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WHO and UNICEF estimates of national immunization coverage - next revision available July  $15,\,2024$ 

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

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

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

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

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

#### DATA SOURCES.

- ADMINISTRATIVE coverage: Reported by national authorities and based on aggregated administrative reports from health service providers on the number of vaccinations administered during a given period (numerator data) and reported target population data (denominator data). May be biased by inaccurate numerator and/or denominator data.
- **OFFICIAL coverage:** Estimated coverage reported by national authorities that reflects their assessment of the most likely coverage based on any combination of administrative coverage, survey-based estimates or other data sources or adjustments. Approaches to determine OFFICIAL coverage may differ across countries.
- SURVEY coverage: Based on estimated coverage from population-based household surveys among children aged 12-23 months or 24-35 months following a review of survey methods and results. Information is based on the combination of vaccination history from documented evidence or caregiver recall. Survey results are considered for the appropriate birth cohort based on the period of data collection.

#### ABBREVIATIONS

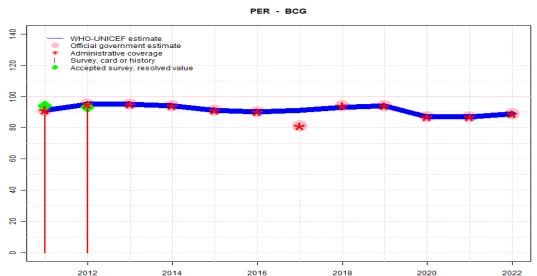
- BCG: percentage of births who received one dose of Bacillus Calmette Guerin vaccine.
- DTP1 / DTP3: percentage of surviving infants who received the 1st / 3rd dose, respectively, of diphtheria and tetanus toxoid with pertussis containing vaccine.
- Pol3: percentage of surviving infants who received the 3rd dose of polio containing vaccine. May be either oral or inactivated polio vaccine.
- IPV1: percentage of surviving infants who received at least one dose of inactivated polio vaccine. In countries utilizing an immunization schedule recommending either (i) a primary series of three doses of oral polio vaccine (OPV) plus at least one dose of IPV where OPV is included in routine

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

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

- MCV1: percentage of surviving infants who received the 1st dose of measles containing vaccine. In countries where the national schedule recommends the 1st dose of MCV at 12 months or later based on the epidemiology of disease in the country, coverage estimates reflect the percentage of children who received the 1st dose of MCV as recommended.
- MCV2: percentage of children who received the 2nd dose of measles containing vaccine according to the nationally recommended schedule.
- RCV1: percentage of surviving infants who received the 1st dose of rubella containing vaccine. Co verage estimates are based on WHO and UNICEF estimates of coverage for the dose of measles containing vaccine that corresponds to the first measles-rubella combination vaccine. Nationally reported coverage of RCV is not taken into consideration nor are the data represented in the accompanying graph and data table.
- HepBB: percentage of births which received a dose of hepatitis B vaccine within 24 hours of delivery. Estimates of hepatitis B birth dose coverage are produced only for countries with a universal birth dose policy. Estimates are not produced for countries that recommend a birth dose to infants born to HepB virus-infected mothers only or where there is insufficient information to determine whether vaccination is within 24 hours of birth.
- **HepB3:** percentage of surviving infants who received the 3rd dose of hepatitis B containing vaccine following the birth dose.
- **Hib3:** percentage of surviving infants who received the 3rd dose of Haemophilus influenzae type b containing vaccine.
- RotaC: percentage of surviving infants who received the final recommended dose of rotavirus vaccine, which can be either the 2nd or the 3rd dose depending on the vaccine.
- PcV3: percentage of surviving infants who received the 3rd dose of pneumococcal conjugate vaccine. In countries where the national schedule recommends two doses during infancy and a booster dose at 12 months or later based on the epidemiology of disease in the country, coverage estimates may reflect the percentage of surviving infants who received two doses of PcV prior to the 1st birthday.
- **YFV:** percentage of surviving infants who received one dose of yellow fever vaccine in countries where YFV is part of the national immunization schedule for children or is recommended in at risk areas; coverage estimates are annualized for the entire cohort of surviving infants.

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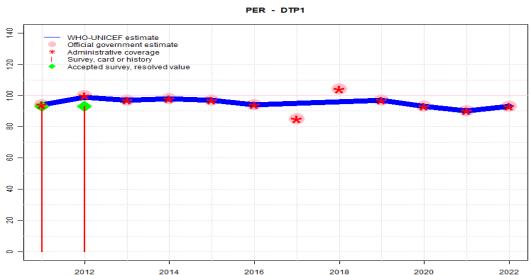


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	91	95	95	94	91	90	91	93	94	87	87	89
Estimate GoC	•••	•••	•••	•••	••	••	•	••	•	•	•	•
Official	91	95	95	94	91	90	81	94	94	87	87	89
Administrative	91	95	95	94	91	90	81	94	94	87	87	89
Survey	94	93	NA									

- ••• 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.

- 2022: Estimate informed by reported data. WHO and UNICEF are aware of a 2021 Peru Encuesta Demográfica y de Salud Familiar-ENDES 2021 that reports BCG coverage of 92 percent for children under 36 months of age. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Increase in reported coverage is partially due a six percent decrease in the reported target population from 2018 to 2019.. Estimate challenged by: D-
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 93 percent changed from previous revision value of 81 percent. GoC=R+ D+
- 2017: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 91 percent changed from previous revision value of 84 percent. Estimate challenged by: D-
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+S+D+
- 2013: Estimate informed by reported data. The 2014 ENDESA survey reporting coverage for children aged less than 12 months (87 percent of whom had documented evidence of vaccination history), born during 2013, suggests coverage (card+recall) of 91 percent for BCG. GoC=R+S+D+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+S+D+
- 2011: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). GoC=R+ S+ D+



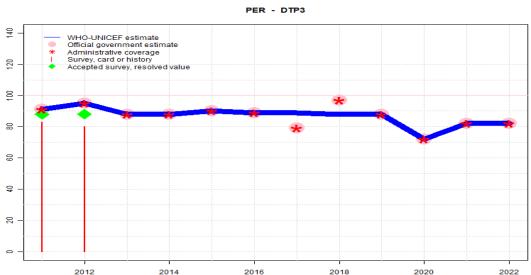
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	94	99	97	98	97	94	95	96	97	93	90	93
Estimate GoC	•••	•••	•••	•••	••	••	•	••	•	•	•	•
Official	94	100	97	98	97	94	85	104	97	93	90	93
Administrative	94	100	97	98	97	94	85	104	97	93	90	93
Survey	93	93	NA									

- ••• 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.

- 2022: Estimate informed by reported data. WHO and UNICEF are aware of a 2021 Peru Encuesta Demográfica y de Salud Familiar-ENDES 2021 that reports DTP-HepB-Hib1 coverage of 91 percent for children under 36 months of age. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by:

  D-
- 2019: Estimate informed by reported data. Increase in reported coverage is partially due a six percent decrease in the reported target population from 2018 to 2019. Estimate challenged by: D-
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Reported data excluded because 104 percent greater than 100 percent. Estimate of 96 percent changed from previous revision value of 90 percent. GoC=R+D+
- 2017: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 95 percent changed from previous revision value of 90 percent. Estimate challenged by: D-
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+S+D+
- 2013: Estimate informed by reported data. The 2014 ENDESA survey reporting coverage for children aged less than 12 months (87 percent of whom had documented evidence of vaccination history), born during 2013, suggests coverage (card+recall) of 89 percent for first dose of DTP-HepB-Hib. GoC=R+S+D+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+ S+ D+
- 2011: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+S+D+

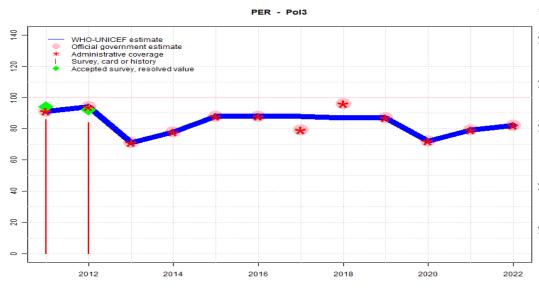


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	91	95	88	88	90	89	89	88	88	72	82	82
Estimate GoC	•	•••	•••	•••	••	••	••	••	•	••	•	•
Official	91	95	88	88	90	89	79	97	88	72	82	82
Administrative	91	95	88	88	90	89	79	97	88	72	82	82
Survey	83	80	NA									

- ••• 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.

- 2022: Estimate informed by reported data. WHO and UNICEF are aware of a 2021 Peru Encuesta Demográfica y de Salud Familiar-ENDES 2021 that reports DTP-HepB-Hib3 coverage of 81 percent for children under 36 months of age. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions.. GoC=R+ D+
- 019: Estimate informed by reported data. Increase in reported coverage is partially due a six percent decrease in the reported target population from 2018 to 2019. Estimate challenged by: D-
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 88 percent changed from previous revision value of 84 percent. GoC=R+ D+
- 2017: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 89 percent changed from previous revision value of 83 percent. GoC=R+D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. Increase in dropout due to multiple factors per EPI review 2014. GoC=R+S+D+
- 2013: Estimate informed by reported data. The 2014 ENDESA survey reporting coverage for children aged less than 12 months (87 percent of whom had documented evidence of vaccination history), born during 2013, suggests coverage (card+recall) of 70 percent modified for recall bias to 72 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 82 percent and 3d dose card only coverage of 66 percent. GoC=R+S+D+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 88 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2013 card or history results of 80 percent modifed for recall bias to 88 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 78 percent and 3rd dose card only coverage of 74 percent. GoC=R+S+D+
- 2011: Estimate informed by reported data supported by survey. Survey evidence of 88 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2012 card or history results of 83 percent modifed for recall bias to 88 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 80 percent and 3rd dose card only coverage of 76 percent. Estimate challenged by: S-



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	91	94	71	78	88	88	88	87	87	72	79	82
Estimate GoC	•••	•••	•	•	••	••	••	••	•	•	•	•
Official	91	94	71	78	88	88	79	96	87	72	79	82
Administrative	91	94	71	78	88	88	79	96	87	72	79	82
Survey	86	84	NA									

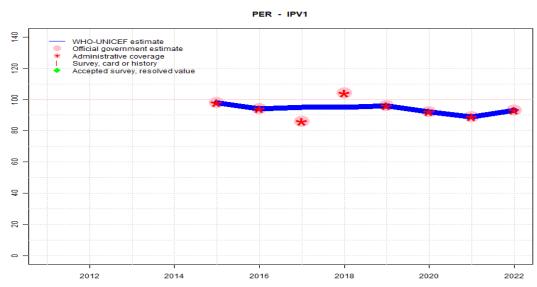
- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a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

- 2022: Estimate informed by reported data. WHO and UNICEF are aware of a 2021 Peru Encuesta Demográfica y de Salud Familiar-ENDES 2021 that reports Polio3 coverage of 83 percent for children under 36 months of age. Estimate challenged by: D-
- 2021: Estimate is informed by a recalculation of reported numerator for the first dose of oral polio vaccine, which is the third dose of polio vaccine in the schedule, and surviving infants. Estimate challenged by: D-R-
- 2020: Estimate is informed by a recalculation of reported numerator for the first dose of oral polio vaccine, which is the third dose of polio vaccine in the schedule, and surviving infants. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions.. Estimate challenged by: D-R-
- 2019: Estimate informed by reported data. Increase in reported coverage is partially due a six percent decrease in the reported target population from 2018 to 2019. Estimate challenged by: D-
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 87 percent changed from previous revision value of 83 percent. GoC=R+ D+
- 2017: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 88 percent changed from previous revision value of 83 percent. GoC=R+ D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. Estimate challenged by: D-S-
- 2013: Estimate informed by reported data. The 2014 ENDESA survey reporting coverage for children aged less than 12 months (87 percent of whom had documented evidence of vaccination history), born during 2013, suggests coverage (card+recall) of 51 percent modified for recall bias to 55 percent based on 1st dose card or history coverage of 81 percent, 1st dose card only coverage of 72 percent and 3d dose card only coverage of 49 percent. In 2013, Peru introduced a sequential schedule with IPV1, IPV2, OPV3, OPV4 and a fifth dose of OPV at 4 years. Decline in reported coverage may also be partly explained by a stockout of polio vaccine. Estimate challenged by: S-
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 92 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2013 card or history results of 84 percent modifed for recall bias to 92 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 78 percent and 3rd dose card only coverage of 74 percent. GoC=R+S+D+
- 2011: Estimate informed by reported data supported by survey. Survey evidence of 94 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2012

### Peru - Pol3

card or history results of 86 percent modifed for recall bias to 94 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 80 percent and 3rd dose card only coverage of 77 percent. GoC=R+S+D+



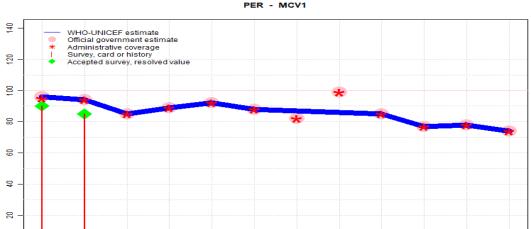
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	98	94	95	95	96	92	89	93
Estimate GoC	NA	NA	NA	NA	••	••	••	••	••	•	•	•
Official	NA	NA	NA	NA	98	94	86	104	96	92	89	93
Administrative	NA	NA	NA	NA	98	94	86	104	96	92	89	93
Survey	NA											

- ••• 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.

- Estimates for a dose of inactivated polio vaccine (IPV) begin in 2015 following the Global Polio Eradication Initiative's Polio Eradication and Endgame Strategic Plan: 2013-2018 which recommended at least one full dose or two fractional doses of IPV into routine immunization schedules as a strategy to mitigate the potential consequences should any re-emergence of type 2 poliovirus occur following the planned withdrawal of Sabin type 2 strains from oral polio vaccine (OPV).
- 2022: Estimate informed by reported data. WHO and UNICEF are aware of a 2021 Peru Encuesta Demográfica y de Salud Familiar-ENDES 2021 that reports IPV1 coverage of 94 percent for children under 36 months of age. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: D-
- 2019: Estimate informed by reported data. Estimate of 96 percent changed from previous revision value of 91 percent. GoC=R+
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Reported data excluded because 104 percent greater than 100 percent. Estimate of 95 percent changed from previous revision value of 89 percent. GoC=R+ D+
- 2017: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 95 percent changed from previous revision value of 90 percent. GoC=R+ D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. Inactivated polio vaccine was introduced in 2014. Sequential schedule is used with IPV recommended at 2 and 4 month. GoC=R+ D+

2022



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	96	94	85	89	92	88	87	86	85	77	78	74
Estimate GoC	•	•••	•••	•••	••	••	••	••	••	••	••	••
	06	0.4	05	80	02	00	00	00	0.5	77	70	74
<del></del>												74
					-		-					NA
Official Administrative Survey	96 95 90	94 94 85	85 85 NA	89 89 NA	92 92 NA	88 88 NA	82 82 NA	99 99 NA	85 85 NA	77 77 NA	78 78 NA	7

2016

2018

2020

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

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

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

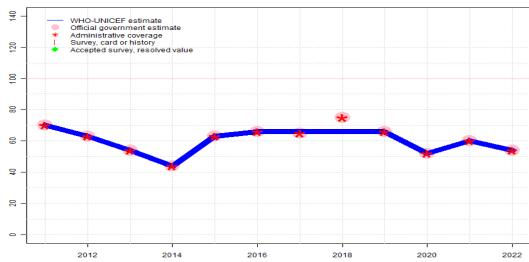
#### Description:

- 2022: Estimate informed by reported data. WHO and UNICEF are aware of a 2021 Peru Encuesta Demográfica y de Salud Familiar-ENDES 2021 that reports MCV1 coverage of 83 percent for children under 36 months of age. GoC=R+D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Reported data excluded due to an increase from 82 percent to 99 percent with decrease 85 percent. Estimate of 86 percent changed from previous revision value of 85 percent. GoC=R+ D+
- 2017: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 87 percent changed from previous revision value of 83 percent. GoC=R+ D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+S+D+
- 2013: Estimate informed by reported data. GoC=R+S+D+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 85 percent based on 1 survey(s). GoC=R+S+D+
- 2011: Estimate informed by reported data supported by survey. Survey evidence of 90 percent based on 1 survey(s). Estimate challenged by: S-

2012

2014





	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	70	63	54	44	63	66	66	66	66	52	60	54
Estimate GoC	•	••	••	••	••	••	••	••	••	••	••	••
Official	70	63	54	44	63	66	65	75	66	52	60	54
A 1	70	0.0	54	44	63	66	65	75	66	52	60	54
Administrative	10	63	04	44	0.5	00	0.5	10	00	- 5∠	00	94

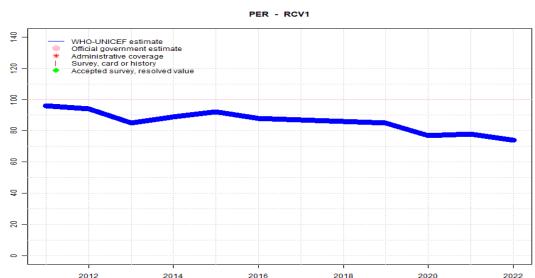
- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a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

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

#### Description:

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

- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions.. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. GoC=R+ D+
- 2017: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. GoC=R+ D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. Increase from previous year can be attributed to full year with the new schedule. GoC=R+D+
- 2014: Estimate informed by reported data. Second dose of measles containing vaccine (MCV2) recommended at age 18 months from 2014. GoC=R+D+
- 2013: Estimate informed by reported data. GoC=R+ D+
- 2012: Estimate informed by reported data. GoC=R+ D+
- 2011: Estimate informed by reported data. Estimate challenged by: D-



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	96	94	85	89	92	88	87	86	85	77	78	74
Estimate GoC	•	•••	•••	•••	••	••	••	••	••	••	••	••
Official	NA											
Administrative	NA											
Survey	NA											

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

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

#### Description:

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

2022: Estimate based on estimated MCV1. WHO and UNICEF are aware of a 2021 Peru Encuesta Demográfica y de Salud Familiar-ENDES 2021 that reports MCV1 coverage of 83 percent for children under 36 months of age. GoC=R+D+

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

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

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

2018: Estimate based on estimated MCV1. Estimate of 86 percent changed from previous revision value of 85 percent. GoC=R+D+

2017: Estimate based on estimated MCV1. Estimate of 87 percent changed from previous revision value of 83 percent. GoC=R+D+

2016: Estimate based on estimated MCV1. GoC=R+ D+

2015: Estimate based on estimated MCV1. GoC=R+ D+

2014: Estimate based on estimated MCV1. GoC=R+S+D+

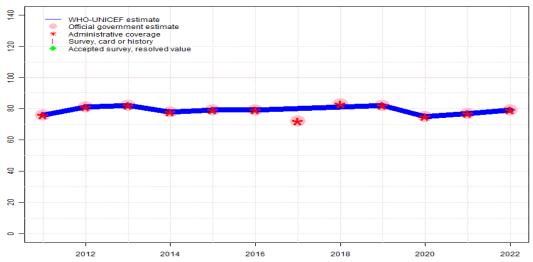
2013: Estimate based on estimated MCV1. GoC=R+S+D+

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

2011: Estimate based on estimated MCV1. Estimate challenged by: S-

### Peru - HepBB





	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	76	81	82	78	79	79	80	81	82	75	77	79
Estimate GoC	••	••	••	••	••	••	••	••	•	•	•	•
Official	76	81	82	78	79	79	72	83	82	75	77	79
Administrative	76	81	82	78	79	79	72	83	82	75	77	79
Survey	NA											

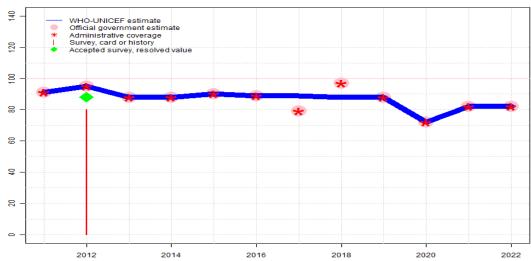
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- 2022: Estimate informed by reported data. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by:
- 2019: Estimate informed by reported data. Increase in reported coverage is partially due a six percent decrease in the reported target population from 2018 to 2019. Estimate challenged by: D-
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 81 percent changed from previous revision value of 73 percent. GoC=R+ D+
- 2017: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 80 percent changed from previous revision value of 75 percent. GoC=R+D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+ D+
- 2013: Estimate informed by reported data. GoC=R+ D+
- 2012: Estimate informed by reported data. GoC=R+ D+
- 2011: Estimate informed by reported data. GoC=R+ D+



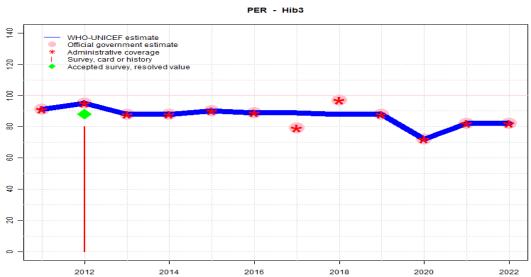


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	91	95	88	88	90	89	89	88	88	72	82	82
Estimate GoC	•••	•••	•••	•••	••	••	••	••	•	•	•	•
Official	91	95	88	88	90	89	79	97	88	72	82	82
Administrative	91	95	88	88	90	89	79	97	88	72	82	82
Survey	NA	80	NA									

- ••• 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.

- 2022: Estimate informed by reported data. WHO and UNICEF are aware of a 2021 Peru Encuesta Demográfica y de Salud Familiar-ENDES 2021 that reports DTP-HepB-Hib3 coverage of 81 percent for children under 36 months of age. Estimate challenged by: D-
- 2021: Estimate based on estimated DTP3 coverage level. Estimate challenged by: D-R-
- 2020: Estimate based on estimated DTP3 coverage level. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: R-
- Estimate informed by reported data. Increase in reported coverage is partially due a six percent decrease in the reported target population from 2018 to 2019. Estimate challenged by: D-
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 88 percent changed from previous revision value of 84 percent. GoC=R+ D+
- 2017: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 89 percent changed from previous revision value of 83 percent. GoC=R+ D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. Increase in dropout due to multiple factors per EPI review 2014. GoC=R+S+D+
- 2013: Estimate informed by reported data. The 2014 ENDESA survey reporting coverage for children aged less than 12 months (87 percent of whom had documented evidence of vaccination history), born during 2013, suggests coverage (card+recall) of 70 percent modified for recall bias to 72 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 82 percent and 3d dose card only coverage of 66 percent. GoC=R+S+D+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 88 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2013 card or history results of 80 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 78 percent and 3rd dose card only coverage of 74 percent. GoC=R+S+D+
- 2011: Estimate informed by reported data. GoC=R+S+D+

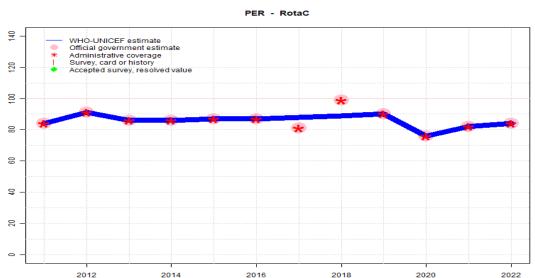


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	91	95	88	88	90	89	89	88	88	72	82	82
Estimate GoC	•••	•••	•••	•••	••	••	••	••	•	•	•	•
Official	91	95	88	88	90	89	79	97	88	72	82	82
Administrative	91	95	88	88	90	89	79	97	88	72	82	82
Survey	NA	80	NA									

- ••• 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.

- 2022: Estimate informed by reported data. WHO and UNICEF are aware of a 2021 Peru Encuesta Demográfica y de Salud Familiar-ENDES 2021 that reports DTP-HepB-Hib3 coverage of 81 percent for children under 36 months of age. Estimate challenged by: D-
- 2021: Estimate based on estimated DTP3 coverage level. Estimate challenged by: D-R-
- 2020: Estimate based on DTP3. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. Estimate challenged by: R-
- 2019: Estimate informed by reported data. Increase in reported coverage is partially due a six percent decrease in the reported target population from 2018 to 2019. Estimate challenged by: D-
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 88 percent changed from previous revision value of 84 percent. GoC=R+ D+
- 2017: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 89 percent changed from previous revision value of 83 percent. GoC=R+D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. Increase in dropout due to multiple factors per EPI review 2014. GoC=R+S+D+
- 2013: Estimate informed by reported data. The 2014 ENDESA survey reporting coverage for children aged less than 12 months (87 percent of whom had documented evidence of vaccination history), born during 2013, suggests coverage (card+recall) of 70 percent modified for recall bias to 72 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 82 percent and 3d dose card only coverage of 66 percent. GoC=R+S+D+
- 2012: Estimate informed by reported data supported by survey. Survey evidence of 88 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2013 card or history results of 80 percent modifed for recall bias to 88 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 78 percent and 3rd dose card only coverage of 74 percent. GoC=R+S+D+
- 2011: Estimate informed by reported data. GoC=R+ S+ D+



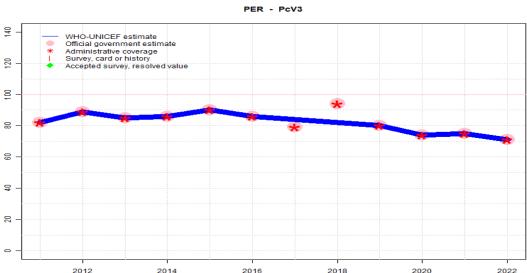
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	84	91	86	86	87	87	88	89	90	76	82	84
Estimate GoC	••	••	••	••	••	••	••	•	•	•	•	•
Official	84	91	86	86	87	87	81	99	90	76	82	84
Administrative	84	91	86	86	87	87	81	99	90	76	82	84
Survey	NA											

- ••• 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.

- 2022: Estimate informed by reported data. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions.. Estimate challenged by:

  D-
- 2019: Estimate informed by reported data. Increase in reported coverage is partially due a six percent decrease in the reported target population from 2018 to 2019. Estimate challenged by: D-
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 89 percent changed from previous revision value of 85 percent. Estimate challenged by: D-
- 2017: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 88 percent changed from previous revision value of 85 percent. GoC=R+D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+ D+
- 2013: Estimate informed by reported data. GoC=R+ D+
- 2012: Estimate informed by reported data. GoC=R+ D+
- 2011: Estimate informed by reported data. GoC=R+ D+

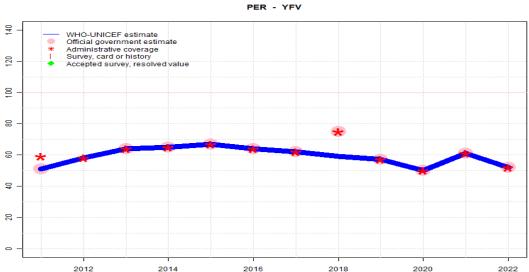


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	82	89	85	86	90	86	84	82	80	74	75	71
Estimate GoC	••	••	••	••	••	••	••	••	••	••	••	••
Official	82	89	85	86	90	86	79	94	80	74	75	71
Administrative	82	89	85	86	90	86	79	94	80	74	75	71
Survey	NA											

- ••• 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.

- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Reported data excluded due to an increase from 79 percent to 94 percent with decrease 80 percent. GoC=R+D+
- 2017: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 84 percent changed from previous revision value of 80 percent. GoC=R+ D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+ D+
- 2013: Estimate informed by reported data. GoC=R+ D+
- 2012: Estimate informed by reported data. GoC=R+ D+
- 2011: Estimate informed by reported data. GoC=R+



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	51	58	64	65	67	64	62	59	57	50	61	52
Estimate GoC	••	••	••	••	••	••	••	•	••	••	••	••
Official	51	NA	64	65	67	64	62	75	57	50	61	52
Administrative	59	58	64	65	67	64	62	75	57	50	61	52
Survey	NA											

- ••• 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.

- 2022: Estimate informed by reported data. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+D+
- 2020: Estimate informed by reported data. Decline in reported coverage is unexplained by country but aligns with COVID-19 pandemic service disruptions. GoC=R+ D+
- 2019: Estimate informed by reported data. Programme reports national and subnational vaccine stockout of unknown duration. GoC=R+ D+  $\,$
- 2018: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Reported data excluded due to an increase from 62 percent to 75 percent with decrease 57 percent. Estimate of 59 percent changed from previous revision value of 65 percent. Estimate challenged by: D-
- 2017: Estimate informed by interpolation between reported data. Reported data excluded. Reported target population increased 5.4 percent between 2016 and 2017 followed by a decrease of 5.8 percent between 2017 and 2018. In addition, the number of doses administered during 2018 was exceptionally higher than prior years. Estimate of 62 percent changed from previous revision value of 63 percent. GoC=R+D+
- 2016: Estimate informed by reported data. GoC=R+ D+
- 2015: Estimate informed by reported data. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+ D+
- 2013: Estimate informed by reported data. GoC=R+ D+
- 2012: Estimate informed by reported administrative data. GoC=R+ D+
- 2011: Estimate informed by reported data. GoC=R+ D+

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.

#### 2013 Peru Encuesta Demográfica y de Salud Familiar-ENDES, 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 12 months	91.1	$0\text{-}12 \mathrm{\ m}$	1681	87
BCG	Card < 12 months	80.3	$0\text{-}12 \mathrm{\ m}$	1681	87
BCG	History	10.7	$0\text{-}12 \mathrm{\ m}$	1681	87
DTP1	C or H $<$ 12 months	89.2	0-12 m	1681	87
DTP1	Card < 12 months	81.7	0-12 m	1681	87
DTP1	History	7.6	0-12 m	1681	87
DTP3	C or H $<$ 12 months	69.6	0-12 m	1681	87
DTP3	Card < 12 months	66.1	$0\text{-}12 \mathrm{\ m}$	1681	87
DTP3	History	3.5	$0\text{-}12 \mathrm{\ m}$	1681	87
HepB1	C or H $<$ 12 months	89.2	0-12 m	1681	87
HepB1	Card < 12 months	81.7	0-12 m	1681	87
HepB1	History	7.6	0-12 m	1681	87
HepB3	C or H $<$ 12 months	69.6	0-12 m	1681	87
HepB3	Card < 12 months	66.1	0-12 m	1681	87
HepB3	History	3.5	0-12 m	1681	87
Hib1	C or H $<$ 12 months	89.2	0-12 m	1681	87
Hib1	Card < 12 months	81.7	0-12 m	1681	87
Hib1	History	7.6	0-12 m	1681	87
Hib3	C or H $<$ 12 months	69.6	0-12 m	1681	87
Hib3	Card < 12 months	66.1	0-12 m	1681	87
Hib3	History	3.5	$0\text{-}12 \mathrm{\ m}$	1681	87
Pol1	C or H $<$ 12 months	81.1	$0\text{-}12 \mathrm{\ m}$	1681	87
Pol1	Card < 12 months	71.7	$0-12 \mathrm{m}$	1681	87
Pol1	History	9.3	0-12 m	1681	87

Pol3	C or H $<$ 12 months	51.3	$0-12 \mathrm{m}$	1681	87
Pol3	Card < 12 months	48.8	$0\text{-}12 \mathrm{\ m}$	1681	87
Pol3	History	2.5	$0-12 \mathrm{m}$	1681	87

#### 2012 Perú: Encuesta Demográfica y de Salud Familiar - ENDES 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <18 months	93.4	18-29 m	1586	79
BCG	Card	74.1	18-29 m	1254	79
BCG	Card or History	93.4	18-29 m	1586	79
BCG	History	19.3	18-29 m	332	79
DTP1	C or $H < 18$ months	92.9	18-29 m	1586	79
DTP1	Card	77.8	$18-29 \mathrm{\ m}$	1254	79
DTP1	Card or History	92.9	$18-29~\mathrm{m}$	1586	79
DTP1	History	15.2	$18-29 \mathrm{\ m}$	332	79
DTP3	C or H <18 months	78.6	$18-29~\mathrm{m}$	1586	79
DTP3	Card	73.5	$18-29~\mathrm{m}$	1254	79
DTP3	Card or History	80	$18-29~\mathrm{m}$	1586	79
DTP3	History	6.5	$18-29~\mathrm{m}$	332	79
HepB1	C or H <18 months	92.9	$18-29~\mathrm{m}$	1586	79
HepB1	Card	77.8	$18\text{-}29~\mathrm{m}$	1254	79
HepB1	Card or History	92.9	$18\text{-}29~\mathrm{m}$	1586	79
HepB1	History	15.2	$18\text{-}29~\mathrm{m}$	332	79
HepB3	C  or  H < 18  months	78.6	$18\text{-}29~\mathrm{m}$	1586	79
HepB3	Card	73.5	$18\text{-}29~\mathrm{m}$	1254	79
HepB3	Card or History	80	$18\text{-}29~\mathrm{m}$	1586	79
HepB3	History	6.5	$18\text{-}29~\mathrm{m}$	332	79
Hib1	C  or  H < 18  months	92.9	$18\text{-}29~\mathrm{m}$	1586	79
Hib1	Card	77.8	$18\text{-}29~\mathrm{m}$	1254	79
Hib1	Card or History	92.9	$18\text{-}29~\mathrm{m}$	1586	79
Hib1	History	15.2	$18\text{-}29~\mathrm{m}$	332	79
Hib3	C  or  H < 18  months	78.6	$18\text{-}29~\mathrm{m}$	1586	79
Hib3	Card	73.5	$18-29 \mathrm{\ m}$	1254	79
Hib3	Card or History	80	$18-29 \mathrm{\ m}$	1586	79
Hib3	History	6.5	$18-29 \mathrm{\ m}$	332	79
MCV1	C  or  H < 18  months	78.5	$18-29 \mathrm{\ m}$	1586	79
MCV1	Card	70.8	$18\text{-}29~\mathrm{m}$	1254	79
MCV1	Card or History	85.1	$18\text{-}29~\mathrm{m}$	1586	79
MCV1	History	14.3	$18\text{-}29~\mathrm{m}$	332	79

Pol1	C  or  H < 18  months	97	$18\text{-}29~\mathrm{m}$	1586	79
Pol1	Card	78.2	$18\text{-}29~\mathrm{m}$	1254	79
Pol1	Card or History	97.1	$18\text{-}29~\mathrm{m}$	1586	79
Pol1	History	18.8	$18\text{-}29~\mathrm{m}$	332	79
Pol3	C or H $<$ 18 months	83	$18\text{-}29~\mathrm{m}$	1586	79
Pol3	Card	74.5	$18\text{-}29~\mathrm{m}$	1254	79
Pol3	Card or History	84.1	$18\text{-}29~\mathrm{m}$	1586	79
Pol3	History	9.6	$18-29~\mathrm{m}$	332	79

### 2011 Peru Encuesta Demográfica y de Salud Familiar-ENDES, 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	92.2	$0\text{-}36~\mathrm{m}$	5213	87
DTP1	Card or History	92.1	$0\text{-}36~\mathrm{m}$	5213	87
DTP3	Card or History	77.8	$0\text{-}36~\mathrm{m}$	5213	87
HepB1	Card or History	92.1	$0\text{-}36~\mathrm{m}$	5213	87
HepB3	Card or History	77.8	$0\text{-}36~\mathrm{m}$	5213	87
Hib1	Card or History	92.1	$0\text{-}36~\mathrm{m}$	5213	87
Hib3	Card or History	77.8	$0\text{-}36~\mathrm{m}$	5213	87
MCV1	Card or History	79	$0\text{-}36~\mathrm{m}$	5213	87
Pol1	Card or History	92.1	$0\text{-}36~\mathrm{m}$	5213	87
Pol3	Card or History	73.9	$0\text{-}36~\mathrm{m}$	5213	87

### 2011 Perú: Encuesta Demográfica y de Salud Familiar - ENDES 2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 18 months	94.2	$18-29~\mathrm{m}$	1732	81
BCG	Card	76.2	$18\text{-}29~\mathrm{m}$	1396	81
BCG	Card or History	94.3	$18\text{-}29~\mathrm{m}$	1732	81
BCG	History	18.1	$18\text{-}29~\mathrm{m}$	336	81
DTP1	C or H $<$ 18 months	92.2	$18\text{-}29~\mathrm{m}$	1732	81
DTP1	Card	79.7	$18\text{-}29~\mathrm{m}$	1396	81
DTP1	Card or History	92.8	$18\text{-}29~\mathrm{m}$	1732	81
DTP1	History	13.1	$18\text{-}29~\mathrm{m}$	336	81
DTP3	C or H $<$ 18 months	82.5	$18\text{-}29~\mathrm{m}$	1732	81
DTP3	Card	76.4	$18\text{-}29~\mathrm{m}$	1396	81
DTP3	Card or History	83.3	$18-29 \mathrm{\ m}$	1732	81

DTP3	History	6.9	$18-29~\mathrm{m}$	336	81
MCV1	C or H $<$ 18 months	84.2	$18\text{-}29~\mathrm{m}$	1732	81
MCV1	Card	74.2	$18\text{-}29~\mathrm{m}$	1396	81
MCV1	Card or History	89.5	$18\text{-}29~\mathrm{m}$	1732	81
MCV1	History	15.3	$18\text{-}29~\mathrm{m}$	336	81
Pol1	C  or  H < 18  months	97.4	$18\text{-}29~\mathrm{m}$	1732	81
Pol1	Card	80	$18-29~\mathrm{m}$	1396	81
Pol1	Card or History	98	$18\text{-}29~\mathrm{m}$	1732	81
Pol1	History	18	$18\text{-}29~\mathrm{m}$	336	81
Pol3	C  or  H < 18  months	85	$18-29~\mathrm{m}$	1732	81
Pol3	Card	76.6	$18-29~\mathrm{m}$	1396	81
Pol3	Card or History	86	$18-29~\mathrm{m}$	1732	81
Pol3	History	9.4	$18\text{-}29~\mathrm{m}$	336	81

### 2010 Perú: Encuesta Demográfica y de Salud Familiar - ENDES 2011

Confirmation method	Coverage	Age cohort	Sample	Cards seen
C or H $<$ 18 months	94.8	$18\text{-}29~\mathrm{m}$	1715	81
Card	76.3	$18\text{-}29~\mathrm{m}$	1715	81
Card or History	94.8	$18-29 \mathrm{\ m}$	1715	81
History	18.5	$18-29 \mathrm{\ m}$	1715	81
C or H $<$ 18 months	90.3	$18\text{-}29~\mathrm{m}$	1715	81
Card	79.4	$18\text{-}29~\mathrm{m}$	1715	81
Card or History	90.6	$18\text{-}29~\mathrm{m}$	1715	81
History	11.1	$18\text{-}29~\mathrm{m}$	1715	81
C or H $<$ 18 months	80.4	$18\text{-}29~\mathrm{m}$	1715	81
Card	74.9	$18\text{-}29~\mathrm{m}$	1715	81
Card or History	81.4	$18\text{-}29~\mathrm{m}$	1715	81
History	6.4	$18\text{-}29~\mathrm{m}$	1715	81
C or H $<$ 18 months	80.4	$18\text{-}29~\mathrm{m}$	1715	81
Card	73.3	$18\text{-}29~\mathrm{m}$	1715	81
Card or History	88.3	$18\text{-}29~\mathrm{m}$	1715	81
History	15	$18\text{-}29~\mathrm{m}$	1715	81
C or H $<$ 18 months	96.5	$18\text{-}29~\mathrm{m}$	1715	81
Card	78.7	$18\text{-}29~\mathrm{m}$	1715	81
Card or History	96.8	$18\text{-}29~\mathrm{m}$	1715	81
History	18.1	$18\text{-}29~\mathrm{m}$	1715	81
C or H $<$ 18 months	83.7	$18\text{-}29~\mathrm{m}$	1715	81
Card	75.2	$18\text{-}29~\mathrm{m}$	1715	81
	C or H <18 months Card Card or History History C or H <18 months Card Card or History History C or H <18 months Card Card or History History C or H <18 months Card Card or History History C or H <18 months Card Card or History History C or H <18 months Card Card or History History C or H <18 months Card Card or History Card or History History C or H <18 months	C or H <18 months 94.8 Card 76.3 Card or History 94.8 History 18.5 C or H <18 months 90.3 Card 79.4 Card or History 90.6 History 11.1 C or H <18 months 80.4 Card 74.9 Card or History 81.4 History 6.4 C or H <18 months 80.4 Card 73.3 Card 73.3 Card or History 88.3 History 15 C or H <18 months 96.5 Card 78.7 Card or History 96.8 History 18.1 C or H <18 months 83.7	C or H <18 months	Card       76.3       18-29 m       1715         Card or History       94.8       18-29 m       1715         History       18.5       18-29 m       1715         C or H < 18 months

Pol3 Pol3	Card or History History	84.9 9.7	18-29 m 18-29 m	1715 1715	81 81	BCG BCG BCG	Card Card or History History	61.3 93.7 32.3	18-29 m 18-29 m 18-29 m	1639 1639 1639	66 66 66
	erú: Encuesta Demo 010	gráfica y	de Salud	Famili	ar - ENDES Continua,	DTP1 DTP1 DTP1 DTP1	C or H <12 months Card Card or History History	95.1 64.9 95.7 30.8	18-29 m 18-29 m 18-29 m 18-29 m	1639 1639 1639 1639	66 66 66
BCG BCG BCG DTP1 DTP1 DTP1 DTP1 DTP3 DTP3 DTP3 DTP3	Confirmation method C or H <18 months Card Card or History History C or H <18 months Card Card or History History C or H <18 months Card Card or History History C or H <18 months Card	90 68.2 90 21.8 85.4 74.6 85.9 11.3 72.5 68.8 73.7 5	18-29 m 18-29 m	1747 1747 1747 1747 1747 1747 1747 1747	76 76 76 76 76 76 76 76 76 76 76 76	DTP3 DTP3 DTP3 DTP3 MCV1 MCV1 MCV1 MCV1 Pol1 Pol1 Pol1 Pol3 Pol3	C or H <12 months Card Card or History History C or H <12 months Card Card or History History C or H <12 months Card Card or History History C or H <12 months Card Card or History History Card or History Card or H <12 months Card	71 59.6 72.9 13.3 70.5 53 76.1 23.1 91.8 63.3 92.3 29.1 66.6 57.8	18-29 m 18-29 m	1639 1639 1639 1639 1639 1639 1639 1639	66 66 66 66 66 66 66 66 66 66 66 66 66
MCV1 MCV1 MCV1 MCV1 Pol1	Card Card or History History C or H <18 months	77.2 65.6 83.4 17.8 91.6	18-29 m 18-29 m 18-29 m 18-29 m 18-29 m	1747 1747 1747 1747 1747	76 76 76 76 76	Pol3 Pol3 2006 Pe	Card or History History erú: Encuesta Demo	67.9 10.1 gráfica y	18-29 m 18-29 m	1639 1639 Familia	66 66 ar - ENDES 2007-2008
Pol1 Pol1 Pol3 Pol3 Pol3 Pol3	Card Card or History History C or H <18 months Card Card or History History	73.3 92 18.7 75.3 67.3 76.4	18-29 m 18-29 m 18-29 m 18-29 m 18-29 m 18-29 m 18-29 m	1747 1747 1747 1747 1747 1747 1747	76 76 76 76 76 76 76	BCG BCG BCG BCG DTP1	Confirmation method C or H <18 months Card Card or History History C or H <18 months	95.7 60.6 95.7 35.1 95.9	18-29 m 18-29 m 18-29 m 18-29 m 18-29 m	1671 1050 1671 620 1671	63 63 63 63 63
20	erú: Encuesta Demo 2009 Confirmation method C or H <12 months	Coverage			ar - ENDES Continua Cards seen 66	DTP1 DTP1 DTP1 DTP3 DTP3 DTP3 DTP3	Card Card or History History C or H <18 months Card Card or History History	62.2 96.4 34.2 75.5 57.8 76.2 18.4	18-29 m 18-29 m 18-29 m 18-29 m 18-29 m 18-29 m	1050 1671 620 1671 1050 1671 620	63 63 63 63 63 63

MCV1	C or H $<$ 18 months	77.7	$18\text{-}29~\mathrm{m}$	1671	63
MCV1	Card	53.7	$18\text{-}29~\mathrm{m}$	1050	63
MCV1	Card or History	82.8	$18\text{-}29~\mathrm{m}$	1671	63
MCV1	History	29.1	$18\text{-}29~\mathrm{m}$	620	63
Pol1	C  or  H < 18  months	93	$18\text{-}29~\mathrm{m}$	1671	63
Pol1	Card	61.8	$18\text{-}29~\mathrm{m}$	1050	63
Pol1	Card or History	93.5	$18\text{-}29~\mathrm{m}$	1671	63
Pol1	History	31.8	$18\text{-}29~\mathrm{m}$	620	63
Pol3	C or H $<$ 18 months	68.7	$18\text{-}29~\mathrm{m}$	1671	63
Pol3	Card	57	$18\text{-}29~\mathrm{m}$	1050	63
Pol3	Card or History	69.1	$18\text{-}29~\mathrm{m}$	1671	63
Pol3	History	12.1	$18\text{-}29~\mathrm{m}$	620	63

2005 Perú: Encuesta Demográfica y de Salud Familiar - ENDES 2007-2008

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	95.2	$24\text{-}35~\mathrm{m}$	1653	63
DTP1	Card or History	95.8	$24\text{-}35~\mathrm{m}$	1653	63
DTP3	Card or History	76.6	$24\text{-}35~\mathrm{m}$	1653	63
MCV1	Card or History	76.8	$24\text{-}35~\mathrm{m}$	1653	63
Pol1	Card or History	92.8	$24\text{-}35~\mathrm{m}$	1653	63
Pol3	Card or History	66	$24\text{-}35~\mathrm{m}$	1653	63

2003 Peru Encuesta Demográfica y de Salud Familiar ENDES Continua 2004-2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	${\bf Cards\ seen}$
BCG	C or H $<$ 12 months	94.7	$18\text{-}29~\mathrm{m}$	859	68
BCG	Card	64.6	$18-29~\mathrm{m}$	859	68
BCG	Card or History	95.1	$18\text{-}29~\mathrm{m}$	859	68
BCG	History	30.5	$18\text{-}29~\mathrm{m}$	859	68
DTP1	C or H $<$ 12 months	96.9	$18\text{-}29~\mathrm{m}$	859	68
DTP1	Card	67.5	$18\text{-}29~\mathrm{m}$	859	68
DTP1	Card or History	97.8	$18-29~\mathrm{m}$	859	68
DTP1	History	30.3	$18-29~\mathrm{m}$	859	68
DTP3	C or H <12 months	81.9	$18-29~\mathrm{m}$	859	68
DTP3	Card	65.6	$18-29~\mathrm{m}$	859	68

DTP3	Card or History	85.4	$18-29~\mathrm{m}$	859	68
DTP3	History	19.8	$18-29~\mathrm{m}$	859	68
MCV1	C or H $<$ 12 months	83.2	$18-29~\mathrm{m}$	859	68
MCV1	Card	60.5	$18\text{-}29~\mathrm{m}$	859	68
MCV1	Card or History	87.4	$18\text{-}29~\mathrm{m}$	859	68
MCV1	History	26.8	$18\text{-}29~\mathrm{m}$	859	68
Pol1	C or H $<$ 12 months	96.1	$18\text{-}29~\mathrm{m}$	859	68
Pol1	Card	68	$18\text{-}29~\mathrm{m}$	859	68
Pol1	Card or History	97	$18\text{-}29~\mathrm{m}$	859	68
Pol1	History	28.9	$18-29~\mathrm{m}$	859	68
Pol3	C or H $<$ 12 months	76.4	$18-29~\mathrm{m}$	859	68
Pol3	Card	65.5	$18-29~\mathrm{m}$	859	68
Pol3	Card or History	79.2	$18-29~\mathrm{m}$	859	68
Pol3	History	13.7	$18-29~\mathrm{m}$	859	68

2003 Perú Encuesta Demográfica y de Salud Familiar, ENDES Continua  $2004\,$ 

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H $<$ 18 months	94	$18\text{-}29~\mathrm{m}$	455	67
BCG	Card	62	$18\text{-}29~\mathrm{m}$	455	67
BCG	Card or history	94.5	$18-29 \mathrm{\ m}$	455	67
BCG	History	32.5	$18\text{-}29~\mathrm{m}$	455	67
DTP1	C or H $<$ 18 months	95.8	$18\text{-}29~\mathrm{m}$	455	67
DTP1	Card	65.5	$18\text{-}29~\mathrm{m}$	455	67
DTP1	Card or history	97.2	$18-29 \mathrm{\ m}$	455	67
DTP1	History	31.7	$18-29~\mathrm{m}$	455	67
DTP3	C or H $<$ 18 months	82.8	$18-29~\mathrm{m}$	455	67
DTP3	Card	63.8	$18-29~\mathrm{m}$	455	67
DTP3	Card or history	86.6	$18-29 \mathrm{\ m}$	455	67
DTP3	History	22.9	$18-29~\mathrm{m}$	455	67
MCV1	C or H <18 months	84.8	$18-29~\mathrm{m}$	455	67
MCV1	Card	60	$18\text{-}29~\mathrm{m}$	455	67
MCV1	Card or history	90	$18-29~\mathrm{m}$	455	67
MCV1	History	30	$18\text{-}29~\mathrm{m}$	455	67
Pol1	C or H $<$ 18 months	95.6	$18-29~\mathrm{m}$	455	67
Pol1	Card	66.2	$18-29~\mathrm{m}$	455	67
Pol1	Card or history	96.9	$18-29 \mathrm{\ m}$	455	67
Pol1	History	30.7	$18\text{-}29~\mathrm{m}$	455	67

Pol3	C or H $<$ 18 months	77.5	$18\text{-}29~\mathrm{m}$	455	67	DTP1	History	38.8	$18\text{-}29~\mathrm{m}$	2353	58
Pol3	Card	64.6	$18\text{-}29~\mathrm{m}$	455	67	DTP3	Card	55.5	$18\text{-}29~\mathrm{m}$	2353	58
Pol3	Card or history	81	$18\text{-}29~\mathrm{m}$	455	67	DTP3	Card or History	84.7	$12\text{-}23~\mathrm{m}$	2353	58
Pol3	History	16.4	$18\text{-}29~\mathrm{m}$	455	67	DTP3	History	29.1	$18\text{-}29~\mathrm{m}$	2353	58
						MCV1	Card	50.8	$18\text{-}29~\mathrm{m}$	2353	58
1999 Peru, Encuesta Demográfica y de Salud Familiar 2000, 2001					m 2000 2001	MCV1	Card or History	84.4	$12\text{-}23~\mathrm{m}$	2353	58
					r 2000, 2001	MCV1	History	33.6	$18\text{-}29~\mathrm{m}$	2353	58
						Pol1	Card	57.8	$18\text{-}29~\mathrm{m}$	2353	58
Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen	Pol1	Card or History	95.9	$12\text{-}23~\mathrm{m}$	2353	58
BCG	Card	56.6	18-29 m	2353	58	Pol1	History	38	$18\text{-}29~\mathrm{m}$	2353	58
BCG	Card or History	96.2	12-23  m	2353	58	Pol3	Card	54.4	$18\text{-}29~\mathrm{m}$	2353	58
BCG	History	39.6	$18-29~\mathrm{m}$	2353	58	Pol3	Card or History	76.4	$12\text{-}23~\mathrm{m}$	2353	58
DTP1	Card	57.7	$18-29~\mathrm{m}$	2353	58	Pol3	History	22	$18\text{-}29~\mathrm{m}$	2353	58
DTP1	Card or History	96.5	$12\text{-}23~\mathrm{m}$	2353	58						

Further information and estimates for previous years are available at:

https://data.unicef.org/topic/child-health/immunization/

https://immunizationdata.who.int/listing.html