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:

*Brown et al. 2013. An introduction to the grade of confidence used to characterize uncertainty around immunization coverage: a computational logic approach.


*Brown et al. 2013. An introduction to the grade of confidence used to characterize uncertainty around immunization coverage: a computational logic approach.

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. Cover 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.

Disclaimer: All reasonable precautions have been taken by the World Health Organization and United Nations Children’s Fund to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization or United Nations Children’s Fund be liable for damages arising from its use.
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.

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimate</th>
<th>GoC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>85%</td>
<td>R-</td>
</tr>
<tr>
<td>2020</td>
<td>85%</td>
<td>R-</td>
</tr>
<tr>
<td>2019</td>
<td>80%</td>
<td>R-</td>
</tr>
<tr>
<td>2018</td>
<td>85%</td>
<td>R-</td>
</tr>
<tr>
<td>2017</td>
<td>85%</td>
<td>R-</td>
</tr>
<tr>
<td>2016</td>
<td>85%</td>
<td>R-</td>
</tr>
<tr>
<td>2015</td>
<td>85%</td>
<td>R-</td>
</tr>
<tr>
<td>2014</td>
<td>85%</td>
<td>R-</td>
</tr>
<tr>
<td>2013</td>
<td>85%</td>
<td>R-</td>
</tr>
<tr>
<td>2012</td>
<td>85%</td>
<td>R-</td>
</tr>
<tr>
<td>2011</td>
<td>85%</td>
<td>R-</td>
</tr>
</tbody>
</table>

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.
The WHO and UNICEF estimates of national immunization coverage (vaccine) 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.
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:

**2021:** Reported data calibrated to 2016 levels. WHO and UNICEF are aware of a planned MICS survey for 2022 and await the final results. Programme reports vaccine stock out subnational levels. Estimate challenged by: R-

**2020:** Reported data calibrated to 2016 levels. Estimate challenged by: R-

**2019:** Reported data calibrated to 2016 levels. Estimate challenged by: R-

**2018:** Reported data calibrated to 2016 levels. Estimate challenged by: D-R-

**2017:** Reported data calibrated to 2016 levels. Estimate challenged by: D-R-

**2016:** Estimate of 83 percent assigned by working group. Estimate based on survey results for 2014 cohort as reported number of vaccinated children is similar between 2014 and 2016. Lao Social Indicator Survey II (LSIS II) 2017 results ignored by working group. Survey results inconsistent with previous survey and across vaccine doses. Estimate challenged by: D-R-

**2015:** Estimate based on interpolated between 2014 and 2016 levels. Reported denominator decline between 2014 and 2015 may explain observed increase in reported coverage. Estimate challenged by: D-R-

**2014:** Estimate of 83 percent assigned by working group. Estimate based on survey results. National Immunization Survey 2015, Lao People’s Democratic Republic (Lao PDR) card or history results of 81 percent modified for recall bias to 83 percent based on 1st dose card or history coverage of 76 percent, 1st dose card only coverage of 47 percent and 3rd dose card only coverage of 43 percent. Estimate challenged by: D-R-

**2013:** Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: D-R-

**2012:** Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: R-S-

**2011:** Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: R-S-

**2010:** Estimate is based on reported coverage supported by survey. Lao Social Indicator Survey (LSIS) 2011 - 12 (Multiple Indicator Cluster Survey / Demographic and Health Survey) card or history results of 56 percent modified for recall bias to 63 percent based on 1st dose card or history coverage of 77 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 37 percent. Estimate challenged by: D-S-

---

July 8, 2022; page 5

WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2023

Data received as of July 7, 2022
Lao People’s Democratic Republic - Pol3

Description:

2021: Reported data calibrated to 2016 levels. WHO and UNICEF are aware of a planned MICS survey for 2022 and await the final results. Programme reports vaccine stock out
subnational levels. Estimate challenged by: R-

2020: Reported data calibrated to 2016 levels. Estimate challenged by: R-

2019: Reported data calibrated to 2016 levels. Estimate challenged by: R-

2018: Reported data calibrated to 2016 levels. Estimate challenged by: D-R-

2017: Reported data calibrated to 2016 levels. Estimate challenged by: D-R-

2016: Estimate of 83 percent assigned by working group. Estimate based on survey results for
2014 cohort as reported number of vaccinated children is similar between 2014 and 2016.
Lao Social Indicator Survey II (LSIS II) 2017 results ignored by working group. Survey
results inconsistent with previous survey and across vaccine doses. Lao Social Indicator
Survey II (LSIS II) 2017 results ignored by working group. Survey results likely reflect
contribution of polio campaigns conducted around time of survey. Lao Social Indicator
Survey II (LSIS II) 2017 card or history results of 69 percent modified for recall bias
to 76 percent based on 1st dose card or history coverage of 84 percent, 1st dose card
only coverage of 51 percent and 3rd dose card only coverage of 46 percent. Activities to
control outbreak of vaccine-derived poliovirus may explain, at least in part, the decrease
in coverage with routine vaccines. Estimate challenged by: D-R-

2015: Estimate based on interpolation between 2014 and 2016 levels. Reported denomina-
tor decline between 2014 and 2015 may explain observed increase in reported coverage.
Estimate challenged by: D-R-

2014: Estimate of 83 percent assigned by working group. Estimate based on survey results.
National Immunization Survey 2015, Lao People’s Democratic Republic (Lao PDR) card
or history results of 82 percent modified for recall bias to 83 percent based on 1st dose
card or history coverage of 88 percent, 1st dose card only coverage of 73 percent and 3rd
dose card only coverage of 69 percent. Estimate challenged by: D-R-

2013: Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: D-R-

2012: Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: R-

2011: Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: R-

2010: Estimate based on administrative data reported by national government supported by
survey. Survey evidence of 66 percent based on 1 survey(s). Lao Social Indicator Survey
(LSIS) 2011 - 12 (Multiple Indicator Cluster Survey / Demographic and Health Survey)
card or history results of 53 percent modified for recall bias to 66 percent based on 1st
dose card or history coverage of 78 percent, 1st dose card only coverage of 44 percent
and 3rd dose card only coverage of 37 percent. Estimate challenged by: D-

The WHO and UNICEF estimates of national immunization coverage (vuenic) 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. 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.
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).

#### 2021: Estimate based on difference in reported coverage between DTP3 and IPV1 applied to DTP3 estimated coverage. WHO and UNICEF are aware of a planned MICS survey for 2022 and await the final results. Programme reports vaccine stock out subnational levels. Estimate challenged by: R-

#### 2020: Estimate based on difference in reported coverage between DTP3 and IPV1 applied to DTP3 estimated coverage. Estimate of 74 percent changed from previous revision value of 57 percent. Estimate challenged by: R-

#### 2019: Estimate based on difference in reported coverage between DTP3 and IPV1 applied to DTP3 estimated coverage. Estimate of 76 percent changed from previous revision value of 58 percent. Estimate challenged by: R-

#### 2018: Estimate based on difference in reported coverage between DTP3 and IPV1 applied to WUENIC DTP3 estimated coverage. Estimate of 76 percent changed from previous revision value of 59 percent. Estimate challenged by: D-R-

#### 2017: Estimate based on difference in reported coverage between DTP3 and IPV1 applied to DTP3 estimated coverage. Estimate of 75 percent changed from previous revision value of 58 percent. Estimate challenged by: D-R-

#### 2016: Estimate based on difference in reported coverage between DTP3 and IPV1 applied to DTP3 estimated coverage. Lao Social Indicator Survey II (LSIS II) 2017 results ignored by working group. Survey results inconsistent with previous survey and across vaccine doses. Estimate of 56 percent changed from previous revision value of 41 percent. Estimate challenged by: D-R-

#### 2015: Inactivated polio vaccine in 2015. Programme reports 50 percent coverage in 25 percent of the national target population. Estimate is based on total annual national target population. Reported denominator decline between 2014 and 2015 may explain observed increase in reported coverage. Estimate of 13 percent changed from previous revision value of 24 percent. Estimate challenged by: R-
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.

### Description:

2021: Reported data calibrated to 2016 levels. WHO and UNICEF are aware of a planned MICS survey for 2022 and await the final results. Programme reports vaccine stock out subnational levels. Estimate challenged by: R-

2020: Reported data calibrated to 2016 levels. Estimate challenged by: R-

2019: Reported data calibrated to 2016 levels. Estimate challenged by: R-

2018: Reported data calibrated to 2016 levels. Estimate challenged by: R-

2017: Reported data calibrated to 2016 levels. Estimate challenged by: R-

2016: Estimate of 81 percent assigned by working group. Estimate based on survey results for 2014 cohort as reported number of vaccinated children is similar between 2014 and 2016. Lao Social Indicator Survey II (LSIS II) 2017 results ignored by working group. Survey results inconsistent with previous survey and across vaccine doses. Estimate challenged by: R-

2015: Estimate based on interpolation between 2014 and 2016 levels. Reported data excluded due to an increase from 87 percent to 99 percent with decrease 87 percent. Reported denominator decline between 2014 and 2015 may explain observed increase in reported coverage. Estimate challenged by: D-

2014: Estimate of 81 percent assigned by working group. Estimate based on survey results. Estimate challenged by: D-

2013: Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: D-

2012: Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: R-

2011: Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: R-

2010: Estimate based on administrative data reported by national government supported by survey. Survey evidence of 64 percent based on 1 survey(s). Estimate challenged by: D-

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.
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.

- **2021:** Estimate based on difference in reported coverage between MCV1 and MCV2 applied to MCV1 WUENIC estimated coverage. WHO and UNICEF are aware of a planned MICS survey for 2022 and await the final results. Programme reports vaccine stock out subnational levels. Estimate challenged by: R-

- **2020:** Estimate based on difference in reported coverage between MCV1 and MCV2 applied to MCV1 WUENIC estimated coverage. Estimate of 64 percent changed from previous revision value of 47 percent. Estimate challenged by: R-

- **2019:** Estimate based on difference in reported coverage between MCV1 and MCV2 applied to MCV1 WUENIC estimated coverage. Estimate of 56 percent changed from previous revision value of 44 percent. Estimate challenged by: R-

- **2018:** Estimate based on difference in reported coverage between MCV1 and MCV2 applied to MCV1 WUENIC estimated coverage. Estimate of 70 percent changed from previous revision value of 53 percent. Estimate challenged by: R-

- **2017:** Estimate based on coverage reported by national government. Second dose of measles-containing vaccine introduced in November 2017 and reported coverage is less than 1 percent. GoC=R+ D+

### Table:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1</td>
<td>70</td>
<td>56</td>
<td>64</td>
<td>50</td>
</tr>
<tr>
<td>Estimate</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1</td>
<td>70</td>
<td>56</td>
<td>64</td>
<td>50</td>
</tr>
<tr>
<td>Official</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1</td>
<td>76</td>
<td>67</td>
<td>70</td>
<td>56</td>
</tr>
<tr>
<td>Administrative</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1</td>
<td>76</td>
<td>62</td>
<td>70</td>
<td>56</td>
</tr>
<tr>
<td>Survey</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>
Lao People’s Democratic Republic - 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 accompanying graph and data table.

2021: Estimate based on estimated MCV1. WHO and UNICEF are aware of a planned MICS survey for 2022 and await the final results. Programme reports vaccine stock out subnational levels. Estimate challenged by: R-

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

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

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

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

2016: Estimate based on estimated MCV1. Lao Social Indicator Survey II (LSIS II) 2017 results ignored by working group. Survey results inconsistent with previous survey and across vaccine doses. Estimate challenged by: R-

2015: Estimate based on estimated MCV1. Reported denominator decline between 2014 and 2015 may explain observed increase in reported coverage. Estimate challenged by: D-R-

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

2013: Estimate based on estimated MCV1. Estimate challenged by: D-R-

2012: Estimate based on estimated MCV1. Estimate challenged by: R-S-

The WHO and UNICEF estimates of national immunization coverage (wunic) 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.

July 8, 2022; page 10

WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2023 data received as of July 7, 2022
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.

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimate</th>
<th>GoC</th>
<th>Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>55</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>56</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>58</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>58</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>64</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2015</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2014</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2013</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2012</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2011</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>2010</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

2021: Reported data calibrated to 2017 levels. WHO and UNICEF are aware of a planned MICS survey for 2022 and await the final results. Estimate challenged by: R-

2020: Reported data calibrated to 2017 levels. Estimate challenged by: R-

2019: Reported data calibrated to 2017 levels. Estimate challenged by: R-

2018: Reported data calibrated to 2017 levels. Estimate challenged by: R-

2017: Estimate of 55 percent assigned by working group. Estimate based on the difference with BCG reported coverage applied to the BCG estimated coverage. HepB birth dose introduced in 2004, reporting for vaccination within 24 hours of birth started in 2017. Estimate may underestimate coverage as only 5 out 18 provinces are reporting vaccination within 24 hours of birth. Estimate challenged by: R-

July 8, 2022; page 11WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2023 data received as of July 7, 2022
Lao People’s Democratic Republic - HepB3

Description:

2021: Reported data calibrated to 2016 levels. WHO and UNICEF are aware of a planned MICS survey for 2022 and await the final results. Programme reports vaccine stock out subnational levels. Estimate challenged by: D-R-

2020: Reported data calibrated to 2016 levels. Estimate challenged by: R-

2019: Reported data calibrated to 2016 levels. Estimate challenged by: R-

2018: Reported data calibrated to 2016 levels. Estimate challenged by: D-R-

2017: Reported data calibrated to 2016 levels. Estimate challenged by: D-R-

2016: Estimate of 83 percent assigned by working group. Estimate based on survey results for 2014 cohort as reported number of vaccinated children is similar between 2014 and 2016. Lao Social Indicator Survey II (LSIS II) 2017 results ignored by working group. Survey results inconsistent with previous survey and across vaccine doses. Lao Social Indicator Survey II (LSIS II) 2017 card or history results of 61 percent modified for recall bias to 66 percent based on 1st dose card or history coverage of 72 percent, 1st dose card only coverage of 47 percent and 3rd dose card only coverage of 43 percent. Estimate challenged by: D-R-

2015: Estimate based on interpolation between 2014 and 2016 levels. Reported denominator decline between 2014 and 2015 may explain observed increase in reported coverage. Estimate challenged by: D-R-

2014: Estimate of 83 percent assigned by working group. Estimate based on survey results. National Immunization Survey 2015, Lao People’s Democratic Republic (Lao PDR) card or history results of 81 percent modified for recall bias to 83 percent based on 1st dose card or history coverage of 88 percent, 1st dose card only coverage of 73 percent and 3rd dose card only coverage of 69 percent. Estimate challenged by: D-R-

2013: Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: D-R-

2012: Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: R-S-

2011: Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: R-S-

2010: Estimate is based on reported coverage supported by survey. Lao Social Indicator Survey (LSIS) 2011 - 12 (Multiple Indicator Cluster Survey / Demographic and Health Survey) card or history results of 56 percent modified for recall bias to 63 percent based on 1st dose card or history coverage of 77 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 37 percent. Estimate challenged by: D-S-

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/uncertainty 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.

July 8, 2022; page 12

WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2023

data received as of July 7, 2022
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:

2021: Reported data calibrated to 2016 levels. WHO and UNICEF are aware of a planned MICS survey for 2022 and await the final results. Programme reports vaccine stock out subnational levels. Estimate challenged by: R-

2020: Reported data calibrated to 2016 levels. Estimate challenged by: R-

2019: Reported data calibrated to 2016 levels. Estimate challenged by: R-

2018: Reported data calibrated to 2016 levels. Estimate challenged by: D-R-

2017: Reported data calibrated to 2016 levels. Estimate challenged by: D-R-

2016: Estimate of 83 percent assigned by working group. Estimate based on survey results for 2014 cohort as reported number of vaccinated children is similar between 2014 and 2016. Lao Social Indicator Survey II (LSIS II) 2017 results ignored by working group. Survey results inconsistent with previous survey and across vaccine doses. Lao Social Indicator Survey II (LSIS II) 2017 card or history results of 61 percent modified for recall bias to 66 percent based on 1st dose card or history coverage of 72 percent, 1st dose card only coverage of 47 percent and 3rd dose card only coverage of 43 percent. Estimate challenged by: D-R-

2015: Estimate based on interpolation between 2014 and 2016 levels. Reported denominator decline between 2014 and 2015 may explain observed increase in reported coverage. Estimate challenged by: D-R-

2014: Estimate of 83 percent assigned by working group. Estimate based on survey results. National Immunization Survey 2015, Lao People’s Democratic Republic (Lao PDR) card or history results of 81 percent modified for recall bias to 83 percent based on 1st dose card or history coverage of 88 percent, 1st dose card only coverage of 73 percent and 3rd dose card only coverage of 69 percent. Estimate challenged by: D-R-

2013: Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: D-R-

2012: Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: R-S-

2011: Reported data calibrated to 2010 and 2014 levels. Estimate challenged by: R-S-

2010: Estimate is based on reported coverage supported by survey. Lao Social Indicator Survey (LSIS) 2011 - 12 (Multiple Indicator Cluster Survey / Demographic and Health Survey) card or history results of 56 percent modified for recall bias to 63 percent based on 1st dose card or history coverage of 77 percent, 1st dose card only coverage of 45 percent and 3rd dose card only coverage of 37 percent. DTP-HepB-Hib vaccine was introduced in 2009. Reporting started in 2010. Estimate challenged by: D-S-
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-], or [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.
Lao People’s Democratic Republic - PcV3

Description:

2021: Reported data calibrated to 2016 levels. WHO and UNICEF are aware of a planned MICS survey for 2022 and await the final results. Programme reports vaccine stock out subnational levels. Estimate challenged by: R-

2020: Reported data calibrated to 2016 levels. Estimate challenged by: R-

2019: Reported data calibrated to 2016 levels. Estimate challenged by: R-

2018: Reported data calibrated to 2016 levels. Estimate challenged by: D-R-

2017: Reported data calibrated to 2016 levels. Estimate challenged by: D-R-

2016: Estimate of 78 percent assigned by working group. Estimate based on difference in reported numerator between DTP3 and PCV3 applied to WUENIC estimated coverage. Lao Social Indicator Survey II (LSIS II) 2017 results ignored by working group. Survey results inconsistent with previous survey and across vaccine doses. Lao Social Indicator Survey II (LSIS II) 2017 card or history results of 48 percent modified for recall bias to 51 percent based on 1st dose card or history coverage of 57 percent, 1st dose card only coverage of 40 percent and 3rd dose card only coverage of 36 percent. Estimate challenged by: D-R-

2015: Reported data calibrated to 2016 levels. Reported denominator decline between 2014 and 2015 may explain observed increase in reported coverage. Estimate challenged by: D-R-

2014: Reported data calibrated to 2016 levels. Pneumococcal conjugate vaccine introduced during 2013 and reporting began in 2014. Estimate challenged by: D-R-

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.
### 2016 Lao Social Indicator Survey II (LSIS II) 2017

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Confirmation method</th>
<th>Coverage</th>
<th>Age cohort</th>
<th>Sample</th>
<th>Cards seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>C or H &lt;12 months</td>
<td>81.5</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>BCG</td>
<td>Card</td>
<td>50.5</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>BCG</td>
<td>Card or History</td>
<td>81.5</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>BCG</td>
<td>History</td>
<td>31</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>DTP1</td>
<td>C or H &lt;12 months</td>
<td>71.8</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card</td>
<td>47.4</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card or History</td>
<td>72.5</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>DTP1</td>
<td>History</td>
<td>25.1</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>DTP3</td>
<td>C or H &lt;12 months</td>
<td>58.8</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card</td>
<td>43.1</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card or History</td>
<td>60.8</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>DTP3</td>
<td>History</td>
<td>17.7</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>HepB1</td>
<td>C or H &lt;12 months</td>
<td>71.8</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>HepB1</td>
<td>Card</td>
<td>47.4</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>HepB1</td>
<td>Card or History</td>
<td>72.5</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>HepB1</td>
<td>History</td>
<td>25.1</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>HepB3</td>
<td>C or H &lt;12 months</td>
<td>58.8</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>HepB3</td>
<td>Card</td>
<td>43.1</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>HepB3</td>
<td>Card or History</td>
<td>60.8</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>HepB3</td>
<td>History</td>
<td>17.7</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>Hib1</td>
<td>C or H &lt;12 months</td>
<td>71.8</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>Hib1</td>
<td>Card</td>
<td>47.4</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>Hib1</td>
<td>Card or History</td>
<td>72.5</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>Hib1</td>
<td>History</td>
<td>25.1</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>Hib3</td>
<td>C or H &lt;12 months</td>
<td>58.8</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>Hib3</td>
<td>Card</td>
<td>43.1</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>Hib3</td>
<td>Card or History</td>
<td>60.8</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>Hib3</td>
<td>History</td>
<td>17.7</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>IPV1</td>
<td>C or H &lt;12 months</td>
<td>48.3</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>IPV1</td>
<td>Card</td>
<td>31.4</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>IPV1</td>
<td>Card or History</td>
<td>50.9</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>IPV1</td>
<td>History</td>
<td>19.5</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>MCV1</td>
<td>C or H &lt;12 months</td>
<td>59.7</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>MCV1</td>
<td>Card</td>
<td>39.7</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>MCV1</td>
<td>Card or History</td>
<td>66</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>MCV1</td>
<td>History</td>
<td>26.3</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
<tr>
<td>PcV1</td>
<td>C or H &lt;12 months</td>
<td>56.4</td>
<td>12-23 m</td>
<td>2203</td>
<td>53</td>
</tr>
</tbody>
</table>

### 2014 National Immunization Survey 2015, Lao People’s Democratic Republic (Lao PDR)

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Confirmation method</th>
<th>Coverage</th>
<th>Age cohort</th>
<th>Sample</th>
<th>Cards seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>Card</td>
<td>72</td>
<td>12-23 m</td>
<td>5981</td>
<td>64</td>
</tr>
<tr>
<td>BCG</td>
<td>Card &lt;12 months</td>
<td>67.2</td>
<td>12-23 m</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>BCG</td>
<td>Card or History</td>
<td>88.8</td>
<td>12-23 m</td>
<td>5981</td>
<td>64</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card</td>
<td>73.3</td>
<td>12-23 m</td>
<td>5981</td>
<td>64</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card &lt;12 months</td>
<td>69.2</td>
<td>12-23 m</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card or History</td>
<td>88</td>
<td>12-23 m</td>
<td>5981</td>
<td>64</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card</td>
<td>69.1</td>
<td>12-23 m</td>
<td>5981</td>
<td>64</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card &lt;12 months</td>
<td>52.5</td>
<td>12-23 m</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card or History</td>
<td>81.4</td>
<td>12-23 m</td>
<td>5981</td>
<td>64</td>
</tr>
<tr>
<td>HepB1</td>
<td>Card</td>
<td>73.3</td>
<td>12-23 m</td>
<td>5981</td>
<td>64</td>
</tr>
<tr>
<td>HepB1</td>
<td>Card &lt;12 months</td>
<td>69.2</td>
<td>12-23 m</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>HepB1</td>
<td>Card or History</td>
<td>88</td>
<td>12-23 m</td>
<td>5981</td>
<td>64</td>
</tr>
<tr>
<td>HepB3</td>
<td>Card</td>
<td>69.1</td>
<td>12-23 m</td>
<td>5981</td>
<td>64</td>
</tr>
<tr>
<td>HepB3</td>
<td>Card &lt;12 months</td>
<td>52.5</td>
<td>12-23 m</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>HepB3</td>
<td>Card or History</td>
<td>81.4</td>
<td>12-23 m</td>
<td>5981</td>
<td>64</td>
</tr>
<tr>
<td>Hib1</td>
<td>Card</td>
<td>73.3</td>
<td>12-23 m</td>
<td>5981</td>
<td>64</td>
</tr>
<tr>
<td>Hib1</td>
<td>Card &lt;12 months</td>
<td>69.2</td>
<td>12-23 m</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hib1</td>
<td>Card or History</td>
<td>88</td>
<td>12-23 m</td>
<td>5981</td>
<td>64</td>
</tr>
<tr>
<td>Hib3</td>
<td>Card</td>
<td>69.1</td>
<td>12-23 m</td>
<td>5981</td>
<td>64</td>
</tr>
</tbody>
</table>
### Lao People’s Democratic Republic - survey details

#### Hib3 Card
- **Coverage**: 52.5%
- **Age cohort**: 12-23 m
- **Sample**: 64

#### Hib3 Card or History
- **Coverage**: 81.4%
- **Age cohort**: 12-23 m
- **Sample**: 5981

#### MCV1 Card
- **Coverage**: 65.6%
- **Age cohort**: 12-23 m
- **Sample**: 64

#### MCV1 Card <12 months
- **Coverage**: 48.6%
- **Sample**: 64

#### MCV1 Card or History
- **Coverage**: 81.4%
- **Age cohort**: 12-23 m
- **Sample**: 5981

#### Pol1 Card
- **Coverage**: 73.2%
- **Age cohort**: 12-23 m
- **Sample**: 64

#### Pol1 Card <12 months
- **Coverage**: 69.4%
- **Sample**: 64

#### Pol1 Card or History
- **Coverage**: 81.4%
- **Age cohort**: 12-23 m
- **Sample**: 5981

#### Pol3 Card
- **Coverage**: 73.2%
- **Age cohort**: 12-23 m
- **Sample**: 64

#### Pol3 Card <12 months
- **Coverage**: 53%
- **Sample**: 64

#### Pol3 Card or History
- **Coverage**: 81.4%
- **Age cohort**: 12-23 m
- **Sample**: 5981

### 2010 Lao Social Indicator Survey (LSIS) 2011 - 12 (Multiple Indicator Cluster Survey / Demographic and Health Survey)

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Confirmation method</th>
<th>Coverage</th>
<th>Age cohort</th>
<th>Sample Cards seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>C or H &lt;12 months</td>
<td>77.1</td>
<td>12-23 m</td>
<td>2141 47</td>
</tr>
<tr>
<td>BCG</td>
<td>Card</td>
<td>44.7</td>
<td>12-23 m</td>
<td>- 47</td>
</tr>
<tr>
<td>BCG</td>
<td>Card or History</td>
<td>78.3</td>
<td>12-23 m</td>
<td>2141 47</td>
</tr>
<tr>
<td>BCG</td>
<td>History</td>
<td>33.6</td>
<td>12-23 m</td>
<td>- 47</td>
</tr>
<tr>
<td>DTP1</td>
<td>C or H &lt;12 months</td>
<td>75.1</td>
<td>12-23 m</td>
<td>2141 47</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card</td>
<td>44.6</td>
<td>12-23 m</td>
<td>- 47</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card or History</td>
<td>76.8</td>
<td>12-23 m</td>
<td>2141 47</td>
</tr>
<tr>
<td>DTP1</td>
<td>History</td>
<td>32.2</td>
<td>12-23 m</td>
<td>- 47</td>
</tr>
<tr>
<td>DTP3</td>
<td>C or H &lt;12 months</td>
<td>51.5</td>
<td>12-23 m</td>
<td>2141 47</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card</td>
<td>36.8</td>
<td>12-23 m</td>
<td>- 47</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card or History</td>
<td>55.5</td>
<td>12-23 m</td>
<td>2141 47</td>
</tr>
<tr>
<td>DTP3</td>
<td>History</td>
<td>18.6</td>
<td>12-23 m</td>
<td>- 47</td>
</tr>
<tr>
<td>HepB1</td>
<td>C or H &lt;12 months</td>
<td>75.1</td>
<td>12-23 m</td>
<td>2141 47</td>
</tr>
<tr>
<td>HepB1</td>
<td>Card</td>
<td>44.6</td>
<td>12-23 m</td>
<td>- 47</td>
</tr>
<tr>
<td>HepB1</td>
<td>Card or History</td>
<td>76.8</td>
<td>12-23 m</td>
<td>2141 47</td>
</tr>
<tr>
<td>HepB1</td>
<td>History</td>
<td>32.2</td>
<td>12-23 m</td>
<td>- 47</td>
</tr>
<tr>
<td>HepB3</td>
<td>C or H &lt;12 months</td>
<td>51.5</td>
<td>12-23 m</td>
<td>2141 47</td>
</tr>
<tr>
<td>HepB3</td>
<td>Card</td>
<td>36.8</td>
<td>12-23 m</td>
<td>- 47</td>
</tr>
<tr>
<td>HepB3</td>
<td>Card or History</td>
<td>55.5</td>
<td>12-23 m</td>
<td>2141 47</td>
</tr>
<tr>
<td>HepB3</td>
<td>History</td>
<td>18.6</td>
<td>12-23 m</td>
<td>- 47</td>
</tr>
<tr>
<td>Hib1</td>
<td>C or H &lt;12 months</td>
<td>75.1</td>
<td>12-23 m</td>
<td>2141 47</td>
</tr>
<tr>
<td>Hib1</td>
<td>Card</td>
<td>44.6</td>
<td>12-23 m</td>
<td>- 47</td>
</tr>
<tr>
<td>Hib1</td>
<td>Card or History</td>
<td>76.8</td>
<td>12-23 m</td>
<td>2141 47</td>
</tr>
<tr>
<td>Hib1</td>
<td>History</td>
<td>32.2</td>
<td>12-23 m</td>
<td>- 47</td>
</tr>
</tbody>
</table>

#### Hib1 History
- **Coverage**: 32.2%
- **Age cohort**: 12-23 m
- **Sample**: 47

#### Hib3 C or H <12 months
- **Coverage**: 51.5%
- **Age cohort**: 12-23 m
- **Sample**: 2141

#### Hib3 Card
- **Coverage**: 36.8%
- **Age cohort**: 12-23 m
- **Sample**: 47

#### Hib3 Card or History
- **Coverage**: 55.5%
- **Age cohort**: 12-23 m
- **Sample**: 2141

#### Hib3 History
- **Coverage**: 18.6%
- **Age cohort**: 12-23 m
- **Sample**: 47

#### MCV1 C or H <12 months
- **Coverage**: 55.3%
- **Age cohort**: 12-23 m
- **Sample**: 2141

#### MCV1 Card
- **Coverage**: 34%
- **Age cohort**: 12-23 m
- **Sample**: 47

#### MCV1 Card or History
- **Coverage**: 63.7%
- **Age cohort**: 12-23 m
- **Sample**: 2141

#### MCV1 History
- **Coverage**: 29.7%
- **Age cohort**: 12-23 m
- **Sample**: 47

#### Pol1 C or H <12 months
- **Coverage**: 76.5%
- **Age cohort**: 12-23 m
- **Sample**: 2141

#### Pol1 Card
- **Coverage**: 44.3%
- **Age cohort**: 12-23 m
- **Sample**: 47

#### Pol1 Card or History
- **Coverage**: 78.3%
- **Age cohort**: 12-23 m
- **Sample**: 2141

#### Pol1 History
- **Coverage**: 34%
- **Age cohort**: 12-23 m
- **Sample**: 47

#### Pol3 C or H <12 months
- **Coverage**: 49.1%
- **Age cohort**: 12-23 m
- **Sample**: 2141

#### Pol3 Card
- **Coverage**: 37%
- **Age cohort**: 12-23 m
- **Sample**: 47

#### Pol3 Card or History
- **Coverage**: 52.6%
- **Age cohort**: 12-23 m
- **Sample**: 2141

#### Pol3 History
- **Coverage**: 15.6%
- **Age cohort**: 12-23 m
- **Sample**: 47

### 2005 Lao PDR Multiple Indicator Cluster Survey 2006 Final Report

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Confirmation method</th>
<th>Coverage</th>
<th>Age cohort</th>
<th>Sample Cards seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>C or H &lt;12 months</td>
<td>61</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>BCG</td>
<td>Card</td>
<td>47.3</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>BCG</td>
<td>Card or History</td>
<td>63.7</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>BCG</td>
<td>History</td>
<td>16.4</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>DTP1</td>
<td>C or H &lt;12 months</td>
<td>60.1</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card</td>
<td>48</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card or History</td>
<td>64.1</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>DTP1</td>
<td>History</td>
<td>16.1</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>DTP3</td>
<td>C or H &lt;12 months</td>
<td>31.8</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card</td>
<td>33.5</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card or History</td>
<td>41.3</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>DTP3</td>
<td>History</td>
<td>7.8</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>MCV1</td>
<td>C or H &lt;12 months</td>
<td>33</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>MCV1</td>
<td>Card</td>
<td>25.3</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>MCV1</td>
<td>Card or History</td>
<td>40.2</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>MCV1</td>
<td>History</td>
<td>15</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>Pol1</td>
<td>C or H &lt;12 months</td>
<td>63</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
<tr>
<td>Pol1</td>
<td>Card</td>
<td>48.1</td>
<td>12-23 m</td>
<td>828 49</td>
</tr>
</tbody>
</table>

---

July 8, 2022; page 17

WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2023

data received as of July 7, 2022
Lao People’s Democratic Republic - survey details

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Confirmation method</th>
<th>Coverage</th>
<th>Age cohort</th>
<th>Sample</th>
<th>Cards seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>Card</td>
<td>69.3</td>
<td>12-23 m</td>
<td>398</td>
<td>44</td>
</tr>
<tr>
<td>DTP1</td>
<td>Card</td>
<td>83.2</td>
<td>12-23 m</td>
<td>398</td>
<td>44</td>
</tr>
<tr>
<td>DTP3</td>
<td>Card</td>
<td>52.8</td>
<td>12-23 m</td>
<td>398</td>
<td>44</td>
</tr>
<tr>
<td>MCV1</td>
<td>Card</td>
<td>41.8</td>
<td>12-23 m</td>
<td>398</td>
<td>44</td>
</tr>
<tr>
<td>Pol1</td>
<td>Card</td>
<td>81.2</td>
<td>12-23 m</td>
<td>398</td>
<td>44</td>
</tr>
<tr>
<td>Pol3</td>
<td>Card</td>
<td>57.1</td>
<td>12-23 m</td>
<td>398</td>
<td>44</td>
</tr>
</tbody>
</table>

Pol1 Card or History 66.8 12-23 m 828 49
Pol1 History 18.7 12-23 m 828 49
Pol1 C or H <12 months 32.2 12-23 m 828 49
Pol3 Card or History 42.3 12-23 m 828 49
Pol3 History 7.9 12-23 m 828 49

1999 Lao PDR Multiple Indicator Cluster Survey MICS-II 2000, 2001

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