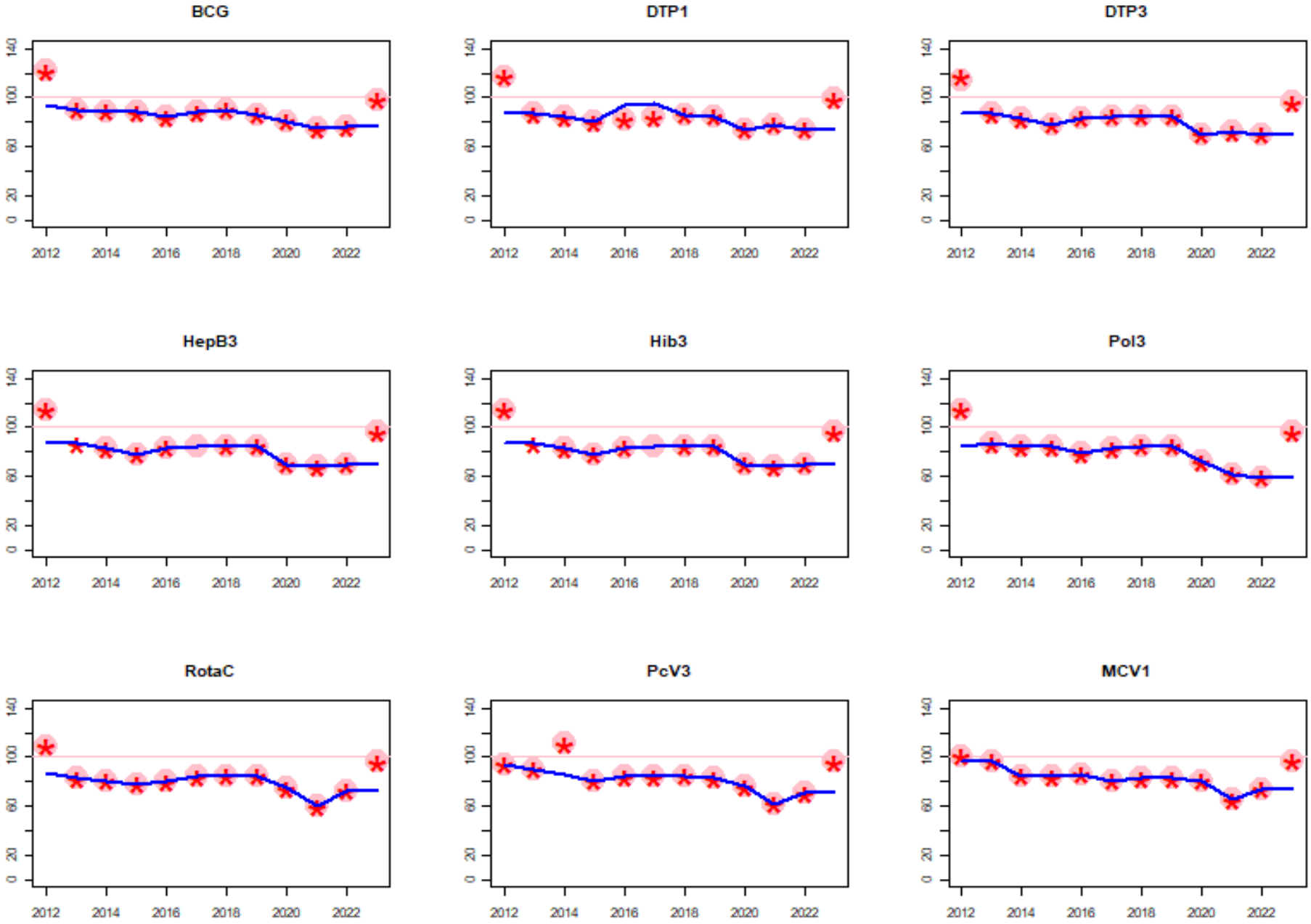

BCG
DTP1
DTP3
HepB3
Hib3
Pol3
RotaC
PcV3
MCV1
0
20
60
100
140
2012
2014
2016
2018
2020
2022

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 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 available empirical data accurately reflect immunization system performance and those where the data are likely compromised and present a misleading view of coverage.

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. Bull World Health Organ.
*Burton et al. 2012. PLoS One.
*Danovaro-Holliday et al. 2021. Gates Open Res.

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 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 data collection period.

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. For countries utilizing IPV containing vaccine only, i.e., no recommended dose of OPV, 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.

IPV2: percentage of surviving infants who received a 2nd dose of inactivated polio vaccine. IPV2 coverage estimates produced for OPV using countries.

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.

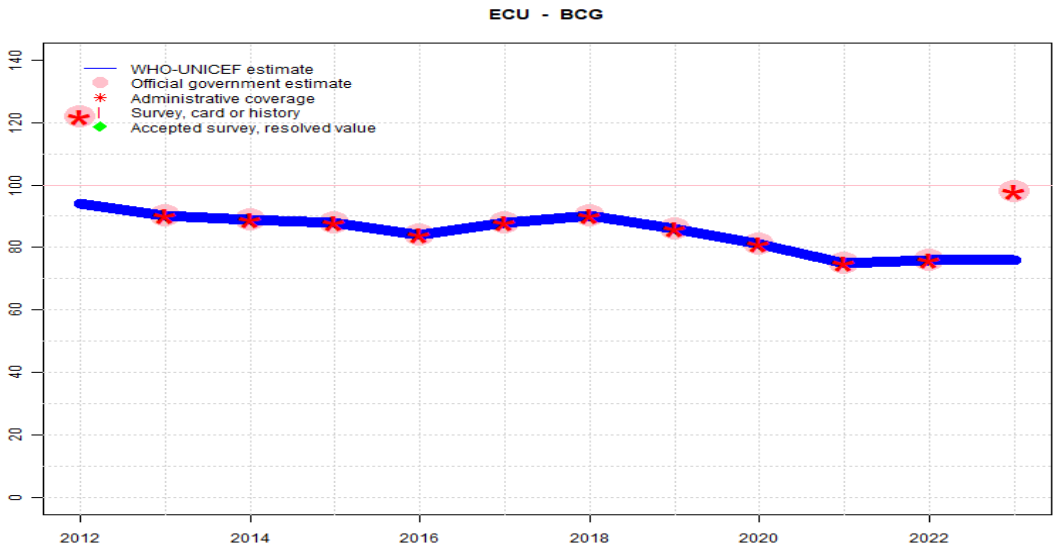
RotaC: percentage of surviving infants who received the final recommended dose of rotavirus vaccine, which can be either the 2nd or the 3rd dose depending on the vaccine.

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.

MengA: percentage of children who received one dose of meningococcal A conjugate vaccine. MengA coverage estimates produced for countries in the meningitis belt of sub-Saharan Africa.

Ecuador - BCG



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	94	90	89	88	84	88	90	86	81	75	76	76
Estimate GoC	•	•••	••	•	•	•	•	•	•	•	•	•
Official	122	90	89	88	84	88	90	86	81	75	76	98
Administrative	122	90	89	88	84	88	90	86	81	75	76	98
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:

2023: Estimate based on extrapolation from data reported by national government. Reported data excluded due to sudden change in coverage from 76 level to 98 percent. Increase in reported coverage reflects a 27 percent decrease in surviving infants - the result of preliminary data from the 2022 census. Reported administrative data are incomplete. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. Programme reports one-month vaccine stockout at national and subnational levels. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme reports three months AD syringe stock-out at national and subnational levels. Estimate challenged by: D-

2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-

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

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

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

2016: Estimate informed by reported data. Estimate challenged by: D-

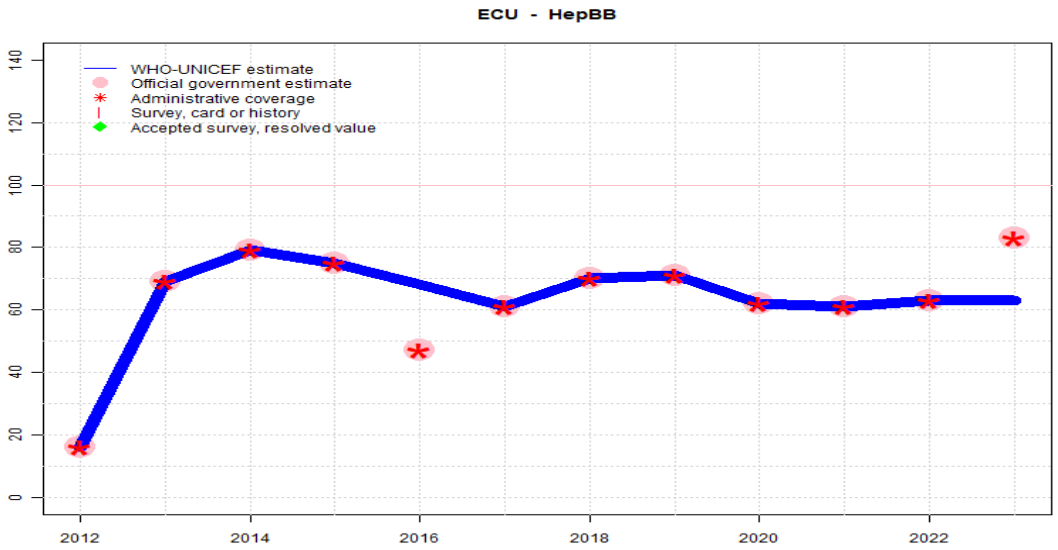
2015: Estimate informed by reported data. Estimate challenged by: D-

2014: Estimate informed by reported data. GoC=R+ D+

2013: Coverage levels for 2013 following a revision of the target population are in line with the results of the 2012 coverage survey for the 2011 birth cohort. Decline in reported coverage is partly due to a revision of the target population estimate in 2013. GoC=R+ S+ D+

2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded because 122 percent greater than 100 percent. Estimate challenged by: R-

Ecuador - HepBB



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	16	69	79	75	68	61	70	71	62	61	63	63
Estimate GoC	••	••	••	••	•	••	••	••	••	•	•	•
Official	16	69	79	75	47	61	70	71	62	61	63	83
Administrative	16	69	79	75	47	61	70	71	62	61	63	83
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:

2023: Estimate informed by extrapolation from reported data. Reported data excluded due to sudden change in coverage from 63 level to 83 percent. Increase in reported coverage reflects a 27 percent decrease in surviving infants - the result of preliminary data from the 2022 census. Reported administrative data are incomplete. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme reports three months AD syringe stockout at national and subnational levels. Estimate challenged by: D-

2020: Estimate informed by reported data. Programme reports a five month vaccine stockout at national and subnational levels. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. 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 interpolation between reported data. Reported data excluded due to decline in reported coverage from 75 percent to 47 percent with increase to 61 percent. Estimate challenged by: D-

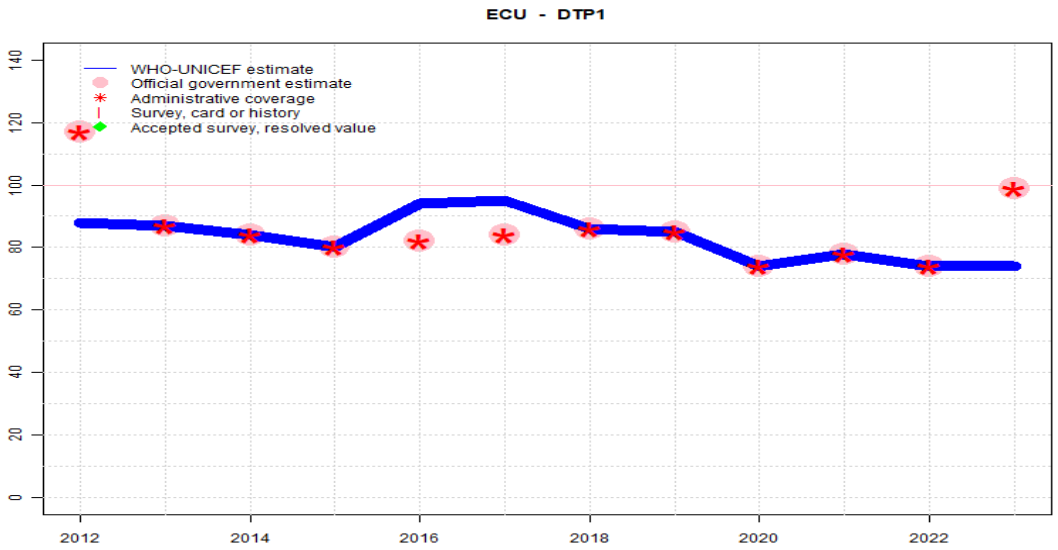
2015: Estimate informed by reported data. GoC=R+ D+

2014: Estimate informed by reported data. GoC=R+ D+

2013: Estimate informed by reported data. Decline in reported coverage is partly due to a revision of the target population estimate in 2013. Programme reports a three months stockout of monovalent HepB vaccine.. GoC=R+ D+

2012: Estimate informed by reported data. HepB birth dose introduced universally in 2012. GoC=R+ D+

Ecuador - DTP1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	88	87	84	80	94	95	86	85	74	78	74	74
Estimate GoC	•	••	•	•	•	•	•	•	•	•	•	•
Official	117	87	84	80	82	84	86	85	74	78	74	99
Administrative	117	87	84	80	82	84	86	85	74	78	74	99
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:

2023: Estimate based on extrapolation from data reported by national government. Reported data excluded due to sudden change in coverage from 74 level to 99 percent. Increase in reported coverage reflects a 27 percent decrease in surviving infants - the result of preliminary data from the 2022 census. Reported administrative data are incomplete. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme reports three months AD syringe stock-out at national and subnational levels. Programme reports three months vaccine stockout at national and subnational levels. Estimate challenged by: D-

2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-

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

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

2017: DTP1 coverage estimated based on DTP3 coverage of 85. Reported data implies a negative dropout rate. Coverage likely overestimated. Estimate challenged by: R-

2016: DTP1 coverage estimated based on DTP3 coverage of 83. Reported data implies a negative dropout rate. Coverage likely overestimated. Estimate challenged by: R-

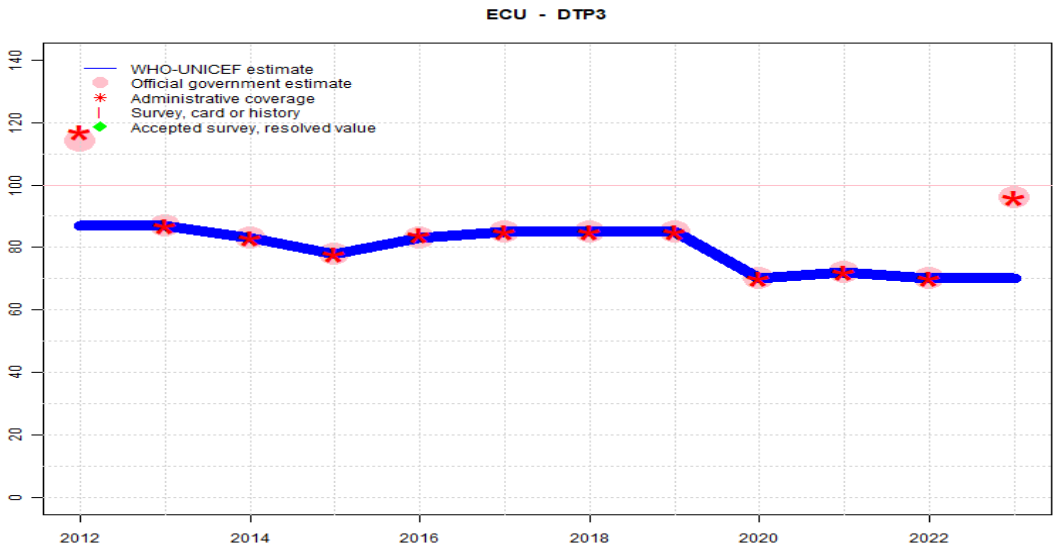
2015: Estimate informed by reported data. Programme reports stockout of DTP-HepB-Hib vaccine during Q1 2015. Estimate challenged by: D-

2014: Estimate informed by reported data. Programme reports four months stockout at national level. Estimate challenged by: D-

2013: Coverage levels for 2013 following a revision of the target population are in line with the results of the 2012 coverage survey for the 2011 birth cohort. Decline in reported coverage is partly due to a revision of the target population estimate in 2013. GoC=R+ D+

2012: Reported data calibrated to 1997 and 2013 levels. Reported data excluded because 117 percent greater than 100 percent. Estimate challenged by: D-R-

Ecuador - DTP3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	87	87	83	78	83	85	85	85	70	72	70	70
Estimate GoC	•	•••	•	•	•	•	•	•	•	•	•	•
Official	114	87	83	78	83	85	85	85	70	72	70	96
Administrative	117	87	83	78	84	85	85	85	70	72	70	96
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:

2023: Estimate based on extrapolation from data reported by national government. Reported data excluded due to sudden change in coverage from 70 level to 96 percent. Increase in reported coverage reflects a 27 percent decrease in surviving infants - the result of preliminary data from the 2022 census. Reported administrative data are incomplete. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme reports three months AD syringe stock-out at national and subnational levels. Programme reports three months vaccine stockout at national and subnational levels. Estimate challenged by: D-

2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-

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

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

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

2016: Estimate informed by reported data. Estimate challenged by: D-

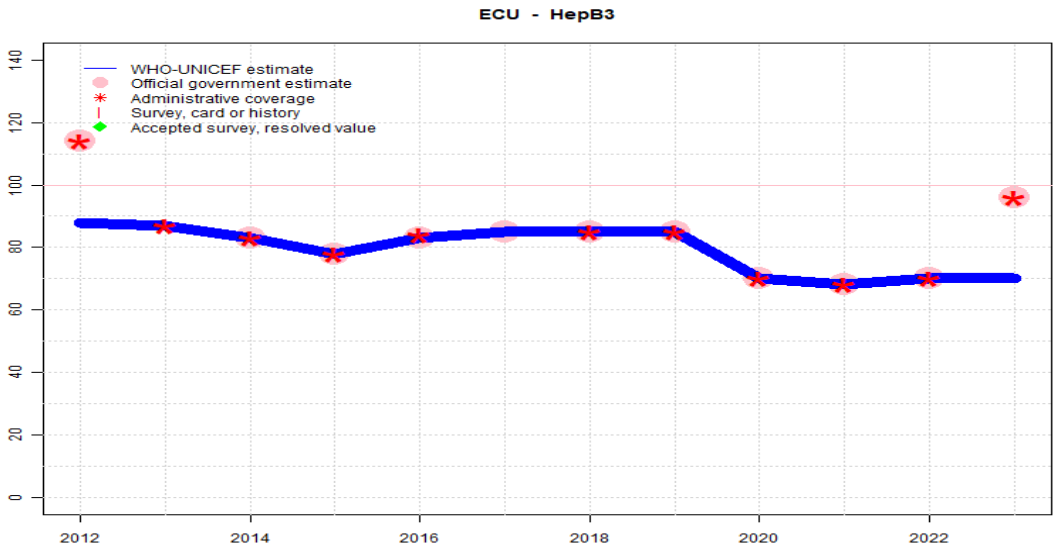
2015: Estimate informed by reported data. Programme reports stockout of DTP-HepB-Hib vaccine during Q1 2015. Estimate challenged by: D-

2014: Estimate informed by reported data. Programme reports four months stockout at national level. Estimate challenged by: D-

2013: Coverage levels for 2013 following a revision of the target population are in line with the results of the 2012 coverage survey for the 2011 birth cohort. Decline in reported coverage is partly due to a revision of the target population estimate in 2013. GoC=R+ S+ D+

2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded because 114 percent greater than 100 percent. Estimate challenged by: D-R-

Ecuador - HepB3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	88	87	83	78	83	85	85	85	70	68	70	70
Estimate GoC	•	••	•	•	•	••	•	•	•	•	•	•
Official	114	NA	83	78	83	85	85	85	70	68	70	96
Administrative	114	87	83	78	84	NA	85	85	70	68	70	96
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:

2023: Estimate based on extrapolation from data reported by national government. Reported data excluded due to sudden change in coverage from 70 level to 96 percent. Increase in reported coverage reflects a 27 percent decrease in surviving infants - the result of preliminary data from the 2022 census. Reported administrative data are incomplete. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme reports three months AD syringe stock-out at national and subnational levels. Programme reports three months vaccine stockout at national and subnational levels. Estimate challenged by: D-

2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-

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

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

2017: Estimate informed by reported data. GoC=R+

2016: Estimate informed by reported data. Estimate challenged by: D-

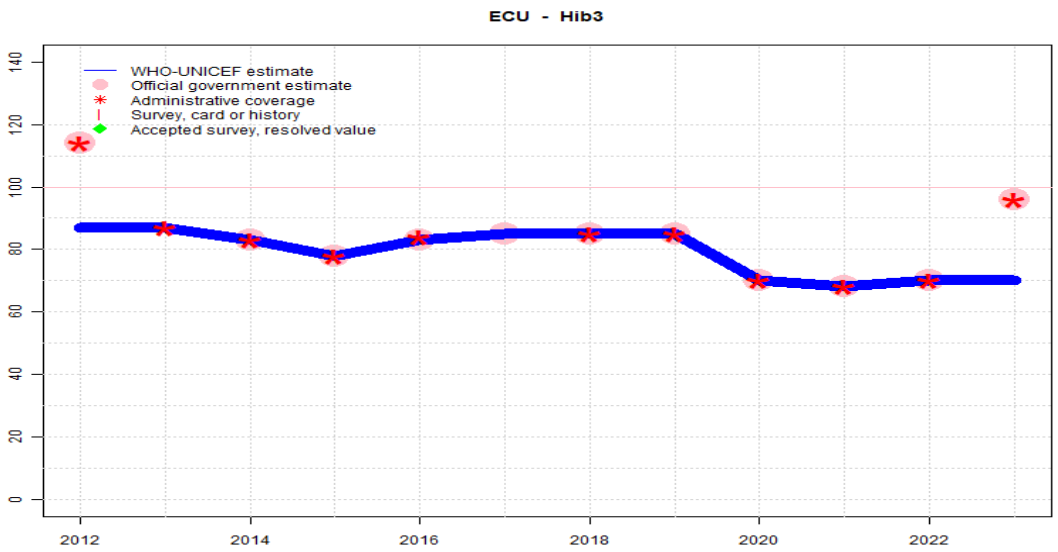
2015: Estimate informed by reported data. Programme reports stockout of DTP-HepB-Hib vaccine during Q1 2015. Estimate challenged by: D-

2014: Estimate informed by reported data. Programme reports four months stockout at national level. Estimate challenged by: D-

2013: Coverage levels for 2013 following a revision of the target population are in line with the results of the 2012 coverage survey for the 2011 birth cohort. Decline in reported coverage is partly due to a revision of the target population estimate in 2013. GoC=R+ D+

2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded because 114 percent greater than 100 percent. Estimate challenged by: R-

Ecuador - Hib3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	87	87	83	78	83	85	85	85	70	68	70	70
Estimate GoC	•	••	•	•	•	••	•	•	•	•	•	•
Official	114	NA	83	78	83	85	85	85	70	68	70	96
Administrative	114	87	83	78	84	NA	85	85	70	68	70	96
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:

2023: Estimate based on extrapolation from data reported by national government. Reported data excluded due to sudden change in coverage from 70 level to 96 percent. Increase in reported coverage reflects a 27 percent decrease in surviving infants - the result of preliminary data from the 2022 census. Reported administrative data are incomplete. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme reports three months AD syringe stock-out at national and subnational levels. Programme reports three months vaccine stockout at national and subnational levels. Estimate challenged by: D-

2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-

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

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

2017: Estimate informed by reported data. GoC=R+

2016: Estimate informed by reported data. Estimate challenged by: D-

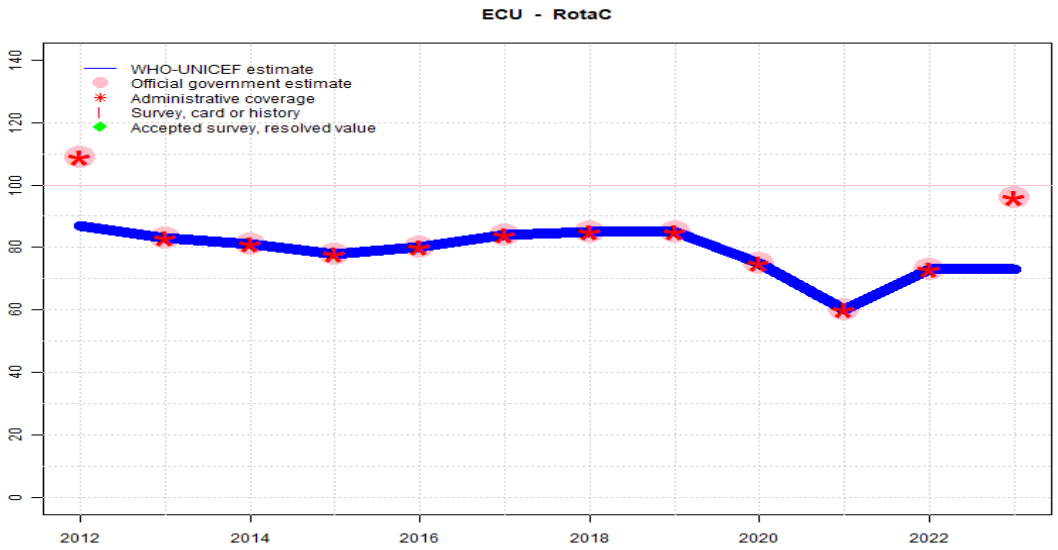
2015: Estimate informed by reported data. Programme reports stockout of DTP-HepB-Hib vaccine during Q1 2015. Estimate challenged by: D-

2014: Estimate informed by reported data. Programme reports four months stockout at national level. Estimate challenged by: D-

2013: Coverage levels for 2013 following a revision of the target population are in line with the results of the 2012 coverage survey for the 2011 birth cohort. Decline in reported coverage is partly due to a revision of the target population estimate in 2013. GoC=R+ D+

2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded because 114 percent greater than 100 percent. Estimate challenged by: R-

Ecuador - RotaC



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	87	83	81	78	80	84	85	85	75	60	73	73
Estimate GoC	●●	●●	●●	●	●	●	●	●	●	●	●	●
Official	109	83	81	78	80	84	85	85	75	60	73	96
Administrative	109	83	81	78	80	84	85	85	75	60	73	96
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:

2023: Estimate informed by extrapolation from reported data. Reported data excluded. Reported data excluded due to sudden unexplained change. Increase in reported coverage reflects a 27 percent decrease in surviving infants - the result of preliminary data from the 2022 census. Reported administrative data are incomplete. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme reports three months AD syringe stockout at national and subnational levels. Programme reports four months vaccine stockout at national and subnational levels. Estimate challenged by: D-

2020: Estimate informed by reported data. Programme reports a two months vaccine stockout at national and subnational levels. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-

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

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

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

2016: Estimate informed by reported data. Estimate challenged by: D-

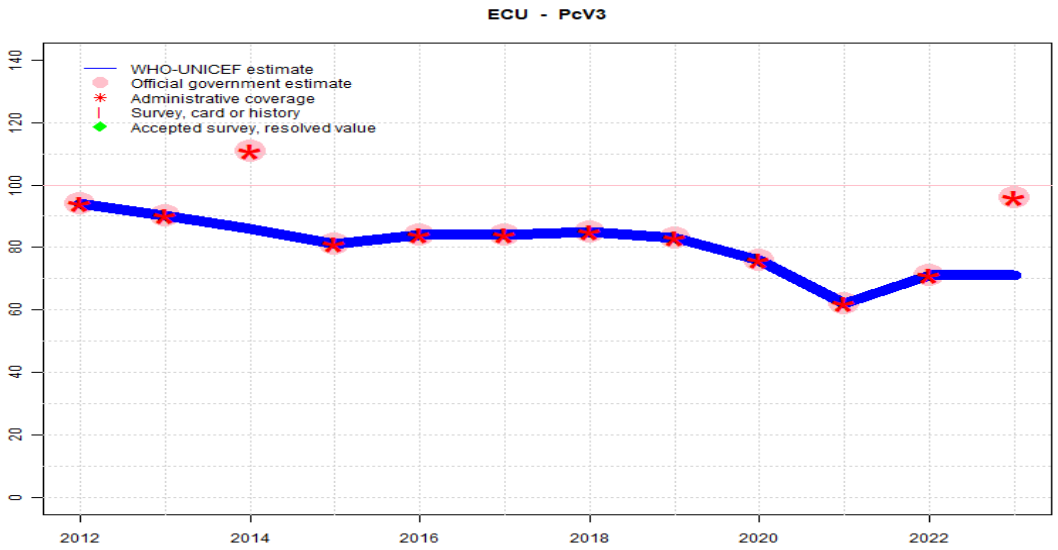
2015: Estimate informed by reported data. Estimate challenged by: D-

2014: Estimate informed by reported data. GoC=R+ D+

2013: Estimate informed by reported data. Decline in reported coverage is partly due to a revision of the target population estimate in 2013. GoC=R+ D+

2012: Estimate informed by interpolation between reported data. Reported data excluded because 109 percent greater than 100 percent. GoC=R+ D+

Ecuador - PcV3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	94	90	86	81	84	84	85	83	76	62	71	71
Estimate GoC	●●	●●	●	●	●	●	●	●	●	●	●	●
Official	94	90	111	81	84	84	85	83	76	62	71	96
Administrative	94	90	111	81	84	84	85	83	76	62	71	96
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:

2023: Estimate informed by extrapolation from reported data. Reported data excluded. Reported data excluded due to sudden unexplained change. Increase in reported coverage reflects a 27 percent decrease in surviving infants - the result of preliminary data from the 2022 census. Reported administrative data are incomplete. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme reports three months AD syringe stockout at national and subnational levels. Programme reports three months vaccine stockout at national and subnational levels. Estimate challenged by: D-

2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-

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

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

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

2016: Estimate informed by reported data. Estimate challenged by: D-

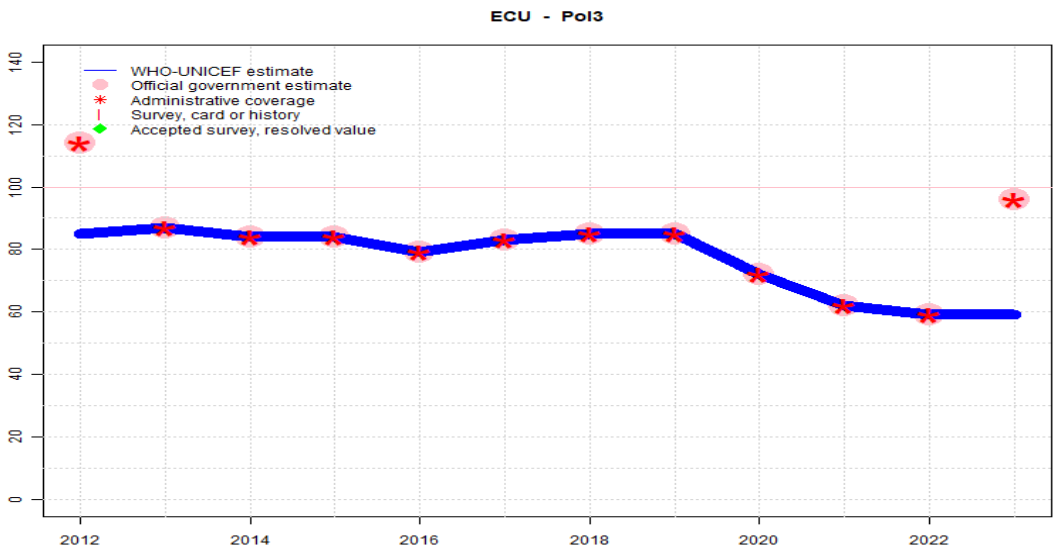
2015: Estimate informed by reported data. Estimate based on reported coverage following change in recommended schedule. Estimate challenged by: D-

2014: Estimate informed by interpolation between reported data. Reported data excluded because 111 percent greater than 100 percent. Reported data excluded due to an increase from 90 percent to 111 percent with decrease 81 percent. Programme reports a change in schedule from 2+1 to a 3-dose schedule recommended at 2 m, 4 m, and 6 m. Estimate challenged by: D-

2013: Estimate informed by reported data. Decline in reported coverage is partly due to a revision of the target population estimate in 2013. GoC=R+ D+

2012: Estimate informed by reported data. GoC=R+ D+

Ecuador - Pol3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	85	87	84	84	79	83	85	85	72	62	59	59
Estimate GoC	•	•••	•	•	•	•	•	•	•	•	•	•
Official	114	87	84	84	79	83	85	85	72	62	59	96
Administrative	114	87	84	84	79	83	85	85	72	62	59	96
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:

2023: Estimate based on extrapolation from data reported by national government. Reported data excluded due to sudden change in coverage from 59 level to 96 percent. Increase in reported coverage reflects a 27 percent decrease in surviving infants - the result of preliminary data from the 2022 census. Reported administrative data are incomplete. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme reports three months AD syringe stock-out at national and subnational levels. Programme reports three months vaccine stockout at national and subnational levels. Estimate challenged by: D-

2020: Estimate informed by reported data. Programme reports a two months vaccine stockout at national and subnational levels. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-

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

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

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

2016: Estimate informed by reported data. Estimate challenged by: D-

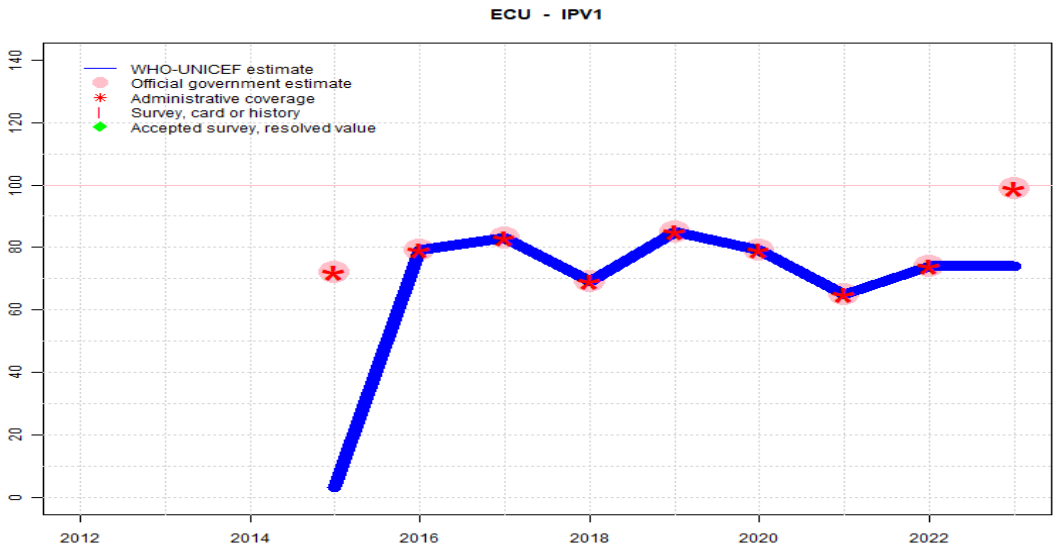
2015: Estimate informed by reported data. Estimate challenged by: D-

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

2013: Coverage levels for 2013 following a revision of the target population are in line with the results of the 2012 coverage survey for the 2011 birth cohort. Decline in reported coverage is partly due to a revision of the target population estimate in 2013. GoC=R+ S+ D+

2012: Reported data calibrated to 2011 and 2013 levels. Reported data excluded because 114 percent greater than 100 percent. Estimate challenged by: D-R-

Ecuador - IPV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	3	79	83	69	85	79	65	74	74
Estimate GoC	NA	NA	NA	•	•	•	••	•	•	••	•	•
Official	NA	NA	NA	72	79	83	69	85	79	65	74	99
Administrative	NA	NA	NA	72	79	83	69	85	79	65	74	99
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:

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).

2023: Estimate informed by extrapolation from reported data. Reported data excluded due to sudden change in coverage from 74 level to 99 percent. Increase in reported coverage reflects a 27 percent decrease in surviving infants - the result of preliminary data from the 2022 census. Reported administrative data are incomplete. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme reports three months AD syringe stockout at national and subnational levels. Programme reports two months vaccine stockout at national and subnational levels.. GoC=R+

2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-

2019: Estimate informed by reported data. Programme reports use of fractional IPV dose. Reported data reflect second fractional dose. Estimate challenged by: D-

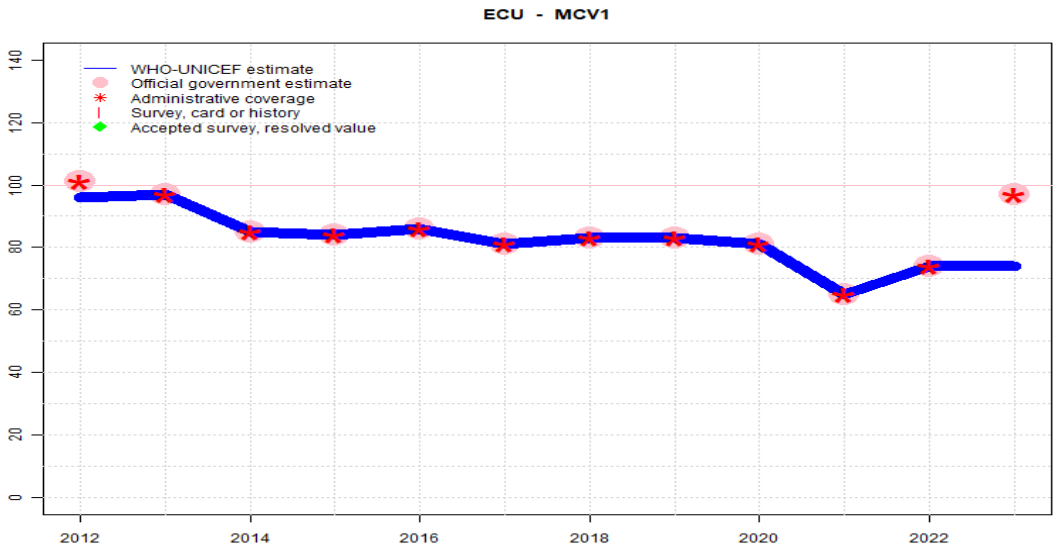
2018: Estimate informed by reported data. Programme reports use of fractional IPV dose. Reported data reflect second fractional dose. GoC=R+ D+

2017: Estimate informed by reported data. Programme reports using fractional dose of IPV. Estimate challenged by: D-

2016: Estimate informed by reported data. Increase due to national roll out. Estimate challenged by: D-

2015: Inactivated polio vaccine introduced in December 2015. Programme reports 72 percent coverage among four percent of the national target population. Estimate is based on coverage achieved among the total annual national target population. Estimate challenged by: R-

Ecuador - MCV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	96	97	85	84	86	81	83	83	81	65	74	74
Estimate GoC	●●	●●	●	●	●	●	●	●	●	●	●	●
Official	101	97	85	84	86	81	83	83	81	65	74	97
Administrative	101	97	85	84	86	81	83	83	81	65	74	97
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:

2023: Estimate based on extrapolation from data reported by national government. Reported data excluded due to sudden change in coverage from 74 level to 97 percent. Increase in reported coverage reflects a 27 percent decrease in surviving infants - the result of preliminary data from the 2022 census. Reported administrative data are incomplete. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme reports three months AD syringe stockout at national and subnational levels. Programme reports four months vaccine stockout at national and subnational levels. Estimate challenged by: D-

2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-

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

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

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

2016: Estimate informed by reported data. Estimate challenged by: D-

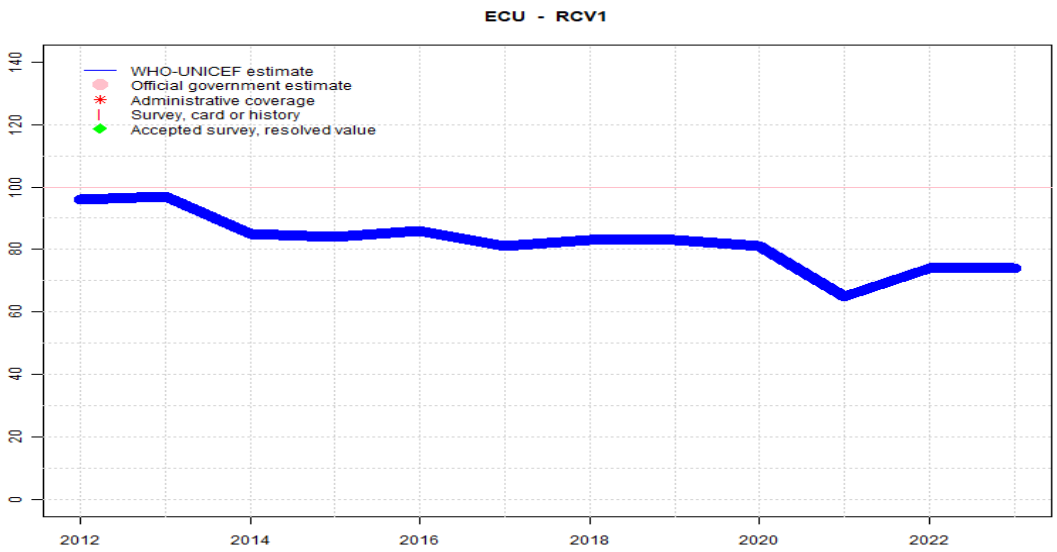
2015: Estimate informed by reported data. Estimate challenged by: D-

2014: Estimate informed by reported data. Programme reports a decrease in the number of children vaccinated with first dose of measles containing vaccine (MCV). Programme provides a dose of MR at 6 months following recent outbreak but that dose is a temporary response. The first dose of MMR is recommended at 12 months and is the coverage reflected here. Estimate is based on reported data to be consistent across vaccines. Estimate challenged by: D-

2013: Estimate informed by reported data. Decline in reported coverage is partly due to a revision of the target population estimate in 2013. Programme reports a three months stockout at the national level. GoC=R+ D+

2012: Estimate informed by interpolation between reported data. Reported data excluded because 101 percent greater than 100 percent. GoC=R+ D+

Ecuador - RCV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	96	97	85	84	86	81	83	83	81	65	74	74
Estimate GoC	●●	●●	●	●	●	●	●	●	●	●	●	●
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.

2023: Estimate based on estimated MCV1. Increase in reported coverage reflects a 27 percent decrease in surviving infants - the result of preliminary data from the 2022 census. Reported administrative data are incomplete. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. Estimate challenged by: D-

2022: Estimate based on estimated MCV1. Estimate challenged by: D-

2021: Estimate based on estimated MCV1. Programme reports three months AD syringe stock-out at national and subnational levels. Estimate challenged by: D-

2020: Estimate based on estimated MCV1. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-

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

2018: Estimate based on estimated MCV1. Estimate challenged by: D-

2017: Estimate based on estimated MCV1. Estimate challenged by: D-

2016: Estimate based on estimated MCV1. Estimate challenged by: D-

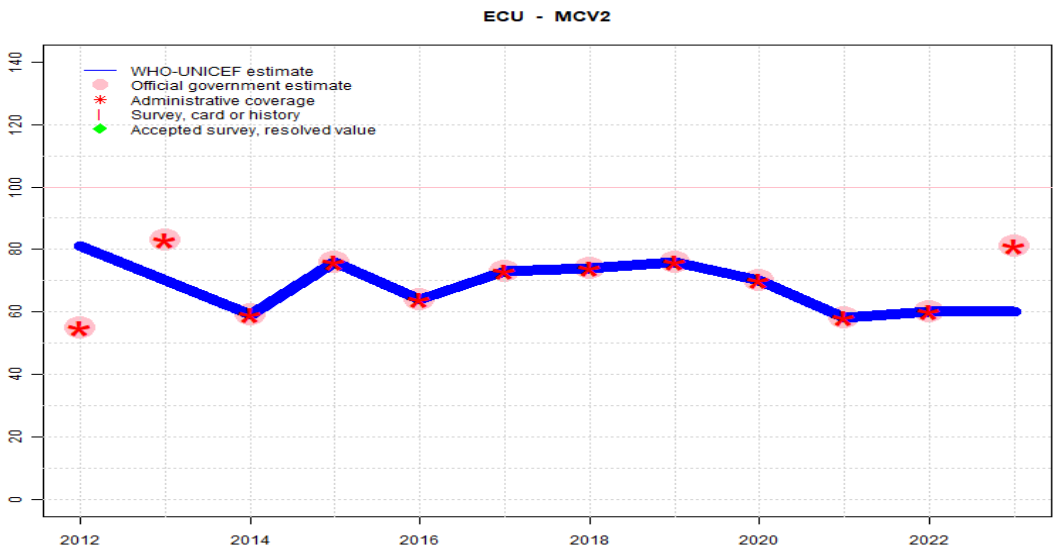
2015: Estimate based on estimated MCV1. Estimate challenged by: D-

2014: Estimate based on estimated MCV1. Estimate challenged by: D-

2013: Estimate based on estimated MCV1. Decline in reported coverage is partly due to a revision of the target population estimate in 2013. GoC=R+ D+

2012: Estimate based on estimated MCV1. GoC=R+ D+

Ecuador - MCV2



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	81	70	59	76	64	73	74	76	70	58	60	60
Estimate GoC	•	•	••	•	•	•	••	•	•	•	•	•
Official	55	83	59	76	64	73	74	76	70	58	60	81
Administrative	55	83	59	76	64	73	74	76	70	58	60	81
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.

2023: Estimate informed by extrapolation from reported data. Reported data excluded due to sudden change in coverage from 60 level to 81 percent. Increase in reported coverage reflects a 27 percent decrease in surviving infants - the result of preliminary data from the 2022 census. Reported administrative data are incomplete. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme reports three months AD syringe stockout at national and subnational levels. Programme reports four months vaccine stockout at national and subnational levels. Estimate challenged by: D-

2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-

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

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

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

2016: Estimate informed by reported data. Estimate challenged by: D-

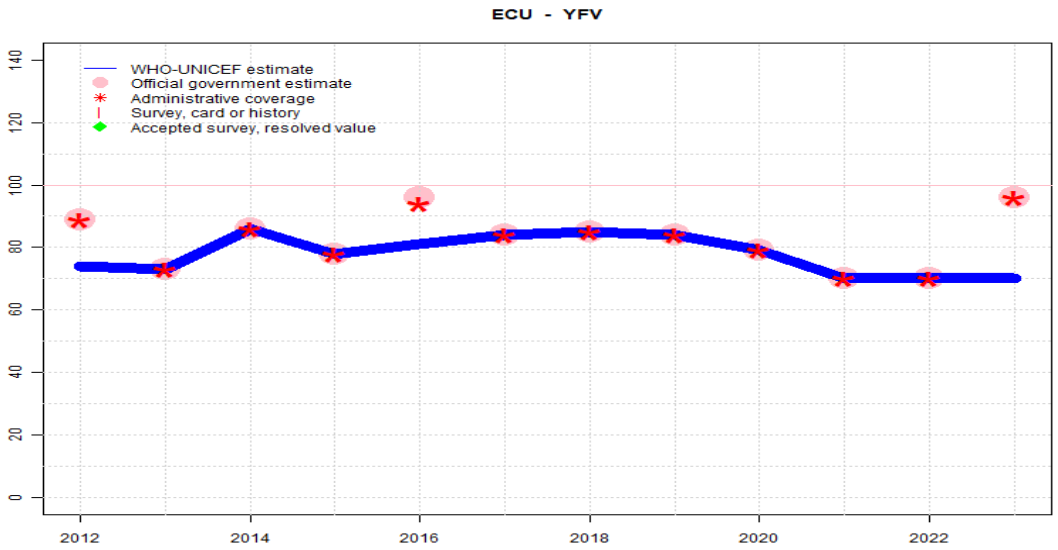
2015: Estimate informed by reported data. Change in recommended age at administration from 6 years to 18 months. Increase may reflect change in schedule Estimate challenged by: D-

2014: Estimate informed by reported data. Estimate is based on reported coverage consistent with other vaccines. The number of doses of measles containing vaccine administered has declined between 2013 and 2014. GoC=R+ D+

2013: Estimate informed by interpolation between reported data. Reported data excluded due to an increase from 55 percent to 83 percent with decrease 59 percent. Decline in reported coverage is partly due to a revision of the target population estimate in 2013. Programme reports a three months stockout at the national level. Estimate challenged by: D-

2012: Estimate informed by interpolation between reported data. Reported data excluded due to decline in reported coverage from 92 percent to 55 percent with increase to 83 percent. Estimate challenged by: D-

Ecuador - YFV



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	74	73	86	78	81	84	85	84	79	70	70	70
Estimate GoC	•	••	•	•	•	•	•	•	•	•	•	•
Official	89	73	86	78	96	84	85	84	79	70	70	96
Administrative	89	73	86	78	94	84	85	84	79	70	70	96
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:

2023: Estimate based on extrapolation from data reported by national government. Reported data excluded due to sudden change in coverage from 70 level to 96 percent. Increase in reported coverage reflects a 27 percent decrease in surviving infants - the result of preliminary data from the 2022 census. Reported administrative data are incomplete. No nationally representative independent assessment for the most recent 5 annual birth cohorts. WHO and UNICEF recommend a high quality independent assessment to verify reported levels of coverage. Estimate challenged by: D-

2022: Estimate informed by reported data. Estimate challenged by: D-

2021: Estimate informed by reported data. Programme reports three months AD syringe stock-out at national and subnational levels. Programme reports two months vaccine stockout at national and subnational levels. Estimate challenged by: D-

2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-

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

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

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

2016: Estimate informed by interpolation between reported data. Reported data excluded due to an increase from 78 percent to 96 percent with decrease 84 percent. Estimate challenged by: D-

2015: Estimate informed by reported data. Estimate challenged by: D-

2014: Estimate informed by reported data. Estimate is based on reported data. Estimate challenged by: D-

2013: Programme reports a one month stockout at the national level. Decline in reported coverage is partly due to a revision of the target population estimate in 2013. Programme reports a one month stockout at the national level. GoC=R+ D+

2012: Estimate of 74 percent assigned by working group. Estimate is calibrated to measles coverage based on difference between survey result and reported data for MCV1 applied to YFV official estimate. Estimate challenged by: D-R-

Ecuador - survey details

NOTE: A survey to measure vaccination coverage for infants (i.e., children aged 0-11 months) will sample children aged 12-23 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 12-23 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.

2011 Encuesta Nacional de Salud y Nutrición: ENSANUT-ECU 2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	97.7	12-23 m	2065	88
DTP3	Card or History	88.1	12-23 m	2065	88
MCV1	Card or History	78.9	12-23 m	2065	88
Pol3	Card or History	84.8	12-23 m	2065	88

2003 Encuesta Demográfica y de Salud Materna e Infantil (ENDEMAIN-2004)

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	92.9	12-23 m	788	72
BCG	Card or History	96.7	12-23 m	788	72
DTP3	C or H <12 months	70	12-23 m	788	72
DTP3	Card or History	74.6	12-23 m	788	72
MCV1	C or H <12 months	17.6	12-23 m	788	72
MCV1	Card or History	65.9	12-23 m	788	72
Pol3	C or H <12 months	67.9	12-23 m	788	72
Pol3	Card or History	71.8	12-23 m	788	72

1998 República del Ecuador, Encuesta Demográfica y de Salud Materna e Infantil Endemain-99

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	58	12-23 m	679	-
DTP1	Card	58.5	12-23 m	679	-
DTP3	Card	52.4	12-23 m	679	-
MCV1	Card	45.9	12-23 m	679	-
Pol1	Card	58.5	12-23 m	679	-
Pol3	Card	52.1	12-23 m	679	-

Ecuador - 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