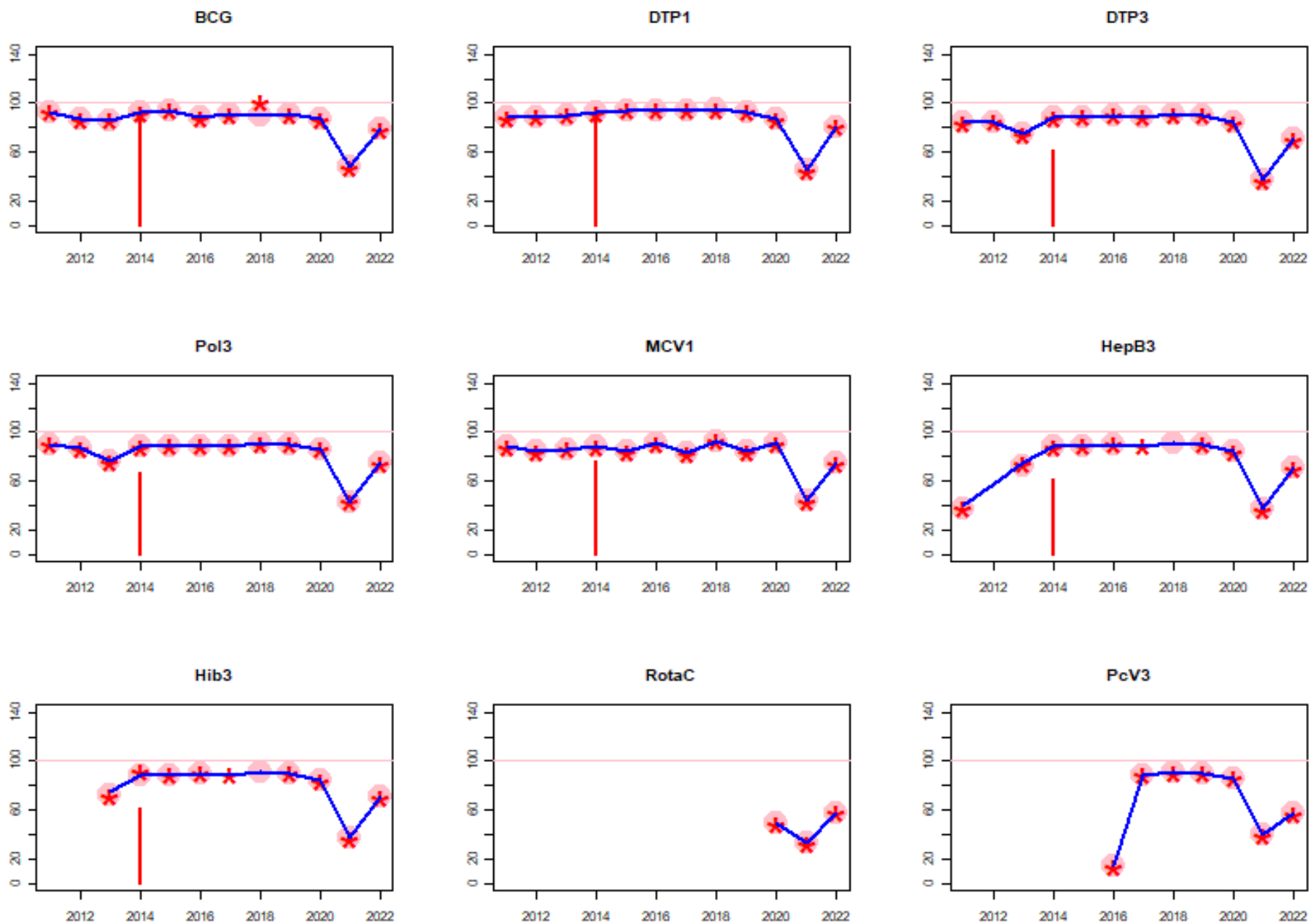


Myanmar: WHO and UNICEF estimates of immunization coverage: 2022 revision



BACKGROUND NOTE: Each year WHO and UNICEF jointly review reports submitted by Member States regarding national immunization coverage, finalized survey reports as well as data from 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.

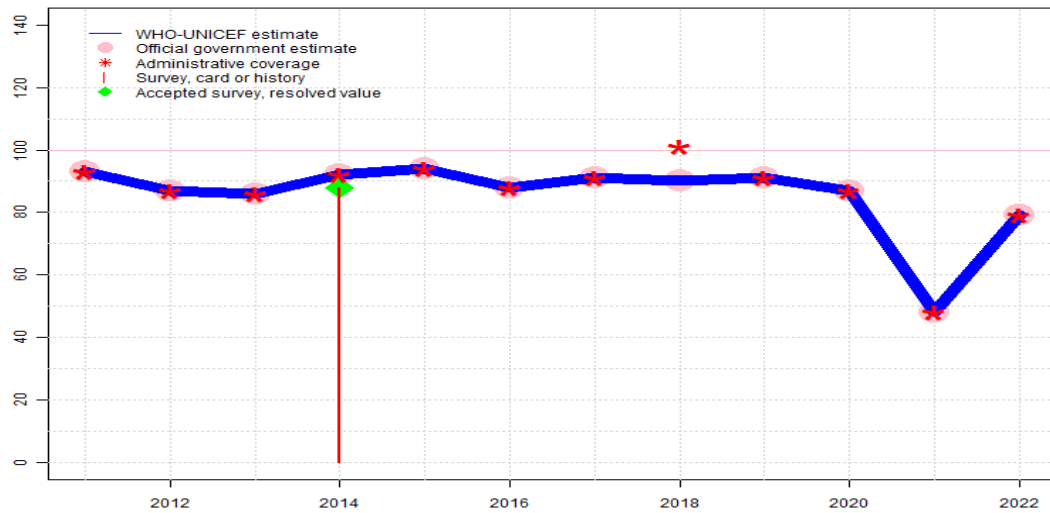
PcV3: percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect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

MMR - BCG



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	93	87	86	92	94	88	91	90	91	87	48	79
Estimate GoC	●	●	●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	93	87	86	92	94	88	91	90	91	87	48	79
Administrative	93	87	86	92	94	88	91	101	91	87	48	79
Survey	NA	NA	NA	88	NA	NA	NA	NA	NA	NA	NA	NA

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

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

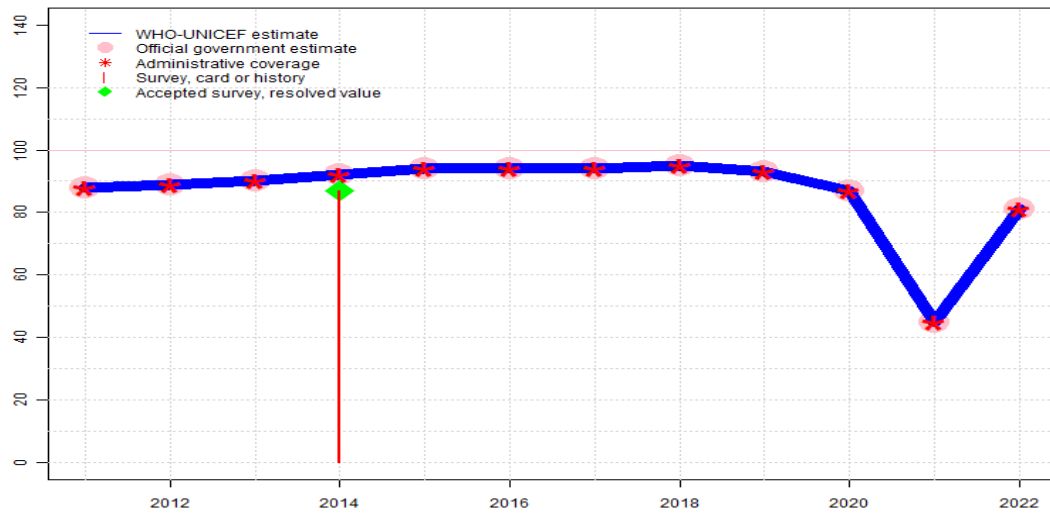
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2022: Estimate informed by reported data. No nationally representative household survey within the last 5 years. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Reported data suggest partial recovery from prior year disruption to services. GoC=R+ D+
- 2021: Estimate informed by reported data. WHO and UNICEF are aware of a EPI coverage evaluation survey that started in 2020 but was interrupted due to Covid-19. An independent assessment of reported coverage is still recommended. Routine immunization performance was low for all antigens due to disruptions caused by Covid-19 and instability. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by reported data. GoC=R+ D+
- 2016: Estimate informed by reported data. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2015: Estimate informed by reported data. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 88 percent based on 1 survey(s). Reported coverage levels for 2014 computed using target population data from preliminary 2014 census results. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.
- 2013: Estimate informed by reported data. Estimate challenged by: D-
- 2012: Estimate informed by reported data. Estimate challenged by: D-
- 2011: Estimate informed by reported data. Estimate challenged by: D-

Myanmar - DTP1

MMR - DTP1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	88	89	90	92	94	94	94	95	93	87	45	81
Estimate GoC	•	•	•	••	••	••	••	••	••	••	••	••
Official	88	89	90	92	94	94	94	95	93	87	45	81
Administrative	88	89	90	92	94	94	94	95	93	87	45	81
Survey	NA	NA	NA	87	NA	NA	NA	NA	NA	NA	NA	NA

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

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

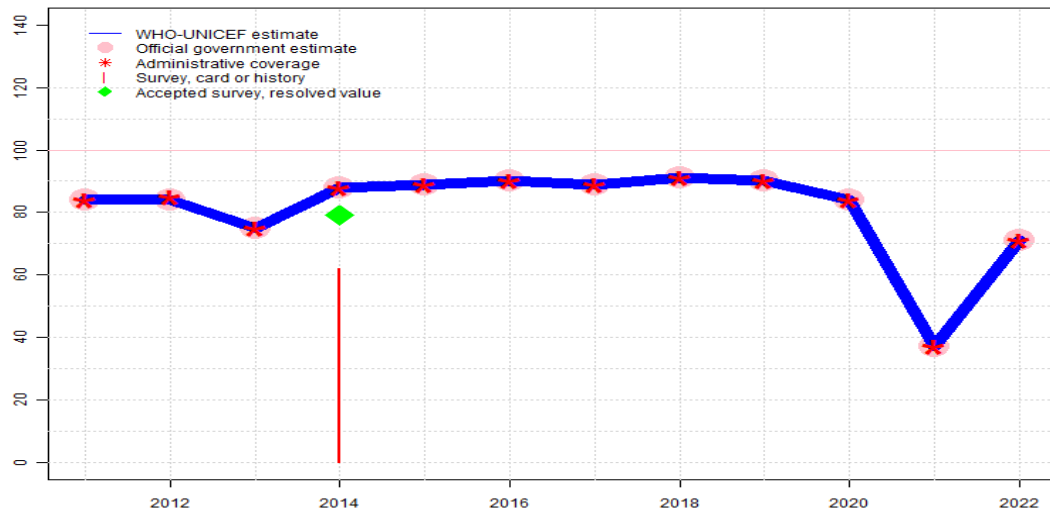
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2022: Estimate informed by reported data. No nationally representative household survey within the last 5 years. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Programme reports one month DTP containing vaccine stockout at national and subnational levels. Reported data suggest partial recovery from prior year disruption to services. GoC=R+ D+
- 2021: Estimate informed by reported data. WHO and UNICEF are aware of a EPI coverage evaluation survey that started in 2020 but was interrupted due to Covid-19. An independent assessment of reported coverage is still recommended. Programme reports 0.75 month vaccine stockout at national level. Routine immunization performance was low for all antigens due to disruptions caused by Covid-19 and instability. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by reported data. GoC=R+ D+
- 2016: Estimate informed by reported data. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2015: Estimate informed by reported data. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 87 percent based on 1 survey(s). Reported coverage levels for 2014 computed using target population data from preliminary 2014 census results. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.
- 2013: Estimate informed by reported data. Estimate challenged by: D-
- 2012: Estimate informed by reported data. Estimate challenged by: D-
- 2011: Estimate informed by reported data. Estimate challenged by: D-

Myanmar - DTP3

MMR - DTP3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	84	84	75	88	89	90	89	91	90	84	37	71
Estimate GoC	•	•	•	••	••	••	••	••	••	••	••	••
Official	84	84	75	88	89	90	89	91	90	84	37	71
Administrative	84	85	75	88	89	90	89	91	90	84	37	71
Survey	NA	NA	NA	62	NA	NA	NA	NA	NA	NA	NA	NA

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

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

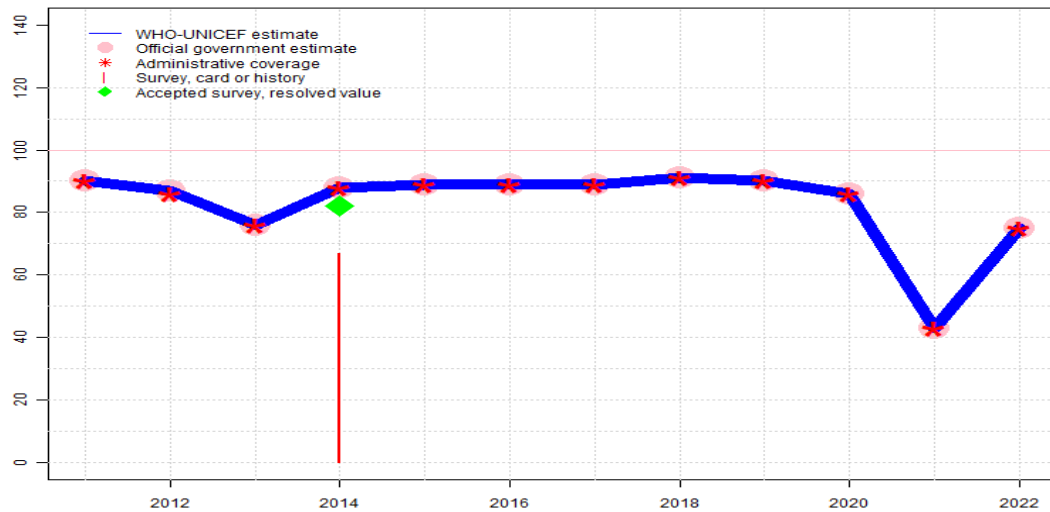
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2022: Estimate informed by reported data. No nationally representative household survey within the last 5 years. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Programme reports one month DTP containing vaccine stockout at national and subnational levels. Reported data suggest partial recovery from prior year disruption to services. GoC=R+ D+
- 2021: Estimate informed by reported data. WHO and UNICEF are aware of a EPI coverage evaluation survey that started in 2020 but was interrupted due to Covid-19. An independent assessment of reported coverage is still recommended. Programme reports 0.75 month vaccine stockout at national level. Routine immunization performance was low for all antigens due to disruptions caused by Covid-19 and instability. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2017: Estimate informed by reported data. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2016: Estimate informed by reported data. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2015: Estimate informed by reported data. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 79 percent based on 1 survey(s). Myanmar Demographic and Health Survey 2015-2016 card or history results of 62 percent modified for recall bias to 79 percent based on 1st dose card or history coverage of 87 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 41 percent. Reported coverage levels for 2014 computed using target population data from preliminary 2014 census results. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.
- 2013: Estimate informed by reported administrative data. . Estimates based on administrative coverage. Estimate challenged by: D-
- 2012: Estimate informed by reported data. Estimate challenged by: D-
- 2011: Estimate informed by reported data. Estimate challenged by: D-

Myanmar - Pol3

MMR - Pol3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	90	87	76	88	89	89	89	91	90	86	43	75
Estimate GoC	•	•	•	••	••	••	••	••	••	••	••	••
Official	90	87	76	88	89	89	89	91	90	86	43	75
Administrative	90	86	76	88	89	89	89	91	90	86	43	75
Survey	NA	NA	NA	67	NA	NA	NA	NA	NA	NA	NA	NA

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

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

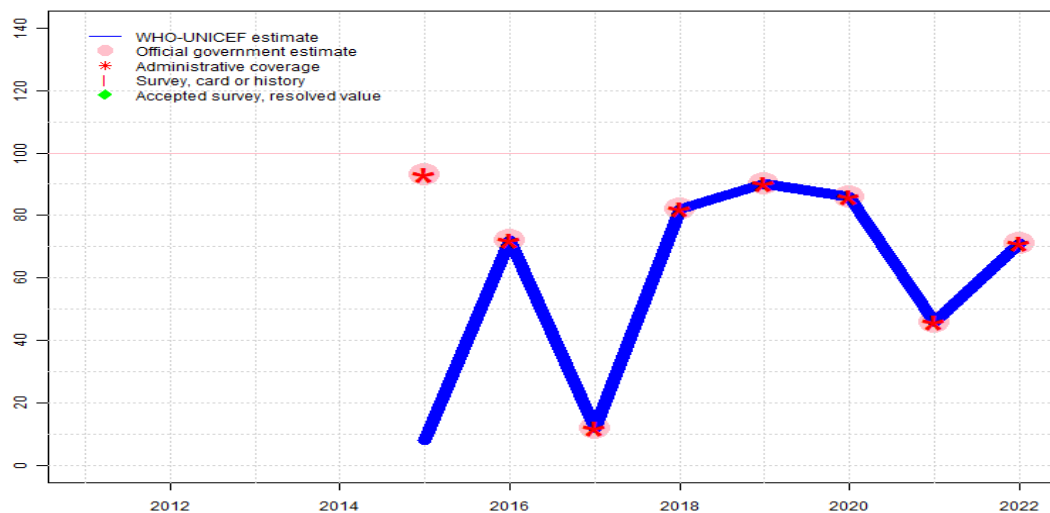
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Description:

- 2022: Estimate informed by reported data. No nationally representative household survey within the last 5 years. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Reported data suggest partial recovery from prior year disruption to services. GoC=R+ D+
- 2021: Estimate informed by reported data. WHO and UNICEF are aware of a EPI coverage evaluation survey that started in 2020 but was interrupted due to Covid-19. An independent assessment of reported coverage is still recommended. Routine immunization performance was low for all antigens due to disruptions caused by Covid-19 and instability. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by reported data. GoC=R+ D+
- 2016: Estimate informed by reported data. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2015: Estimate informed by reported data. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 82 percent based on 1 survey(s). Myanmar Demographic and Health Survey 2015-2016 card or history results of 67 percent modified for recall bias to 82 percent based on 1st dose card or history coverage of 90 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 41 percent. Reported coverage levels for 2014 computed using target population data from preliminary 2014 census results. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.
- 2013: Estimate informed by reported data. Estimate challenged by: D-
- 2012: Estimate informed by reported data. Estimate challenged by: D-
- 2011: Estimate informed by reported data. Estimate challenged by: D-

Myanmar - IPV1

MMR - IPV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	8	72	12	82	90	86	46	71
Estimate GoC	NA	NA	NA	NA	••	••	••	••	••	••	••	••
Official	NA	NA	NA	NA	93	72	12	82	90	86	46	71
Administrative	NA	NA	NA	NA	93	72	12	82	90	86	46	71
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

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. No nationally representative household survey within the last 5 years. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Programme reports five months IPV vaccine stockout at national and subnational levels. Reported data suggest partial recovery from prior year disruption to services. GoC=R+ D+

2021: Estimate informed by reported data. WHO and UNICEF are aware of a EPI coverage evaluation survey that started in 2020 but was interrupted due to Covid-19. An independent assessment of reported coverage is still recommended. Routine immunization performance was low for all antigens due to disruptions caused by Covid-19 and instability. GoC=R+ D+

2020: Estimate informed by reported data. GoC=R+ D+

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

2018: Estimate informed by reported data. Programme appears to have recovered from prior year vaccine stockout. GoC=R+ D+

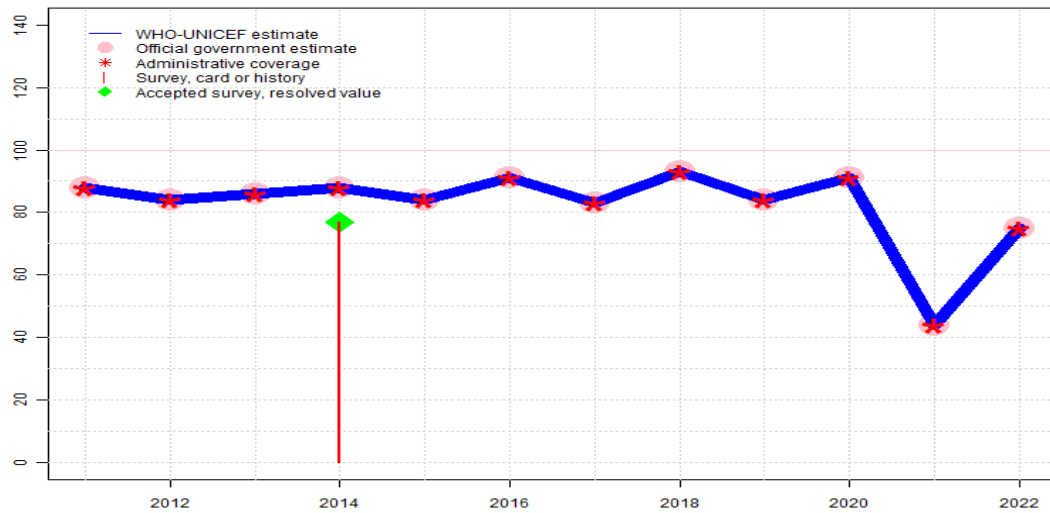
2017: Estimate informed by reported data. Country reported stockout of unspecified period. GoC=R+ D+

2016: Estimate informed by reported data. Programme reports a national level vaccine stockout of unspecified duration. Estimate is based on reported data following introduction. GoC=R+ D+

2015: Programme reports 93 percent coverage in 8 percent of the national target population. Estimate based on coverage achieved in total national annual birth cohort. Inactivated polio vaccine during December 2015. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.

Myanmar - MCV1

MMR - MCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	88	84	86	88	84	91	83	93	84	91	44	75
Estimate GoC	•	•	•	••	••	••	••	••	••	••	••	••
Official	88	84	86	88	84	91	83	93	84	91	44	75
Administrative Survey	88	84	86	88	84	91	83	93	84	91	44	75
Survey	NA	NA	NA	77	NA	NA	NA	NA	NA	NA	NA	NA

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

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

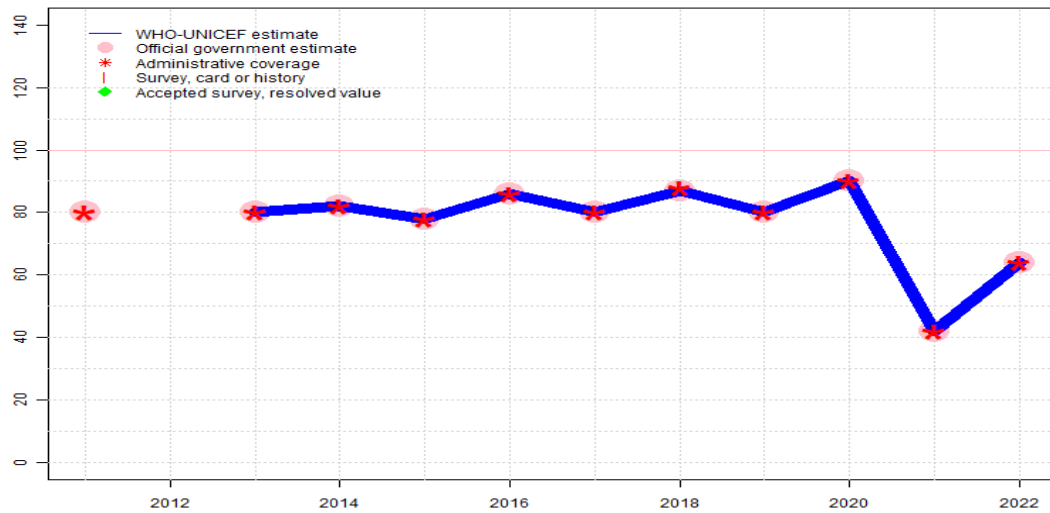
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2022: Estimate informed by reported data. No nationally representative household survey within the last 5 years. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Reported data suggest partial recovery from prior year disruption to services. GoC=R+ D+
- 2021: Estimate informed by reported data. WHO and UNICEF are aware of a EPI coverage evaluation survey that started in 2020 but was interrupted due to Covid-19. An independent assessment of reported coverage is still recommended. Routine immunization performance was low for all antigens due to disruptions caused by Covid-19 and instability. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. Country reports a reduction measles-rubella vaccination in late 2017 during a Japanese Encephalitis (JE) vaccination campaign and conducting catch-up activities in early 2018. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2017: Estimate informed by reported data. Country reports a reduction measles-rubella vaccination in late 2017 during a Japanese Encephalitis (JE) vaccination campaign and conducting catch-up activities in early 2018. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2016: Estimate informed by reported data. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2015: Estimate informed by reported data. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.
- 2014: Estimate is based on the reported data consistent with other vaccines. Reported coverage levels for 2014 computed using target population data from preliminary 2014 census results. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.
- 2013: Estimate informed by reported data. Estimate challenged by: D-
- 2012: Estimate informed by reported data. Estimate challenged by: D-
- 2011: Estimate informed by reported data. Estimate challenged by: D-

Myanmar - MCV2

MMR - MCV2



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	80	NA	80	82	78	86	80	87	80	90	42	64
Estimate GoC	●	NA	●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	80	NA	80	82	78	86	80	87	80	90	42	64
Administrative	80	NA	80	82	78	86	80	88	80	90	42	64
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

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

Description:

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

2022: Estimate informed by reported data. No nationally representative household survey within the last 5 years. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Reported data suggest partial recovery from prior year disruption to services. GoC=R+ D+

2021: Estimate informed by reported data. WHO and UNICEF are aware of a EPI coverage evaluation survey that started in 2020 but was interrupted due to Covid-19. An independent assessment of reported coverage is still recommended. Routine immunization performance was low for all antigens due to disruptions caused by Covid-19 and instability. GoC=R+ D+

2020: Estimate informed by reported data. GoC=R+ D+

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

2018: Estimate informed by reported data. Country reports a reduction measles-rubella vaccination in late 2017 during a Japanese Encephalitis (JE) vaccination campaign and conducting catch-up activities in early 2018. GoC=R+ D+

2017: Estimate informed by reported data. Country reports a reduction measles-rubella vaccination in late 2017 during a Japanese Encephalitis (JE) vaccination campaign and conducting catch-up activities in early 2018. GoC=R+ D+

2016: Estimate informed by reported data. GoC=R+ D+

2015: Estimate informed by reported data. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.

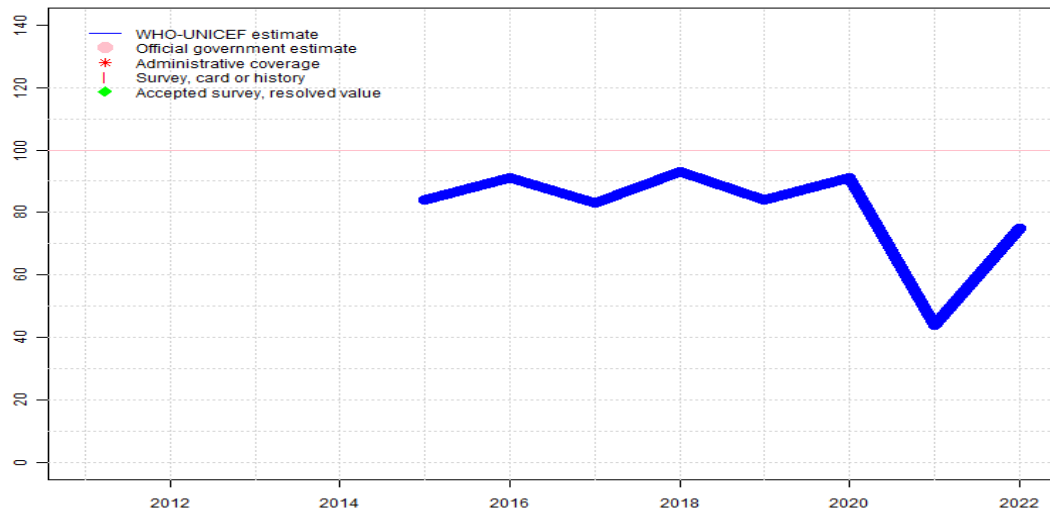
2014: Estimate informed by reported data. Reported coverage levels for 2014 computed using target population data from preliminary 2014 census results. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.

2013: Estimate informed by reported data. Estimate challenged by: D-

2011: Estimate informed by reported data. Between 2008 and 2012, the second dose of measles was externally funded. Vaccine doses administered were doses left over from campaigns. Estimate challenged by: D-

Myanmar - RCV1

MMR - RCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	84	91	83	93	84	91	44	75
Estimate GoC	NA	NA	NA	NA	●●	●●	●●	●●	●●	●●	●●	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

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

Description:

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

2022: Estimate based on estimated MCV1. No nationally representative household survey within the last 5 years. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Reported data suggest partial recovery from prior year disruption to services. GoC=R+ D+

2021: Estimate based on estimated MCV1. WHO and UNICEF are aware of a EPI coverage evaluation survey that started in 2020 but was interrupted due to Covid-19. An independent assessment of reported coverage is still recommended. Routine immunization performance was low for all antigens due to disruptions caused by Covid-19 and instability. GoC=R+ D+

2020: Estimate based on estimated MCV1. GoC=R+ D+

2019: Estimate based on estimated MCV1. GoC=R+ D+

2018: Estimate based on estimated MCV1. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.

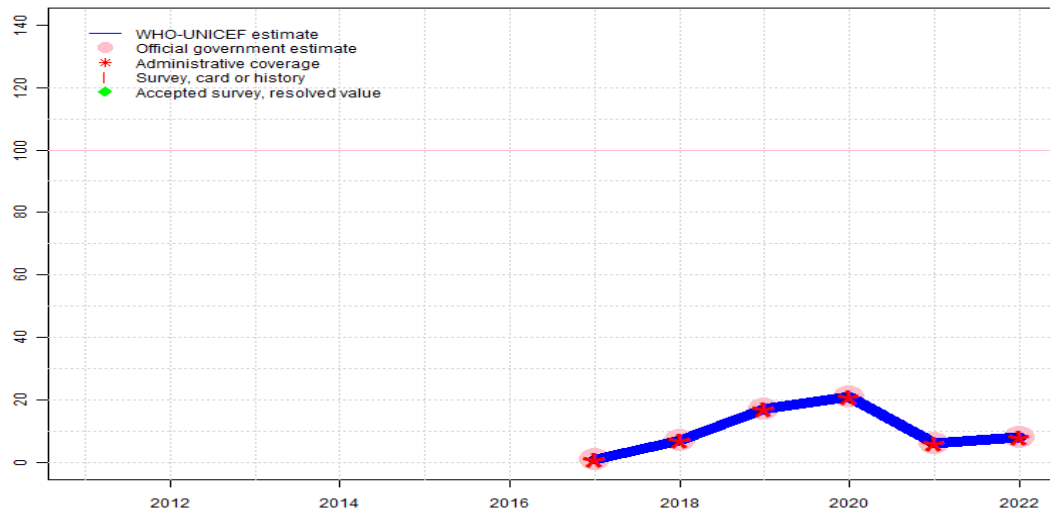
2017: Estimate based on estimated MCV1. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.

2016: Estimate based on estimated MCV1. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.

2015: Estimate based on estimated MCV1. Rubella vaccine introduced during 2015. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.

Myanmar - HepBB

MMR - HepBB



Description:

- 2022: Estimate informed by reported data. No nationally representative household survey within the last 5 years. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Reported data suggest partial recovery from prior year disruption to services. GoC=R+ D+
- 2021: Estimate informed by reported data. WHO and UNICEF are aware of a EPI coverage evaluation survey that started in 2020 but was interrupted due to Covid-19. An independent assessment of reported coverage is still recommended. Routine immunization performance was low for all antigens due to disruptions caused by Covid-19 and instability. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. Estimate based on reported data during period of introduction. GoC=R+ D+
- 2017: Estimate informed by reported data. HepBB introduced in 2017 and country reports stockout of unspecified period. GoC=R+ D+

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	NA	1	7	17	21	6	8
Estimate GoC	NA	NA	NA	NA	NA	NA	••	••	••	••	••	••
Official	NA	NA	NA	NA	NA	NA	1	7	17	21	6	8
Administrative	NA	NA	NA	NA	NA	NA	1	7	17	21	6	8
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

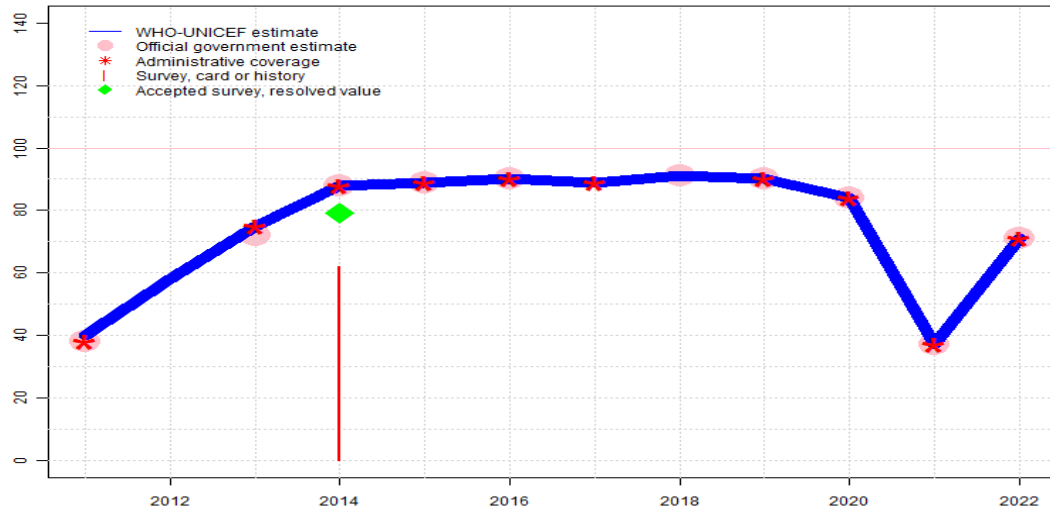
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

Myanmar - HepB3

MMR - HepB3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	40	58	75	88	89	90	89	91	90	84	37	71
Estimate GoC	•	•	•	••	••	••	••	••	••	••	••	••
Official	38	NA	72	88	89	90	NA	91	90	84	37	71
Administrative	38	NA	75	88	89	90	89	NA	90	84	37	71
Survey	NA	NA	NA	62	NA	NA	NA	NA	NA	NA	NA	NA

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

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

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

Description:

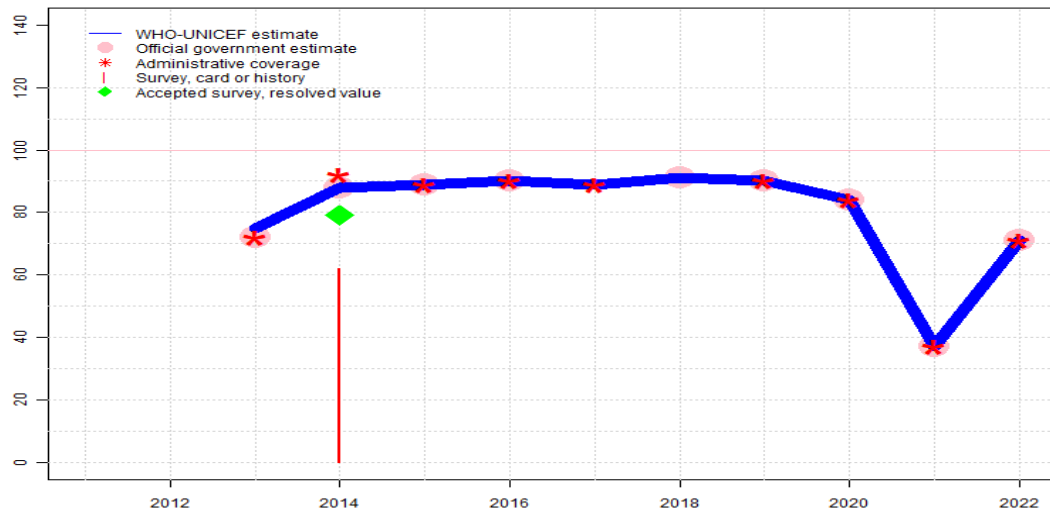
- 2022: Estimate informed by reported data. No nationally representative household survey within the last 5 years. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Reported data suggest partial recovery from prior year disruption to services. GoC=R+ D+
- 2021: Estimate informed by reported data. WHO and UNICEF are aware of a EPI coverage evaluation survey that started in 2020 but was interrupted due to Covid-19. An independent assessment of reported coverage is still recommended. Programme reports 0.75 month vaccine stockout at national level. Routine immunization performance was low for all antigens due to disruptions caused by Covid-19 and instability. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2017: Estimate informed by reported administrative data. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2016: Estimate informed by reported data. Programme reports a national level vaccine stockout of unspecified duration. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2015: Estimate informed by reported data. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 79 percent based on 1 survey(s). Myanmar Demographic and Health Survey 2015-2016 card or history results of 62 percent modified for recall bias to 79 percent based on 1st dose card or history coverage of 87 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 41 percent. Reported coverage levels for 2014 computed using target population data from preliminary 2014 census results. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.
- 2013: Estimate of 75 percent assigned by working group. Estimate is based on coverage for third dose of DTP containing vaccine. Vaccine presentation changed from monovalent HepB to DTP-HepB-Hib combination vaccine in November 2012. Stock out from HepB containing vaccines was reported at national level. Estimate challenged by: D-R-
- 2012: Reported data calibrated to 2006 and 2013 levels. Stock out in all 330 districts. Estimate challenged by: D-S-

Myanmar - HepB3

2011: Reported data calibrated to 2006 and 2013 levels. Decline in coverage is attributed to vaccine stockout. Estimate challenged by: D-R-

Myanmar - Hib3

MMR - Hib3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	75	88	89	90	89	91	90	84	37	71
Estimate GoC	NA	NA	•	••	••	••	••	••	••	••	••	••
Official	NA	NA	72	88	89	90	NA	91	90	84	37	71
Administrative	NA	NA	72	92	89	90	89	NA	90	84	37	71
Survey	NA	NA	NA	62	NA	NA	NA	NA	NA	NA	NA	NA

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

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

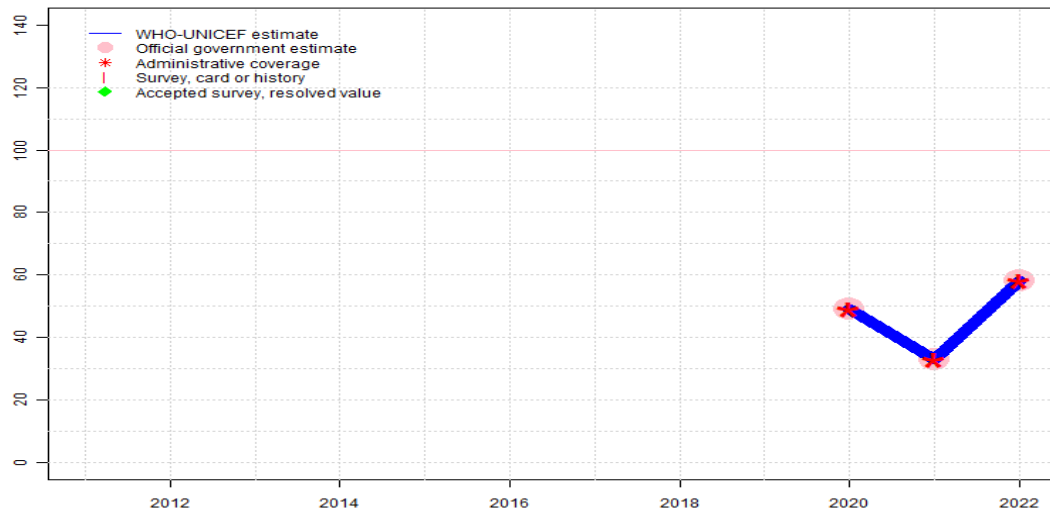
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2022: Estimate informed by reported data. No nationally representative household survey within the last 5 years. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Programme reports four months monovalent Hib vaccine stockout at national and subnational levels. Reported data suggest partial recovery from prior year disruption to services. GoC=R+ D+
- 2021: Estimate informed by reported data. WHO and UNICEF are aware of a EPI coverage evaluation survey that started in 2020 but was interrupted due to Covid-19. An independent assessment of reported coverage is still recommended. Programme reports 0.75 month vaccine stockout at national level. Routine immunization performance was low for all antigens due to disruptions caused by Covid-19 and instability. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2017: Estimate informed by reported administrative data. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2016: Estimate informed by reported data. GoC=Assigned by working group. GoC revised for consistency with other vaccine doses.
- 2015: Estimate informed by reported data. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 79 percent based on 1 survey(s). Myanmar Demographic and Health Survey 2015-2016 card or history results of 62 percent modified for recall bias to 79 percent based on 1st dose card or history coverage of 87 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 41 percent. Reported coverage levels for 2014 computed using target population data from preliminary 2014 census results. GoC=Assigned by working group. In spite of what appear to be inconsistent reported number of children vaccinated and target population suggesting problems with the recording and monitoring system and/or incomplete reporting, the results of the 2015-16 Demographic and Health Survey support reported coverage levels. However, there is concern that less than half of the survey results are derived from documented evidence.
- 2013: Estimate of 75 percent assigned by working group. Estimate is based on coverage for third dose of DTP containing vaccine. Hib vaccine introduced in November 2012. Reporting started in 2013. Estimate challenged by: D-R-

Myanmar - RotaC

MMR - RotaC



Description:

- 2022: Estimate informed by reported data. No nationally representative household survey within the last 5 years. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Reported data suggest partial recovery from prior year disruption to services. GoC=R+ D+
- 2021: Estimate informed by reported data. WHO and UNICEF are aware of a EPI coverage evaluation survey that started in 2020 but was interrupted due to Covid-19. An independent assessment of reported coverage is still recommended. Routine immunization performance was low for all antigens due to disruptions caused by Covid-19 and instability. GoC=R+ D+
- 2020: Estimate informed by reported data. Rotavirus vaccine introduced in February 2020. GoC=R+ D+

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	49	33	58
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	••	••	••
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	49	33	58
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	49	33	58
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

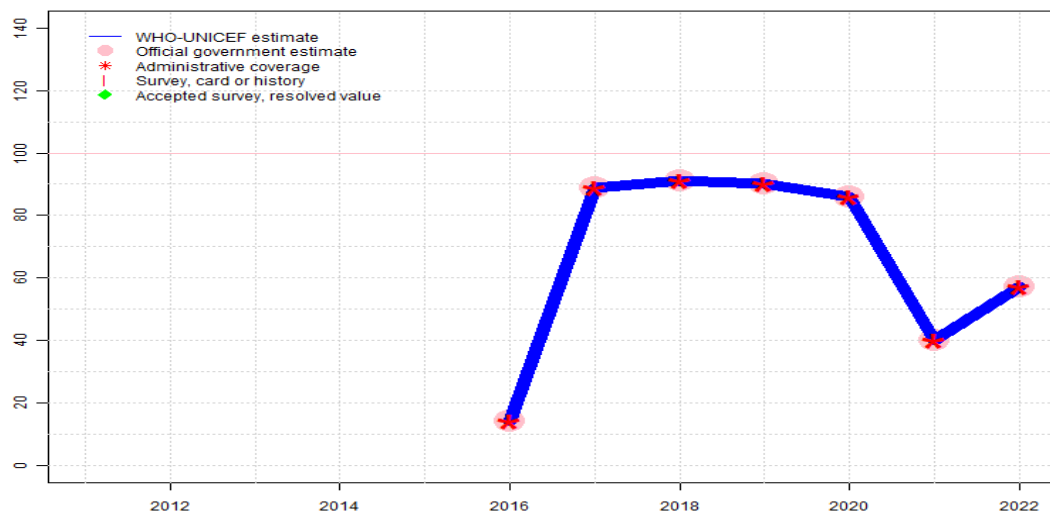
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

Myanmar - PcV3

MMR - PcV3



Description:

- 2022: Estimate informed by reported data. No nationally representative household survey within the last 5 years. WHO and UNICEF are aware of an ongoing 2023 Demographic and Health Survey and await the final results. Programme reports four months PcV vaccine stockout at national and subnational levels. Reported data suggest partial recovery from prior year disruption to services. GoC=R+ D+
- 2021: Estimate informed by reported data. WHO and UNICEF are aware of a EPI coverage evaluation survey that started in 2020 but was interrupted due to Covid-19. An independent assessment of reported coverage is still recommended. Routine immunization performance was low for all antigens due to disruptions caused by Covid-19 and instability. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by reported data. GoC=R+ D+
- 2016: Estimate informed by reported data. Pneumococcal conjugate vaccine introduced during 2016. Reporting began in 2016. GoC=R+ D+

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	14	89	91	90	86	40	57
Estimate GoC	NA	NA	NA	NA	NA	••	••	••	••	••	••	••
Official	NA	NA	NA	NA	NA	14	89	91	90	86	40	57
Administrative	NA	NA	NA	NA	NA	14	89	91	90	86	40	57
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

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

Myanmar - 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.

2014 Myanmar Demographic and Health Survey 2015-2016

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	44.8	12-23 m	383	45
BCG	Card <12 months	86.6	12-23 m	852	45
BCG	Card or History	87.8	12-23 m	852	45
DTP1	Card	44.8	12-23 m	383	45
DTP1	Card <12 months	85.5	12-23 m	852	45
DTP1	Card or History	86.9	12-23 m	852	45
DTP3	Card	40.6	12-23 m	383	45
DTP3	Card <12 months	60.2	12-23 m	852	45
DTP3	Card or History	62.3	12-23 m	852	45
HepB1	Card	44.8	12-23 m	383	45
HepB1	Card <12 months	85.5	12-23 m	852	45
HepB1	Card or History	86.9	12-23 m	852	45
HepB3	Card	40.6	12-23 m	383	45
HepB3	Card <12 months	60.2	12-23 m	852	45
HepB3	Card or History	62.3	12-23 m	852	45
Hib1	Card	44.8	12-23 m	383	45
Hib1	Card <12 months	85.5	12-23 m	852	45
Hib1	Card or History	86.9	12-23 m	852	45
Hib3	Card	40.6	12-23 m	383	45
Hib3	Card <12 months	60.2	12-23 m	852	45
Hib3	Card or History	62.3	12-23 m	852	45
MCV1	Card	38.7	12-23 m	383	45
MCV1	Card <12 months	61.2	12-23 m	852	45
MCV1	Card or History	77.1	12-23 m	852	45

Pol1	Card	44.8	12-23 m	383	45
Pol1	Card <12 months	88.8	12-23 m	852	45
Pol1	Card or History	90.3	12-23 m	852	45
Pol3	Card	40.9	12-23 m	383	45
Pol3	Card <12 months	64.9	12-23 m	852	45
Pol3	Card or History	67	12-23 m	852	45

2013 Myanmar Demographic and Health Survey 2015-2016

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card <12 months	87.6	24-35 m	782	45
DTP1	Card <12 months	86.2	24-35 m	782	45
DTP3	Card <12 months	64.5	24-35 m	782	45
HepB1	Card <12 months	86.2	24-35 m	782	45
HepB3	Card <12 months	64.5	24-35 m	782	45
Hib1	Card <12 months	86.2	24-35 m	782	45
Hib3	Card <12 months	64.5	24-35 m	782	45
MCV1	Card <12 months	74.3	24-35 m	782	45
Pol1	Card <12 months	89.5	24-35 m	782	45
Pol3	Card <12 months	68.5	24-35 m	782	45

2008 Myanmar Multiple Indicator Cluster Survey 2009 - 2010

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	97.2	12-23 m	3207	96
BCG	Card	95.9	12-23 m	3207	96
BCG	Card or History	98.3	12-23 m	3207	96
BCG	History	2.4	12-23 m	3207	96
DTP1	C or H <12 months	96.9	12-23 m	3207	96
DTP1	Card	96	12-23 m	3207	96
DTP1	Card or History	98.3	12-23 m	3207	96
DTP1	History	2.3	12-23 m	3207	96
DTP3	C or H <12 months	95.9	12-23 m	3207	96
DTP3	Card	95.5	12-23 m	3207	96
DTP3	Card or History	97.8	12-23 m	3207	96
DTP3	History	2.4	12-23 m	3207	96
HepB1	C or H <12 months	96.9	12-23 m	3207	96

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HepB1	Card	96	12-23 m	3207	96
HepB1	Card or History	98.3	12-23 m	3207	96
HepB1	History	2.3	12-23 m	3207	96
HepB3	C or H <12 months	95.9	12-23 m	3207	96
HepB3	Card	95.5	12-23 m	3207	96
HepB3	Card or History	97.7	12-23 m	3207	96
HepB3	History	2.2	12-23 m	3207	96
MCV1	C or H <12 months	90.7	12-23 m	3207	96
MCV1	Card	93.2	12-23 m	3207	96
MCV1	Card or History	98	12-23 m	3207	96
MCV1	History	4.7	12-23 m	3207	96
Pol1	C or H <12 months	97.5	12-23 m	3207	96
Pol1	Card	96.1	12-23 m	3207	96
Pol1	Card or History	98.7	12-23 m	3207	96
Pol1	History	2.6	12-23 m	3207	96
Pol3	C or H <12 months	95.9	12-23 m	3207	96
Pol3	Card	95.2	12-23 m	3207	96
Pol3	Card or History	97.7	12-23 m	3207	96
Pol3	History	2.4	12-23 m	3207	96

2006 Myanmar 2007 Fertility and Reproductive Health Survey

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	83.6	12-23 m	767	26
DTP3	Card or History	81.9	12-23 m	767	26
HepB3	Card or History	73	12-23 m	767	26
MCV1	Card or History	83.6	12-23 m	767	26
Pol3	Card or History	86.6	12-23 m	767	26

2005 Myanmar 2007 Fertility and Reproductive Health Survey

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	84.2	24-35 m	905	26
DTP3	Card or History	81.2	24-35 m	905	26
HepB3	Card or History	72.4	24-35 m	905	26
MCV1	Card or History	84.4	24-35 m	905	26
Pol3	Card or History	86	24-35 m	905	26

2004 Myanmar 2007 Fertility and Reproductive Health Survey

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	82.9	36-47 m	940	26
DTP3	Card or History	79.6	36-47 m	940	26
HepB3	Card or History	68.7	36-47 m	940	26
MCV1	Card or History	82.6	36-47 m	940	26
Pol3	Card or History	86	36-47 m	940	26

2003 Myanmar 2007 Fertility and Reproductive Health Survey

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	83.1	48-59 m	984	26
DTP3	Card or History	80.6	48-59 m	984	26
HepB3	Card or History	71.1	48-59 m	984	26
MCV1	Card or History	82.9	48-59 m	984	26
Pol3	Card or History	83	48-59 m	984	26

2002 Myanmar Multiple Indicator Cluster Survey (2003)

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	40.1	12-23 m	2480	52
BCG	Card <12 months	98.1	12-23 m	2480	52
BCG	Card or history	92.7	12-23 m	2480	52
BCG	History	52.6	12-23 m	2480	52
DTP1	Card	40.1	12-23 m	2480	52
DTP1	Card <12 months	98.5	12-23 m	2480	52
DTP1	Card or history	91.4	12-23 m	2480	52
DTP1	History	51.3	12-23 m	2480	52
DTP3	Card	38.3	12-23 m	2480	52
DTP3	Card <12 months	97.1	12-23 m	2480	52
DTP3	Card or history	83	12-23 m	2480	52
DTP3	History	44.7	12-23 m	2480	52
MCV1	Card	37	12-23 m	2480	52
MCV1	Card <12 months	94.2	12-23 m	2480	52
MCV1	Card or history	83.1	12-23 m	2480	52

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MCV1	History	46.1	12-23 m	2480	52
Pol1	Card	40	12-23 m	2480	52
Pol1	Card <12 months	98.5	12-23 m	2480	52
Pol1	Card or history	94.3	12-23 m	2480	52
Pol1	History	54.3	12-23 m	2480	52
Pol3	Card	38.1	12-23 m	2480	52
Pol3	Card <12 months	97.2	12-23 m	2480	52
Pol3	Card or history	89.9	12-23 m	2480	52
Pol3	History	51.8	12-23 m	2480	52

1999 Myanmar Multiple Indicator Cluster Survey 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	51.4	12-23 m	2831	52
BCG	Card or History	93.4	12-23 m	2831	52

BCG	History	42	12-23 m	2831	52
DTP1	Card	51.3	12-23 m	2831	52
DTP1	Card or History	92.4	12-23 m	2831	52
DTP1	History	41.1	12-23 m	2831	52
DTP3	Card	47.3	12-23 m	2831	52
DTP3	Card or History	82.9	12-23 m	2831	52
DTP3	History	35.6	12-23 m	2831	52
MCV1	Card	47	12-23 m	2831	52
MCV1	Card or History	87.2	12-23 m	2831	52
MCV1	History	40.2	12-23 m	2831	52
Pol1	Card	51.1	12-23 m	2831	52
Pol1	Card or History	96.4	12-23 m	2831	52
Pol1	History	45.3	12-23 m	2831	52
Pol3	Card	46.8	12-23 m	2831	52
Pol3	Card or History	89.7	12-23 m	2831	52
Pol3	History	42.9	12-23 m	2831	52

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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>