:

2022: Estimate informed by reported data. Decline in reported coverage partially explained by a 7.9 percent increase in reported target population from 2021 to 2022. Programme notes that the target population is extrapolated from the 2010 census. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate challenged by: D-

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

2019: Estimate informed by reported data. GoC=R+ S+ D+

2018: Estimate informed by reported data. GoC=R+ S+ D+

2017: Estimate based on reported data. Zambia Demographic and Health Survey 2018 card or history results of 92 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 76 percent and 3rd dose card only coverage of 74 percent. 2018 DHS Key Indicators Report coverage of 92. GoC=R+ S+ D+

2016: Estimate informed by reported administrative data supported by survey. Survey evidence of 95 percent based on 1 survey(s). Zambia Demographic and Health Survey 2018 card or history results of 91 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 67 percent and 3rd dose card only coverage of 65 percent. Reported official government estimates are based on unexplained adjustments to the administrative coverage. Unexplained increase in reported coverage data. GoC=R+ S+ D+

2015: Estimate based on reported data. GoC=R+ S+ D+

2014: Estimate informed by reported data. Official reported estimate is based on the results of the 2014 Demographic and Health Survey. GoC=R+ S+ D+

2013: Estimate informed by reported data supported by survey. Survey evidence of 87 percent based on 1 survey(s). Zambia Demographic and Health Survey, 2013-14 card or history results of 86 percent modified for recall bias to 87 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 72 percent. Estimate challenged by: D-

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

2011: Estimate informed by reported data. Estimate challenged by: S-

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	81	78	79	86	90	95	94	90	88	84	91	82
Estimate GoC	●	●	●	●●●	●●●	●●●	●●●	●●●	●●●	●	●	●
Official	81	78	79	86	90	99	94	90	88	84	91	82
Administrative	81	78	79	89	91	95	94	90	84	84	91	82
Survey	NA	NA	86	NA	NA	91	92	NA	NA	NA	NA	NA

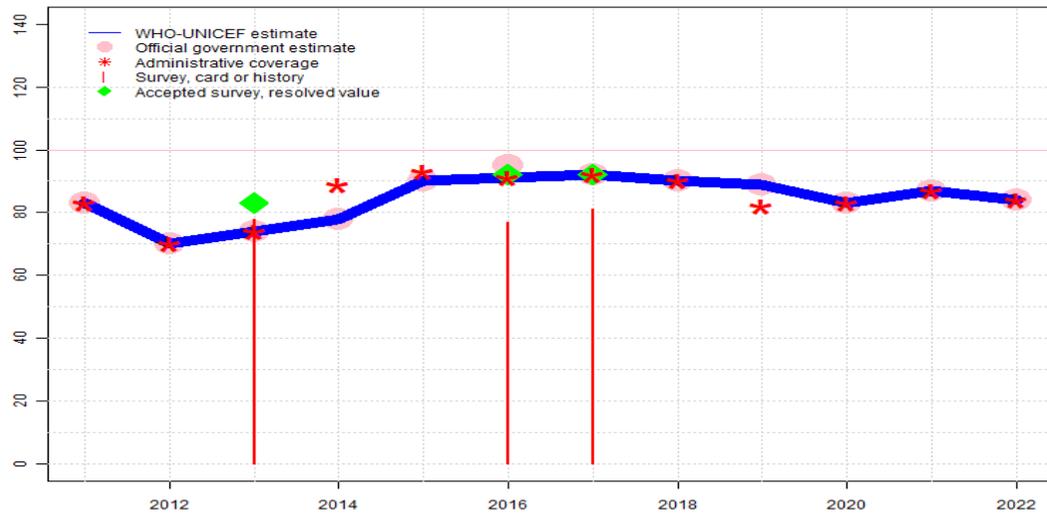
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Zambia - Pol3

ZMB - Pol3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	83	70	74	78	90	91	92	90	89	83	87	84
Estimate GoC	●	●	●	●	●●●	●●●	●●●	●●●	●	●	●	●
Official	83	70	74	78	90	95	92	90	89	83	87	84
Administrative	83	70	74	89	93	91	92	90	82	83	87	84
Survey	NA	NA	78	NA	NA	77	81	NA	NA	NA	NA	NA

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

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

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

## Description:

2022: Estimate informed by reported data. Decline in reported coverage partially explained by a 7.9 percent increase in reported target population from 2021 to 2022. Programme notes that the target population is extrapolated from the 2010 census. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate challenged by: D-

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

2019: Estimate informed by reported data. GoC=Assigned by working group. Consistency with other antigens.

2018: Estimate informed by reported data. Programme reports vaccine stockout of unspecified duration. GoC=R+ S+ D+

2017: Estimate based on reported data. Zambia Demographic and Health Survey 2018 card or history results of 81 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 76 percent and 3rd dose card only coverage of 73 percent. GoC=R+ S+ D+

2016: Estimate informed by reported administrative data supported by survey. Survey evidence of 92 percent based on 1 survey(s). Zambia Demographic and Health Survey 2018 card or history results of 77 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 67 percent and 3rd dose card only coverage of 64 percent. Reported official government estimates are based on unexplained adjustments to the administrative coverage. Unexplained increase in reported coverage data. GoC=R+ S+ D+

2015: Estimate based on reported data. Vaccine to vaccine consistency. GoC=R+ S+ D+

2014: Estimate informed by reported data. Official reported estimate is based on the results of the 2014 Demographic and Health Survey. Estimate challenged by: D-S-

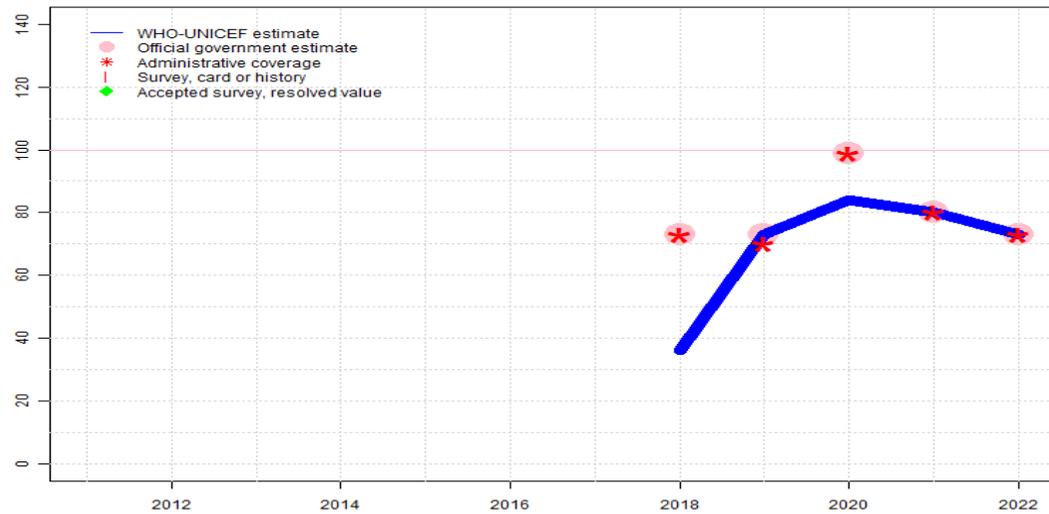
2013: Estimate informed by reported data supported by survey. Survey evidence of 83 percent based on 1 survey(s). Zambia Demographic and Health Survey, 2013-14 card or history results of 78 percent modified for recall bias to 83 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 80 percent and 3rd dose card only coverage of 69 percent. Estimate challenged by: D-

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

2011: Estimate informed by reported data. Estimate challenged by: S-

# Zambia - IPV1

ZMB - IPV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	36	73	84	80	73						
Estimate GoC	NA	•	•	•	•	•						
Official	NA	73	73	99	80	73						
Administrative	NA	73	70	99	80	73						
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:

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. Decline in reported coverage partially explained by a 7.9 percent increase in reported target population from 2021 to 2022. Programme notes that the target population is extrapolated from the 2010 census. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Programme reports less than one half month vaccine stockout at national level. Estimate challenged by: D-

2021: Estimate informed by reported data. Estimate challenged by: D-

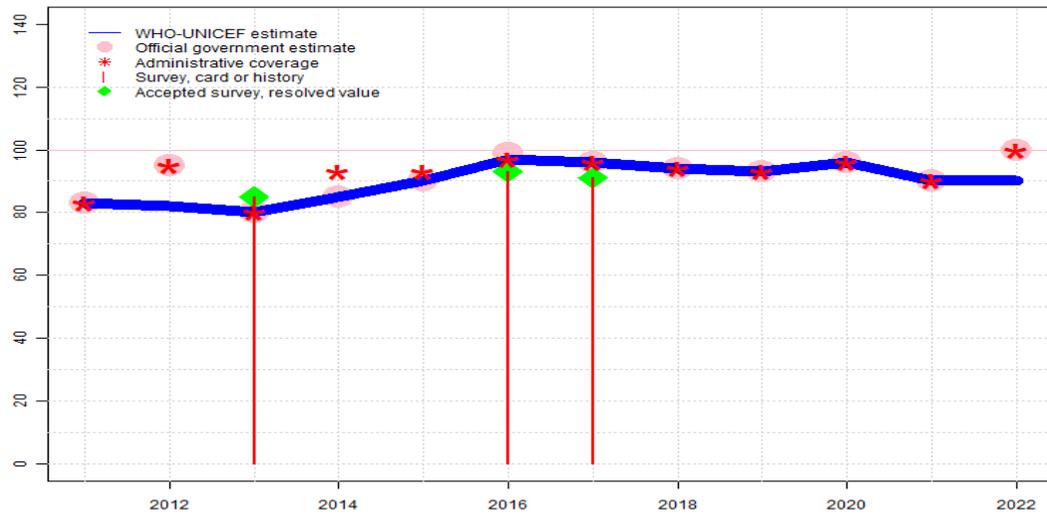
2020: Estimate based on DTP3 coverage estimates. This may underestimate IPV coverage given intensification of vaccination activities conducted in 2020 with a focus on children aged 3 to 59 months for IPV. Reported data excluded due to an increase from 73 percent to 99 percent with decrease 80 percent. Estimate challenged by: D-R-

2019: Estimate based on reported data following introduction. Estimate challenged by: R-

2018: Programme reports 73 percent coverage achieved among 50 percent of the target population. Estimate based on that achieved in the annualized national target population. Inactivated polio vaccine introduced in 2018. Programme reports IPV stockout for unspecified period of time. Estimate challenged by: R-

# Zambia - MCV1

ZMB - MCV1



## Description:

- 2022: Estimate based on extrapolation from data reported by national government. Reported data excluded. Unexplained and inconsistent trend in reported measles coverage between first and second dose. Decline in reported coverage partially explained by a 7.9 percent increase in reported target population from 2021 to 2022. Programme notes that the target population is extrapolated from the 2010 census. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-
- 2021: Estimate informed by reported data. 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. Programme reports vaccine stockout of unspecified duration. GoC=R+ S+ D+
- 2017: Estimate based on reported data. GoC=R+ S+ D+
- 2016: Estimate informed by reported administrative data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Reported official government estimates are based on unexplained adjustments to the administrative coverage. Unexplained increase in reported coverage data. GoC=R+ S+ D+
- 2015: Estimate based on reported data. GoC=R+ S+ D+
- 2014: Estimate informed by reported data. Official reported estimate is based on the results of the 2014 Demographic and Health Survey. Estimate challenged by: D-
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 85 percent based on 1 survey(s). Estimate challenged by: D-
- 2012: Estimate informed by interpolation between reported data. Reported data excluded due to an increase from 83 percent to 95 percent with decrease 80 percent. Reported coverage likely includes doses administered during national supplemental activities. Estimate challenged by: D-
- 2011: Estimate informed by reported data. Estimate is based on reported data to maintain consistency with other antigens. GoC=R+ S+ D+

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	83	82	80	85	90	97	96	94	93	96	90	90
Estimate GoC	●●●	●	●	●	●●●	●●●	●●●	●●●	●	●	●	●
Official	83	95	80	85	90	99	96	94	93	96	90	100
Administrative	83	95	80	93	93	97	96	94	93	96	90	100
Survey	NA	NA	85	NA	NA	93	91	NA	NA	NA	NA	NA

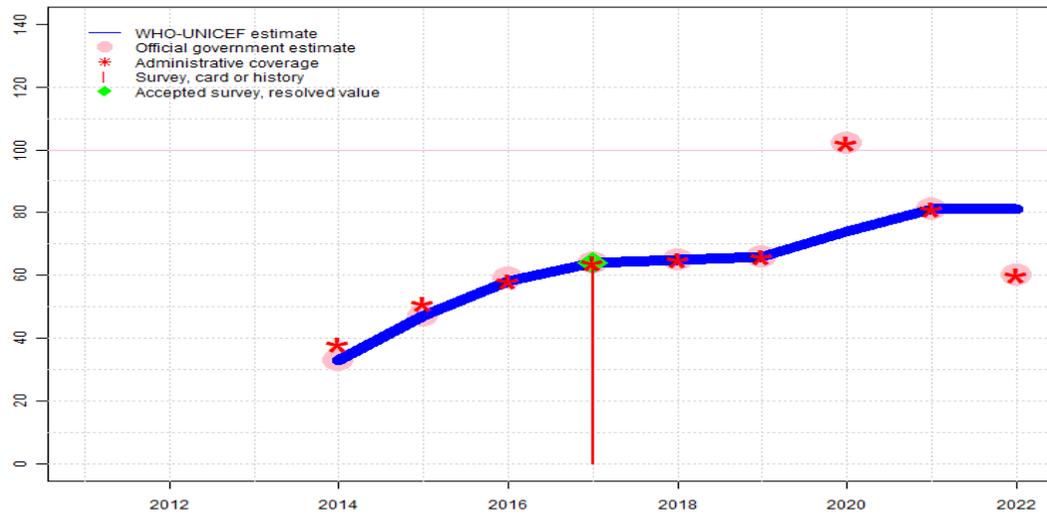
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Zambia - MCV2

ZMB - MCV2



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	33	47	58	64	65	66	74	81	81
Estimate GoC	NA	NA	NA	••	•	•••	•••	•••	•••	•	••	••
Official	NA	NA	NA	33	47	59	64	65	66	102	81	60
Administrative	NA	NA	NA	38	51	58	64	65	66	102	81	60
Survey	NA	NA	NA	NA	NA	NA	64	NA	NA	NA	NA	NA

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

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

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

## Description:

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

2022: Estimate based on extrapolation from data reported by national government. Reported data excluded. Unexplained and inconsistent trend in reported measles coverage between first and second dose. Reported data excluded due to sudden change in coverage from 81 level to 60 percent. Decline in reported coverage partially explained by a 7.9 percent increase in reported target population from 2021 to 2022. Programme notes that the target population is extrapolated from the 2010 census. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. GoC=R+ D+

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

2020: Estimate informed by interpolation between reported data. Reported data excluded. Reported data includes doses administered during intensification of vaccination activities conducted in 2020. Reported data excluded because 102 percent greater than 100 percent. Reported data excluded due to an increase from 66 percent to 102 percent with decrease 81 percent. Estimate challenged by: D-

2019: Estimate informed by reported data. GoC=R+ S+ D+

2018: Estimate informed by reported data. Programme reports vaccine stockout of unspecified duration. GoC=R+ S+ D+

2017: Estimate informed by reported data supported by survey. Survey evidence of 64 percent based on 1 survey(s). GoC=R+ S+ D+

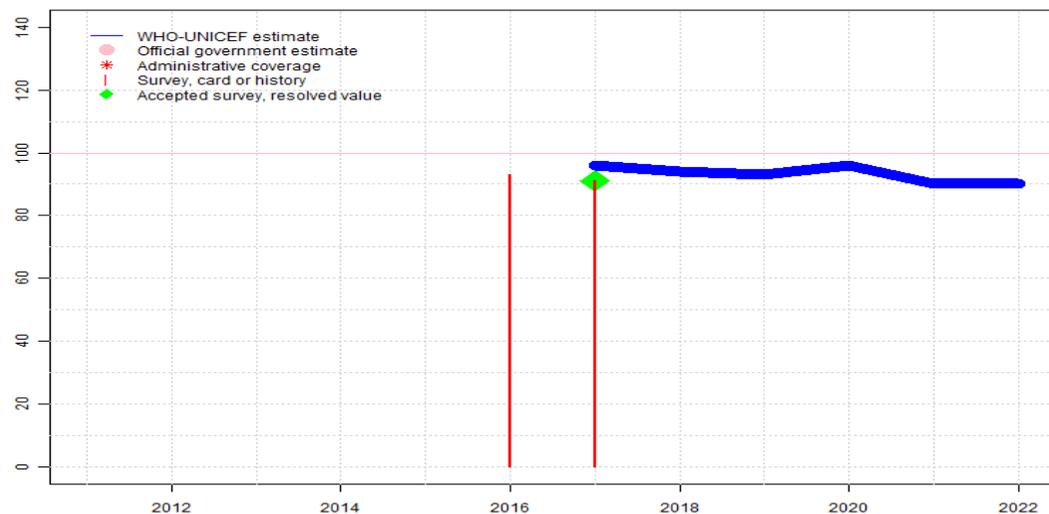
2016: Estimate informed by reported data. Estimate is based on reported data following introduction. Reported official government estimates are based on unexplained adjustments to the administrative coverage. GoC=R+ S+ D+

2015: Estimate informed by reported data. Increase following introduction. Estimate challenged by: S-

2014: Estimate informed by reported data. Official reported estimate is based on the results of the 2014 Demographic and Health Survey. Second dose of measles containing vaccine introduced during 2014. GoC=R+ D+

# Zambia - RCV1

ZMB - RCV1



## 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. Decline in reported coverage partially explained by a 7.9 percent increase in reported target population from 2021 to 2022. Programme notes that the target population is extrapolated from the 2010 census. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-

2021: Estimate based on estimated MCV1. Estimate challenged by: D-

2020: Estimate based on estimated MCV1. Estimate challenged by: D-

2019: Estimate based on estimated MCV1. Estimate challenged by: D-

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

2017: Estimate based on estimated MCV1. Rubella containing vaccine introduced in 2017 as Measles-Rubella vaccine. 2018 DHS Key Indicators Report coverage of 91. GoC=R+ S+ D+

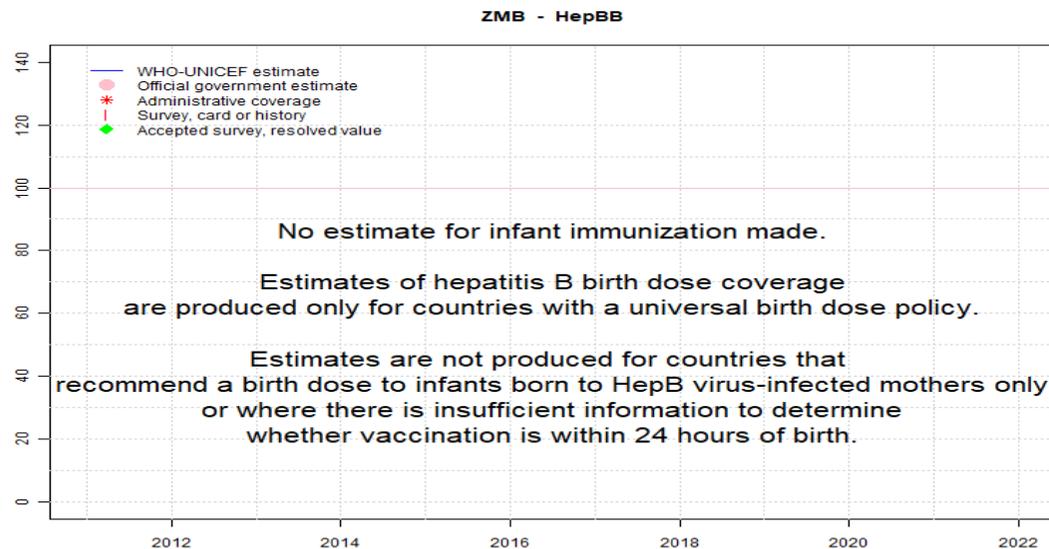
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	NA	96	94	93	96	90	90
Estimate GoC	NA	NA	NA	NA	NA	NA	●●●	●●●	●	●	●	●
Official	NA											
Administrative	NA											
Survey	NA	NA	NA	NA	NA	93	91	NA	NA	NA	NA	NA

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.

# Zambia - HepBB



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

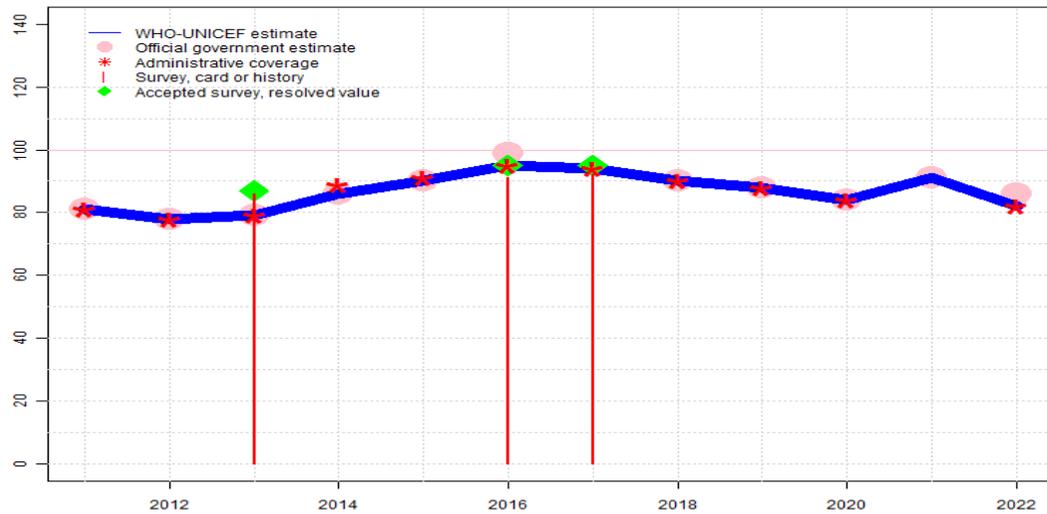
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Zambia - HepB3

ZMB - HepB3



## Description:

2022: Estimate informed by estimated DTP3 coverage for consistency. Decline in reported coverage partially explained by a 7.9 percent increase in reported target population from 2021 to 2022. Programme notes that the target population is extrapolated from the 2010 census. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-R-

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

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

2019: Estimate informed by reported data. GoC=R+ S+ D+

2018: Estimate informed by reported data. GoC=R+ S+ D+

2017: Estimate based on reported data. Zambia Demographic and Health Survey 2018 card or history results of 92 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 76 percent and 3rd dose card only coverage of 74 percent. GoC=R+ S+ D+

2016: Estimate informed by reported administrative data supported by survey. Survey evidence of 95 percent based on 1 survey(s). Zambia Demographic and Health Survey 2018 card or history results of 91 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 67 percent and 3rd dose card only coverage of 65 percent. Reported official government estimates are based on unexplained adjustments to the administrative coverage. Unexplained increase in reported coverage data. GoC=R+ S+ D+

2015: Estimate based on reported data. GoC=R+ S+ D+

2014: Estimate informed by reported data. Official reported estimate is based on the results of the 2014 Demographic and Health Survey. GoC=R+ S+ D+

2013: Estimate informed by reported data supported by survey. Survey evidence of 87 percent based on 1 survey(s). Zambia Demographic and Health Survey, 2013-14 card or history results of 86 percent modified for recall bias to 87 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 72 percent. Estimate challenged by: D-

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

2011: Estimate informed by reported data. Estimate challenged by: S-

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	81	78	79	86	90	95	94	90	88	84	91	82
Estimate GoC	•	•	•	•••	•••	•••	•••	•••	•••	•	••	•
Official	81	78	79	86	90	99	NA	90	88	84	91	86
Administrative	81	78	79	89	91	95	94	90	88	84	NA	82
Survey	NA	NA	86	NA	NA	91	92	NA	NA	NA	NA	NA

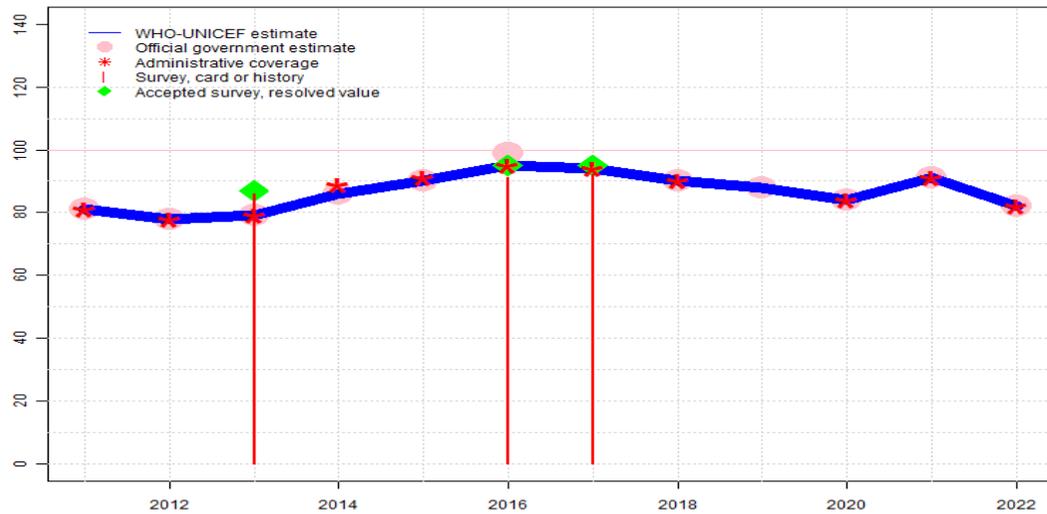
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Zambia - Hib3

ZMB - Hib3



## Description:

- 2022: Estimate informed by reported data. Decline in reported coverage partially explained by a 7.9 percent increase in reported target population from 2021 to 2022. Programme notes that the target population is extrapolated from the 2010 census. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. GoC=Assigned by working group. Consistency with other antigens.
- 2018: Estimate informed by reported data. GoC=R+ S+ D+
- 2017: Estimate based on reported data. Zambia Demographic and Health Survey 2018 card or history results of 92 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 76 percent and 3rd dose card only coverage of 74 percent. GoC=R+ S+ D+
- 2016: Estimate informed by reported administrative data supported by survey. Survey evidence of 95 percent based on 1 survey(s). Zambia Demographic and Health Survey 2018 card or history results of 91 percent modified for recall bias to 95 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 67 percent and 3rd dose card only coverage of 65 percent. Reported official government estimates are based on unexplained adjustments to the administrative coverage. Unexplained increase in reported coverage data. GoC=R+ S+ D+
- 2015: Estimate based on reported data. GoC=R+ S+ D+
- 2014: Estimate informed by reported data. Official reported estimate is based on the results of the 2014 Demographic and Health Survey. GoC=R+ S+ D+
- 2013: Estimate informed by reported data supported by survey. Survey evidence of 87 percent based on 1 survey(s). Zambia Demographic and Health Survey, 2013-14 card or history results of 86 percent modified for recall bias to 87 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 72 percent. Estimate challenged by: D-
- 2012: Estimate informed by reported data. Estimate challenged by: S-
- 2011: Estimate informed by reported data. Estimate challenged by: S-

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	81	78	79	86	90	95	94	90	88	84	91	82
Estimate GoC	•	•	•	•••	•••	•••	•••	•••	•	•	•	•
Official	81	78	79	86	90	99	NA	90	88	84	91	82
Administrative	81	78	79	89	91	95	94	90	NA	84	91	82
Survey	NA	NA	86	NA	NA	91	92	NA	NA	NA	NA	NA

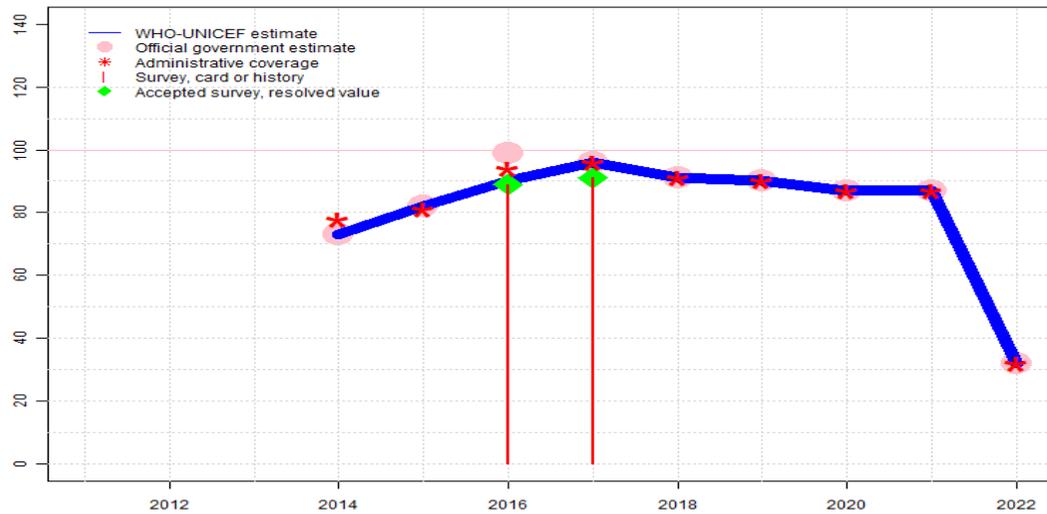
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Zambia - RotaC

ZMB - RotaC



## Description:

- 2022: Estimate informed by reported data. Decline in reported coverage partially explained by a 7.9 percent increase in reported target population from 2021 to 2022. Programme notes that the target population is extrapolated from the 2010 census. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Programme reports four months vaccine stockout at national and subnational levels. GoC=R+ D+
- 2021: Estimate informed by reported data. Programme reports a four months vaccine stockout. 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. GoC=R+ S+ D+
- 2017: Estimate informed by reported data supported by survey. Survey evidence of 91 percent based on 1 survey(s). GoC=R+ S+ D+
- 2016: Estimate is based on a four percentage point adjustment to the reported administrative coverage derived from the difference between the reported administrative coverage for DTP1 and the best possible performance coverage level of 99 percent. Reported official government estimates are based on unexplained adjustments to the administrative coverage. Estimate challenged by: D-R-
- 2015: Estimate based on reported data. GoC=R+ S+ D+
- 2014: Estimate informed by reported data. Official reported estimate is based on the results of the 2014 Demographic and Health Survey. Rotavirus vaccine introduced during 2013. Reporting began during 2014. Estimate challenged by: S-

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	73	82	90	96	91	90	87	87	32
Estimate GoC	NA	NA	NA	•	•••	•	•••	•••	•	•	•	••
Official	NA	NA	NA	73	82	99	96	91	90	87	87	32
Administrative	NA	NA	NA	78	81	94	96	91	90	87	87	32
Survey	NA	NA	NA	NA	NA	89	91	NA	NA	NA	NA	NA

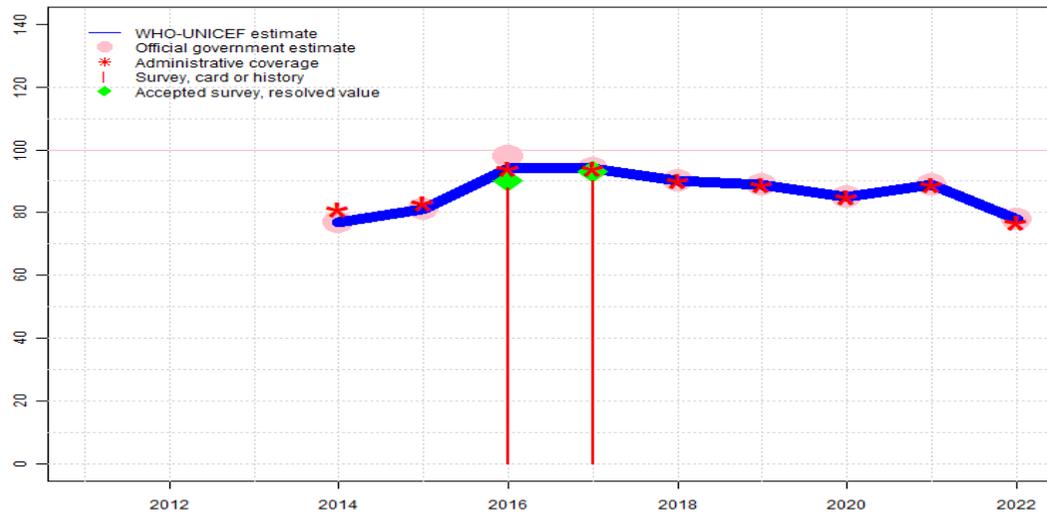
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

# Zambia - PcV3

ZMB - PcV3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	77	81	94	94	90	89	85	89	78
Estimate GoC	NA	NA	NA	•	•	•••	•••	•••	•••	•	•	•
Official	NA	NA	NA	77	81	98	94	90	89	85	89	78
Administrative	NA	NA	NA	81	83	94	94	90	89	85	89	77
Survey	NA	NA	NA	NA	NA	88	90	NA	NA	NA	NA	NA

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

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

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

## Description:

- 2022: Estimate informed by reported data. Decline in reported coverage partially explained by a 7.9 percent increase in reported target population from 2021 to 2022. Programme notes that the target population is extrapolated from the 2010 census. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Programme reports one month vaccine stockout at national and subnational levels. Estimated coverage may overestimate actual coverage. Consistency with other vaccine doses. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Programme reports a one month vaccine stockout. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Estimate challenged by: D-
- 2019: Estimate informed by reported data. GoC=R+ S+ D+
- 2018: Estimate informed by reported data. GoC=R+ S+ D+
- 2017: Estimate based on reported data. Zambia Demographic and Health Survey 2018 card or history results of 90 percent modified for recall bias to 93 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 76 percent and 3rd dose card only coverage of 72 percent. GoC=R+ S+ D+
- 2016: Estimate informed by reported administrative data supported by survey. Survey evidence of 90 percent based on 1 survey(s). Zambia Demographic and Health Survey 2018 card or history results of 88 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 67 percent and 3rd dose card only coverage of 63 percent. Reported official government estimates are based on unexplained adjustments to the administrative coverage. GoC=R+ S+ D+
- 2015: Estimate based on reported data. Estimate challenged by: D-S-
- 2014: Estimate informed by reported data. Official reported estimate is based on the results of the 2014 Demographic and Health Survey. Pneumococcal conjugate vaccine introduced during 2014. reporting began in 2014. Estimate challenged by: S-

# Zambia - survey details

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.

## 2017 Zambia Demographic and Health Survey 2018

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	97	12-23 m	1891	77
BCG	Card	75.9	12-23 m	1450	77
BCG	Card or History	97.5	12-23 m	1891	77
BCG	History	21.6	12-23 m	440	77
DTP1	C or H <12 months	97.6	12-23 m	1891	77
DTP1	Card	76.4	12-23 m	1450	77
DTP1	Card or History	97.9	12-23 m	1891	77
DTP1	History	21.5	12-23 m	440	77
DTP3	C or H <12 months	91.4	12-23 m	1891	77
DTP3	Card	73.8	12-23 m	1450	77
DTP3	Card or History	92.1	12-23 m	1891	77
DTP3	History	18.3	12-23 m	440	77
HepB1	C or H <12 months	97.6	12-23 m	1891	77
HepB1	Card	76.4	12-23 m	1450	77
HepB1	Card or History	97.9	12-23 m	1891	77
HepB1	History	21.5	12-23 m	440	77
HepB3	C or H <12 months	91.4	12-23 m	1891	77
HepB3	Card	73.8	12-23 m	1450	77
HepB3	Card or History	92.1	12-23 m	1891	77
HepB3	History	18.3	12-23 m	440	77
Hib1	C or H <12 months	97.6	12-23 m	1891	77
Hib1	Card	76.4	12-23 m	1450	77
Hib1	Card or History	97.9	12-23 m	1891	77
Hib1	History	21.5	12-23 m	440	77

Hib3	C or H <12 months	91.4	12-23 m	1891	77
Hib3	Card	73.8	12-23 m	1450	77
Hib3	Card or History	92.1	12-23 m	1891	77
Hib3	History	18.3	12-23 m	440	77
MCV1	C or H <12 months	85.6	12-23 m	1891	77
MCV1	Card	71.7	12-23 m	1450	77
MCV1	Card or History	90.9	12-23 m	1891	77
MCV1	History	19.2	12-23 m	440	77
MCV2	C or H <12 months	62	24-35 m	1862	77
MCV2	Card	45.4	24-35 m	1258	77
MCV2	Card or History	63.8	24-35 m	1862	77
MCV2	History	18.4	24-35 m	604	77
PCV1	C or H <12 months	97.4	12-23 m	1891	77
PCV1	Card	76.3	12-23 m	1450	77
PCV1	Card or History	97.6	12-23 m	1891	77
PCV1	History	21.3	12-23 m	440	77
PCV3	C or H <12 months	89.2	12-23 m	1891	77
PCV3	Card	72	12-23 m	1450	77
PCV3	Card or History	89.8	12-23 m	1891	77
PCV3	History	17.8	12-23 m	440	77
Pol1	C or H <12 months	96.2	12-23 m	1891	77
Pol1	Card	76.4	12-23 m	1450	77
Pol1	Card or History	96.5	12-23 m	1891	77
Pol1	History	20.1	12-23 m	440	77
Pol3	C or H <12 months	80.6	12-23 m	1891	77
Pol3	Card	72.8	12-23 m	1450	77
Pol3	Card or History	81.2	12-23 m	1891	77
Pol3	History	8.4	12-23 m	440	77
RotaC	C or H <12 months	89.6	12-23 m	1891	77
RotaC	Card	72.7	12-23 m	1450	77
RotaC	Card or History	90.6	12-23 m	1891	77
RotaC	History	17.9	12-23 m	440	77

## 2016 Zambia Demographic and Health Survey 2018

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	96.1	24-35 m	1862	77
BCG	Card	66.6	24-35 m	1258	77
BCG	Card or History	97.3	24-35 m	1862	77

# Zambia - survey details

BCG	History	30.7	24-35 m	604	77
DTP1	C or H <12 months	97	24-35 m	1862	77
DTP1	Card	67.3	24-35 m	1258	77
DTP1	Card or History	97.5	24-35 m	1862	77
DTP1	History	30.2	24-35 m	604	77
DTP3	C or H <12 months	88.7	24-35 m	1862	77
DTP3	Card	64.8	24-35 m	1258	77
DTP3	Card or History	90.9	24-35 m	1862	77
DTP3	History	26.1	24-35 m	604	77
HepB1	C or H <12 months	97	24-35 m	1862	77
HepB1	Card	67.3	24-35 m	1258	77
HepB1	Card or History	97.5	24-35 m	1862	77
HepB1	History	30.2	24-35 m	604	77
HepB3	C or H <12 months	88.7	24-35 m	1862	77
HepB3	Card	64.8	24-35 m	1258	77
HepB3	Card or History	90.9	24-35 m	1862	77
HepB3	History	26.1	24-35 m	604	77
Hib1	C or H <12 months	97	24-35 m	1862	77
Hib1	Card	67.3	24-35 m	1258	77
Hib1	Card or History	97.5	24-35 m	1862	77
Hib1	History	30.2	24-35 m	604	77
Hib3	C or H <12 months	88.7	24-35 m	1862	77
Hib3	Card	64.8	24-35 m	1258	77
Hib3	Card or History	90.9	24-35 m	1862	77
Hib3	History	26.1	24-35 m	604	77
MCV1	C or H <12 months	82.6	24-35 m	1862	77
MCV1	Card	64.2	24-35 m	1258	77
MCV1	Card or History	93.1	24-35 m	1862	77
MCV1	History	28.9	24-35 m	604	77
PCV1	C or H <12 months	95.8	24-35 m	1862	77
PCV1	Card	66.8	24-35 m	1258	77
PCV1	Card or History	96.5	24-35 m	1862	77
PCV1	History	29.7	24-35 m	604	77
PCV3	C or H <12 months	86.1	24-35 m	1862	77
PCV3	Card	62.8	24-35 m	1258	77
PCV3	Card or History	87.7	24-35 m	1862	77
PCV3	History	24.9	24-35 m	604	77
Pol1	C or H <12 months	95.5	24-35 m	1862	77
Pol1	Card	67.1	24-35 m	1258	77
Pol1	Card or History	95.9	24-35 m	1862	77

Pol1	History	28.8	24-35 m	604	77
Pol3	C or H <12 months	75.3	24-35 m	1862	77
Pol3	Card	63.6	24-35 m	1258	77
Pol3	Card or History	77.2	24-35 m	1862	77
Pol3	History	13.6	24-35 m	604	77
RotaC	C or H <12 months	85.8	24-35 m	1862	77
RotaC	Card	62.9	24-35 m	1258	77
RotaC	Card or History	88.7	24-35 m	1862	77
RotaC	History	25.8	24-35 m	604	77

## 2013 Zambia Demographic and Health Survey, 2013-14

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94.1	12-23 m	2575	80
BCG	Card	77.8	12-23 m	2069	80
BCG	Card or History	94.9	12-23 m	2575	80
BCG	History	17	12-23 m	506	80
DTP1	C or H <12 months	94.8	12-23 m	2575	80
DTP1	Card	79.1	12-23 m	2069	80
DTP1	Card or History	95.9	12-23 m	2575	80
DTP1	History	16.9	12-23 m	506	80
DTP3	C or H <12 months	82.4	12-23 m	2575	80
DTP3	Card	71.5	12-23 m	2069	80
DTP3	Card or History	85.8	12-23 m	2575	80
DTP3	History	14.4	12-23 m	506	80
HepB1	C or H <12 months	94.8	12-23 m	2575	80
HepB1	Card	79.1	12-23 m	2069	80
HepB1	Card or History	95.9	12-23 m	2575	80
HepB1	History	16.9	12-23 m	506	80
HepB3	C or H <12 months	82.4	12-23 m	2575	80
HepB3	Card	71.5	12-23 m	2069	80
HepB3	Card or History	85.8	12-23 m	2575	80
HepB3	History	14.4	12-23 m	506	80
Hib1	C or H <12 months	94.8	12-23 m	2575	80
Hib1	Card	79.1	12-23 m	2069	80
Hib1	Card or History	95.9	12-23 m	2575	80
Hib1	History	16.9	12-23 m	506	80
Hib3	C or H <12 months	82.4	12-23 m	2575	80
Hib3	Card	71.5	12-23 m	2069	80

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Hib3	Card or History	85.8	12-23 m	2575	80
Hib3	History	14.4	12-23 m	506	80
MCV1	C or H <12 months	72.5	12-23 m	2575	80
MCV1	Card	69.7	12-23 m	2069	80
MCV1	Card or History	84.9	12-23 m	2575	80
MCV1	History	15.2	12-23 m	506	80
Pol1	Card	79.6	12-23 m	2069	80
Pol1	Card or History	96.3	12-23 m	2575	80
Pol1	History	16.7	12-23 m	506	80
Pol3	Card	69.3	12-23 m	2069	80
Pol3	Card or History	77.6	12-23 m	2575	80
Pol3	History	8.2	12-23 m	506	80

## 2012 Zambia Demographic and Health Survey, 2013-14

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94.5	24-35 m	2507	80
DTP1	C or H <12 months	94.3	24-35 m	2507	80
DTP3	C or H <12 months	84.5	24-35 m	2507	80
HepB1	C or H <12 months	94.3	24-35 m	2507	80
HepB3	C or H <12 months	84.5	24-35 m	2507	80
Hib1	C or H <12 months	94.3	24-35 m	2507	80
Hib3	C or H <12 months	84.5	24-35 m	2507	80
MCV1	C or H <12 months	72.5	24-35 m	2507	80
Pol1	C or H <12 months	95.1	24-35 m	2507	80
Pol3	C or H <12 months	76.5	24-35 m	2507	80

## 2011 Zambia Demographic and Health Survey, 2013-14

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	91.5	36-47 m	2447	80
DTP1	C or H <12 months	91.8	36-47 m	2447	80
DTP3	C or H <12 months	80.5	36-47 m	2447	80
HepB1	C or H <12 months	91.8	36-47 m	2447	80
HepB3	C or H <12 months	80.5	36-47 m	2447	80
Hib1	C or H <12 months	91.8	36-47 m	2447	80
Hib3	C or H <12 months	80.5	36-47 m	2447	80

MCV1	C or H <12 months	73.8	36-47 m	2447	80
Pol1	C or H <12 months	91.8	36-47 m	2447	80
Pol3	C or H <12 months	71.8	36-47 m	2447	80

## 2010 Expanded Program on Immunization Survey using the cluster survey methodology, Zambia, 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	73.4	12-23 m	1890	77
BCG	Card or History	98.3	12-23 m	1890	77
DTP1	Card	72.7	12-23 m	1890	77
DTP1	Card or History	98.2	12-23 m	1890	77
DTP3	Card	70.8	12-23 m	1890	77
DTP3	Card or History	92.5	12-23 m	1890	77
HepB1	Card	72.7	12-23 m	1890	77
HepB1	Card or History	98.2	12-23 m	1890	77
HepB3	Card	70.8	12-23 m	1890	77
HepB3	Card or History	92.5	12-23 m	1890	77
Hib1	Card	72.7	12-23 m	1890	77
Hib1	Card or History	98.2	12-23 m	1890	77
Hib3	Card	70.8	12-23 m	1890	77
Hib3	Card or History	92.5	12-23 m	1890	77
MCV1	Card	67.3	12-23 m	1890	77
MCV1	Card or History	90.3	12-23 m	1890	77
Pol1	Card	73.1	12-23 m	1890	77
Pol1	Card or History	97.9	12-23 m	1890	77
Pol3	Card	69.8	12-23 m	1890	77
Pol3	Card or History	90.2	12-23 m	1890	77

## 2010 Zambia Demographic and Health Survey, 2013-14

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	93.1	48-59 m	2627	80
DTP1	C or H <12 months	93	48-59 m	2627	80
DTP3	C or H <12 months	81.3	48-59 m	2627	80
HepB1	C or H <12 months	93	48-59 m	2627	80
HepB3	C or H <12 months	81.3	48-59 m	2627	80

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Hib1	C or H <12 months	93	48-59 m	2627	80
Hib3	C or H <12 months	81.3	48-59 m	2627	80
MCV1	C or H <12 months	69.5	48-59 m	2627	80
Pol1	C or H <12 months	93.7	48-59 m	2627	80
Pol3	C or H <12 months	70.1	48-59 m	2627	80

## 2006 Zambia Demographic and Health Survey 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	90.3	12-23 m	1272	78
BCG	Card	75.9	12-23 m	1272	78
BCG	Card or History	92.3	12-23 m	1272	78
BCG	History	16.4	12-23 m	1272	78
DTP1	C or H <12 months	91.4	12-23 m	1272	78
DTP1	Card	76.1	12-23 m	1272	78
DTP1	Card or History	92.3	12-23 m	1272	78
DTP1	History	16.3	12-23 m	1272	78
DTP3	C or H <12 months	77.3	12-23 m	1272	78
DTP3	Card	66.9	12-23 m	1272	78
DTP3	Card or History	79.7	12-23 m	1272	78
DTP3	History	12.8	12-23 m	1272	78
HepB1	C or H <12 months	91.4	12-23 m	1272	78
HepB1	Card	76.1	12-23 m	1272	78
HepB1	Card or History	92.3	12-23 m	1272	78
HepB1	History	16.3	12-23 m	1272	78
HepB3	C or H <12 months	77.3	12-23 m	1272	78
HepB3	Card	66.9	12-23 m	1272	78
HepB3	Card or History	79.7	12-23 m	1272	78
HepB3	History	12.8	12-23 m	1272	78
Hib1	C or H <12 months	91.4	12-23 m	1272	78
Hib1	Card	76.1	12-23 m	1272	78
Hib1	Card or History	92.3	12-23 m	1272	78
Hib1	History	16.3	12-23 m	1272	78
Hib3	C or H <12 months	77.3	12-23 m	1272	78
Hib3	Card	66.9	12-23 m	1272	78
Hib3	Card or History	79.7	12-23 m	1272	78
Hib3	History	12.8	12-23 m	1272	78
MCV1	C or H <12 months	68.8	12-23 m	1272	78
MCV1	Card	69.8	12-23 m	1272	78

MCV1	Card or History	84.9	12-23 m	1272	78
MCV1	History	15.1	12-23 m	1272	78
Pol1	C or H <12 months	92.3	12-23 m	1272	78
Pol1	Card	77	12-23 m	1272	78
Pol1	Card or History	93.5	12-23 m	1272	78
Pol1	History	16.5	12-23 m	1272	78
Pol3	C or H <12 months	74.2	12-23 m	1272	78
Pol3	Card	67.9	12-23 m	1272	78
Pol3	Card or History	77	12-23 m	1272	78
Pol3	History	9.2	12-23 m	1272	78

## 2001 Zambia Demographic and Health Survey 2001-2002

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	90.7	12-23 m	1299	80
BCG	Card	78	12-23 m	1299	80
BCG	Card or History	94	12-23 m	1299	80
BCG	History	16	12-23 m	1299	80
DTP1	C or H <12 months	91.9	12-23 m	1299	80
DTP1	Card	78.3	12-23 m	1299	80
DTP1	Card or History	94.1	12-23 m	1299	80
DTP1	History	15.8	12-23 m	1299	80
DTP3	C or H <12 months	73.8	12-23 m	1299	80
DTP3	Card	70.9	12-23 m	1299	80
DTP3	Card or History	80	12-23 m	1299	80
DTP3	History	9.2	12-23 m	1299	80
MCV1	C or H <12 months	70.2	12-23 m	1299	80
MCV1	Card	70.5	12-23 m	1299	80
MCV1	Card or History	84.4	12-23 m	1299	80
MCV1	History	13.9	12-23 m	1299	80
Pol1	C or H <12 months	93.6	12-23 m	1299	80
Pol1	Card	78.7	12-23 m	1299	80
Pol1	Card or History	95.6	12-23 m	1299	80
Pol1	History	16.8	12-23 m	1299	80
Pol3	C or H <12 months	73.4	12-23 m	1299	80
Pol3	Card	71.1	12-23 m	1299	80
Pol3	Card or History	80.2	12-23 m	1299	80
Pol3	History	9.1	12-23 m	1299	80

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## 2000 Zambia EPI Cluster Survey Report 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	92	12-23 m	221	83
DTP1	Card or History	93	12-23 m	221	83
DTP3	Card or History	77.8	12-23 m	221	83
MCV1	Card	85	12-23 m	221	83
Pol1	Card or History	92	12-23 m	221	83
Pol3	Card or History	79	12-23 m	221	83

## 1998 Zambia Multiple Indicator Cluster Survey 1999

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	51.5	12-23 m	328	-
BCG	History	13.1	12-23 m	328	-
DTP1	Card	60.9	12-23 m	328	-
DTP1	History	20.6	12-23 m	328	-
DTP3	Card	56	12-23 m	328	-
DTP3	History	8.2	12-23 m	328	-
MCV1	Card	57.2	12-23 m	328	-
MCV1	History	17.1	12-23 m	328	-
Pol1	Card	63.7	12-23 m	328	-
Pol1	History	21.8	12-23 m	328	-
Pol3	Card	58.9	12-23 m	328	-
Pol3	History	16.9	12-23 m	328	-

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Further information and estimates for previous years are available at:

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

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