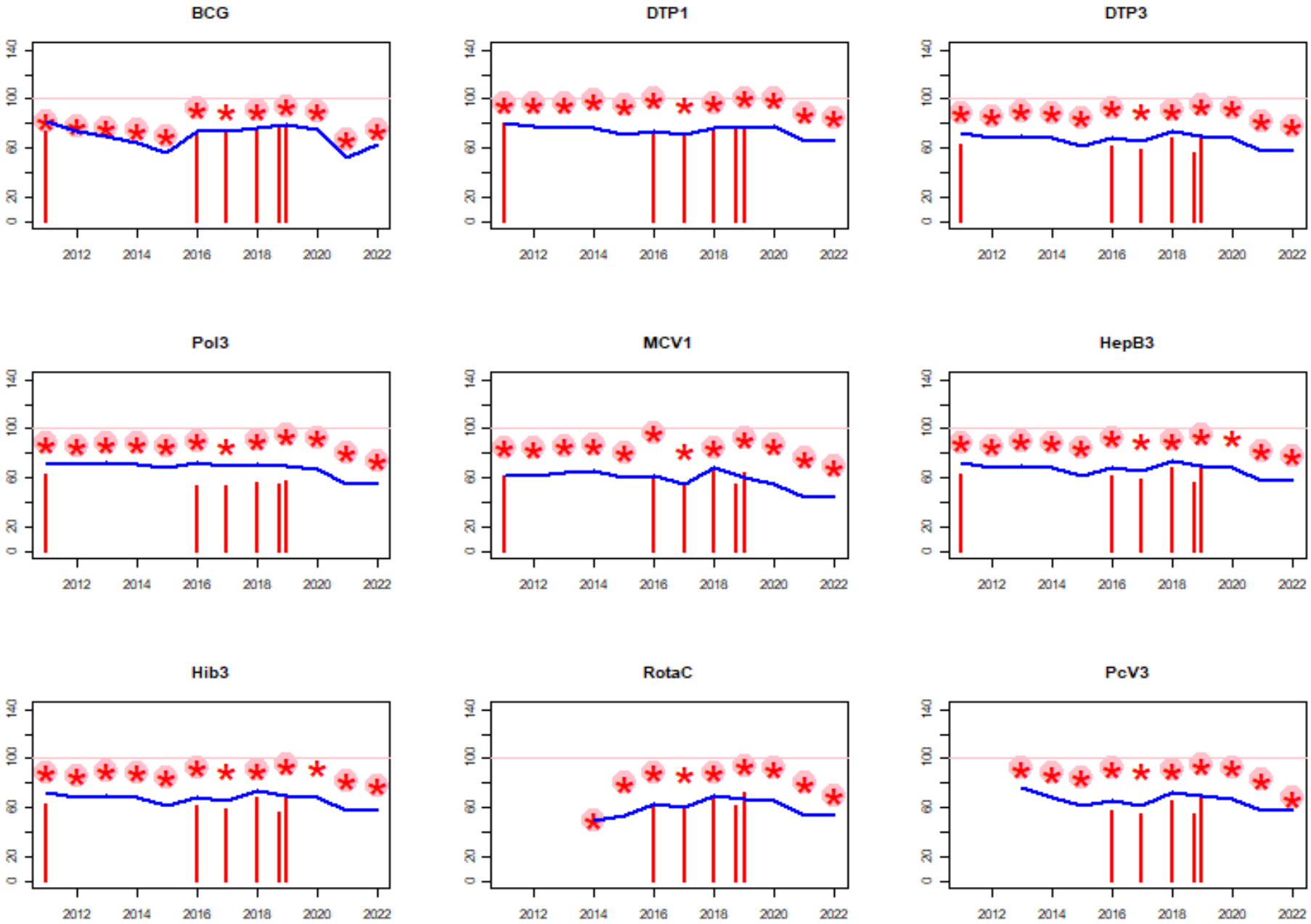

BCG
DTP1
DTP3
Pol3
MCV1
HepB3
Hib3
RotaC
PcV3
0
20
60
100
140
2012
2014
2016
2018
2020
2022

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

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

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

DATA SOURCES.

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

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

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

ABBREVIATIONS

BCG: percentage of births who received one dose of Bacillus Calmette Guerin vaccine.

DTP1 / DTP3: percentage of surviving infants who received the 1st / 3rd dose, respectively, of diphtheria and tetanus toxoid with pertussis containing vaccine.

Pol3: percentage of surviving infants who received the 3rd dose of polio containing vaccine. May be either oral or inactivated polio vaccine.

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

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

MCV1: percentage of surviving infants who received the 1st dose of measles containing vaccine. In countries where the national schedule recommends the 1st dose of MCV at 12 months or later based on the epidemiology of disease in the country, coverage estimates reflect the percentage of children who received the 1st dose of MCV as recommended.

MCV2: percentage of children who received the 2nd dose of measles containing vaccine according to the nationally recommended schedule.

RCV1: percentage of surviving infants who received the 1st dose of rubella containing vaccine. Co verage estimates are based on WHO and UNICEF estimates of coverage for the dose of measles containing vaccine that corresponds to the first measles-rubella combination vaccine. Nationally reported coverage of RCV is not taken into consideration nor are the data represented in the accompanying graph and data table.

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

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

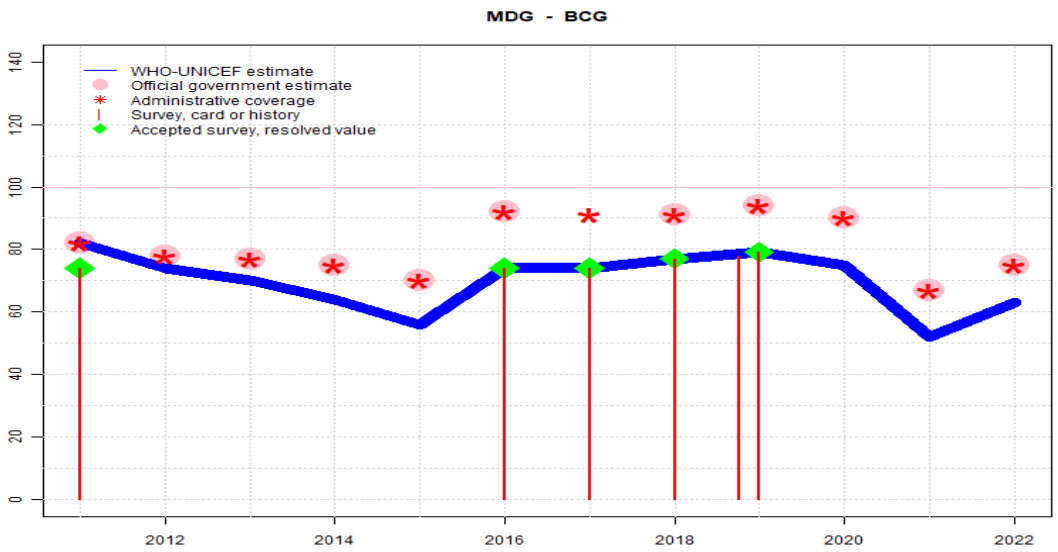
Hib3: percentage of surviving infants who received the 3rd dose of Haemophilus influenzae type b containing vaccine.

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

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

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

Madagascar - BCG



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	82	74	70	64	56	74	74	77	79	75	52	63
Estimate GoC	●●●	●●●	●	●	●	●	●	●	●	●	●	●
Official	82	78	77	75	70	92	NA	91	94	90	67	75
Administrative	82	78	77	75	70	92	91	91	94	90	67	75
Survey	74	NA	NA	NA	NA	74	74	77	*	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 the relative difference between doses administered between 2021 and 2022 applied to the estimated BCG coverage for 2021. Reported data excluded. Unexplained increase in the reported target population of surviving infants of 11 percent between 2021 and 2022. Reported increase in the number of doses for some vaccines of lesser magnitude. Programme reports a one month vaccine stockout at national and subnational levels. Estimate challenged by: D-R-

2021: Reported data calibrated to 2019 levels. Programme reports a six month vaccine stockout at national and subnational levels.. Estimate challenged by: D-R-S-

2020: Reported data calibrated to 2019 levels. Programme reports one month vaccine stockout at national and subnational levels. Estimate challenged by: D-R-

2019: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 79 percent based on 2 survey(s). Estimate challenged by: D-R-

2018: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 77 percent based on 1 survey(s). Estimate of 77 percent changed from previous revision value of 75 percent. Estimate challenged by: D-R-

2017: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 74 percent based on 1 survey(s). Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 74 percent based on 1 survey(s). Estimate challenged by: D-R-

2015: Reported data calibrated to 2011 and 2016 levels. Estimate challenged by: D-R-S-

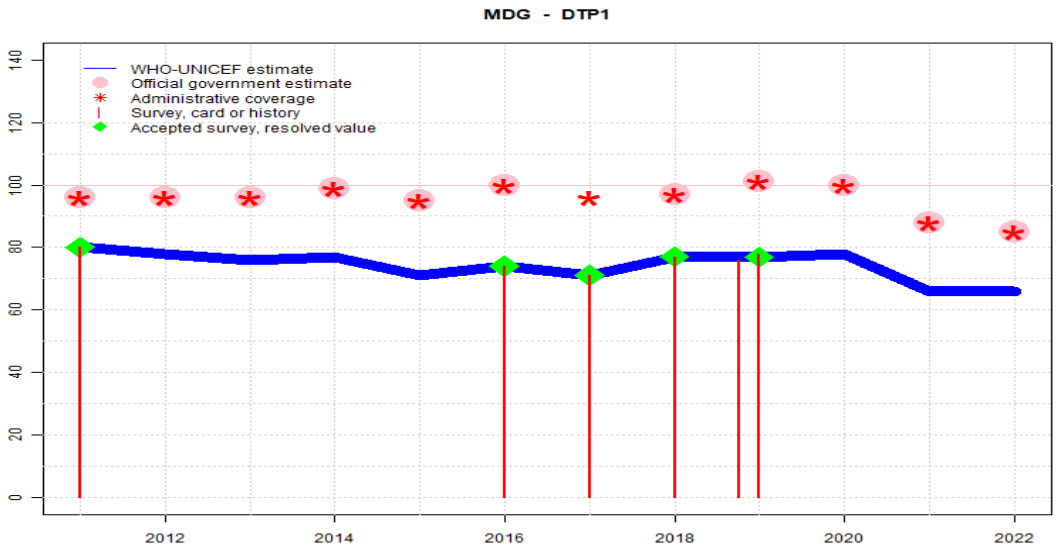
2014: Reported data calibrated to 2011 and 2016 levels. Estimate challenged by: D-R-

2013: Reported data calibrated to 2011 and 2016 levels. Since 2006, maternal and child health weeks have been conducted twice per year and serve as an important contribution towards routine immunization service delivery. In 2011 and 2012, the maternal and child health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. Estimate challenged by: D-R-

2012: Reported data calibrated to 2011 and 2016 levels. Since 2006, maternal and child health weeks have been conducted twice per year and serve as an important contribution towards routine immunization service delivery. In 2011 and 2012, the maternal and child health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. GoC=Assigned by working group. Estimate is supported by R+ S+ D+.

2011: Estimate informed by reported data supported by survey. Survey evidence of 74 percent based on 1 survey(s). GoC=Assigned by working group. Estimate is supported by R+ S+ D+.

Madagascar - DTP1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	80	78	76	77	71	74	71	77	77	78	66	66
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	96	96	96	99	95	100	NA	97	101	100	88	85
Administrative	96	96	96	99	95	100	96	97	101	100	88	85
Survey	80	NA	NA	NA	NA	74	71	77	*	NA	NA	NA

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

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

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

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

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

Description:

2022: Reported data calibrated to 2019 levels. Reported data excluded. Unexplained increase in the reported target population of surviving infants of 11 percent between 2021 and 2022. Reported increase in the number of doses for some vaccines of lesser magnitude. Estimate challenged by: D-R-

2021: Reported data calibrated to 2019 levels. Programme reports a one month vaccine stock-out at national and subnational levels.. Estimate of 66 percent changed from previous revision value of 65 percent. Estimate challenged by: D-R-S-

2020: Reported data calibrated to 2019 levels. Programme reports one month vaccine stockout at national and subnational levels. Estimate of 78 percent changed from previous revision value of 73 percent. Estimate challenged by: D-R-

2019: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 77 percent based on 2 survey(s). Reported data excluded because 101 percent greater than 100 percent. Estimate of 77 percent changed from previous revision value of 76 percent. Estimate challenged by: D-R-

2018: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 77 percent based on 1 survey(s). Estimate of 77 percent changed from previous revision value of 73 percent. Estimate challenged by: D-R-

2017: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 71 percent based on 1 survey(s). Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 74 percent based on 1 survey(s). Estimate challenged by: D-R-

2015: Reported data calibrated to 2011 and 2016 levels. Estimate challenged by: D-R-

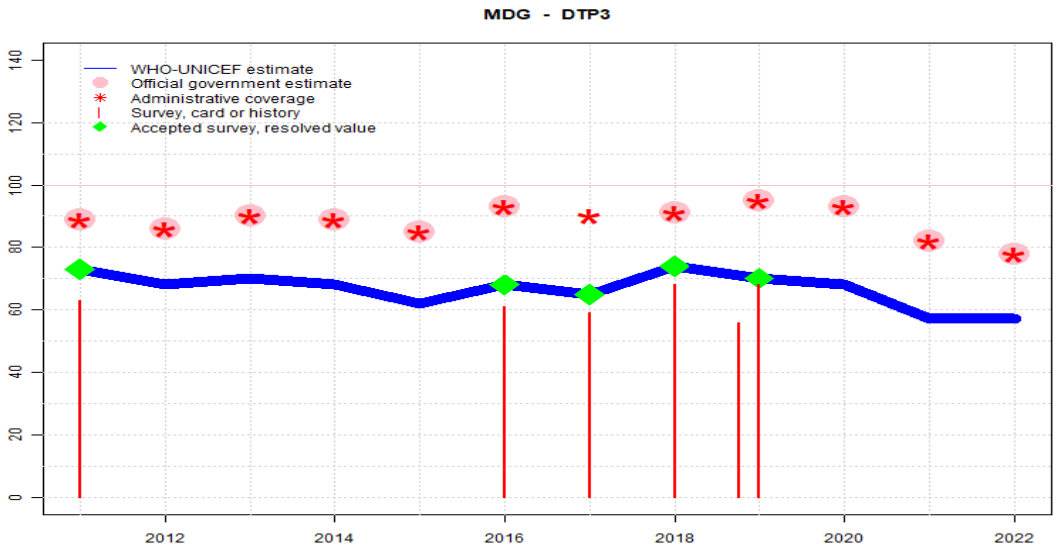
2014: Reported data calibrated to 2011 and 2016 levels. Estimate challenged by: D-R-

2013: Reported data calibrated to 2011 and 2016 levels. Since 2006, maternal and child health weeks have been conducted twice per year and serve as an important contribution towards routine immunization service delivery. In 2011 and 2012, the maternal and child health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. Estimate challenged by: D-R-

2012: Reported data calibrated to 2011 and 2016 levels. Since 2006, maternal and child health weeks have been conducted twice per year and serve as an important contribution towards routine immunization service delivery. In 2011 and 2012, the maternal and child health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. Estimate challenged by: D-R-

2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 80 percent based on 1 survey(s). Estimate challenged by: D-R-

Madagascar - DTP3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	73	68	70	68	62	68	65	74	70	68	57	57
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	89	86	90	89	85	93	NA	91	95	93	82	78
Administrative	89	86	90	89	85	93	90	91	95	93	82	78
Survey	63	NA	NA	NA	NA	61	59	68	*	NA	NA	NA

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

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

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

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

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

Description:

2022: Reported data calibrated to 2019 levels. Reported data excluded. Unexplained increase in the reported target population of surviving infants of 11 percent between 2021 and 2022. Reported increase in the number of doses for some vaccines of lesser magnitude. Estimate challenged by: D-R-

2021: Reported data calibrated to 2019 levels. Programme reports a one month vaccine stock-out at national and subnational levels.. Estimate of 57 percent changed from previous revision value of 55 percent. Estimate challenged by: D-R-S-

2020: Reported data calibrated to 2019 levels. Programme reports one month vaccine stockout at national and subnational levels. Estimate of 68 percent changed from previous revision value of 66 percent. Estimate challenged by: D-R-

2019: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 70 percent based on 2 survey(s). Enquête Démographique et de Santé à Madagascar 2021 card or history results of 68 percent modifed for recall bias to 72 percent based on 1st dose card or history coverage of 78 percent, 1st dose card only coverage of 54 percent and 3rd dose card only coverage of 50 percent. Madagascar Enquete de Couverture Vaccinale 2021 (ECV 2021) card or history results of 56 percent modifed for recall bias to 68 percent based on 1st dose card or history coverage of 76 percent, 1st dose card only coverage of 50 percent and 3rd dose card only coverage of 45 percent. Estimate of 70 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2018: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 74 percent based on 1 survey(s). Enquête Démographique et de Santé à Madagascar 2021 card or history results of 68 percent modifed for recall bias to 74 percent based on 1st dose card or history coverage of 77 percent, 1st dose card only coverage of 46 percent and 3rd dose card only coverage of 44 percent. Estimate of 74 percent changed from previous revision value of 65 percent. Estimate challenged by: D-R-

2017: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 65 percent based on 1 survey(s). Madagascar Multiple Indicator Cluster Survey 2018 card or history results of 59 percent modifed for recall bias to 65 percent based on 1st dose card or history coverage of 71 percent, 1st dose card only coverage of 48 percent and 3rd dose card only coverage of 44 percent. Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 68 percent based on 1 survey(s). Madagascar Multiple Indicator Cluster Survey 2018 card or history results of 61 percent modifed for recall bias to 68 percent based on 1st dose card or history coverage of 74 percent, 1st dose card only coverage of 38 percent and 3rd dose card only coverage of 35 percent. Estimate challenged by: D-R-

2015: Reported data calibrated to 2011 and 2016 levels. Estimate challenged by: D-R-

2014: Reported data calibrated to 2011 and 2016 levels. Estimate challenged by: D-R-

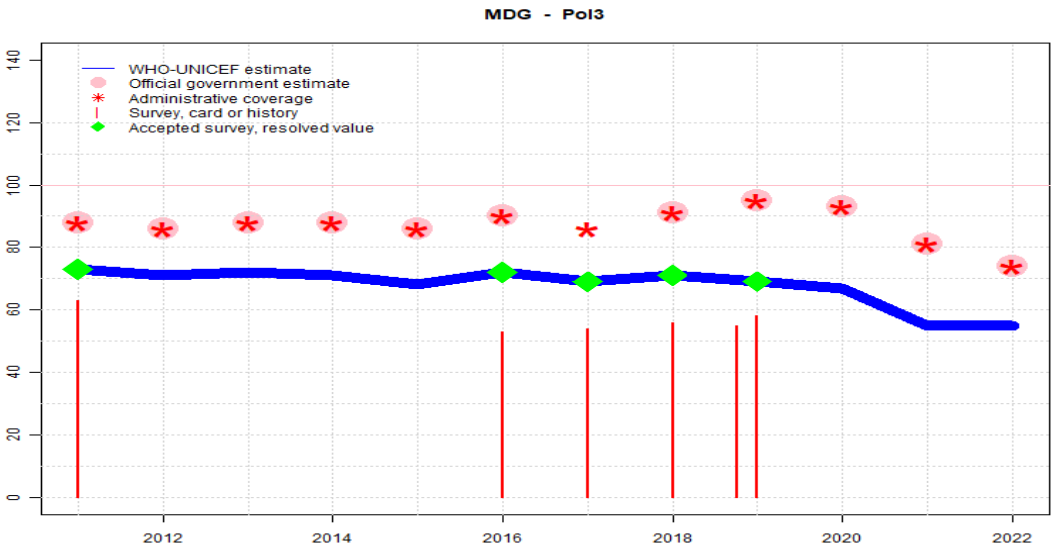
2013: Reported data calibrated to 2011 and 2016 levels. Since 2006, maternal and child health weeks have been conducted twice per year and serve as an important contribution towards routine immunization service delivery. In 2011 and 2012, the maternal and child

health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. Estimate challenged by: D-R-

2012: Reported data calibrated to 2011 and 2016 levels. Since 2006, maternal and child health weeks have been conducted twice per year and serve as an important contribution towards routine immunization service delivery. In 2011 and 2012, the maternal and child health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. Estimate challenged by: D-R-

2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 73 percent based on 1 survey(s). National Monitoring of the Millenium Development Goals Survey in Madagascar; ENSOMD 2012-2013 card or history results of 63 percent modifed for recall bias to 73 percent based on 1st dose card or history coverage of 80 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 41 percent. Estimate challenged by: D-R-

Madagascar - Pol3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	73	71	72	71	68	72	69	71	69	67	55	55
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	88	86	88	88	86	90	NA	91	95	93	81	74
Administrative	88	86	88	88	86	90	86	91	95	93	81	74
Survey	63	NA	NA	NA	NA	53	54	56	*	NA	NA	NA

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

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

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

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

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

Description:

2022: Reported data calibrated to 2019 levels. Reported data excluded. Unexplained increase in the reported target population of surviving infants of 11 percent between 2021 and 2022. Reported increase in the number of doses for some vaccines of lesser magnitude. Programme reports a OPV vaccine stockout of less than a month at the national level. Estimate challenged by: D-R-

2021: Reported data calibrated to 2019 levels. Programme reports a two months OPV stock-out at national and subnational levels.. Estimate of 55 percent changed from previous revision value of 52 percent. Estimate challenged by: D-R-S-

2020: Reported data calibrated to 2019 levels. Estimate of 67 percent changed from previous revision value of 64 percent. Estimate challenged by: D-R-

2019: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 69 percent based on 2 survey(s). Enquête Démographique et de Santé à Madagascar 2021 card or history results of 58 percent modifed for recall bias to 71 percent based on 1st dose card or history coverage of 77 percent, 1st dose card only coverage of 54 percent and 3rd dose card only coverage of 50 percent. Madagascar Enquete de Couverture Vaccinale 2021 (ECV 2021) card or history results of 55 percent modifed for recall bias to 66 percent based on 1st dose card or history coverage of 75 percent, 1st dose card only coverage of 49 percent and 3rd dose card only coverage of 43 percent. Estimate of 69 percent changed from previous revision value of 66 percent. Estimate challenged by: D-R-

2018: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 71 percent based on 1 survey(s). Enquête Démographique et de Santé à Madagascar 2021 card or history results of 56 percent modifed for recall bias to 71 percent based on 1st dose card or history coverage of 76 percent, 1st dose card only coverage of 46 percent and 3rd dose card only coverage of 43 percent. Estimate of 71 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2017: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 69 percent based on 1 survey(s). Madagascar Multiple Indicator Cluster Survey 2018 card or history results of 54 percent modifed for recall bias to 69 percent based on 1st dose card or history coverage of 75 percent, 1st dose card only coverage of 47 percent and 3rd dose card only coverage of 43 percent. Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 72 percent based on 1 survey(s). Madagascar Multiple Indicator Cluster Survey 2018 card or history results of 53 percent modifed for recall bias to 72 percent based on 1st dose card or history coverage of 76 percent, 1st dose card only coverage of 37 percent and 3rd dose card only coverage of 35 percent. Estimate challenged by: D-R-

2015: Reported data calibrated to 2011 and 2016 levels. Estimate challenged by: D-R-

2014: Reported data calibrated to 2011 and 2016 levels. Estimate challenged by: D-R-

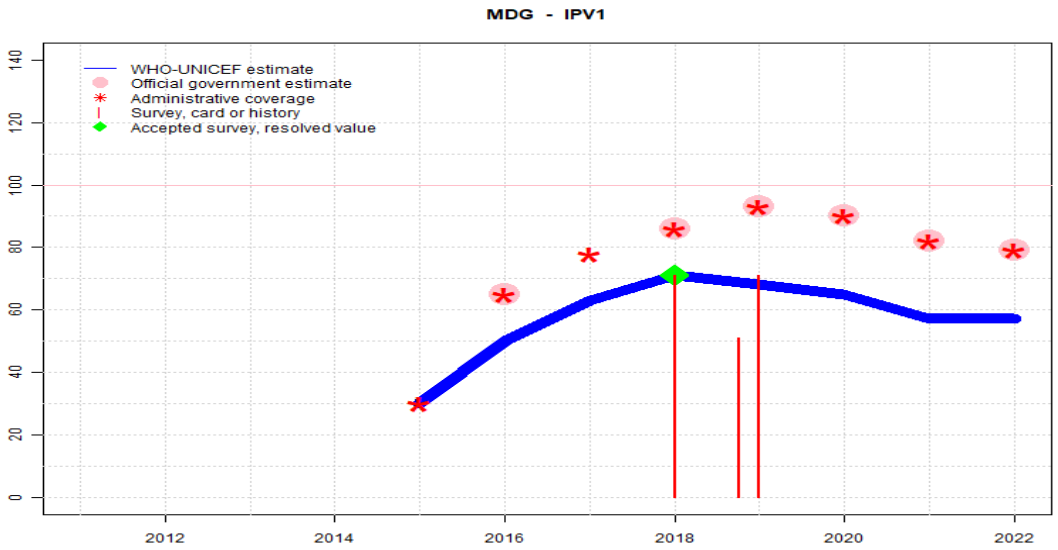
2013: Reported data calibrated to 2011 and 2016 levels. Since 2006, maternal and child health weeks have been conducted twice per year and serve as an important contribution towards routine immunization service delivery. In 2011 and 2012, the maternal and child

health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. Estimate challenged by: D-R-

2012: Reported data calibrated to 2011 and 2016 levels. Since 2006, maternal and child health weeks have been conducted twice per year and serve as an important contribution towards routine immunization service delivery. In 2011 and 2012, the maternal and child health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. Estimate challenged by: D-R-

2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 73 percent based on 1 survey(s). National Monitoring of the Millenium Development Goals Survey in Madagascar; ENSOMD 2012-2013 card or history results of 63 percent modifed for recall bias to 73 percent based on 1st dose card or history coverage of 80 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 41 percent. Estimate challenged by: D-R-

Madagascar - IPV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	30	50	63	71	68	65	57	57
Estimate GoC	NA	NA	NA	NA	•	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	NA	65	NA	86	93	90	82	79
Administrative	NA	NA	NA	NA	30	65	78	86	93	90	82	79
Survey	NA	NA	NA	NA	NA	NA	NA	71	*	NA	NA	NA

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

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

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

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

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

Description:

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

2022: Reported data calibrated to 2019 levels. Reported data excluded. Unexplained increase in the reported target population of surviving infants of 11 percent between 2021 and 2022. Reported increase in the number of doses for some vaccines of lesser magnitude. Estimate challenged by: D-R-

2021: Reported data calibrated to 2019 levels. . Estimate challenged by: D-R-

2020: Reported data calibrated to 2019 levels. Estimate challenged by: D-R-

2019: Estimate of 68 percent assigned by working group. Estimate is based on estimated DTP3 coverage level. Enquête Démographique et de Santé à Madagascar 2021 results ignored by working group. .Madagascar Enquete de Couverture Vaccinale 2021 (ECV 2021) results ignored by working group. . Estimate challenged by: D-R-

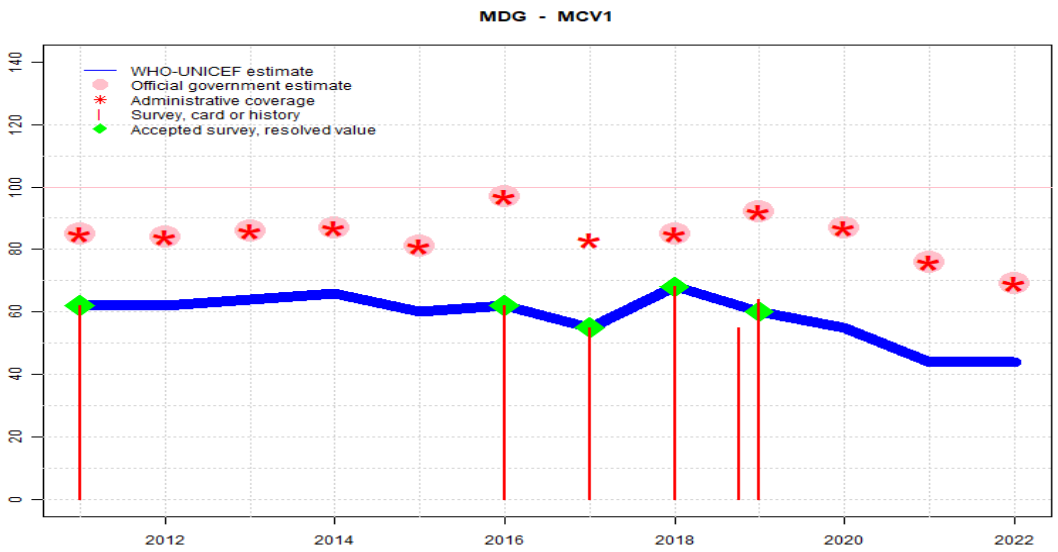
2018: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 71 percent based on 1 survey(s). Estimate of 71 percent changed from previous revision value of 61 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2018 levels. Programme reports 1-month vaccine stockout. Estimate of 63 percent changed from previous revision value of 53 percent. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2016: Reported data calibrated to 2018 levels. Programme reports three months vaccine stockout. Estimate of 50 percent changed from previous revision value of 40 percent. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

2015: Inactivated polio vaccine introduced in May 2015. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

Madagascar - MCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	62	62	64	66	60	62	55	68	60	55	44	44
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	85	84	86	87	81	97	NA	85	92	87	76	69
Administrative	85	84	86	87	81	97	83	85	92	87	76	69
Survey	62	NA	NA	NA	NA	62	55	68	*	NA	NA	NA

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

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

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

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

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

Description:

2022: Reported data calibrated to 2019 levels. Reported data excluded. Unexplained increase in the reported target population of surviving infants of 11 percent between 2021 and 2022. Reported increase in the number of doses for some vaccines of lesser magnitude. Estimate challenged by: D-R-

2021: Reported data calibrated to 2019 levels. . Estimate of 44 percent changed from previous revision value of 39 percent. Estimate challenged by: D-R-S-

2020: Reported data calibrated to 2019 levels. Estimate of 55 percent changed from previous revision value of 50 percent. Estimate challenged by: D-R-S-

2019: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 60 percent based on 2 survey(s). Estimate of 60 percent changed from previous revision value of 55 percent. Estimate challenged by: D-R-

2018: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 68 percent based on 1 survey(s). From October 2018 to Jan 2019 more than 19 000 measles cases have been reported by the Ministry of Health. Cases reported from all 22 regions of the country. Half of the cases have not been vaccinated or have an unknown vaccination status. Children under five years account for one third of all cases. Estimate of 68 percent changed from previous revision value of 52 percent. Estimate challenged by: D-R-S-

2017: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 55 percent based on 1 survey(s). Estimate challenged by: D-R-S-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 62 percent based on 1 survey(s). Reported data excluded due to an increase from 81 percent to 97 percent with decrease 83 percent. Estimate challenged by: D-R-

2015: Reported data calibrated to 2011 and 2016 levels. Estimate challenged by: D-R-

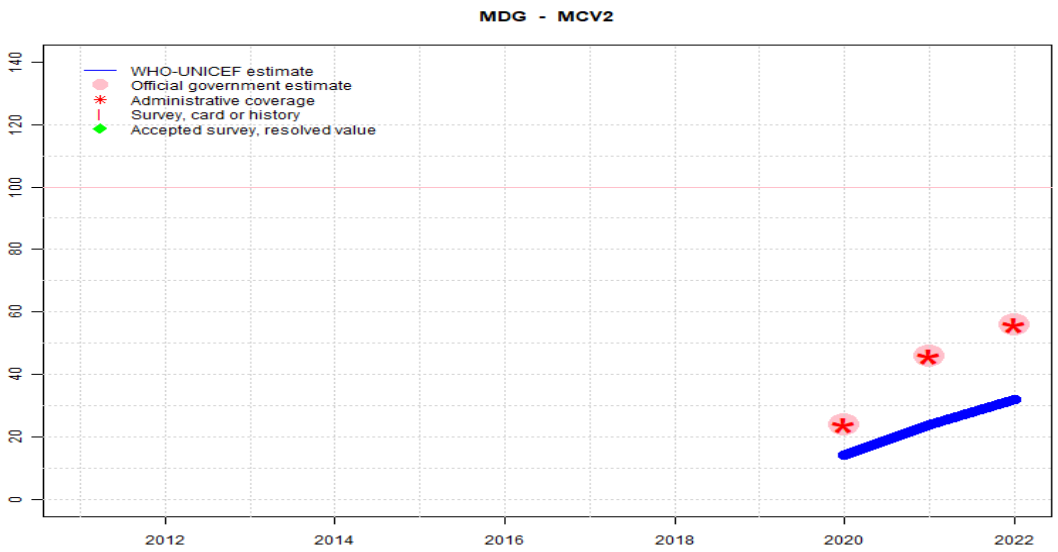
2014: Reported data calibrated to 2011 and 2016 levels. Estimate challenged by: D-R-

2013: Reported data calibrated to 2011 and 2016 levels. Since 2006, maternal and child health weeks have been conducted twice per year and serve as an important contribution towards routine immunization service delivery. In 2011 and 2012, the maternal and child health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. Estimate challenged by: D-R-

2012: Reported data calibrated to 2011 and 2016 levels. Since 2006, maternal and child health weeks have been conducted twice per year and serve as an important contribution towards routine immunization service delivery. In 2011 and 2012, the maternal and child health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. Estimate challenged by: D-R-

2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 62 percent based on 1 survey(s). Estimate challenged by: D-R-

Madagascar - MCV2



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	14	24	32
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	24	46	56
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	24	46	56
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:

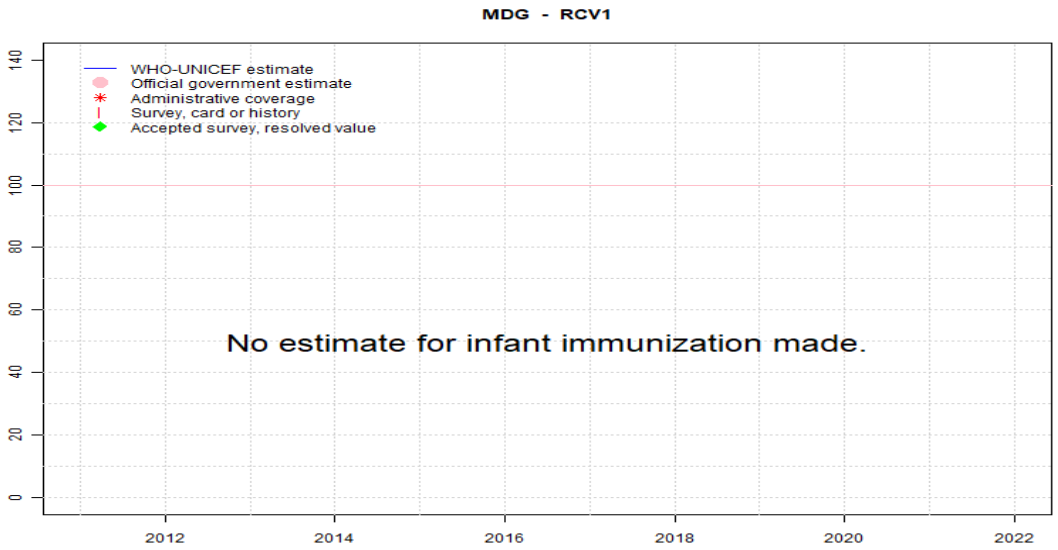
Coverage estimates for the second dose of measles containing vaccine are for children by the nationally recommended age.

2022: Estimate informed by the relative difference between doses administered for MCV1 to MCV2 applied to the estimated MCV1 coverage. Reported data excluded. Unexplained increase in the reported target population of surviving infants of 11 percent between 2021 and 2022. Reported increase in the number of doses for some vaccines of lesser magnitude. Estimate challenged by: D-R-

2021: Estimate based on the relative difference between doses administered for MCV1 to MCV2 applied to the estimated MCV1 coverage. . Estimate challenged by: D-R-

2020: Second dose of measles vaccine introduced in 2020 targeting children 15-18 months of age. Estimate based on the relative difference between doses administered for MCV1 to MCV2 applied to the estimated MCV1 coverage. Estimate challenged by: D-R-

Madagascar - RCV1



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

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

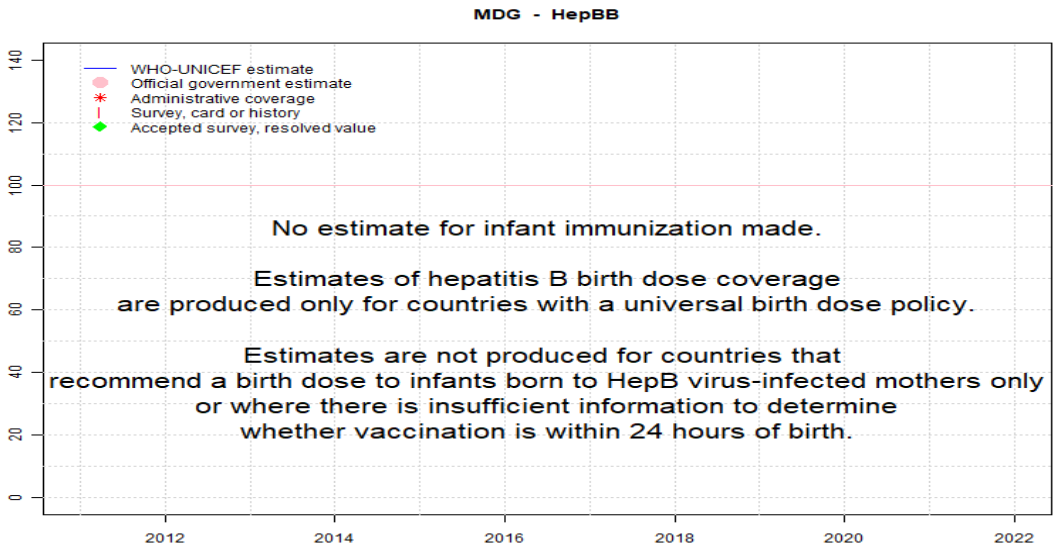
●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

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

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

Madagascar - HepBB



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

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

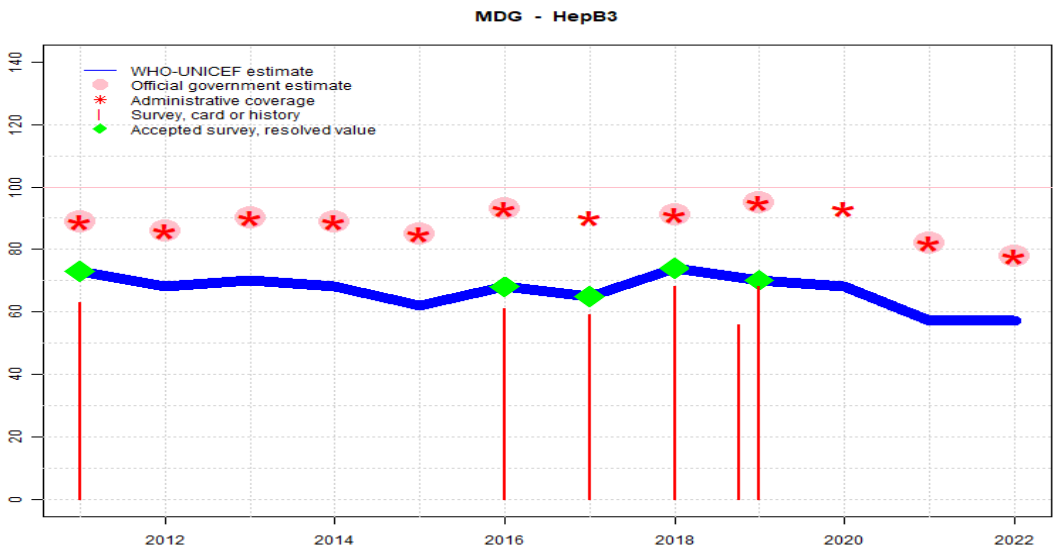
●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

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

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

Madagascar - HepB3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	73	68	70	68	62	68	65	74	70	68	57	57
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	89	86	90	89	85	93	NA	91	95	NA	82	78
Administrative	89	86	90	89	85	93	90	91	95	93	82	78
Survey	63	NA	NA	NA	NA	61	59	68	*	NA	NA	NA

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

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

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

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

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

Description:

2022: Reported data calibrated to 2019 levels. Reported data excluded. Unexplained increase in the reported target population of surviving infants of 11 percent between 2021 and 2022. Reported increase in the number of doses for some vaccines of lesser magnitude. Estimate challenged by: D-R-

2021: Reported data calibrated to 2019 levels. Programme reports a one month vaccine stock-out at national and subnational levels.. Estimate of 57 percent changed from previous revision value of 55 percent. Estimate challenged by: D-R-S-

2020: Reported data calibrated to 2019 levels. Programme reports one month vaccine stockout at national and subnational levels. Estimate of 68 percent changed from previous revision value of 66 percent. GoC=Assigned by working group. GoC assigned for consistency with other vaccine doses.

2019: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 70 percent based on 2 survey(s). Enquête Démographique et de Santé à Madagascar 2021 card or history results of 68 percent modifed for recall bias to 72 percent based on 1st dose card or history coverage of 78 percent, 1st dose card only coverage of 54 percent and 3rd dose card only coverage of 50 percent. Madagascar Enquete de Couverture Vaccinale 2021 (ECV 2021) card or history results of 56 percent modifed for recall bias to 68 percent based on 1st dose card or history coverage of 76 percent, 1st dose card only coverage of 50 percent and 3rd dose card only coverage of 45 percent. Estimate of 70 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2018: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 74 percent based on 1 survey(s). Enquête Démographique et de Santé à Madagascar 2021 card or history results of 68 percent modifed for recall bias to 74 percent based on 1st dose card or history coverage of 77 percent, 1st dose card only coverage of 46 percent and 3rd dose card only coverage of 44 percent. Estimate of 74 percent changed from previous revision value of 65 percent. Estimate challenged by: D-R-

2017: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 65 percent based on 1 survey(s). Madagascar Multiple Indicator Cluster Survey 2018 card or history results of 59 percent modifed for recall bias to 65 percent based on 1st dose card or history coverage of 71 percent, 1st dose card only coverage of 48 percent and 3rd dose card only coverage of 44 percent. Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 68 percent based on 1 survey(s). Madagascar Multiple Indicator Cluster Survey 2018 card or history results of 61 percent modifed for recall bias to 68 percent based on 1st dose card or history coverage of 74 percent, 1st dose card only coverage of 38 percent and 3rd dose card only coverage of 35 percent. Estimate challenged by: D-R-

2015: Reported data calibrated to 2011 and 2016 levels. Estimate challenged by: D-R-

2014: Reported data calibrated to 2011 and 2016 levels. Estimate challenged by: D-R-

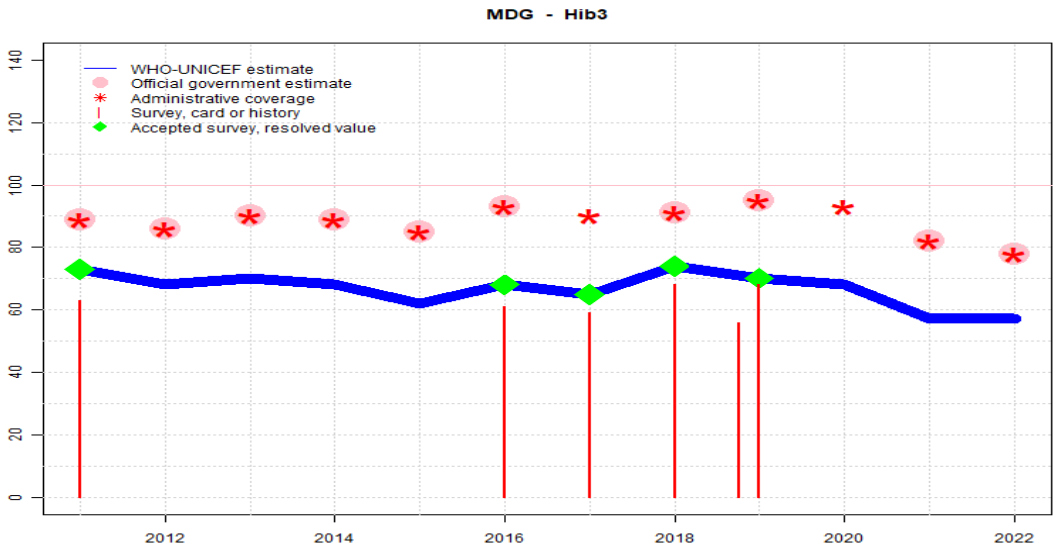
2013: Reported data calibrated to 2011 and 2016 levels. Since 2006, maternal and child health weeks have been conducted twice per year and serve as an important contribution to-

wards routine immunization service delivery. In 2011 and 2012, the maternal and child health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. Estimate challenged by: D-R-

2012: Reported data calibrated to 2011 and 2016 levels. Since 2006, maternal and child health weeks have been conducted twice per year and serve as an important contribution towards routine immunization service delivery. In 2011 and 2012, the maternal and child health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. Estimate challenged by: D-R-

2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 73 percent based on 1 survey(s). National Monitoring of the Millenium Development Goals Survey in Madagascar; ENSOMD 2012-2013 card or history results of 63 percent modifed for recall bias to 73 percent based on 1st dose card or history coverage of 80 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 41 percent. Estimate challenged by: D-R-

Madagascar - Hib3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	73	68	70	68	62	68	65	74	70	68	57	57
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	89	86	90	89	85	93	NA	91	95	NA	82	78
Administrative	89	86	90	89	85	93	90	91	95	93	82	78
Survey	63	NA	NA	NA	NA	61	59	68	*	NA	NA	NA

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

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

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

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

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

Description:

2022: Reported data calibrated to 2019 levels. Reported data excluded. Unexplained increase in the reported target population of surviving infants of 11 percent between 2021 and 2022. Reported increase in the number of doses for some vaccines of lesser magnitude. Estimate challenged by: D-R-

2021: Reported data calibrated to 2019 levels. Programme reports a one month vaccine stock-out at national and subnational levels.. Estimate of 57 percent changed from previous revision value of 55 percent. Estimate challenged by: D-R-S-

2020: Reported data calibrated to 2019 levels. Programme reports one month vaccine stockout at national and subnational levels. Estimate of 68 percent changed from previous revision value of 66 percent. GoC=Assigned by working group. GoC assigned for consistency with other vaccine doses.

2019: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 70 percent based on 2 survey(s). Enquête Démographique et de Santé à Madagascar 2021 card or history results of 68 percent modifed for recall bias to 72 percent based on 1st dose card or history coverage of 78 percent, 1st dose card only coverage of 54 percent and 3rd dose card only coverage of 50 percent. Madagascar Enquete de Couverture Vaccinale 2021 (ECV 2021) card or history results of 56 percent modifed for recall bias to 68 percent based on 1st dose card or history coverage of 76 percent, 1st dose card only coverage of 50 percent and 3rd dose card only coverage of 45 percent. Estimate of 70 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2018: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 74 percent based on 1 survey(s). Enquête Démographique et de Santé à Madagascar 2021 card or history results of 68 percent modifed for recall bias to 74 percent based on 1st dose card or history coverage of 77 percent, 1st dose card only coverage of 46 percent and 3rd dose card only coverage of 44 percent. Estimate of 74 percent changed from previous revision value of 65 percent. Estimate challenged by: D-R-

2017: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 65 percent based on 1 survey(s). Madagascar Multiple Indicator Cluster Survey 2018 card or history results of 59 percent modifed for recall bias to 65 percent based on 1st dose card or history coverage of 71 percent, 1st dose card only coverage of 48 percent and 3rd dose card only coverage of 44 percent. Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 68 percent based on 1 survey(s). Madagascar Multiple Indicator Cluster Survey 2018 card or history results of 61 percent modifed for recall bias to 68 percent based on 1st dose card or history coverage of 74 percent, 1st dose card only coverage of 38 percent and 3rd dose card only coverage of 35 percent. Estimate challenged by: D-R-

2015: Reported data calibrated to 2011 and 2016 levels. Estimate challenged by: D-R-

2014: Reported data calibrated to 2011 and 2016 levels. Estimate challenged by: D-R-

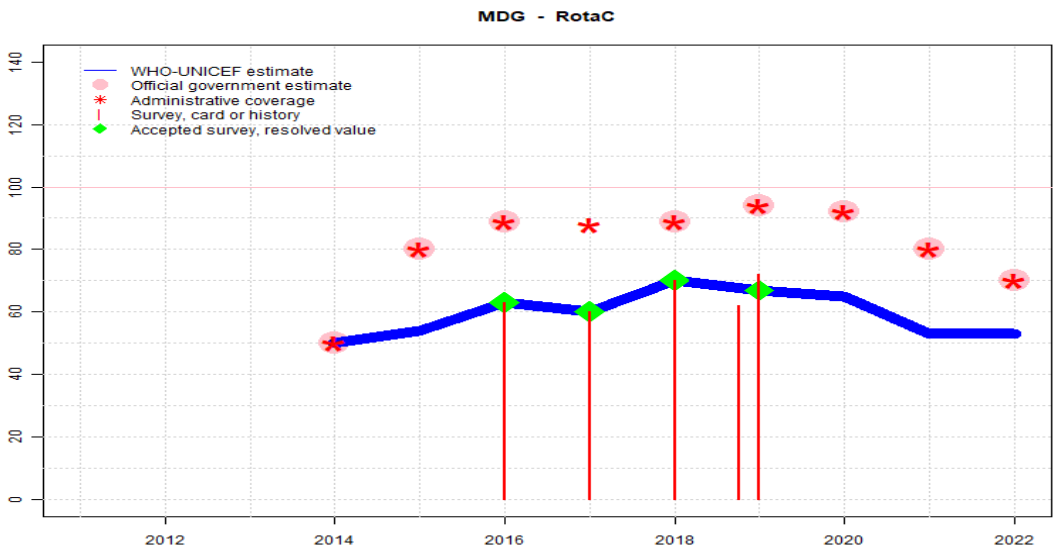
2013: Reported data calibrated to 2011 and 2016 levels. Since 2006, maternal and child health weeks have been conducted twice per year and serve as an important contribution to-

wards routine immunization service delivery. In 2011 and 2012, the maternal and child health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. Estimate challenged by: D-R-

2012: Reported data calibrated to 2011 and 2016 levels. Since 2006, maternal and child health weeks have been conducted twice per year and serve as an important contribution towards routine immunization service delivery. In 2011 and 2012, the maternal and child health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. Estimate challenged by: D-R-

2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 73 percent based on 1 survey(s). National Monitoring of the Millenium Development Goals Survey in Madagascar; ENSOMD 2012-2013 card or history results of 63 percent modifed for recall bias to 73 percent based on 1st dose card or history coverage of 80 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 41 percent. Estimate challenged by: D-R-

Madagascar - RotaC



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	50	54	63	60	70	67	65	53	53
Estimate GoC	NA	NA	NA	•	•	•	•	•	•	•	•	•
Official	NA	NA	NA	50	80	89	NA	89	94	92	80	70
Administrative	NA	NA	NA	50	80	89	88	89	94	92	80	70
Survey	NA	NA	NA	NA	NA	63	60	70	*	NA	NA	NA

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

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

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

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

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

Description:

2022: Reported data calibrated to 2019 levels. Reported data excluded. Unexplained increase in the reported target population of surviving infants of 11 percent between 2021 and 2022. Reported increase in the number of doses for some vaccines of lesser magnitude. Programme reports a vaccine stockout of less than a month at the national level. Estimate challenged by: D-R-

2021: Reported data calibrated to 2019 levels. Programme reports a one month vaccine stockout at national and subnational levels.. Estimate of 53 percent changed from previous revision value of 48 percent. Estimate challenged by: D-R-S-

2020: Reported data calibrated to 2019 levels. Estimate of 65 percent changed from previous revision value of 60 percent. Estimate challenged by: D-R-

2019: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 67 percent based on 2 survey(s). Estimate of 67 percent changed from previous revision value of 62 percent. Estimate challenged by: D-R-

2018: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 70 percent based on 1 survey(s). Estimate of 70 percent changed from previous revision value of 59 percent. Estimate challenged by: D-R-

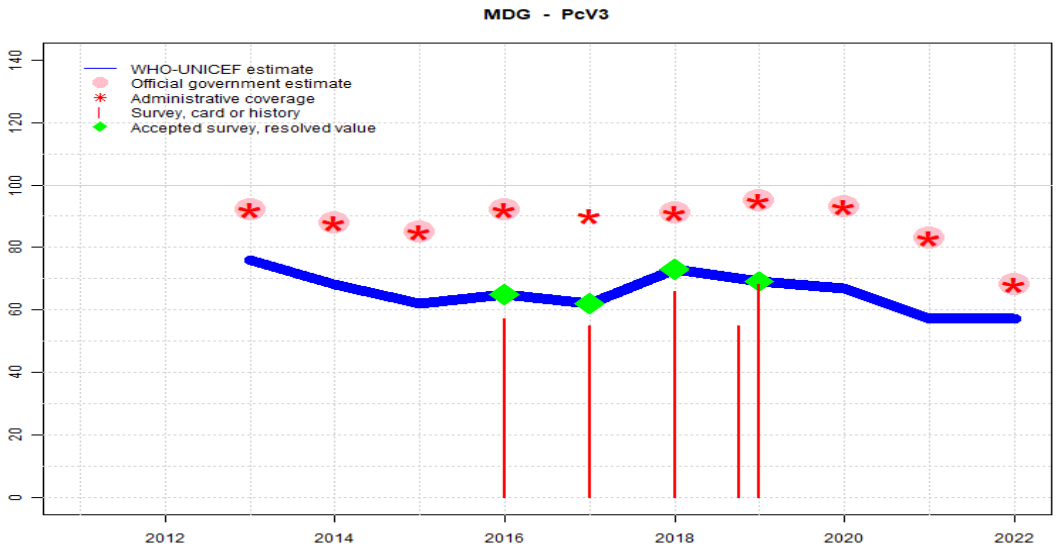
2017: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 60 percent based on 1 survey(s). Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 63 percent based on 1 survey(s). Estimate challenged by: D-R-

2015: Reported data calibrated to 2016 levels. Estimate challenged by: D-R-

2014: Estimate is exceptionally based on reported data during introduction. Rotavirus vaccine introduced during May 2014. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

Madagascar - PcV3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	76	68	62	65	62	73	69	67	57	57
Estimate GoC	NA	NA	•	•	•	•	•	•	•	•	•	•
Official	NA	NA	92	88	85	92	NA	91	95	93	83	68
Administrative	NA	NA	92	88	85	92	90	91	95	93	83	68
Survey	NA	NA	NA	NA	NA	57	55	66	*	NA	NA	NA

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

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

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

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

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

Description:

2022: Reported data calibrated to 2019 levels. Reported data excluded. Unexplained increase in the reported target population of surviving infants of 11 percent between 2021 and 2022. Reported increase in the number of doses for some vaccines of lesser magnitude.Reported data excluded due to decline in reported coverage from 83 level to 68 percent. Programme reports a two months vaccine stockout at national and subnational levels. Estimate challenged by: D-R-

2021: Reported data calibrated to 2019 levels. . Estimate of 57 percent changed from previous revision value of 54 percent. Estimate challenged by: D-R-S-

2020: Reported data calibrated to 2019 levels. Estimate of 67 percent changed from previous revision value of 64 percent. Estimate challenged by: D-R-

2019: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 69 percent based on 2 survey(s). Enquête Démographique et de Santé à Madagascar 2021 card or history results of 68 percent modifed for recall bias to 72 percent based on 1st dose card or history coverage of 78 percent, 1st dose card only coverage of 54 percent and 3rd dose card only coverage of 50 percent. Madagascar Enquete de Couverture Vaccinale 2021 (ECV 2021) card or history results of 55 percent modifed for recall bias to 66 percent based on 1st dose card or history coverage of 75 percent, 1st dose card only coverage of 50 percent and 3rd dose card only coverage of 44 percent. Estimate of 69 percent changed from previous revision value of 66 percent. Estimate challenged by: D-R-

2018: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 73 percent based on 1 survey(s). Enquête Démographique et de Santé à Madagascar 2021 card or history results of 66 percent modifed for recall bias to 73 percent based on 1st dose card or history coverage of 76 percent, 1st dose card only coverage of 46 percent and 3rd dose card only coverage of 44 percent. Estimate of 73 percent changed from previous revision value of 62 percent. Estimate challenged by: D-R-S-

2017: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 62 percent based on 1 survey(s). Madagascar Multiple Indicator Cluster Survey 2018 card or history results of 55 percent modifed for recall bias to 62 percent based on 1st dose card or history coverage of 68 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 41 percent. Estimate challenged by: D-R-S-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 65 percent based on 1 survey(s). Madagascar Multiple Indicator Cluster Survey 2018 card or history results of 57 percent modifed for recall bias to 65 percent based on 1st dose card or history coverage of 71 percent, 1st dose card only coverage of 37 percent and 3rd dose card only coverage of 34 percent. Estimate challenged by: D-R-

2015: Reported data calibrated to 2013 and 2016 levels. Estimate challenged by: D-R-

2014: Reported data calibrated to 2013 and 2016 levels. Estimate challenged by: D-R-

2013: Estimate of 76 percent assigned by working group. Estimate is based on calibrated DTP3 level. Since 2006, maternal and child health weeks have been conducted twice per year

and serve as an important contribution towards routine immunization service delivery. In 2011 and 2012, the maternal and child health weeks accounted for 20 to 30 percent of children 0 to 11 months of age reached with routine vaccination services. PcV vaccine introduced in 2012, reporting began in 2013. Estimate challenged by: D-R-

Madagascar - 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.

2019 Enquete Demographique et de Sante a Madagascar 2021

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	78.2	12-23 m	23370	56
BCG	Card	53.2	12-23 m	13020	56
BCG	Card or History	78.3	12-23 m	23370	56
BCG	History	25.2	12-23 m	10350	56
DTP1	C or H <12 months	77.9	12-23 m	23370	56
DTP1	Card	54.5	12-23 m	13020	56
DTP1	Card or History	78.3	12-23 m	23370	56
DTP1	History	23.8	12-23 m	10350	56
DTP3	C or H <12 months	67.2	12-23 m	23370	56
DTP3	Card	49.9	12-23 m	13020	56
DTP3	Card or History	67.9	12-23 m	23370	56
DTP3	History	18	12-23 m	10350	56
HepB1	C or H <12 months	77.9	12-23 m	23370	56
HepB1	Card	54.5	12-23 m	13020	56
HepB1	Card or History	78.3	12-23 m	23370	56
HepB1	History	23.8	12-23 m	10350	56
HepB3	C or H <12 months	67.2	12-23 m	23370	56
HepB3	Card	49.9	12-23 m	13020	56
HepB3	Card or History	67.9	12-23 m	23370	56
HepB3	History	18	12-23 m	10350	56
Hib1	C or H <12 months	77.9	12-23 m	23370	56
Hib1	Card	54.5	12-23 m	13020	56
Hib1	Card or History	78.3	12-23 m	23370	56
Hib1	History	23.8	12-23 m	10350	56
Hib3	C or H <12 months	67.2	12-23 m	23370	56
Hib3	Card	49.9	12-23 m	13020	56
Hib3	Card or History	67.9	12-23 m	23370	56
Hib3	History	18	12-23 m	10350	56
IPV1	C or H <12 months	70	12-23 m	23370	56
IPV1	Card	48.8	12-23 m	13020	56
IPV1	Card or History	70.7	12-23 m	23370	56
IPV1	History	21.9	12-23 m	10350	56
MCV1	C or H <12 months	58.7	12-23 m	23370	56
MCV1	Card	45	12-23 m	13020	56
MCV1	Card or History	64.1	12-23 m	23370	56
MCV1	History	19.1	12-23 m	10350	56
PCV1	C or H <12 months	77.7	12-23 m	23370	56
PCV1	Card	54.4	12-23 m	13020	56
PCV1	Card or History	78	12-23 m	23370	56
PCV1	History	23.6	12-23 m	10350	56
PCV3	C or H <12 months	66.9	12-23 m	23370	56
PCV3	Card	50	12-23 m	13020	56
PCV3	Card or History	67.5	12-23 m	23370	56
PCV3	History	17.5	12-23 m	10350	56
Pol1	C or H <12 months	76.3	12-23 m	23370	56
Pol1	Card	54.2	12-23 m	13020	56
Pol1	Card or History	76.6	12-23 m	23370	56
Pol1	History	22.3	12-23 m	10350	56
Pol3	C or H <12 months	57.3	12-23 m	23370	56
Pol3	Card	49.8	12-23 m	13020	56
Pol3	Card or History	57.9	12-23 m	23370	56
Pol3	History	8	12-23 m	10350	56
RotaC	C or H <12 months	71.2	12-23 m	23370	56
RotaC	Card	52.3	12-23 m	13020	56
RotaC	Card or History	71.8	12-23 m	23370	56
RotaC	History	19.6	12-23 m	10350	56

2019 Madagascar Enquete de Couverture Vaccinale 2021 (ECV 2021)

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	48.1	12-23 m	1430	52
BCG	Card or History	79.3	12-23 m	1430	52
BCG	History	29.3	12-23 m	1430	52

DTP1	Card	50.5	12-23 m	1430	52
DTP1	Card or History	76.1	12-23 m	1430	52
DTP1	History	25.6	12-23 m	1430	52
DTP3	Card	45	12-23 m	1430	52
DTP3	Card or History	55.6	12-23 m	1430	52
DTP3	History	10.6	12-23 m	1430	52
HepB1	Card	50.5	12-23 m	1430	52
HepB1	Card or History	76.1	12-23 m	1430	52
HepB1	History	25.6	12-23 m	1430	52
HepB3	Card	45	12-23 m	1430	52
HepB3	Card or History	55.6	12-23 m	1430	52
HepB3	History	10.6	12-23 m	1430	52
Hib1	Card	50.5	12-23 m	1430	52
Hib1	Card or History	76.1	12-23 m	1430	52
Hib1	History	25.6	12-23 m	1430	52
Hib3	Card	45	12-23 m	1430	52
Hib3	Card or History	55.6	12-23 m	1430	52
Hib3	History	10.6	12-23 m	1430	52
IPV1	Card	40.1	12-23 m	1430	52
IPV1	Card or History	51.3	12-23 m	1430	52
IPV1	History	11.2	12-23 m	1430	52
MCV1	Card	40.2	12-23 m	1430	52
MCV1	Card or History	54.7	12-23 m	1430	52
MCV1	History	14.4	12-23 m	1430	52
PCV1	Card	49.7	12-23 m	1430	52
PCV1	Card or History	75.3	12-23 m	1430	52
PCV1	History	25.6	12-23 m	1430	52
PCV3	Card	44.1	12-23 m	1430	52
PCV3	Card or History	54.8	12-23 m	1430	52
PCV3	History	10.6	12-23 m	1430	52
Pol1	Card	49	12-23 m	1430	52
Pol1	Card or History	75.1	12-23 m	1430	52
Pol1	History	26.1	12-23 m	1430	52
Pol3	Card	42.9	12-23 m	1430	52
Pol3	Card or History	54.6	12-23 m	1430	52
Pol3	History	11.7	12-23 m	1430	52
RotaC	Card	46	12-23 m	1430	52
RotaC	Card or History	61.5	12-23 m	1430	52
RotaC	History	15.5	12-23 m	1430	52

2018 Enquete Demographique et de Sante a Madagascar 2021

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	76.4	24-35 m	22400	56
BCG	Card	45	24-35 m	10490	56
BCG	Card or History	77.2	24-35 m	22400	56
BCG	History	32.2	24-35 m	11920	56
DTP1	C or H <12 months	75.5	24-35 m	22400	56
DTP1	Card	46	24-35 m	10490	56
DTP1	Card or History	76.7	24-35 m	22400	56
DTP1	History	30.7	24-35 m	11920	56
DTP3	C or H <12 months	66.5	24-35 m	22400	56
DTP3	Card	43.6	24-35 m	10490	56
DTP3	Card or History	68.3	24-35 m	22400	56
DTP3	History	24.7	24-35 m	11920	56
HepB1	C or H <12 months	75.5	24-35 m	22400	56
HepB1	Card	46	24-35 m	10490	56
HepB1	Card or History	76.7	24-35 m	22400	56
HepB1	History	30.7	24-35 m	11920	56
HepB3	C or H <12 months	66.5	24-35 m	22400	56
HepB3	Card	43.6	24-35 m	10490	56
HepB3	Card or History	68.3	24-35 m	22400	56
HepB3	History	24.7	24-35 m	11920	56
Hib1	C or H <12 months	75.5	24-35 m	22400	56
Hib1	Card	46	24-35 m	10490	56
Hib1	Card or History	76.7	24-35 m	22400	56
Hib1	History	30.7	24-35 m	11920	56
Hib3	C or H <12 months	66.5	24-35 m	22400	56
Hib3	Card	43.6	24-35 m	10490	56
Hib3	Card or History	68.3	24-35 m	22400	56
Hib3	History	24.7	24-35 m	11920	56
IPV1	C or H <12 months	68.9	24-35 m	22400	56
IPV1	Card	41.6	24-35 m	10490	56
IPV1	Card or History	71	24-35 m	22400	56
IPV1	History	29.4	24-35 m	11920	56
MCV1	C or H <12 months	58.9	24-35 m	22400	56
MCV1	Card	40.6	24-35 m	10490	56
MCV1	Card or History	67.5	24-35 m	22400	56
MCV1	History	27	24-35 m	11920	56
PCV1	C or H <12 months	74.8	24-35 m	22400	56

PCV1	Card	45.9	24-35 m	10490	56
PCV1	Card or History	76	24-35 m	22400	56
PCV1	History	30	24-35 m	11920	56
PCV3	C or H <12 months	64.7	24-35 m	22400	56
PCV3	Card	43.6	24-35 m	10490	56
PCV3	Card or History	66.5	24-35 m	22400	56
PCV3	History	22.9	24-35 m	11920	56
Pol1	C or H <12 months	74.3	24-35 m	22400	56
Pol1	Card	45.8	24-35 m	10490	56
Pol1	Card or History	75.5	24-35 m	22400	56
Pol1	History	29.6	24-35 m	11920	56
Pol3	C or H <12 months	54	24-35 m	22400	56
Pol3	Card	43.2	24-35 m	10490	56
Pol3	Card or History	55.5	24-35 m	22400	56
Pol3	History	12.3	24-35 m	11920	56
RotaC	C or H <12 months	68.2	24-35 m	22400	56
RotaC	Card	44.7	24-35 m	10490	56
RotaC	Card or History	69.6	24-35 m	22400	56
RotaC	History	24.9	24-35 m	11920	56

2017 Madagascar Enquete par grappes a indicateurs multiples 2018

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	69.6	12-23 m	2625	50
BCG	Card	47.3	12-23 m	2625	50
BCG	Card or History	73.5	12-23 m	2625	50
BCG	History	26.2	12-23 m	2625	50
DTP1	C or H <12 months	66.6	12-23 m	2625	50
DTP1	Card	47.8	12-23 m	2625	50
DTP1	Card or History	71.4	12-23 m	2625	50
DTP1	History	23.6	12-23 m	2625	50
DTP3	C or H <12 months	54.6	12-23 m	2625	50
DTP3	Card	43.7	12-23 m	2625	50
DTP3	Card or History	58.9	12-23 m	2625	50
DTP3	History	15.1	12-23 m	2625	50
HepB1	C or H <12 months	66.6	12-23 m	2625	50
HepB1	Card	47.8	12-23 m	2625	50
HepB1	Card or History	71.4	12-23 m	2625	50
HepB1	History	23.6	12-23 m	2625	50
HepB3	C or H <12 months	54.6	12-23 m	2625	50
HepB3	Card	43.7	12-23 m	2625	50
HepB3	Card or History	58.9	12-23 m	2625	50
HepB3	History	15.1	12-23 m	2625	50
Hib1	C or H <12 months	66.6	12-23 m	2625	50
Hib1	Card	47.8	12-23 m	2625	50
Hib1	Card or History	71.4	12-23 m	2625	50
Hib1	History	23.6	12-23 m	2625	50
Hib3	C or H <12 months	54.6	12-23 m	2625	50
Hib3	Card	43.7	12-23 m	2625	50
Hib3	Card or History	58.9	12-23 m	2625	50
Hib3	History	15.1	12-23 m	2625	50
MCV1	C or H <12 months	49	12-23 m	2625	50
MCV1	Card	37	12-23 m	2625	50
MCV1	Card or History	54.9	12-23 m	2625	50
MCV1	History	17.9	12-23 m	2625	50
PCV1	C or H <12 months	63.3	12-23 m	2625	50
PCV1	Card	45.4	12-23 m	2625	50
PCV1	Card or History	68.5	12-23 m	2625	50
PCV1	History	23.1	12-23 m	2625	50
PCV3	C or H <12 months	50.6	12-23 m	2625	50
PCV3	Card	41.4	12-23 m	2625	50
PCV3	Card or History	55.2	12-23 m	2625	50
PCV3	History	13.7	12-23 m	2625	50
Pol1	C or H <12 months	70.1	12-23 m	2625	50
Pol1	Card	47.4	12-23 m	2625	50
Pol1	Card or History	74.7	12-23 m	2625	50
Pol1	History	27.3	12-23 m	2625	50
Pol3	C or H <12 months	49.9	12-23 m	2625	50
Pol3	Card	43.3	12-23 m	2625	50
Pol3	Card or History	53.6	12-23 m	2625	50
Pol3	History	10.3	12-23 m	2625	50
RotaC	C or H <12 months	55.4	12-23 m	2625	50
RotaC	Card	43.4	12-23 m	2625	50
RotaC	Card or History	60.1	12-23 m	2625	50
RotaC	History	16.7	12-23 m	2625	50

2016 Madagascar Enquete par grappes a indicateurs multiples 2018

Madagascar - survey details

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	66.1	24-35 m	2442	50
BCG	Card	35.7	24-35 m	2442	50
BCG	Card or History	73.7	24-35 m	2442	50
BCG	History	37.9	24-35 m	2442	50
DTP1	C or H <12 months	65.4	24-35 m	2442	50
DTP1	Card	37.6	24-35 m	2442	50
DTP1	Card or History	73.5	24-35 m	2442	50
DTP1	History	36	24-35 m	2442	50
DTP3	C or H <12 months	52.7	24-35 m	2442	50
DTP3	Card	35.1	24-35 m	2442	50
DTP3	Card or History	60.8	24-35 m	2442	50
DTP3	History	25.8	24-35 m	2442	50
HepB1	C or H <12 months	65.4	24-35 m	2442	50
HepB1	Card	37.6	24-35 m	2442	50
HepB1	Card or History	73.5	24-35 m	2442	50
HepB1	History	36	24-35 m	2442	50
HepB3	C or H <12 months	52.7	24-35 m	2442	50
HepB3	Card	35.1	24-35 m	2442	50
HepB3	Card or History	60.8	24-35 m	2442	50
HepB3	History	25.8	24-35 m	2442	50
Hib1	C or H <12 months	65.4	24-35 m	2442	50
Hib1	Card	37.6	24-35 m	2442	50
Hib1	Card or History	73.5	24-35 m	2442	50
Hib1	History	36	24-35 m	2442	50
Hib3	C or H <12 months	52.7	24-35 m	2442	50
Hib3	Card	35.1	24-35 m	2442	50
Hib3	Card or History	60.8	24-35 m	2442	50
Hib3	History	25.8	24-35 m	2442	50
MCV1	C or H <12 months	51.8	24-35 m	2442	50
MCV1	Card	33	24-35 m	2442	50
MCV1	Card or History	61.9	24-35 m	2442	50
MCV1	History	28.9	24-35 m	2442	50
PCV1	C or H <12 months	62.4	24-35 m	2442	50
PCV1	Card	36.6	24-35 m	2442	50
PCV1	Card or History	70.9	24-35 m	2442	50
PCV1	History	34.4	24-35 m	2442	50
PCV3	C or H <12 months	49.3	24-35 m	2442	50
PCV3	Card	34	24-35 m	2442	50
PCV3	Card or History	57	24-35 m	2442	50
PCV3	History	23	24-35 m	2442	50
Pol1	C or H <12 months	68	24-35 m	2442	50
Pol1	Card	37.4	24-35 m	2442	50
Pol1	Card or History	76	24-35 m	2442	50
Pol1	History	38.6	24-35 m	2442	50
Pol3	C or H <12 months	45.9	24-35 m	2442	50
Pol3	Card	34.7	24-35 m	2442	50
Pol3	Card or History	52.8	24-35 m	2442	50
Pol3	History	18.1	24-35 m	2442	50
RotaC	C or H <12 months	55.7	24-35 m	2442	50
RotaC	Card	35.5	24-35 m	2442	50
RotaC	Card or History	62.9	24-35 m	2442	50
RotaC	History	27.4	24-35 m	2442	50

2011 Enquete Nationale sur le Suivi des Objectifs du Millenaire pour le Development a Madagascar, ENSOMD 2012-2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	41.7	12-23 m	977	46
BCG	Card <12 months	79.6	12-23 m	977	46
BCG	Card or History	74.2	12-23 m	2125	46
BCG	History	32.4	12-23 m	1148	46
DTP1	Card	44.9	12-23 m	977	46
DTP1	Card <12 months	98.3	12-23 m	977	46
DTP1	Card or History	79.7	12-23 m	2125	46
DTP1	History	34.8	12-23 m	1148	46
DTP3	Card	41.4	12-23 m	977	46
DTP3	Card <12 months	97.6	12-23 m	977	46
DTP3	Card or History	62.9	12-23 m	2125	46
DTP3	History	21.5	12-23 m	1148	46
HepB1	Card	44.9	12-23 m	977	46
HepB1	Card <12 months	98.3	12-23 m	977	46
HepB1	Card or History	79.7	12-23 m	2125	46
HepB1	History	34.8	12-23 m	1148	46
HepB3	Card	41.4	12-23 m	977	46
HepB3	Card <12 months	97.6	12-23 m	977	46
HepB3	Card or History	62.9	12-23 m	2125	46
HepB3	History	21.5	12-23 m	1148	46
Hib1	Card	44.9	12-23 m	977	46

Hib1	Card <12 months	98.3	12-23 m	977	46
Hib1	Card or History	79.7	12-23 m	2125	46
Hib1	History	34.8	12-23 m	1148	46
Hib3	Card	41.4	12-23 m	977	46
Hib3	Card <12 months	97.6	12-23 m	977	46
Hib3	Card or History	62.9	12-23 m	2125	46
Hib3	History	21.5	12-23 m	1148	46
MCV1	Card	37.7	12-23 m	977	46
MCV1	Card <12 months	88.7	12-23 m	977	46
MCV1	Card or History	61.7	12-23 m	2125	46
MCV1	History	24	12-23 m	1148	46
Pol1	Card	44.9	12-23 m	977	46
Pol1	Card <12 months	98.3	12-23 m	977	46
Pol1	Card or History	79.7	12-23 m	2125	46
Pol1	History	34.8	12-23 m	1148	46
Pol3	Card	41.4	12-23 m	977	46
Pol3	Card <12 months	97.3	12-23 m	977	46
Pol3	Card or History	62.9	12-23 m	2125	46
Pol3	History	21.5	12-23 m	1148	46

2010 Evaluation de la couverture vaccinale, Madagascar, 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	74.1	12-23 m	12848	56
BCG	Card or History	76.1	12-23 m	12848	56
BCG	Scar	69.6	12-23 m	12848	56
DTP1	Card	53.3	12-23 m	12848	56
DTP1	Card or History	92.1	12-23 m	12848	56
DTP3	Card	47.8	12-23 m	12848	56
DTP3	Card or History	82.1	12-23 m	12848	56
HepB1	Card	53.3	12-23 m	12848	56
HepB1	Card or History	92.1	12-23 m	12848	56
HepB3	Card	47.8	12-23 m	12848	56
HepB3	Card or History	82.1	12-23 m	12848	56
Hib1	Card	53.3	12-23 m	12848	56
Hib1	Card or History	92.1	12-23 m	12848	56
Hib3	Card	47.8	12-23 m	12848	56
Hib3	Card or History	82.1	12-23 m	12848	56
MCV1	Card	41.8	12-23 m	12848	56
MCV1	Card or History	73.4	12-23 m	12848	56
Pol1	Card	51.8	12-23 m	12848	56
Pol1	Card or History	89.3	12-23 m	12848	56
Pol3	Card	47	12-23 m	12848	56
Pol3	Card or History	79.9	12-23 m	12848	56

2008 Enquête Démographique et de Santé Madagascar 2008-2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	82.5	12-23 m	2309	60
BCG	Card	58.4	12-23 m	2309	60
BCG	Card or History	83.1	12-23 m	2309	60
BCG	History	24.7	12-23 m	2309	60
DTP1	C or H <12 months	83.7	12-23 m	2309	60
DTP1	Card	59.7	12-23 m	2309	60
DTP1	Card or History	84.2	12-23 m	2309	60
DTP1	History	24.5	12-23 m	2309	60
DTP3	C or H <12 months	71.3	12-23 m	2309	60
DTP3	Card	54.6	12-23 m	2309	60
DTP3	Card or History	72.8	12-23 m	2309	60
DTP3	History	18.2	12-23 m	2309	60
MCV1	C or H <12 months	62.1	12-23 m	2309	60
MCV1	Card	50.7	12-23 m	2309	60
MCV1	Card or History	69.6	12-23 m	2309	60
MCV1	History	18.9	12-23 m	2309	60
Pol1	C or H <12 months	83.8	12-23 m	2309	60
Pol1	Card	59.9	12-23 m	2309	60
Pol1	Card or History	84.3	12-23 m	2309	60
Pol1	History	24.5	12-23 m	2309	60
Pol3	C or H <12 months	68.5	12-23 m	2309	60
Pol3	Card	54.9	12-23 m	2309	60
Pol3	Card or History	69.9	12-23 m	2309	60
Pol3	History	15	12-23 m	2309	60

2007 Enqête sur la couverture vaccinale à Madagascar 2008

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen

BCG	Card	85.5	12-23 m	6632	72
BCG	Card or History	94.2	12-23 m	6632	72
BCG	History	8.7	12-23 m	6632	72
DTP1	Card	66.9	12-23 m	6632	72
DTP1	Card or History	92.3	12-23 m	6632	72
DTP1	History	25.4	12-23 m	6632	72
DTP3	Card	61.1	12-23 m	6632	72
DTP3	Card or History	81.9	12-23 m	6632	72
DTP3	History	20.8	12-23 m	6632	72
HepB1	Card	66.9	12-23 m	6632	72
HepB1	Card or History	92.3	12-23 m	6632	72
HepB1	History	25.4	12-23 m	6632	72
HepB3	Card	61.1	12-23 m	6632	72
HepB3	Card or History	81.9	12-23 m	6632	72
HepB3	History	20.8	12-23 m	6632	72
MCV1	Card	61.4	12-23 m	6632	72
MCV1	Card or History	81	12-23 m	6632	72
MCV1	History	19.6	12-23 m	6632	72
Pol1	Card	64.8	12-23 m	6632	72
Pol1	Card or History	90.2	12-23 m	6632	72
Pol1	History	25.4	12-23 m	6632	72
Pol3	Card	60.3	12-23 m	6632	72
Pol3	Card or History	81	12-23 m	6632	72
Pol3	History	20.7	12-23 m	6632	72

2002 République de Madagascar Enquêt Démographique et de Santé 2003-2004

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	69.4	12-23 m	1287	50
BCG	Card	48	12-23 m	1287	50
BCG	Card or history	71.8	12-23 m	1287	50
BCG	History	23.8	12-23 m	1287	50
DTP1	C or H <12 months	69.1	12-23 m	1287	50
DTP1	Card	47.7	12-23 m	1287	50
DTP1	Card or history	71.3	12-23 m	1287	50
DTP1	History	23.6	12-23 m	1287	50
DTP3	C or H <12 months	58.5	12-23 m	1287	50
DTP3	Card	42.7	12-23 m	1287	50
DTP3	Card or history	61.4	12-23 m	1287	50
DTP3	History	18.7	12-23 m	1287	50
MCV1	C or H <12 months	52.2	12-23 m	1287	50
MCV1	Card	41.7	12-23 m	1287	50
MCV1	Card or history	59	12-23 m	1287	50
MCV1	History	17.3	12-23 m	1287	50
Pol1	C or H <12 months	75	12-23 m	1287	50
Pol1	Card	48.8	12-23 m	1287	50
Pol1	Card or history	77.3	12-23 m	1287	50
Pol1	History	28.5	12-23 m	1287	50
Pol3	C or H <12 months	60.2	12-23 m	1287	50
Pol3	Card	44	12-23 m	1287	50
Pol3	Card or history	63.2	12-23 m	1287	50
Pol3	History	19.2	12-23 m	1287	50

1999 Madagascar MICS 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	45.3	12-23 m	-	48
BCG	Card <12 months	42.5	12-23 m	-	48
BCG	Card or History	71.7	12-23 m	-	48
BCG	History	26.4	12-23 m	-	48
DTP1	Card	47.3	12-23 m	-	48
DTP1	Card <12 months	43.9	12-23 m	-	48
DTP1	Card or History	73.4	12-23 m	-	48
DTP1	History	26.1	12-23 m	-	48
DTP3	Card	40.1	12-23 m	-	48
DTP3	Card <12 months	36.6	12-23 m	-	48
DTP3	Card or History	54.7	12-23 m	-	48
DTP3	History	14.6	12-23 m	-	48
MCV1	Card	36.9	12-23 m	-	48
MCV1	Card <12 months	29.1	12-23 m	-	48
MCV1	Card or History	55.1	12-23 m	-	48
MCV1	History	18.2	12-23 m	-	48
Pol1	Card	47.6	12-23 m	-	48
Pol1	Card <12 months	43.8	12-23 m	-	48
Pol1	Card or History	84.5	12-23 m	-	48
Pol1	History	36.9	12-23 m	-	48
Pol3	Card	40.2	12-23 m	-	48

Madagascar - survey details

Pol3	Card <12 months	36.6	12-23 m	-	48
Pol3	Card or History	57.5	12-23 m	-	48
Pol3	History	17.4	12-23 m	-	48

1998 Madagascar EPM 1999

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	70	12-23 m	-	-
DTP3	Card or History	63	12-23 m	-	-
MCV1	Card or History	44	12-23 m	-	-
Pol3	Card or History	58	12-23 m	-	-

Madagascar - survey details

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