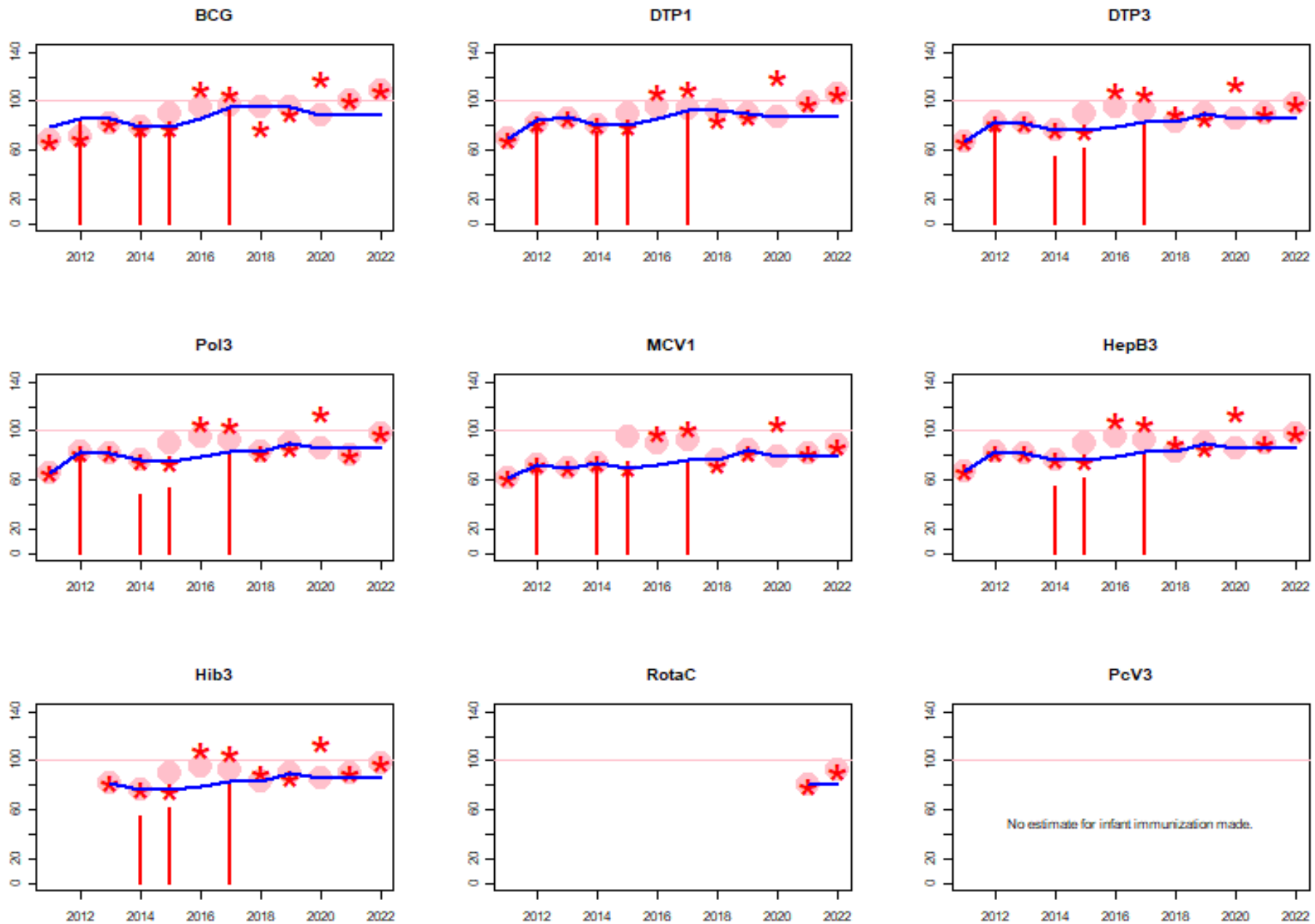


Timor-Leste: WHO and UNICEF estimates of immunization coverage: 2022 revision



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

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

*Burton et al. 2009. WHO and UNICEF estimates of national infant immunization coverage: methods and processes.

*Burton et al. 2012. A formal representation of the WHO and UNICEF estimates of national immunization coverage: a computational logic approach.

*Brown et al. 2013. An introduction to the grade of confidence used to characterize uncertainty around the WHO and UNICEF estimates of national immunization coverage.

DATA SOURCES.

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

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

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

ABBREVIATIONS

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

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

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

IPV1: percentage of surviving infants who received at least one dose of inactivated polio vaccine. In countries utilizing an immunization schedule recommending either (i) a primary series of three doses of oral polio vaccine (OPV) plus at least one dose of IPV where OPV is included in routine

immunization and/or campaign or (ii) a sequential schedule of IPV followed by OPV, WHO and UNICEF estimates for IPV1 reflect coverage with at least one routine dose of IPV among infants <1 year of age among countries. For countries utilizing IPV containing vaccine use only, i.e., no recommended dose of OPV, the WHO and UNICEF estimate for IPV1 corresponds to coverage for the 1st dose of IPV.

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

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

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

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

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

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

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

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

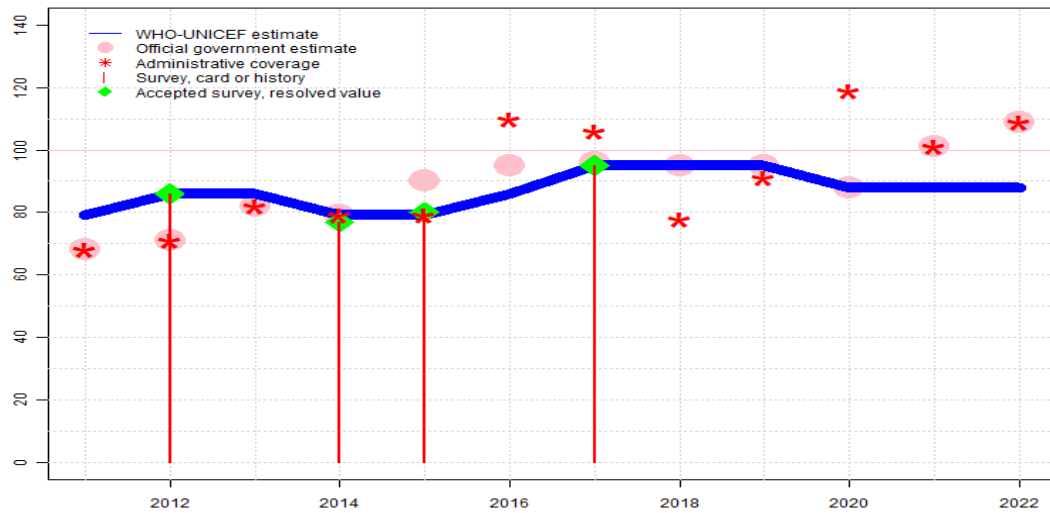
PcV3: percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect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

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

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Timor-Leste - BCG

TLS - BCG



| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 79 | 86 | 86 | 79 | 79 | 86 | 95 | 95 | 95 | 88 | 88 | 88 |
| Estimate GoC | • | • | • | • | • | • | • | •• | • | • | •• | •• |
| Official | 68 | 71 | 82 | 79 | 90 | 95 | 96 | 95 | 95 | 88 | 101 | 109 |
| Administrative | 68 | 71 | 82 | 79 | 79 | 110 | 106 | 78 | 91 | 119 | 101 | 109 |
| Survey | NA | 86 | NA | 77 | 80 | NA | 95 | NA | NA | NA | NA | NA |

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

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

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

Description:

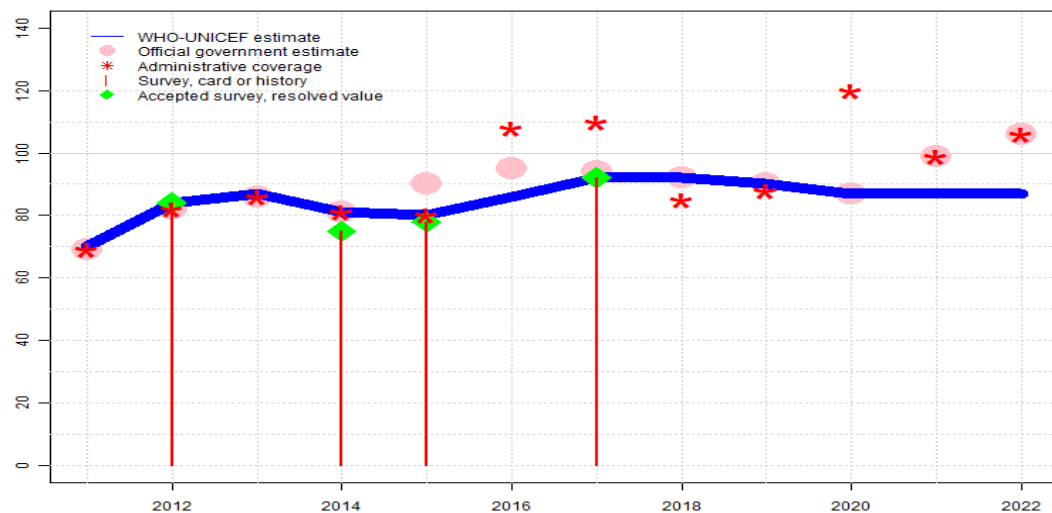
- 2022: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. Reported doses administered in 2021-2022 are meaningfully lower than that for the prior five year period. WHO and UNICEF recommend a revision of reported coverage time series. Reported data excluded because 109 percent greater than 100 percent. WHO and UNICEF are aware that the country is conducting an EPI coverage survey in 2023 and await the final results. Estimate challenged by: D-
- 2021: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. WHO and UNICEF recommend a revision of reported coverage time series. Reported data excluded because 101 percent greater than 100 percent. GoC=R+ D+
- 2020: Estimate informed by reported data. No vital registration system in place in the country. The 2015 census was used as the basis for the denominator used for the reported administrative coverage. These census projections are under discussion by different institutions. WHO and UNICEF recommend a historical series revision once official denominators have been defined. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate is based on survey result. Exceptional relative increase of 35 percent in reported target population from 2017 to 2018 is explained by a reversion to projections from 2010 census. Apparent decline in reported administrative data likely an artefact resulting from change in reported target. Reported official coverage based on survey results. GoC=Assigned by working group. Consistency with other antigens.
- 2017: Estimate of 95 percent assigned by working group. Estimate is based on survey result. Reported data excluded. Adjustment to reported official estimates is unexplained. Estimate challenged by: D-R-S-
- 2016: Reported data calibrated to 2015 and 2017 levels. Reported data excluded. Adjustment to reported official estimates is unexplained. The reported number of children vaccinated includes children beyond one-year of age but the proportion above one-year is unknown. The reported target population estimates for 2016 are lower than those for 2015 due in part to a change from use of projections from 2010 census to 2015 census. Estimate challenged by: D-R-
- 2015: Estimate informed by reported administrative data supported by survey. Survey evidence of 80 percent based on 1 survey(s). WHO and UNICEF are aware of two sub-national surveys conducted during 2015 reflecting coverage for the 2013-14 birth cohorts and encourages efforts to appropriately re-weight the survey results to produce national level coverage results. Official government reported data based on two subnational surveys conducted during 2015. GoC=Assigned by working group. Consistency across vaccines.

Timor-Leste - BCG

- 2014: Estimate informed by reported data supported by survey. Survey evidence of 77 percent based on 1 survey(s). GoC=Assigned by working group. Consistency across vaccines.
- 2013: Estimate of 86 percent assigned by working group. Estimate is based on survey result for 2012. Programme reports three months stockout at national level and in two districts.. Estimate challenged by: R-
- 2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 86 percent based on 1 survey(s). Estimate challenged by: R-
- 2011: Reported data calibrated to 2008 and 2012 levels. Estimate challenged by: R-

Timor-Leste - DTP1

TLS - DTP1



| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 70 | 84 | 87 | 81 | 80 | 86 | 92 | 92 | 90 | 87 | 87 | 87 |
| Estimate GoC | • | • | • | • | • | • | • | • | • | • | • | • |
| Official | 69 | 82 | 86 | 81 | 90 | 95 | 94 | 92 | 90 | 87 | 99 | 106 |
| Administrative | 69 | 82 | 86 | 81 | 80 | 108 | 110 | 85 | 88 | 120 | 99 | 106 |
| Survey | NA | 84 | NA | 75 | 78 | NA | 92 | NA | NA | NA | NA | NA |

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

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

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

Description:

- 2022: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. Reported doses administered in 2021-2022 are meaningfully lower than that for the prior five year period. WHO and UNICEF recommend a revision of reported coverage time series. Reported data excluded because 106 percent greater than 100 percent. WHO and UNICEF are aware that the country is conducting an EPI coverage survey in 2023 and await the final results. Estimate challenged by: D-
- 2021: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. WHO and UNICEF recommend a revision of reported coverage time series. Estimate challenged by: D-
- 2020: Estimate informed by reported data. No vital registration system in place in the country. The 2015 census was used as the basis for the denominator used for the reported administrative coverage. These census projections are under discussion by different institutions. WHO and UNICEF recommend a historical series revision once official denominators have been defined. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate is based on reported data. Exceptional relative increase of 35 percent in reported target population from 2017 to 2018 is explained by a reversion to projections from 2010 census. Apparent decline in reported administrative data likely an artefact resulting from change in reported target. Reported official coverage based on survey results.. Estimate challenged by: D-
- 2017: Estimate of 92 percent assigned by working group. Estimate is based on survey result. Reported data excluded. Adjustment to reported official estimates is unexplained. Estimate challenged by: D-R-S-
- 2016: Reported data calibrated to 2015 and 2017 levels. Reported data excluded. Adjustment to reported official estimates is unexplained. The reported number of children vaccinated includes children beyond one-year of age but the proportion above one-year is unknown. The reported target population estimates for 2016 are lower than those for 2015 due in part to a change from use of projections from 2010 census to 2015 census. Estimate challenged by: D-R-S-
- 2015: Estimate informed by reported administrative data supported by survey. Survey evidence of 78 percent based on 1 survey(s). WHO and UNICEF are aware of two sub-national surveys conducted during 2015 reflecting coverage for the 2013-14 birth cohorts and encourages efforts to appropriately re-weight the survey results to produce national level coverage results. Official government reported data based on two subnational surveys conducted during 2015. GoC=Assigned by working group. Consistency across vaccines.
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 75 percent

Timor-Leste - DTP1

based on 1 survey(s). GoC=Assigned by working group. Consistency across vaccines.

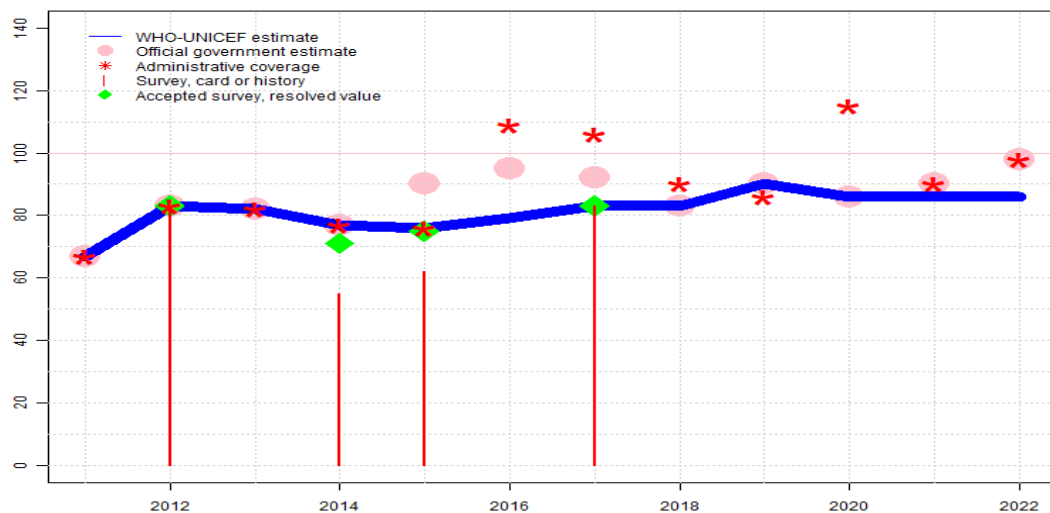
2013: Reported data calibrated to 2012 and 2014 levels. Estimate challenged by: D-R-S-

2012: Estimate of 84 percent assigned by working group. Estimate is based on the survey coverage which supports the reported coverage level. Estimate challenged by: D-R-

2011: Reported data calibrated to 2008 and 2012 levels. Estimate challenged by: D-R-S-

Timor-Leste - DTP3

TLS - DTP3



| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 67 | 83 | 82 | 77 | 76 | 79 | 83 | 83 | 90 | 86 | 86 | 86 |
| Estimate GoC | • | • | • | • | • | • | • | • | • | • | •• | • |
| Official | 67 | 83 | 82 | 77 | 90 | 95 | 92 | 83 | 90 | 86 | 90 | 98 |
| Administrative | 67 | 83 | 82 | 77 | 76 | 109 | 106 | 90 | 86 | 115 | 90 | 98 |
| Survey | NA | 83 | NA | 55 | 62 | NA | 83 | NA | NA | NA | NA | NA |

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

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

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

Description:

- 2022: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. Reported doses administered in 2021-2022 are meaningfully lower than that for the prior five year period. WHO and UNICEF recommend a revision of reported coverage time series. WHO and UNICEF are aware that the country is conducting an EPI coverage survey in 2023 and await the final results. Estimate challenged by: D-
- 2021: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. WHO and UNICEF recommend a revision of reported coverage time series. GoC=R+ D+
- 2020: Estimate informed by reported data. No vital registration system in place in the country. The 2015 census was used as the basis for the denominator used for the reported administrative coverage. These census projections are under discussion by different institutions. WHO and UNICEF recommend a historical series revision once official denominators have been defined. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Official coverage estimates do not reflect trends in reported doses administered (numerator) between 2017 and 2019. Numerator trend for DTP-HepB3-Hib 3 not consistent with that of DTP 1. Estimate challenged by: D-
- 2018: Estimate is based on reported data. Exceptional relative increase of 35 percent in reported target population from 2017 to 2018 is explained by a reversion to projections from 2010 census. Apparent decline in reported administrative data likely an artefact resulting from change in reported target. Reported official coverage based on survey results. Official coverage estimates do not reflect trends in reported doses administered (numerator) between 2017 and 2019. Numerator trend for DTP-HepB3-Hib 3 not consistent with that of DTP 1.. Estimate challenged by: D-
- 2017: Estimate of 83 percent assigned by working group. Estimate is based on survey result. Information was not available in the survey report to adjust for recall bias. Reported data excluded. Adjustment to reported official estimates is unexplained. Official coverage estimates do not reflect trends in reported doses administered (numerator) between 2017 and 2019. Numerator trend for DTP-HepB3-Hib 3 not consistent with that of DTP 1. Estimate challenged by: D-R-
- 2016: Reported data calibrated to 2015 and 2017 levels. Reported data excluded. Adjustment to reported official estimates is unexplained. The reported number of children vaccinated includes children beyond one-year of age but the proportion above one-year is unknown. The reported target population estimates for 2016 are lower than those for 2015 due in part to a change from use of projections from 2010 census to 2015 census. Estimate challenged by: D-R-
- 2015: Estimate informed by reported administrative data supported by survey. Survey evidence

Timor-Leste - DTP3

of 75 percent based on 1 survey(s). Timor-Leste Demographic and Health Survey 2016 card or history results of 62 percent modified for recall bias to 75 percent based on 1st dose card or history coverage of 78 percent, 1st dose card only coverage of 50 percent and 3rd dose card only coverage of 48 percent. WHO and UNICEF are aware of two sub-national surveys conducted during 2015 reflecting coverage for the 2013-14 birth cohorts and encourages efforts to appropriately re-weight the survey results to produce national level coverage results. Official government reported data based on two subnational surveys conducted during 2015. GoC=Assigned by working group. Consistency across vaccines.

2014: Estimate informed by reported data supported by survey. Survey evidence of 71 percent based on 1 survey(s). Timor-Leste Demographic and Health Survey 2016 card or history results of 55 percent modified for recall bias to 71 percent based on 1st dose card or history coverage of 75 percent, 1st dose card only coverage of 40 percent and 3rd dose card only coverage of 38 percent. GoC=Assigned by working group. Consistency across vaccines.

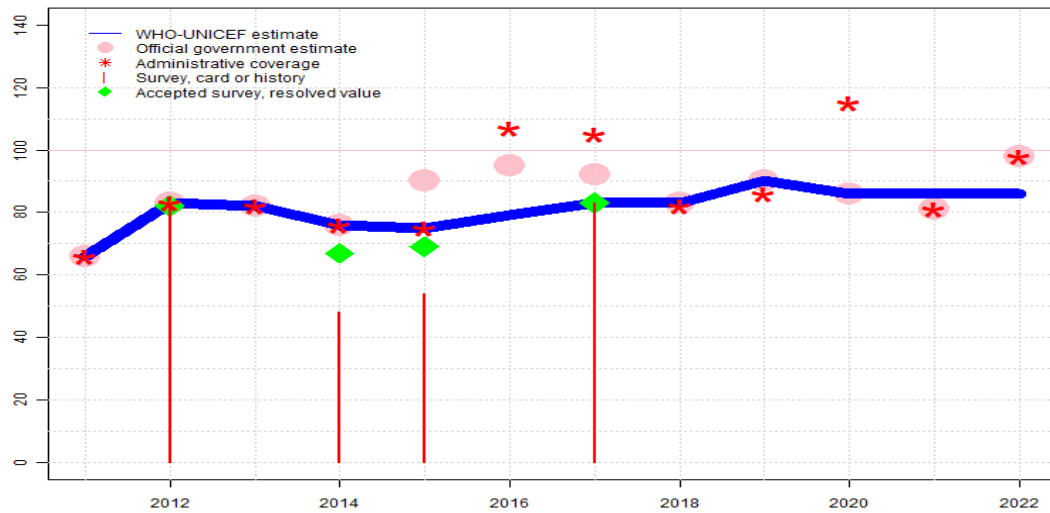
2013: Estimate informed by reported data. Estimate challenged by: D-S-

2012: Estimate informed by reported data supported by survey. Survey evidence of 83 percent based on 1 survey(s). Estimate challenged by: D-S-

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

Timor-Leste - Pol3

TLS - Pol3



| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 66 | 83 | 82 | 76 | 75 | 79 | 83 | 83 | 90 | 86 | 86 | 86 |
| Estimate GoC | • | • | • | • | • | • | • | • | • | • | •• | • |
| Official | 66 | 83 | 82 | 76 | 90 | 95 | 92 | 83 | 90 | 86 | 81 | 98 |
| Administrative | 66 | 83 | 82 | 76 | 75 | 107 | 105 | 82 | 86 | 115 | 81 | 98 |
| Survey | NA | 82 | NA | 48 | 54 | NA | 83 | NA | NA | NA | NA | NA |

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

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

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

Description:

- 2022: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. Reported doses administered in 2021-2022 are meaningfully lower than that for the prior five year period. WHO and UNICEF recommend a revision of reported coverage time series. Reported data excluded due to sudden change in coverage from 81 level to 98 percent. WHO and UNICEF are aware that the country is conducting an EPI coverage survey in 2023 and await the final results. Estimate challenged by: D-
- 2021: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. WHO and UNICEF recommend a revision of reported coverage time series. GoC=R+ D+
- 2020: Estimate informed by reported data. No vital registration system in place in the country. The 2015 census was used as the basis for the denominator used for the reported administrative coverage. These census projections are under discussion by different institutions. WHO and UNICEF recommend a historical series revision once official denominators have been defined. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate is based on reported data. Exceptional relative increase of 35 percent in reported target population from 2017 to 2018 is explained by a reversion to projections from 2010 census. Apparent decline in reported administrative data likely an artefact resulting from change in reported target. Reported official coverage based on survey results. Estimate is based on reported. Estimate challenged by: D-
- 2017: Estimate of 83 percent assigned by working group. Estimate is based on survey result. Information was not available in the survey report to adjust for recall bias. Reported data excluded. Adjustment to reported official estimates is unexplained. Estimate challenged by: D-R-S-
- 2016: Reported data calibrated to 2015 and 2017 levels. Reported data excluded. Adjustment to reported official estimates is unexplained. The reported number of children vaccinated includes children beyond one-year of age but the proportion above one-year is unknown. The reported target population estimates for 2016 are lower than those for 2015 due in part to a change from use of projections from 2010 census to 2015 census. Estimate challenged by: D-R-S-
- 2015: Estimate informed by reported administrative data supported by survey. Survey evidence of 69 percent based on 1 survey(s). Timor-Leste Demographic and Health Survey 2016 card or history results of 54 percent modified for recall bias to 69 percent based on 1st dose card or history coverage of 73 percent, 1st dose card only coverage of 50 percent and 3rd dose card only coverage of 47 percent. WHO and UNICEF are aware of two sub-national surveys conducted during 2015 reflecting coverage for the 2013-14 birth cohorts and en-

Timor-Leste - Pol3

courages efforts to appropriately re-weight the survey results to produce national level coverage results. Official government reported data based on two subnational surveys conducted during 2015. GoC=Assigned by working group. Consistency across vaccines.

2014: Estimate informed by reported data supported by survey. Survey evidence of 67 percent based on 1 survey(s). Timor-Leste Demographic and Health Survey 2016 card or history results of 48 percent modified for recall bias to 67 percent based on 1st dose card or history coverage of 70 percent, 1st dose card only coverage of 40 percent and 3rd dose card only coverage of 38 percent. GoC=Assigned by working group. Consistency across vaccines.

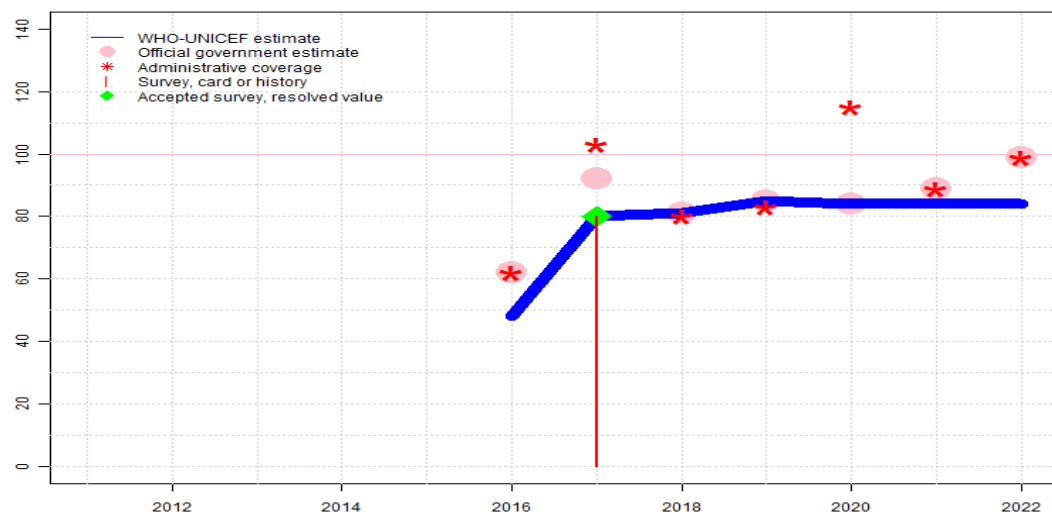
2013: Estimate informed by reported data. Estimate challenged by: D-S-

2012: Estimate informed by reported data supported by survey. Survey evidence of 82 percent based on 1 survey(s). Estimate challenged by: D-S-

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

Timor-Leste - IPV1

TLS - IPV1



| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | 48 | 80 | 81 | 85 | 84 | 84 | 84 |
| Estimate GoC | NA | NA | NA | NA | NA | • | • | • | • | • | •• | • |
| Official | NA | NA | NA | NA | NA | 62 | 92 | 81 | 85 | 84 | 89 | 99 |
| Administrative | NA | NA | NA | NA | NA | 62 | 103 | 80 | 83 | 115 | 89 | 99 |
| Survey | NA | NA | NA | NA | NA | NA | 80 | 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).

2022: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. Reported doses administered in 2021-2022 are meaningfully lower than that for the prior five year period. WHO and UNICEF recommend a revision of reported coverage time series. WHO and UNICEF are aware that the country is conducting an EPI coverage survey in 2023 and await the final results. Estimate challenged by: D-

2021: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. WHO and UNICEF recommend a revision of reported coverage time series. GoC=R+ D+

2020: Estimate informed by reported data. No vital registration system in place in the country. The 2015 census was used as the basis for the denominator used for the reported administrative coverage. These census projections are under discussion by different institutions. WHO and UNICEF recommend a historical series revision once official denominators have been defined. Estimate challenged by: D-

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

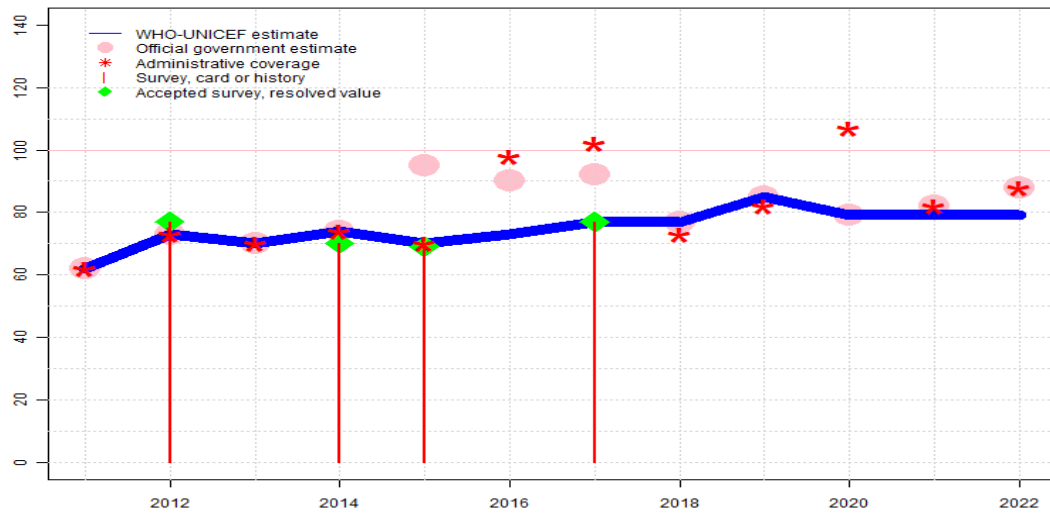
2018: Estimate informed by reported data. Exceptional relative increase of 35 percent in reported target population from 2017 to 2018 is explained by a reversion to projections from 2010 census. Apparent decline in reported administrative data likely an artefact resulting from change in reported target. Reported official coverage based on survey results.. Estimate challenged by: D-

2017: Estimate is based on survey result. Reported data excluded. Adjustment to reported official estimates is unexplained. Reported data excluded due to an increase from 62 percent to 92 percent with decrease 81 percent. Estimate challenged by: D-R-

2016: Estimate is based on recomputed coverage reported by the country using target population data from the 2009 census. Reported data excluded. Adjustment to reported official estimates is unexplained. Inactivated polio vaccine introduced during 2016. Reporting began in 2016. Estimate challenged by: D-R-S-

Timor-Leste - MCV1

TLS - MCV1



| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 62 | 73 | 70 | 74 | 70 | 73 | 77 | 77 | 85 | 79 | 79 | 79 |
| Estimate GoC | • | • | • | • | • | • | • | • | • | • | •• | •• |
| Official | 62 | 73 | 70 | 74 | 95 | 90 | 92 | 77 | 85 | 79 | 82 | 88 |
| Administrative | 62 | 73 | 70 | 74 | 70 | 98 | 102 | 73 | 82 | 107 | 82 | 88 |
| Survey | NA | 77 | NA | 70 | 69 | NA | 77 | NA | NA | NA | NA | NA |

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

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

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

Description:

- 2022: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. Reported doses administered in 2021-2022 are meaningfully lower than that for the prior five year period. WHO and UNICEF recommend a revision of reported coverage time series. WHO and UNICEF are aware that the country is conducting an EPI coverage survey in 2023 and await the final results. GoC=R+ D+
- 2021: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. WHO and UNICEF recommend a revision of reported coverage time series. GoC=R+ D+
- 2020: Estimate informed by reported data. No vital registration system in place in the country. The 2015 census was used as the basis for the denominator used for the reported administrative coverage. These census projections are under discussion by different institutions. WHO and UNICEF recommend a historical series revision once official denominators have been defined. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate is based on reported data. Exceptional relative increase of 35 percent in reported target population from 2017 to 2018 is explained by a reversion to projections from 2010 census. Apparent decline in reported administrative data likely an artefact resulting from change in reported target. Reported official coverage based on survey results. Estimate challenged by: D-
- 2017: Estimate of 77 percent assigned by working group. Estimate is based on survey result. Reported data excluded. Adjustment to reported official estimates is unexplained. Estimate challenged by: D-R-
- 2016: Reported data calibrated to 2015 and 2017 levels. Reported data excluded. Adjustment to reported official estimates is unexplained. The reported number of children vaccinated includes children beyond one-year of age but the proportion above one-year is unknown. The reported target population estimates for 2016 are lower than those for 2015 due in part to a change from use of projections from 2010 census to 2015 census. Estimate challenged by: D-R-
- 2015: Estimate informed by reported administrative data supported by survey. Survey evidence of 69 percent based on 1 survey(s). WHO and UNICEF are aware of two sub-national surveys conducted during 2015 reflecting coverage for the 2013-14 birth cohorts and encourages efforts to appropriately re-weight the survey results to produce national level coverage results. Official government reported data based on two subnational surveys conducted during 2015. GoC=Assigned by working group. Consistency across vaccines.
- 2014: Estimate informed by reported data supported by survey. Survey evidence of 70 percent based on 1 survey(s). GoC=Assigned by working group. Consistency across vaccines.

Timor-Leste - MCV1

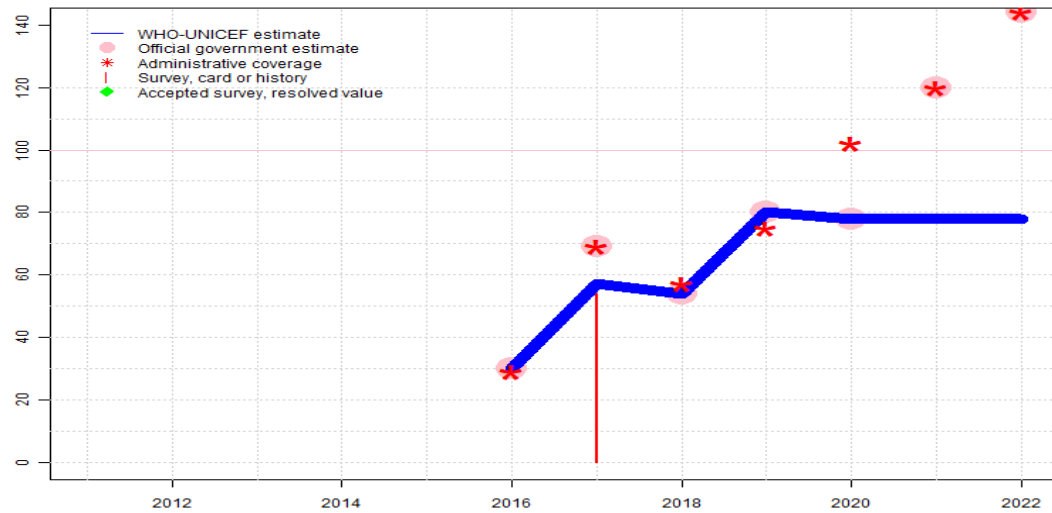
2013: Estimate informed by reported data. Programme reports four months stockout at national level and in four districts. Estimate challenged by: D-

2012: Estimate informed by reported data supported by survey. Survey evidence of 77 percent based on 1 survey(s). Estimate challenged by: D-

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

Timor-Leste - MCV2

TLS - MCV2



| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | 30 | 57 | 54 | 80 | 78 | 78 | 78 |
| Estimate GoC | NA | NA | NA | NA | NA | • | • | • | • | • | • | •• |
| Official | NA | NA | NA | NA | NA | 30 | 69 | 54 | 80 | 78 | 120 | 144 |
| Administrative | NA | NA | NA | NA | NA | 29 | 69 | 57 | 75 | 102 | 120 | 144 |
| Survey | NA | NA | NA | NA | NA | NA | 54 | 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.

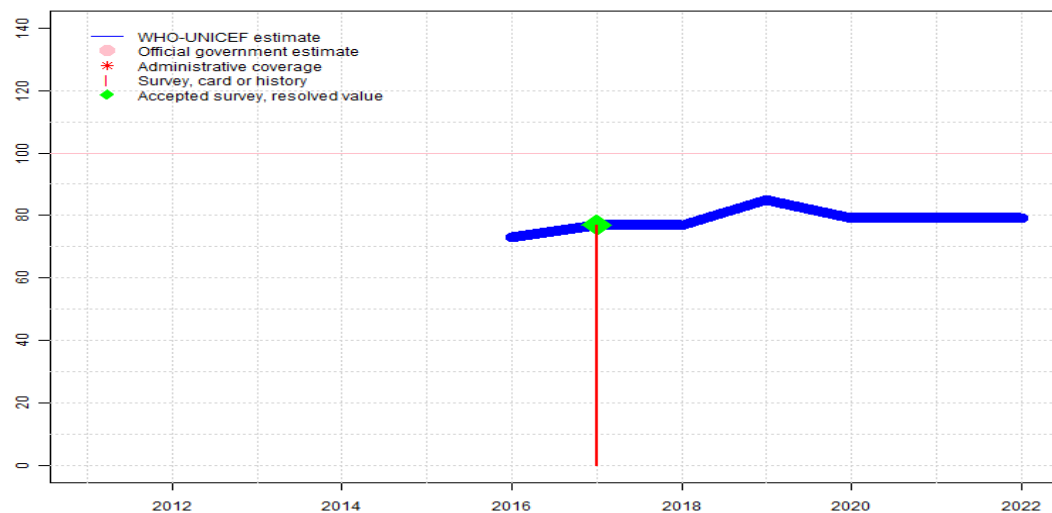
Description:

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

- 2022: Estimate informed by extrapolation from reported data. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. Reported doses administered in 2021-2022 are meaningfully lower than that for the prior five year period. WHO and UNICEF recommend a revision of reported coverage time series. Reported data excluded because 144 percent greater than 100 percent. Reported data excluded due to sudden change in coverage from 120 level to 144 percent. WHO and UNICEF are aware that the country is conducting an EPI coverage survey in 2023 and await the final results. GoC=R+ D+
- 2021: Estimate informed by extrapolation from reported data. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. WHO and UNICEF recommend a revision of reported coverage time series. Reported data excluded because 120 percent greater than 100 percent. Estimate challenged by: D-
- 2020: Estimate informed by reported data. No vital registration system in place in the country. The 2015 census was used as the basis for the denominator used for the reported administrative coverage. These census projections are under discussion by different institutions. WHO and UNICEF recommend a historical series revision once official denominators have been defined. Estimate challenged by: D-
- 2019: Estimate informed by reported data. . Estimate challenged by: D-
- 2018: Estimate informed by reported data. Exceptional relative increase of 35 percent in reported target population from 2017 to 2018 is explained by a reversion to projections from 2010 census. Apparent decline in reported administrative data likely an artefact resulting from change in reported target. Reported official coverage based on survey results. Estimate is based on reported. Estimate challenged by: D-
- 2017: Estimate is based on the relative difference between estimated and reported coverage for MCV1. Survey results ignored. Sample size 299 less than 300. Reported data excluded. Adjustment to reported official estimates is unexplained. Reported data excluded due to an increase from 30 percent to 69 percent with decrease 54 percent. Estimate challenged by: D-R-
- 2016: Estimate is exceptionally based on reported coverage during introduction year. Reported data excluded. Adjustment to reported official estimates is unexplained. Second dose of measles containing vaccine introduced in 2016. Reported data exceptionally accepted. Estimate challenged by: R-

Timor-Leste - RCV1

TLS - RCV1



Description:

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

2022: Estimate based on estimated MCV1. WHO and UNICEF are aware that the country is conducting an EPI coverage survey in 2023 and await the final results. GoC=R+ D+

2021: Estimate based on estimated MCV1. GoC=R+ D+

2020: Estimate based on estimated MCV1. No vital registration system in place in the country. The 2015 census was used as the basis for the denominator used for the reported administrative coverage. These census projections are under discussion by different institutions. WHO and UNICEF recommend a historical series revision once official denominators have been defined. Estimate challenged by: D-

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

2018: Estimate based on estimated MCV1. Exceptional relative increase of 35 percent in reported target population from 2017 to 2018 is explained by a reversion to projections from 2010 census. Apparent decline in reported administrative data likely an artefact resulting from change in reported target. Reported official coverage based on survey results. Estimate challenged by: D-

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

2016: Estimate based on estimated MCV1. Rubella containing vaccine introduced during 2016. Estimate challenged by: D-R-

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | 73 | 77 | 77 | 85 | 79 | 79 | 79 |
| Estimate GoC | 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 | 77 | NA | NA | NA | NA | NA |

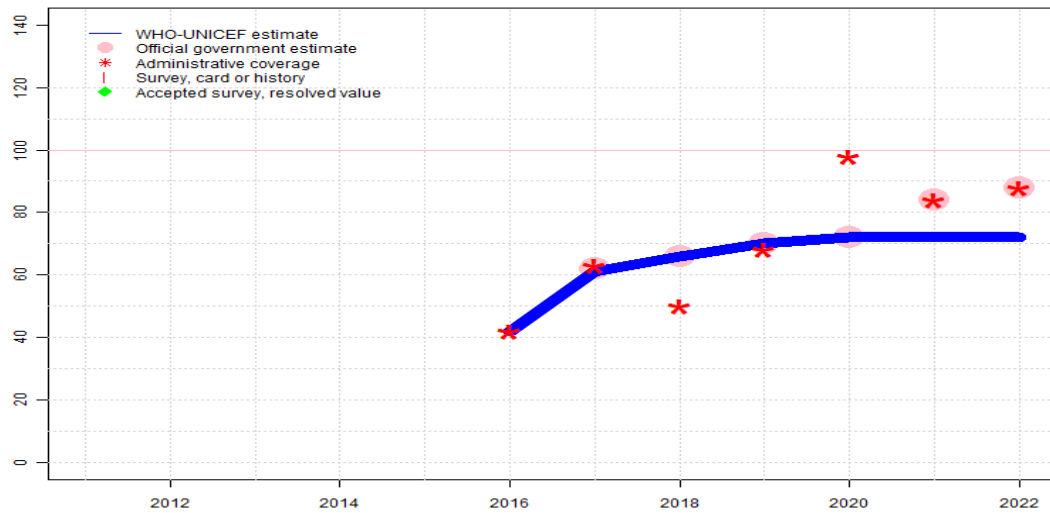
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Timor-Leste - HepBB

TLS - HepBB



| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | 42 | 61 | 66 | 70 | 72 | 72 | 72 |
| Estimate GoC | NA | NA | NA | NA | NA | • | • | •• | • | • | •• | • |
| Official | NA | NA | NA | NA | NA | NA | 62 | 66 | 70 | 72 | 84 | 88 |
| Administrative | NA | NA | NA | NA | NA | 42 | 63 | 50 | 68 | 98 | 84 | 88 |
| 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.

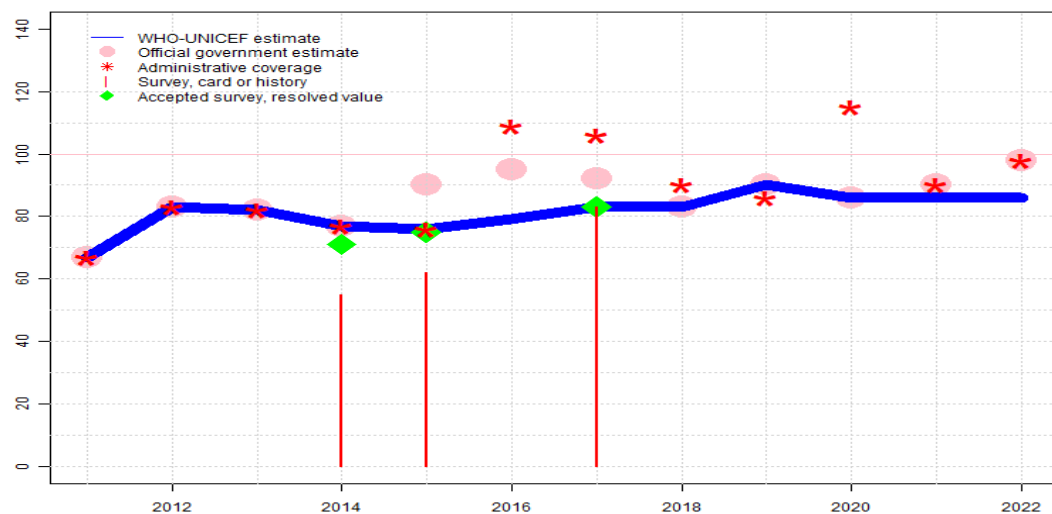
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2022: Estimate informed by extrapolation from reported data. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. Reported doses administered in 2021-2022 are meaningfully lower than that for the prior five year period. WHO and UNICEF recommend a revision of reported coverage time series. WHO and UNICEF are aware that the country is conducting an EPI coverage survey in 2023 and await the final results. Programme reports a one month vaccine stockout at national level. Estimate challenged by: D-
- 2021: Estimate informed by extrapolation from reported data. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. WHO and UNICEF recommend a revision of reported coverage time series. GoC=R+ D+
- 2020: Estimate informed by reported data. No vital registration system in place in the country. The 2015 census was used as the basis for the denominator used for the reported administrative coverage. These census projections are under discussion by different institutions. WHO and UNICEF recommend a historical series revision once official denominators have been defined. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate challenged by: D-
- 2018: Estimate informed by reported data. Exceptional relative increase of 35 percent in reported target population from 2017 to 2018 is explained by a reversion to projections from 2010 census. Apparent decline in reported administrative data likely an artefact resulting from change in reported target. Reported official coverage based on survey results.. GoC=R+ D+
- 2017: Estimate is based on the relative difference between estimated and reported coverage for BCG. Reported data excluded. Adjustment to reported official estimates is unexplained. Estimate challenged by: R-
- 2016: Estimate is exceptionally based on reported coverage during introduction. Reported data excluded. Adjustment to reported official estimates is unexplained. Estimate challenged by: R-

Timor-Leste - HepB3

TLS - HepB3



| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 67 | 83 | 82 | 77 | 76 | 79 | 83 | 83 | 90 | 86 | 86 | 86 |
| Estimate GoC | • | • | • | • | • | • | • | • | • | • | •• | • |
| Official | 67 | 83 | 82 | 77 | 90 | 95 | 92 | 83 | 90 | 86 | 90 | 98 |
| Administrative | 67 | 83 | 82 | 77 | 76 | 109 | 106 | 90 | 86 | 115 | 90 | 98 |
| Survey | NA | NA | NA | 55 | 62 | NA | 83 | NA | NA | NA | NA | NA |

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

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

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

Description:

- 2022: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. Reported doses administered in 2021-2022 are meaningfully lower than that for the prior five year period. WHO and UNICEF recommend a revision of reported coverage time series. WHO and UNICEF are aware that the country is conducting an EPI coverage survey in 2023 and await the final results. Estimate challenged by: D-
- 2021: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. WHO and UNICEF recommend a revision of reported coverage time series. GoC=R+ D+
- 2020: Estimate informed by reported data. No vital registration system in place in the country. The 2015 census was used as the basis for the denominator used for the reported administrative coverage. These census projections are under discussion by different institutions. WHO and UNICEF recommend a historical series revision once official denominators have been defined. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Official coverage estimates do not reflect trends in reported doses administered (numerator) between 2017 and 2019. Numerator trend for DTP-HepB3-Hib 3 not consistent with that of DTP 1. Estimate challenged by: D-
- 2018: Estimate is based on reported data. Exceptional relative increase of 35 percent in reported target population from 2017 to 2018 is explained by a reversion to projections from 2010 census. Apparent decline in reported administrative data likely an artefact resulting from change in reported target. Reported official coverage based on survey results. Official coverage estimates do not reflect trends in reported doses administered (numerator) between 2017 and 2019. Numerator trend for DTP-HepB3-Hib 3 not consistent with that of DTP 1.. Estimate challenged by: D-
- 2017: Estimate of 83 percent assigned by working group. Estimate is based on survey result. Reported data excluded. Adjustment to reported official estimates is unexplained. Official coverage estimates do not reflect trends in reported doses administered (numerator) between 2017 and 2019. Numerator trend for DTP-HepB3-Hib 3 not consistent with that of DTP 1. Estimate challenged by: D-R-
- 2016: Reported data calibrated to 2015 and 2017 levels. Reported data excluded. Adjustment to reported official estimates is unexplained. The reported number of children vaccinated includes children beyond one-year of age but the proportion above one-year is unknown. The reported target population estimates for 2016 are lower than those for 2015 due in part to a change from use of projections from 2010 census to 2015 census. Estimate challenged by: D-R-
- 2015: Estimate informed by reported administrative data supported by survey. Survey evidence of 75 percent based on 1 survey(s). Timor-Leste Demographic and Health Survey 2016

card or history results of 62 percent modified for recall bias to 75 percent based on 1st dose card or history coverage of 78 percent, 1st dose card only coverage of 50 percent and 3rd dose card only coverage of 48 percent. WHO and UNICEF are aware of two sub-national surveys conducted during 2015 reflecting coverage for the 2013-14 birth cohorts and encourages efforts to appropriately re-weight the survey results to produce national level coverage results. Official government reported data based on two subnational surveys conducted during 2015. GoC=Assigned by working group. Consistency across vaccines.

2014: Estimate informed by reported data supported by survey. Survey evidence of 71 percent based on 1 survey(s). Timor-Leste Demographic and Health Survey 2016 card or history results of 55 percent modified for recall bias to 71 percent based on 1st dose card or history coverage of 75 percent, 1st dose card only coverage of 40 percent and 3rd dose card only coverage of 38 percent. GoC=Assigned by working group. Consistency across vaccines.

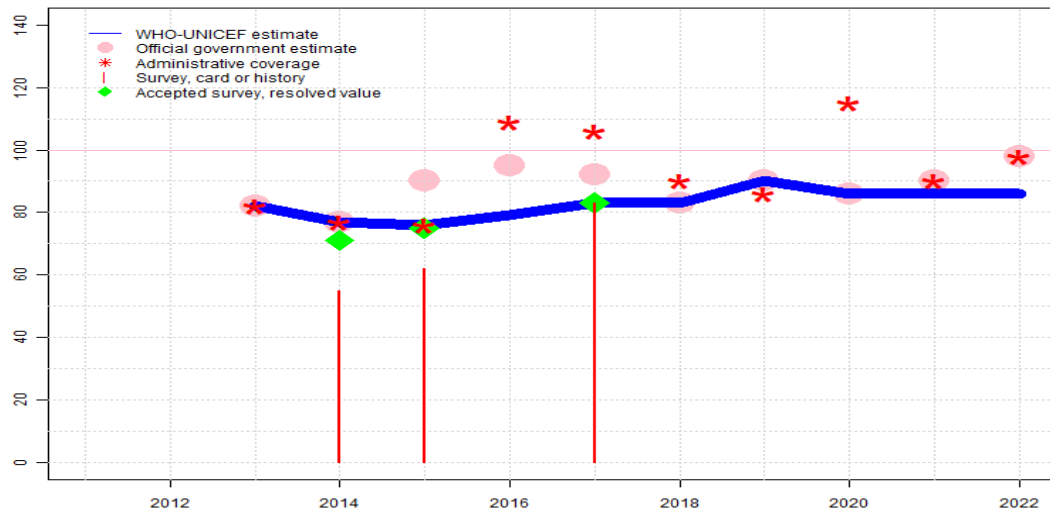
2013: Estimate informed by reported data. Vaccine presentation changed from DTP-HepB to DTP-HepB-Hib in October 2012. Estimate challenged by: D-S-

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

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

Timor-Leste - Hib3

TLS - Hib3



| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | 82 | 77 | 76 | 79 | 83 | 83 | 90 | 86 | 86 | 86 |
| Estimate GoC | NA | NA | • | • | • | • | • | • | • | • | •• | • |
| Official | NA | NA | 82 | 77 | 90 | 95 | 92 | 83 | 90 | 86 | 90 | 98 |
| Administrative | NA | NA | 82 | 77 | 76 | 109 | 106 | 90 | 86 | 115 | 90 | 98 |
| Survey | NA | NA | NA | 55 | 62 | NA | 83 | NA | NA | NA | NA | NA |

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

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

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

Description:

- 2022: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. Reported doses administered in 2021-2022 are meaningfully lower than that for the prior five year period. WHO and UNICEF recommend a revision of reported coverage time series. WHO and UNICEF are aware that the country is conducting an EPI coverage survey in 2023 and await the final results. Estimate challenged by: D-
- 2021: Estimate based on extrapolation from data reported by national government. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. WHO and UNICEF recommend a revision of reported coverage time series. GoC=R+ D+
- 2020: Estimate informed by reported data. No vital registration system in place in the country. The 2015 census was used as the basis for the denominator used for the reported administrative coverage. These census projections are under discussion by different institutions. WHO and UNICEF recommend a historical series revision once official denominators have been defined. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Official coverage estimates do not reflect trends in reported doses administered (numerator) between 2017 and 2019. Numerator trend for DTP-HepB3-Hib 3 not consistent with that of DTP 1. Estimate challenged by: D-
- 2018: Estimate is based on reported data. Exceptional relative increase of 35 percent in reported target population from 2017 to 2018 is explained by a reversion to projections from 2010 census. Apparent decline in reported administrative data likely an artefact resulting from change in reported target. Reported official coverage based on survey results. Official coverage estimates do not reflect trends in reported doses administered (numerator) between 2017 and 2019. Numerator trend for DTP-HepB3-Hib 3 not consistent with that of DTP 1.. Estimate challenged by: D-
- 2017: Estimate of 83 percent assigned by working group. Estimate is based on survey result. Reported data excluded. Adjustment to reported official estimates is unexplained. Official coverage estimates do not reflect trends in reported doses administered (numerator) between 2017 and 2019. Numerator trend for DTP-HepB3-Hib 3 not consistent with that of DTP 1. Estimate challenged by: D-R-
- 2016: Reported data calibrated to 2015 and 2017 levels. Reported data excluded. Adjustment to reported official estimates is unexplained. The reported number of children vaccinated includes children beyond one-year of age but the proportion above one-year is unknown. The reported target population estimates for 2016 are lower than those for 2015 due in part to a change from use of projections from 2010 census to 2015 census. Estimate challenged by: D-R-
- 2015: Estimate informed by reported administrative data supported by survey. Survey evidence of 75 percent based on 1 survey(s). Timor-Leste Demographic and Health Survey 2016

Timor-Leste - Hib3

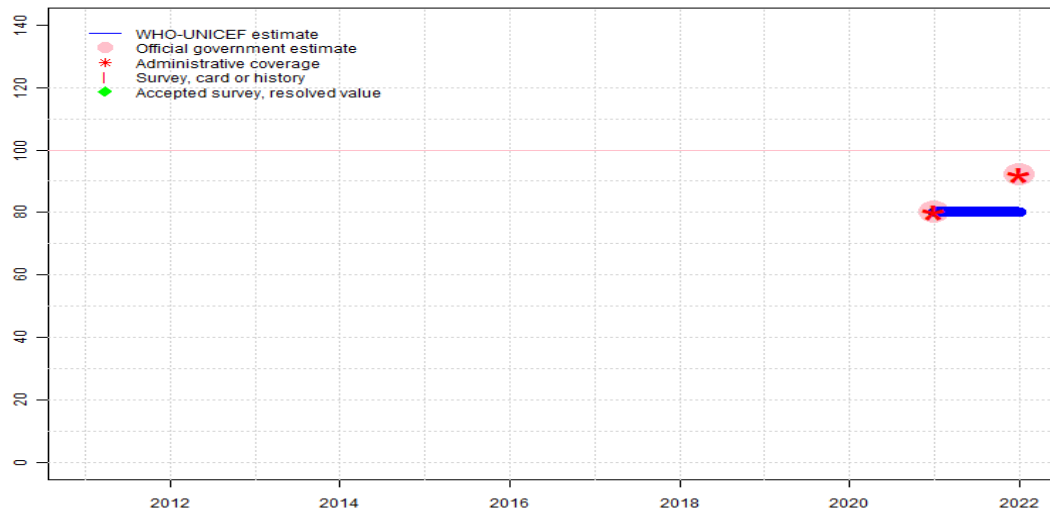
card or history results of 62 percent modified for recall bias to 75 percent based on 1st dose card or history coverage of 78 percent, 1st dose card only coverage of 50 percent and 3rd dose card only coverage of 48 percent. WHO and UNICEF are aware of two sub-national surveys conducted during 2015 reflecting coverage for the 2013-14 birth cohorts and encourages efforts to appropriately re-weight the survey results to produce national level coverage results. Official government reported data based on two subnational surveys conducted during 2015. GoC=Assigned by working group. Consistency across vaccines.

2014: Estimate informed by reported data supported by survey. Survey evidence of 71 percent based on 1 survey(s). Timor-Leste Demographic and Health Survey 2016 card or history results of 55 percent modified for recall bias to 71 percent based on 1st dose card or history coverage of 75 percent, 1st dose card only coverage of 40 percent and 3rd dose card only coverage of 38 percent. GoC=Assigned by working group. Consistency across vaccines.

2013: Estimate informed by reported data. Vaccine introduced in October 2012 and reporting started in 2013. Vaccine presentation is DTP-HepB-Hib. Estimate challenged by: D-S-

Timor-Leste - RotaC

TLS - RotaC



Description:

2022: Estimate informed by prior year estimate consistent with other vaccines. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. Reported doses administered in 2021-2022 are meaningfully lower than that for the prior five year period. WHO and UNICEF recommend a revision of reported coverage time series. WHO and UNICEF are aware that the country is conducting an EPI coverage survey in 2023 and await the final results. Estimate challenged by: D-R-

2021: Vaccine introduced in December 2019, and reporting began in 2021. An exception to the approach used for other antigens, estimate is informed by the reported data during vaccine introduction period. Reported data excluded. The country notes data quality issues and indicates work is needed to improve recording and reporting. For several antigens, reported number of doses administered decreases while coverage increases relative to prior years. WHO and UNICEF recommend a revision of reported coverage time series. Estimate challenged by: R-

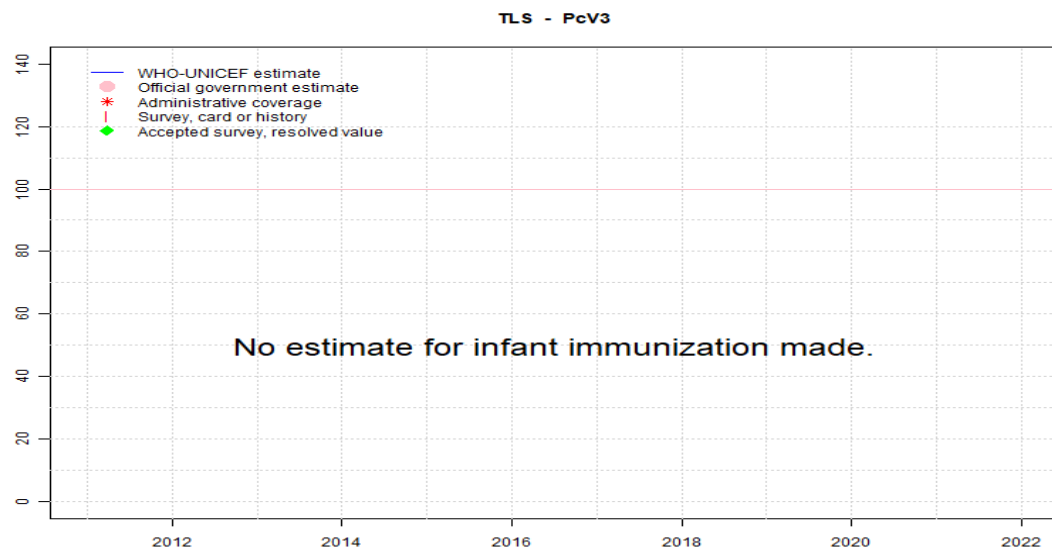
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 80 | 80 |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | ● | ● |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 80 | 92 |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 80 | 92 |
| 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.

Timor-Leste - PcV3



| | 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.

Timor-Leste - survey details

NOTE: A survey to measure vaccination coverage for infants (i.e., children aged 0 to 11 months) will sample children aged 12 to 23 months at the time of survey to capture the youngest annual cohort of children who should have completed the vaccination schedule. Because WUENIC are for infant vaccinations, survey data in this report are presented to reflect the birth year of the youngest survey cohort. For example, results for a survey conducted during December 2020 among children aged 12 to 23 months at the time of the survey reflect the immunization experience of children born in 2019. Depending on the timing of survey field work, results may reflect the immunization experience of children born and vaccinated 1 or 2 years prior to the survey field work.

2017 Timor-Leste Vaccination Cluster Coverage Survey 2018

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | Card or History | 94.7 | 12-23 m | 312 | 62 |
| DTP1 | Card or History | 91.8 | 12-23 m | 312 | 62 |
| DTP3 | Card or History | 83 | 12-23 m | 312 | 62 |
| HepB1 | Card or History | 91.8 | 12-23 m | 312 | 62 |
| HepB3 | Card or History | 83.3 | 12-23 m | 312 | 62 |
| Hib1 | Card or History | 91.8 | 12-23 m | 312 | 62 |
| Hib3 | Card or History | 83.3 | 12-23 m | 312 | 62 |
| IPV1 | Card or History | 80 | 12-23 m | 312 | 62 |
| MCV1 | Card or History | 77.3 | 12-23 m | 312 | 62 |
| MCV2 | Card or History | 54.4 | 24-35 m | 299 | 62 |
| Pol1 | Card or History | 91.8 | 12-23 m | 312 | 62 |
| Pol3 | Card or History | 83.3 | 12-23 m | 312 | 62 |

2015 Timor-Leste Demographic and Health Survey 2016

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | C or H <12 months | 79.1 | 12-23 m | 1456 | 51 |
| BCG | Card | 51 | 12-23 m | 749 | 51 |
| BCG | Card or History | 80.5 | 12-23 m | 1456 | 51 |
| BCG | History | 29.5 | 12-23 m | 707 | 51 |
| DTP1 | C or H <12 months | 77.4 | 12-23 m | 1456 | 51 |
| DTP1 | Card | 50.5 | 12-23 m | 749 | 51 |

| | | | | | |
|-------|-------------------|------|---------|------|----|
| DTP1 | Card or History | 78.4 | 12-23 m | 1456 | 51 |
| DTP1 | History | 27.9 | 12-23 m | 707 | 51 |
| DTP3 | C or H <12 months | 60.1 | 12-23 m | 1456 | 51 |
| DTP3 | Card | 47.5 | 12-23 m | 749 | 51 |
| DTP3 | Card or History | 61.7 | 12-23 m | 1456 | 51 |
| DTP3 | History | 14.1 | 12-23 m | 707 | 51 |
| HepB1 | C or H <12 months | 77.4 | 12-23 m | 1456 | 51 |
| HepB1 | Card | 50.5 | 12-23 m | 749 | 51 |
| HepB1 | Card or History | 78.4 | 12-23 m | 1456 | 51 |
| HepB1 | History | 27.9 | 12-23 m | 707 | 51 |
| HepB3 | C or H <12 months | 60.1 | 12-23 m | 1456 | 51 |
| HepB3 | Card | 47.5 | 12-23 m | 749 | 51 |
| HepB3 | Card or History | 61.7 | 12-23 m | 1456 | 51 |
| HepB3 | History | 14.1 | 12-23 m | 707 | 51 |
| Hib1 | C or H <12 months | 77.4 | 12-23 m | 1456 | 51 |
| Hib1 | Card | 50.5 | 12-23 m | 749 | 51 |
| Hib1 | Card or History | 78.4 | 12-23 m | 1456 | 51 |
| Hib1 | History | 27.9 | 12-23 m | 707 | 51 |
| Hib3 | C or H <12 months | 60.1 | 12-23 m | 1456 | 51 |
| Hib3 | Card | 47.5 | 12-23 m | 749 | 51 |
| Hib3 | Card or History | 61.7 | 12-23 m | 1456 | 51 |
| Hib3 | History | 14.1 | 12-23 m | 707 | 51 |
| MCV1 | C or H <12 months | 65.4 | 12-23 m | 1456 | 51 |
| MCV1 | Card | 43.8 | 12-23 m | 749 | 51 |
| MCV1 | Card or History | 69.3 | 12-23 m | 1456 | 51 |
| MCV1 | History | 25.5 | 12-23 m | 707 | 51 |
| Pol1 | C or H <12 months | 72.6 | 12-23 m | 1456 | 51 |
| Pol1 | Card | 50 | 12-23 m | 749 | 51 |
| Pol1 | Card or History | 73.1 | 12-23 m | 1456 | 51 |
| Pol1 | History | 23 | 12-23 m | 707 | 51 |
| Pol3 | C or H <12 months | 53 | 12-23 m | 1456 | 51 |
| Pol3 | Card | 47 | 12-23 m | 749 | 51 |
| Pol3 | Card or History | 54.3 | 12-23 m | 1456 | 51 |
| Pol3 | History | 7.3 | 12-23 m | 707 | 51 |

2014 Timor-Leste Demographic and Health Survey 2016

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | C or H <12 months | 73.9 | 24-35 m | 1364 | 51 |

Timor-Leste - survey details

| | | | | | |
|-------|-------------------|------|---------|------|----|
| BCG | Card | 40.2 | 24-35 m | 554 | 51 |
| BCG | Card or History | 76.6 | 24-35 m | 1364 | 51 |
| BCG | History | 36.4 | 24-35 m | 809 | 51 |
| DTP1 | C or H <12 months | 73.2 | 24-35 m | 1364 | 51 |
| DTP1 | Card | 40.4 | 24-35 m | 554 | 51 |
| DTP1 | Card or History | 75.4 | 24-35 m | 1364 | 51 |
| DTP1 | History | 35 | 24-35 m | 809 | 51 |
| DTP3 | C or H <12 months | 51.6 | 24-35 m | 1364 | 51 |
| DTP3 | Card | 37.8 | 24-35 m | 554 | 51 |
| DTP3 | Card or History | 55.3 | 24-35 m | 1364 | 51 |
| DTP3 | History | 17.5 | 24-35 m | 809 | 51 |
| HepB1 | C or H <12 months | 73.2 | 24-35 m | 1364 | 51 |
| HepB1 | Card | 40.4 | 24-35 m | 554 | 51 |
| HepB1 | Card or History | 75.4 | 24-35 m | 1364 | 51 |
| HepB1 | History | 35 | 24-35 m | 809 | 51 |
| HepB3 | C or H <12 months | 51.6 | 24-35 m | 1364 | 51 |
| HepB3 | Card | 37.8 | 24-35 m | 554 | 51 |
| HepB3 | Card or History | 55.3 | 24-35 m | 1364 | 51 |
| HepB3 | History | 17.5 | 24-35 m | 809 | 51 |
| Hib1 | C or H <12 months | 73.2 | 24-35 m | 1364 | 51 |
| Hib1 | Card | 40.4 | 24-35 m | 554 | 51 |
| Hib1 | Card or History | 75.4 | 24-35 m | 1364 | 51 |
| Hib1 | History | 35 | 24-35 m | 809 | 51 |
| Hib3 | C or H <12 months | 51.6 | 24-35 m | 1364 | 51 |
| Hib3 | Card | 37.8 | 24-35 m | 554 | 51 |
| Hib3 | Card or History | 55.3 | 24-35 m | 1364 | 51 |
| Hib3 | History | 17.5 | 24-35 m | 809 | 51 |
| MCV1 | C or H <12 months | 64.1 | 24-35 m | 1364 | 51 |
| MCV1 | Card | 36.4 | 24-35 m | 554 | 51 |
| MCV1 | Card or History | 70 | 24-35 m | 1364 | 51 |
| MCV1 | History | 33.6 | 24-35 m | 809 | 51 |
| Pol1 | C or H <12 months | 67.9 | 24-35 m | 1364 | 51 |
| Pol1 | Card | 40.1 | 24-35 m | 554 | 51 |
| Pol1 | Card or History | 69.5 | 24-35 m | 1364 | 51 |
| Pol1 | History | 29.4 | 24-35 m | 809 | 51 |
| Pol3 | C or H <12 months | 45 | 24-35 m | 1364 | 51 |
| Pol3 | Card | 38.3 | 24-35 m | 554 | 51 |
| Pol3 | Card or History | 48.4 | 24-35 m | 1364 | 51 |
| Pol3 | History | 10.1 | 24-35 m | 809 | 51 |

2012 Timor Leste Food and Nutrition Survey, 2013

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | Card or History | 85.5 | 12-23 m | 2396 | 86 |
| DTP1 | Card or History | 84.5 | 12-23 m | 2396 | 86 |
| DTP3 | Card or History | 82.6 | 12-23 m | 2396 | 86 |
| MCV1 | Card or History | 76.8 | 12-23 m | 2396 | 86 |
| Pol1 | Card or History | 83.9 | 12-23 m | 2396 | 86 |
| Pol3 | Card or History | 82.1 | 12-23 m | 2396 | 86 |

2010 Report on Coverage Evaluation Survey Measles Catch-up Activity, 2011 Timor-Leste

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| MCV1 | History | 69.6 | 6-11 m | 210 | - |

2008 Timor-Leste Demographic and Health Survey 2009-10

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | C or H <12 months | 76.6 | 12-23 m | 1752 | 50 |
| BCG | Card | 49.4 | 12-23 m | 1752 | 50 |
| BCG | Card or History | 76.7 | 12-23 m | 1752 | 50 |
| BCG | History | 27.3 | 12-23 m | 1752 | 50 |
| DTP1 | C or H <12 months | 74.2 | 12-23 m | 1752 | 50 |
| DTP1 | Card | 49 | 12-23 m | 1752 | 50 |
| DTP1 | Card or History | 75.1 | 12-23 m | 1752 | 50 |
| DTP1 | History | 26.1 | 12-23 m | 1752 | 50 |
| DTP3 | C or H <12 months | 64.2 | 12-23 m | 1752 | 50 |
| DTP3 | Card | 47 | 12-23 m | 1752 | 50 |
| DTP3 | Card or History | 66.4 | 12-23 m | 1752 | 50 |
| DTP3 | History | 19.4 | 12-23 m | 1752 | 50 |
| HepB1 | C or H <12 months | 73.7 | 12-23 m | 1752 | 50 |
| HepB1 | Card | 49 | 12-23 m | 1752 | 50 |
| HepB1 | Card or History | 74.6 | 12-23 m | 1752 | 50 |
| HepB1 | History | 25.7 | 12-23 m | 1752 | 50 |
| HepB3 | C or H <12 months | 62.9 | 12-23 m | 1752 | 50 |
| HepB3 | Card | 46.8 | 12-23 m | 1752 | 50 |

Timor-Leste - survey details

| | | | | | |
|-------|-------------------|------|---------|------|----|
| HepB3 | Card or History | 65.7 | 12-23 m | 1752 | 50 |
| HepB3 | History | 18.9 | 12-23 m | 1752 | 50 |
| MCV1 | C or H <12 months | 60 | 12-23 m | 1752 | 50 |
| MCV1 | Card | 44.6 | 12-23 m | 1752 | 50 |
| MCV1 | Card or History | 67.8 | 12-23 m | 1752 | 50 |
| MCV1 | History | 23.2 | 12-23 m | 1752 | 50 |
| Pol1 | C or H <12 months | 74 | 12-23 m | 1752 | 50 |
| Pol1 | Card | 49.1 | 12-23 m | 1752 | 50 |
| Pol1 | Card or History | 74.9 | 12-23 m | 1752 | 50 |
| Pol1 | History | 25.7 | 12-23 m | 1752 | 50 |
| Pol3 | C or H <12 months | 54.4 | 12-23 m | 1752 | 50 |
| Pol3 | Card | 47 | 12-23 m | 1752 | 50 |
| Pol3 | Card or History | 56.2 | 12-23 m | 1752 | 50 |
| Pol3 | History | 9.1 | 12-23 m | 1752 | 50 |

2003 Immunization coverage among women and children 12-23 months in the Democratic Republic of Timor-Leste Using the EPI cluster survey methodology

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | Card | 25 | 12-23 m | 2662 | 26 |
| BCG | Card or history | 72 | 12-23 m | 2662 | 26 |
| DTP1 | Card | 20 | 12-23 m | 2662 | 26 |
| DTP1 | Card or history | 65 | 12-23 m | 2662 | 26 |
| DTP3 | Card | 17 | 12-23 m | 2662 | 26 |
| DTP3 | Card or history | 57 | 12-23 m | 2662 | 26 |
| MCV1 | Card | 15 | 12-23 m | 2662 | 26 |
| MCV1 | Card or history | 55 | 12-23 m | 2662 | 26 |
| Pol1 | Card | 20 | 12-23 m | 2662 | 26 |
| Pol1 | Card or history | 65 | 12-23 m | 2662 | 26 |
| Pol3 | Card | 17 | 12-23 m | 2662 | 26 |
| Pol3 | Card or history | 57 | 12-23 m | 2662 | 26 |

2002 Timor-Leste 2003 Demographic and Health Survey

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | Card or History | 75.1 | 12-23 m | 722 | 12 |
| DTP1 | Card or History | 68.1 | 12-23 m | 722 | 12 |
| DTP3 | Card or History | 37.5 | 12-23 m | 722 | 12 |
| MCV1 | Card or History | 56.4 | 12-23 m | 722 | 12 |
| Pol1 | Card or History | 69.1 | 12-23 m | 722 | 12 |
| Pol3 | Card or History | 26.4 | 12-23 m | 722 | 12 |

2001 Multiple Indicator Cluster Survey Timor-Leste 2002

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | C or H <12 months | 34.5 | 12-23 m | 988 | 10 |
| BCG | Card | 8.7 | 12-23 m | 988 | 10 |
| BCG | Card or History | 37.2 | 12-23 m | 988 | 10 |
| BCG | History | 28.5 | 12-23 m | 988 | 10 |
| DTP1 | C or H <12 months | 34.5 | 12-23 m | 988 | 10 |
| DTP1 | Card | 8.6 | 12-23 m | 988 | 10 |
| DTP1 | Card or History | 34.7 | 12-23 m | 988 | 10 |
| DTP1 | History | 26.1 | 12-23 m | 988 | 10 |
| DTP3 | C or H <12 months | 17.3 | 12-23 m | 988 | 10 |
| DTP3 | Card | 5.4 | 12-23 m | 988 | 10 |
| DTP3 | Card or History | 18.3 | 12-23 m | 988 | 10 |
| DTP3 | History | 12.8 | 12-23 m | 988 | 10 |
| MCV1 | C or H <12 months | 23.6 | 12-23 m | 988 | 10 |
| MCV1 | Card | 5.3 | 12-23 m | 988 | 10 |
| MCV1 | Card or History | 27.6 | 12-23 m | 988 | 10 |
| MCV1 | History | 22.3 | 12-23 m | 988 | 10 |
| Pol1 | C or H <12 months | 34 | 12-23 m | 988 | 10 |
| Pol1 | Card | 7.4 | 12-23 m | 988 | 10 |
| Pol1 | Card or History | 37.1 | 12-23 m | 988 | 10 |
| Pol1 | History | 29.8 | 12-23 m | 988 | 10 |
| Pol3 | C or H <12 months | 15.7 | 12-23 m | 988 | 10 |
| Pol3 | Card | 4.4 | 12-23 m | 988 | 10 |
| Pol3 | Card or History | 16.4 | 12-23 m | 988 | 10 |
| Pol3 | History | 12 | 12-23 m | 988 | 10 |

Timor-Leste - 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>