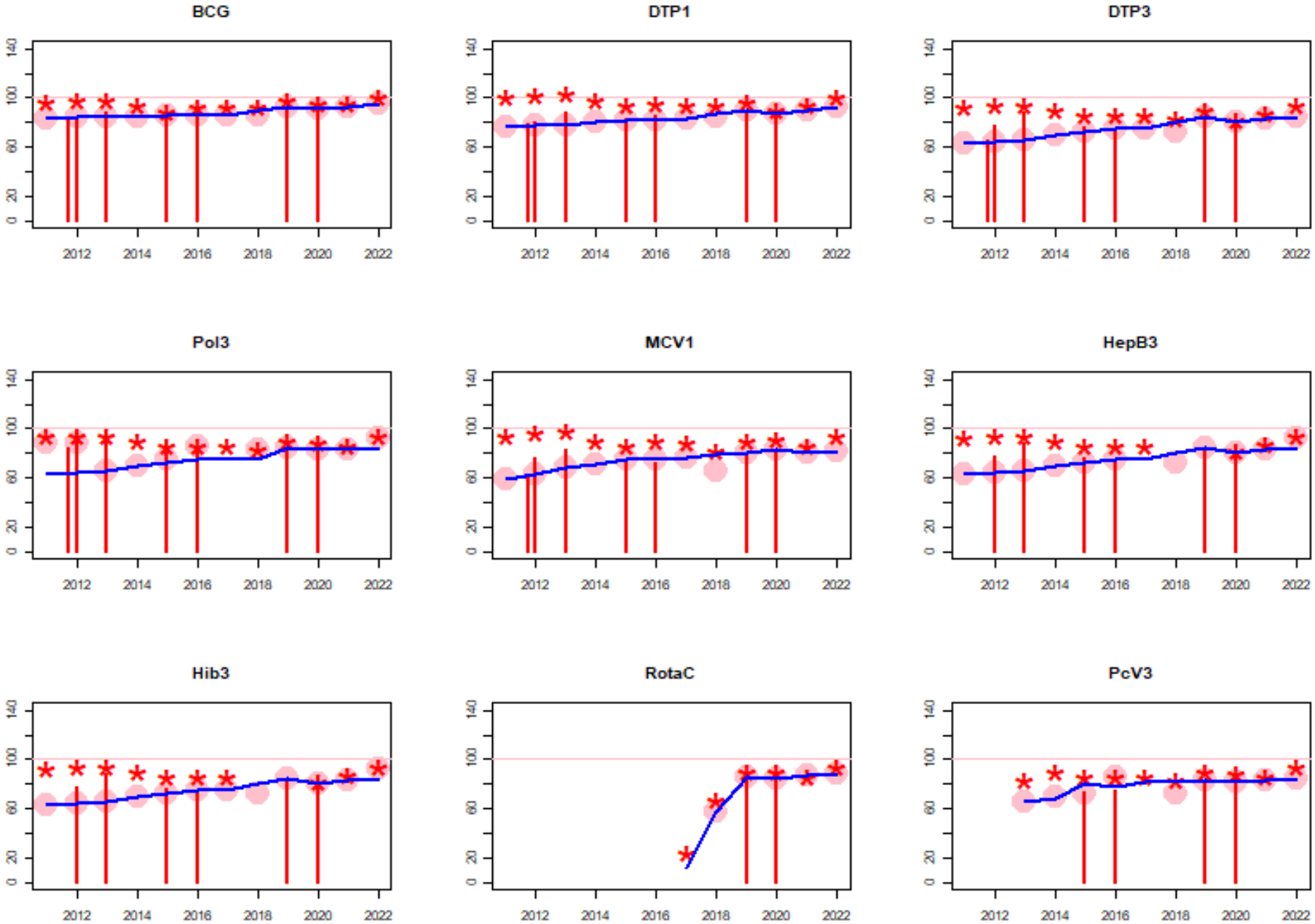

BCG
DTP1
DTP3
Pol3
MCV1
HepB3
Hib3
RotaC
PcV3
0
20
60
100
140
2012
2014
2016
2018
2020
2022

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

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

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

DATA SOURCES.

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

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

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

ABBREVIATIONS

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

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

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

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

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

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

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

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

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

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

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

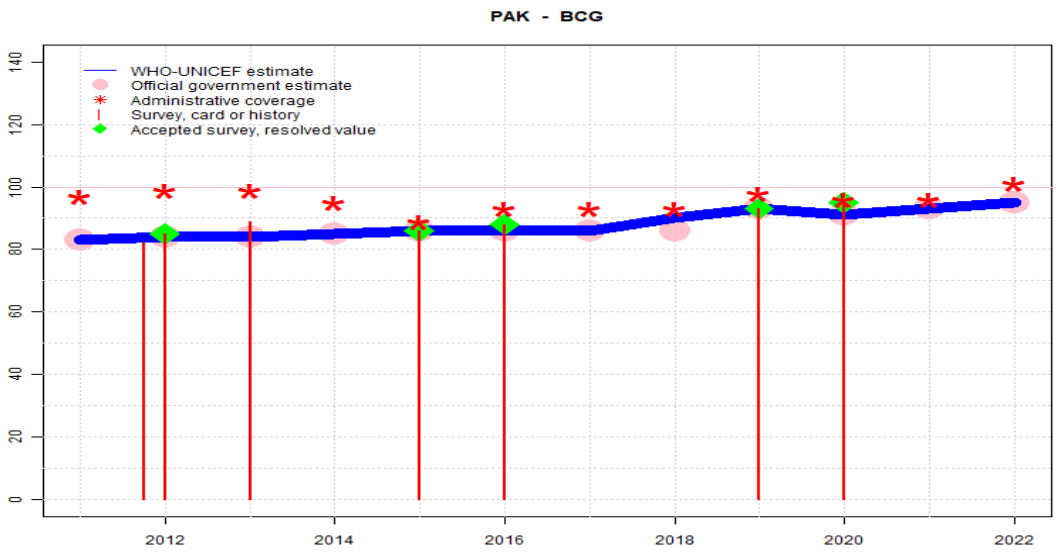
RotaC: percentage of surviving infants who received the final recommended dose of rotavirus vaccine, which can be either the 2nd or the 3rd dose depending on the vaccine.

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

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

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.

Pakistan - BCG



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	83	84	84	85	86	86	86	90	93	91	93	95
Estimate GoC	●●●	●●●	●	●	●●●	●	●	●	●	●	●	●
Official	83	84	84	85	86	86	86	86	93	91	93	95
Administrative	97	99	99	95	89	93	93	93	98	96	96	101
Survey	NA	*	89	NA	86	88	NA	NA	93	95	NA	NA

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

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

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

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

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

Description:

2022: Estimate informed by reported data. Official estimates based on adjusted data using the 2022 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2021: Estimate informed by reported data. Official estimates based on adjusted data using the 2021 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2020: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 1 survey(s). Official estimates for 2019 and 2020 based on the results of TPVICS, a large vaccination coverage survey conducted in early 2021. Monthly coverage data showed a significant decline in coverage from March to May 2020 followed by increases as a result of intensive catch-up vaccination activities. Estimate challenged by: D-

2019: Estimate informed by reported data supported by survey. Survey evidence of 93 percent based on 1 survey(s). Programme reports a nine percent increase in the target population from 2018 to 2019 which may be related to a transition towards data from the 2017 census results. Census derived age-specific results were not available at the time of reporting. Estimate challenged by: D-

2018: Estimate informed by interpolation between reported data. Reported data excluded. As the reported number of doses administered increased from 2017 to 2018, observed declines in reported coverage may be artificial and the result of a larger year-to-year increase in the target population that observed in prior years. GoC=Assigned by working group. Consistency across vaccines in presence of no accepted empirical data.

2017: Estimate informed by reported data. The official estimates for Pakistan were determined through an exercise conducted with technical assistance from WHO and UNICEF in consultation with all provinces and areas using locally available survey data, data quality assessment results, administrative reports and data from the polio programme. Estimate challenged by: D-

2016: Estimate informed by reported data supported by survey. Survey evidence of 88 percent based on 1 survey(s). Estimate challenged by: D-

2015: Estimate informed by reported data supported by survey. Survey evidence of 86 percent based on 1 survey(s). Programme reports three months national level stockout of BCG vaccine. GoC=R+ S+ D+

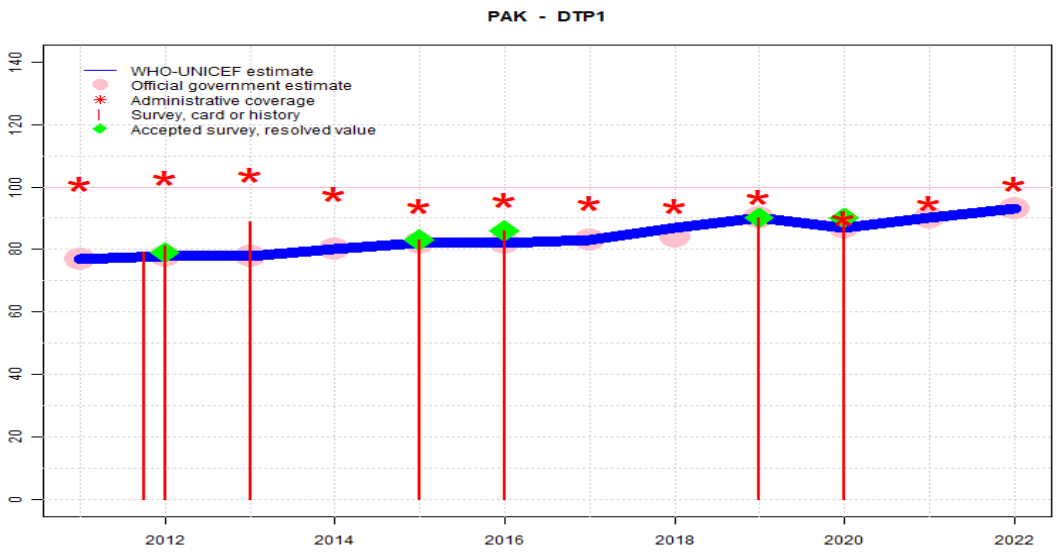
2014: Estimate informed by reported data. Reported target population increase from 2013 to 2014, which was larger than any prior year-to-year change, is also unexplained while the number of children vaccinated remained largely unchanged from 2013 to 2014. Estimate challenged by: D-

2013: Estimate informed by reported data. Survey results ignored. Sample size 0 less than 300. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, t Estimate challenged by: D-

2012: Estimate informed by reported data supported by survey. Survey evidence of 85 percent based on 1 survey(s). Survey results ignored. Sample size 0 less than 300. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, the report suggests exceptionally low drop-out for multi-dose vaccines. GoC=R+ S+ D+

2011: Estimate informed by reported data. GoC=R+ S+ D+

Pakistan - DTP1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	77	78	78	80	82	82	83	87	90	87	90	93
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	77	78	78	80	82	82	83	84	90	87	90	93
Administrative	101	103	104	98	94	96	95	94	97	90	95	101
Survey	NA	*	89	NA	83	86	NA	NA	90	90	NA	NA

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

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

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

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

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

Description:

2022: Estimate informed by reported data. Official estimates based on adjusted data using the 2022 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2021: Estimate informed by reported data. Official estimates based on adjusted data using the 2021 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2020: Estimate informed by reported data supported by survey. Survey evidence of 90 percent based on 1 survey(s). Official estimates for 2019 and 2020 based on the results of TPVICS, a large vaccination coverage survey conducted in early 2021. Monthly coverage data showed a significant decline in coverage from March to May 2020 followed by increases as a result of intensive catch-up vaccination activities. Vaccine stockout of unspecified duration. Estimate of 87 percent changed from previous revision value of 83 percent. Estimate challenged by: D-

2019: Estimate informed by reported data supported by survey. Survey evidence of 90 percent based on 1 survey(s). Programme reports a nine percent increase in the target population from 2018 to 2019 which may be related to a transition towards data from the 2017 census results. Census derived age-specific results were not available at the time of reporting. Estimate challenged by: D-

2018: Estimate informed by interpolation between reported data. Reported data excluded. As the reported number of doses administered increased from 2017 to 2018, observed declines in reported coverage may be artificial and the result of a larger year-to-year increase in the target population that observed in prior years. GoC=Assigned by working group. Consistency across vaccines in presence of no accepted empirical data.

2017: Estimate informed by reported data. The official estimates for Pakistan were determined through an exercise conducted with technical assistance from WHO and UNICEF in consultation with all provinces and areas using locally available survey data, data quality assessment results, administrative reports and data from the polio programme. Estimate challenged by: D-

2016: Estimate informed by reported data supported by survey. Survey evidence of 86 percent based on 1 survey(s). Estimate challenged by: D-

2015: Estimate informed by reported data supported by survey. Survey evidence of 83 percent based on 1 survey(s). Estimate challenged by: D-

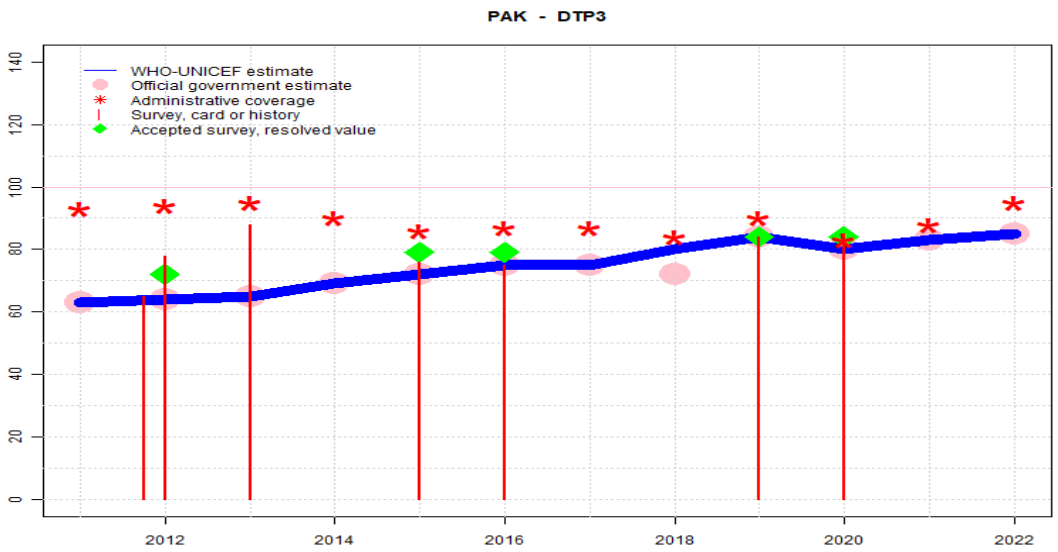
2014: Estimate informed by reported data. Reported target population increase from 2013 to 2014, which was larger than any prior year-to-year change, is also unexplained while the number of children vaccinated remained largely unchanged from 2013 to 2014. Estimate challenged by: D-

2013: Estimate informed by reported data. Survey results ignored. Sample size 0 less than 300. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, t Estimate challenged by: D-

2012: Estimate informed by reported data supported by survey. Survey evidence of 79 percent based on 1 survey(s). Survey results ignored. Sample size 0 less than 300. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, the report suggests exceptionally low drop-out for multi-dose vaccines. Estimate challenged by: D-

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

Pakistan - DTP3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	63	64	65	69	72	75	75	80	84	80	83	85
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	63	64	65	69	72	75	75	72	84	80	83	85
Administrative	93	94	95	90	86	87	87	84	90	83	88	95
Survey	NA	*	88	NA	76	75	NA	NA	84	84	NA	NA

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

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

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

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

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

Description:

2022: Estimate informed by reported data. Official estimates based on adjusted data using the 2022 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2021: Estimate informed by reported data. Official estimates based on adjusted data using the 2021 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2020: Estimate informed by reported data supported by survey. Survey evidence of 84 percent based on 1 survey(s). Official estimates for 2019 and 2020 based on the results of TPVICS, a large vaccination coverage survey conducted in early 2021. Monthly coverage data showed a significant decline in coverage from March to May 2020 followed by increases as a result of intensive catch-up vaccination activities. Vaccine stockout of unspecified duration. Estimate of 80 percent changed from previous revision value of 77 percent. Estimate challenged by: D-

2019: Estimate informed by reported data supported by survey. Survey evidence of 84 percent based on 1 survey(s). Programme reports a nine percent increase in the target population from 2018 to 2019 which may be related to a transition towards data from the 2017 census results. Census derived age-specific results were not available at the time of reporting. Estimate challenged by: D-

2018: Estimate informed by interpolation between reported data. Reported data excluded. Decline observed in administrative coverage likely an artifact of a four percent increase in the target population from 2017 to 2018. GoC=Assigned by working group. Consistency across vaccines in presence of no accepted empirical data.

2017: Estimate informed by reported data. The official estimates for Pakistan were determined through an exercise conducted with technical assistance from WHO and UNICEF in consultation with all provinces and areas using locally available survey data, data quality assessment results, administrative reports and data from the polio programme. Estimate challenged by: D-

2016: Estimate informed by reported data supported by survey. Survey evidence of 79 percent based on 1 survey(s). Pakistan Demographic and Health Survey 2017-2018 card or history results of 75 percent modifed for recall bias to 79 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 63 percent and 3rd dose card only coverage of 58 percent. Estimate challenged by: D-

2015: Estimate informed by reported data supported by survey. Survey evidence of 79 percent based on 1 survey(s). Pakistan Demographic and Health Survey 2017-2018 card or history results of 76 percent modifed for recall bias to 79 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 47 percent and 3rd dose card only coverage of 45 percent. Estimate challenged by: D-

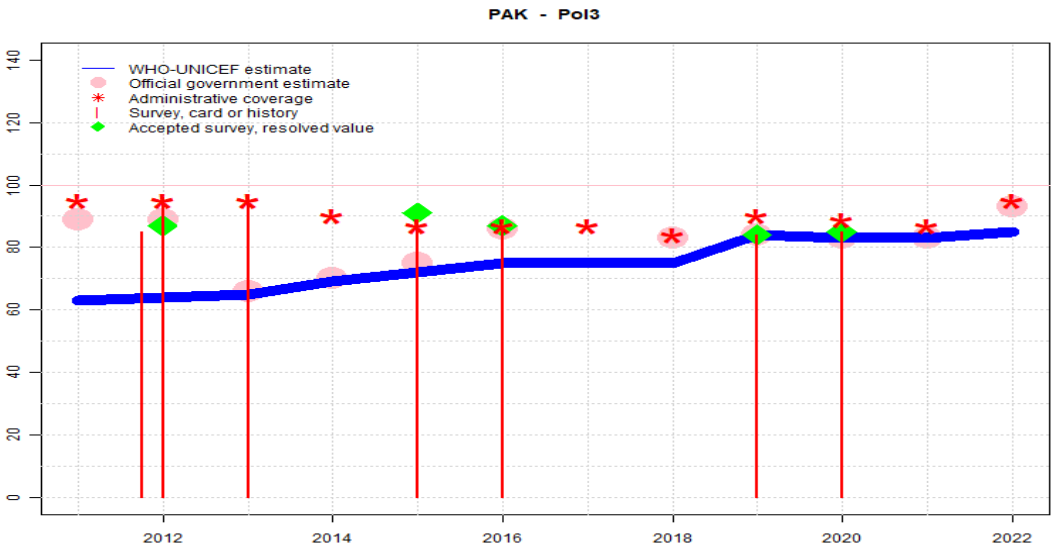
2014: Estimate informed by reported data. Reported target population increase from 2013 to 2014, which was larger than any prior year-to-year change, is also unexplained while the number of children vaccinated remained largely unchanged from 2013 to 2014. Estimate challenged by: D-

2013: Estimate informed by reported data. Survey results ignored. Sample size 0 less than 300. Pakistan Social and Living Standards Measurement Survey (PSLM), 2014-15 card or history results of 88 percent modifed for recall bias to 89 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 65 percent and 3rd dose card only coverage of 65 percent. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, t Estimate challenged by: D-S-

2012: Estimate informed by reported data supported by survey. Survey evidence of 72 percent based on 1 survey(s). Survey results ignored. Sample size 0 less than 300. Pakistan Demographic and Health Survey 2012-2013 card or history results of 65 percent modifed for recall bias to 72 percent based on 1st dose card or history coverage of 79 percent, 1st dose card only coverage of 35 percent and 3rd dose card only coverage of 32 percent. Pakistan Social and Living Standards Measurement Survey (PSLM), 2013-14 card or history results of 78 percent modifed for recall bias to 80 percent based on 1st dose card or history coverage of 81 percent, 1st dose card only coverage of 62 percent and 3rd dose card only coverage of 61 percent. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, the report suggests exceptionally low drop-out for multi-dose vaccines. Estimate challenged by: D-

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

Pakistan - Pol3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	63	64	65	69	72	75	75	75	84	83	83	85
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	89	89	66	70	75	86	NA	83	84	83	83	93
Administrative	95	95	95	90	87	87	87	84	90	89	87	95
Survey	NA	*	97	NA	88	86	NA	NA	84	85	NA	NA

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

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

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

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

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

Description:

2022: Estimate informed by DTP3 estimated coverage. Official estimates based on adjusted data using the 2022 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-R-

2021: Estimate informed by reported data. Official estimates based on adjusted data using the 2021 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2020: Estimate informed by reported data supported by survey. Survey evidence of 85 percent based on 1 survey(s). Official estimates for 2019 and 2020 based on the results of TPVICS, a large vaccination coverage survey conducted in early 2021. Monthly coverage data showed a significant decline in coverage from March to May 2020 followed by increases as a result of intensive catch-up vaccination activities. Estimate challenged by: D-

2019: Estimate informed by reported data supported by survey. Survey evidence of 84 percent based on 1 survey(s). Programme reports a nine percent increase in the target population from 2018 to 2019 which may be related to a transition towards data from the 2017 census results. Census derived age-specific results were not available at the time of reporting. Estimate challenged by: D-

2018: Coverage based on extrapolation from 2017. Reported data excluded. Decline observed in administrative coverage likely an artifact of a four percent increase in the target population from 2017 to 2018. Survey results may include campaign doses. GoC=Assigned by working group. Consistency across vaccines in presence of no accepted empirical data.

2017: Coverage based on DTP3 estimates. The official estimates for Pakistan were determined through an exercise conducted with technical assistance from WHO and UNICEF in consultation with all provinces and areas using locally available survey data, data quality assessment results, administrative reports and data from the polio programme. Estimate challenged by: D-R-S-

2016: Coverage based on DTP3 estimates. Pakistan Demographic and Health Survey 2017-2018 card or history results of 86 percent modifed for recall bias to 87 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 63 percent and 3rd dose card only coverage of 58 percent. Estimate challenged by: D-R-S-

2015: Coverage based on DTP3 estimates. Pakistan Demographic and Health Survey 2017-2018 card or history results of 88 percent modifed for recall bias to 91 percent based on 1st dose card or history coverage of 95 percent, 1st dose card only coverage of 47 percent and 3rd dose card only coverage of 45 percent. Estimate challenged by: D-R-S-

2014: Coverage based on estimated DTP3 coverage. Reported target population increase from 2013 to 2014, which was larger than any prior year-to-year change, is also unexplained while the number of children vaccinated remained largely unchanged from 2013 to 2014. Estimate challenged by: D-R-S-

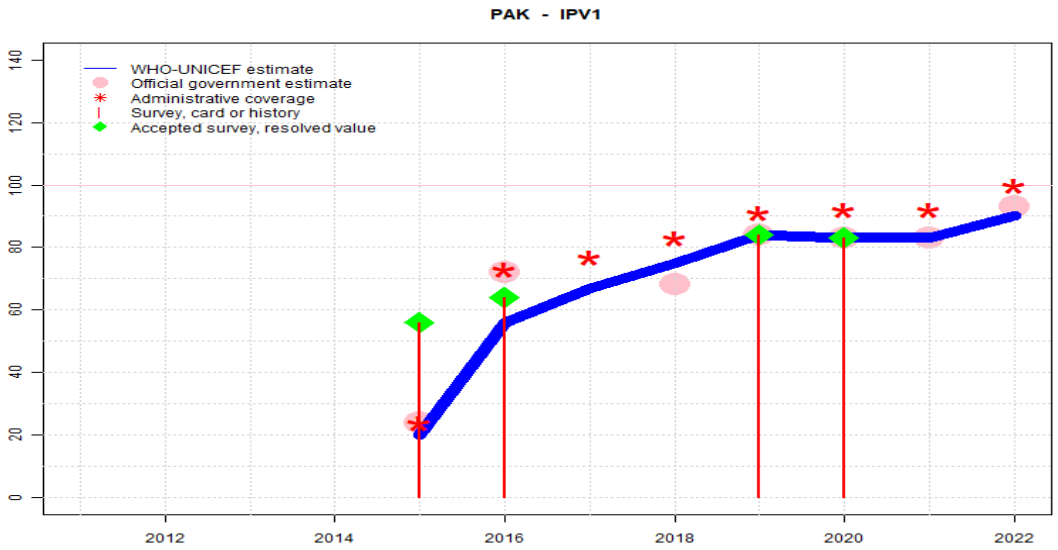
2013: Coverage based on DTP3 estimates. Survey results ignored. Sample size 0 less than 300. Pakistan Social and Living Standards Measurement Survey (PSLM), 2014-15 card or history results of 97 percent modifed for recall bias to 98 percent based on 1st dose

card or history coverage of 98 percent, 1st dose card only coverage of 65 percent and 3rd dose card only coverage of 65 percent. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, t Estimate challenged by: D-R-S-

2012: Coverage based on DTP3 estimates. Survey results ignored. Sample size 0 less than 300. Pakistan Demographic and Health Survey 2012-2013 card or history results of 85 percent modifed for recall bias to 87 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 35 percent and 3rd dose card only coverage of 33 percent. Pakistan Social and Living Standards Measurement Survey (PSLM), 2013-14 card or history results of 96 percent modifed for recall bias to 98 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 62 percent and 3rd dose card only coverage of 62 percent. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, the report suggests exceptionally low drop-out for multi-dose vaccines. Estimate challenged by: D-R-S-

2011: Coverage based on DTP3 estimates. Estimate challenged by: D-R-S-

Pakistan - IPV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	20	56	67	75	84	83	83	90
Estimate GoC	NA	NA	NA	NA	•	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	24	72	NA	68	84	83	83	93
Administrative	NA	NA	NA	NA	24	73	77	83	91	92	92	100
Survey	NA	NA	NA	NA	56	64	NA	NA	84	83	NA	NA

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

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

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

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

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

Description:

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

2022: Estimate informed by the difference between reported administrative DTP3 and IPV1 coverage and the estimated coverage for DTP3. Increases may reflect the contribution of supplementary immunization activities. Official estimates based on adjusted data using the 2022 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-R-

2021: Estimate informed by reported data. Official estimates based on adjusted data using the 2021 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2020: Estimate informed by reported data supported by survey. Survey evidence of 83 percent based on 1 survey(s). Official estimates for 2019 and 2020 based on the results of TPVICS, a large vaccination coverage survey conducted in early 2021. Monthly coverage data showed a significant decline in coverage from March to May 2020 followed by increases as a result of intensive catch-up vaccination activities. Estimate challenged by: D-

2019: Estimate informed by reported data supported by survey. Survey evidence of 84 percent based on 1 survey(s). Programme reports a nine percent increase in the target population from 2018 to 2019 which may be related to a transition towards data from the 2017 census results. Census derived age-specific results were not available at the time of reporting. Estimate challenged by: D-

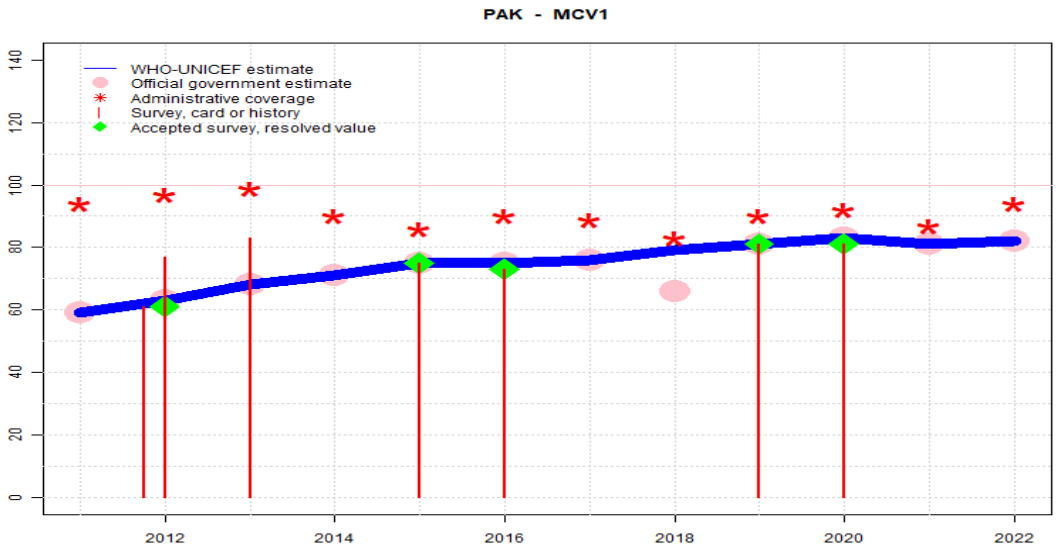
2018: Estimate based on estimated DTP3 coverage. Reported data excluded. As the reported number of doses administered increased from 2017 to 2018, observed declines in reported coverage may be artificial and the result of a larger year-to-year increase in the target population that observed in prior years. GoC=Assigned by working group. Consistency across vaccines in presence of no accepted empirical data.

2017: Estimate is based on DTP3 coverage adjusted by the relative difference in the reported number of children vaccinated with DTP3 and IPV1. The official estimates for Pakistan were determined through an exercise conducted with technical assistance from WHO and UNICEF in consultation with all provinces and areas using locally available survey data, data quality assessment results, administrative reports and data from the polio programme. Estimate challenged by: D-R-S-

2016: Estimate is based on DTP3 coverage adjusted by the relative difference in the reported number of children vaccinated with DTP3 and IPV1. Estimate challenged by: D-R-

2015: Inactivated polio vaccine during 2015. Estimate challenged by: R-S-

Pakistan - MCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	59	63	68	71	75	75	76	79	81	83	81	82
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	59	63	68	71	75	75	76	66	81	83	81	82
Administrative	94	97	99	90	86	90	89	83	90	92	87	94
Survey	NA	*	83	NA	75	73	NA	NA	81	81	NA	NA

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

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

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

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

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

Description:

2022: Estimate informed by reported data. Official estimates based on adjusted data using the 2022 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2021: Estimate informed by reported data. Official estimates based on adjusted data using the 2021 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2020: Estimate informed by reported data supported by survey. Survey evidence of 81 percent based on 1 survey(s). Official estimates for 2019 and 2020 based on the results of TPVICS, a large vaccination coverage survey conducted in early 2021. Monthly coverage data showed a significant decline in coverage from March to May 2020 followed by increases as a result of intensive catch-up vaccination activities. Estimate challenged by: D-

2019: Estimate informed by reported data supported by survey. Survey evidence of 81 percent based on 1 survey(s). Programme reports a nine percent increase in the target population from 2018 to 2019 which may be related to a transition towards data from the 2017 census results. Census derived age-specific results were not available at the time of reporting. Estimate challenged by: D-

2018: Estimate informed by interpolation between reported data. Reported data excluded. As the reported number of doses administered increased from 2017 to 2018, observed declines in reported coverage may be artificial and the result of a larger year-to-year increase in the target population that observed in prior years. GoC=Assigned by working group. Consistency across vaccines in presence of no accepted empirical data.

2017: Estimate informed by reported data. The official estimates for Pakistan were determined through an exercise conducted with technical assistance from WHO and UNICEF in consultation with all provinces and areas using locally available survey data, data quality assessment results, administrative reports and data from the polio programme. Estimate challenged by: D-

2016: Estimate informed by reported data supported by survey. Survey evidence of 73 percent based on 1 survey(s). Estimate challenged by: D-

2015: Estimate informed by reported data supported by survey. Survey evidence of 75 percent based on 1 survey(s). Estimate challenged by: D-

2014: Estimate informed by reported data. Reported target population increase from 2013 to 2014, which was larger than any prior year-to-year change, is also unexplained while the number of children vaccinated remained largely unchanged from 2013 to 2014. Estimate challenged by: D-

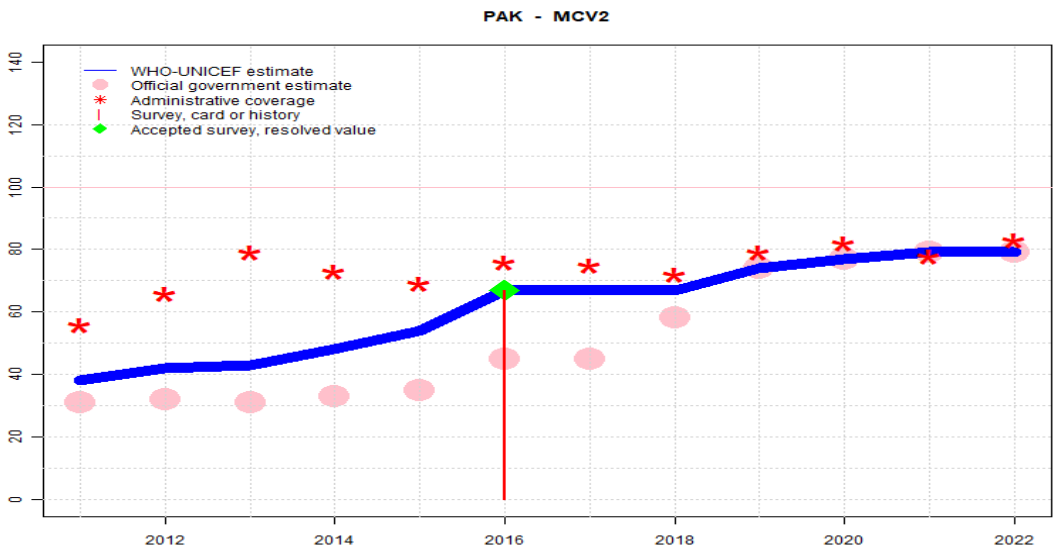
2013: Estimate informed by reported data. Survey results ignored. Sample size 0 less than 300. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, t Estimate challenged by: D-

2012: Estimate informed by reported data supported by survey. Survey evidence of 61 percent

based on 1 survey(s). Survey results ignored. Sample size 0 less than 300. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, the report suggests exceptionally low drop-out for multi-dose vaccines. Estimate challenged by: D-

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

Pakistan - MCV2



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	38	42	43	48	54	67	67	67	74	77	79	79
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	31	32	31	33	35	45	45	58	74	77	79	79
Administrative	56	66	79	73	69	76	75	72	79	82	78	83
Survey	NA	NA	NA	NA	NA	67	NA	NA	NA	NA	NA	NA

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

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

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

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

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

Description:

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

2022: Estimate informed by reported data. Official estimates based on adjusted data using the 2022 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2021: Estimate informed by reported data. Official estimates based on adjusted data using the 2021 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2020: Estimate informed by reported data. Official estimates for 2019 and 2020 based on the results of TPVICS, a large vaccination coverage survey conducted in early 2021. Monthly coverage data showed a significant decline in coverage from March to May 2020 followed by increases as a result of intensive catch-up vaccination activities. Estimate challenged by: D-

2019: Estimate is based on the official coverage reported. Programme reports a nine percent increase in the target population from 2018 to 2019 which may be related to a transition towards data from the 2017 census results. Census derived age-specific results were not available at the time of reporting. Estimate challenged by: D-

2018: Estimate is based on prior year estimate. Reported data excluded. As the reported number of doses administered increased from 2017 to 2018, observed declines in reported coverage may be artificial and the result of a larger year-to-year increase in the target population that observed in prior years. GoC=Assigned by working group. Consistency across vaccines in presence of no accepted empirical data.

2017: Estimate is based on survey result from prior year. The official estimates for Pakistan were determined through an exercise conducted with technical assistance from WHO and UNICEF in consultation with all provinces and areas using locally available survey data, data quality assessment results, administrative reports and data from the polio programme. Estimate challenged by: D-R-

2016: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 67 percent based on 1 survey(s). Estimate challenged by: D-R-

2015: Reported data calibrated to 2009 and 2016 levels. Estimate challenged by: D-R-S-

2014: Reported data calibrated to 2009 and 2016 levels. Estimate challenged by: D-R-S-

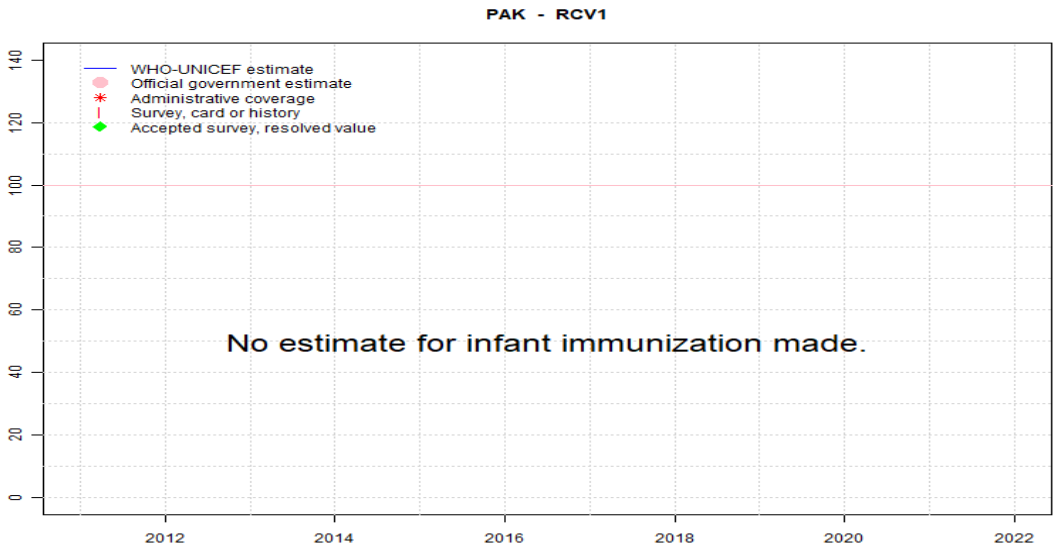
2013: Reported data calibrated to 2009 and 2016 levels. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, t Estimate challenged by: D-R-

2012: Reported data calibrated to 2009 and 2016 levels. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, the report suggests exceptionally low drop-out for multi-dose vaccines. Estimate challenged by: D-R-

Pakistan - MCV2

2011: Reported data calibrated to 2009 and 2016 levels. Estimate challenged by: D-R-

Pakistan - RCV1



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

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

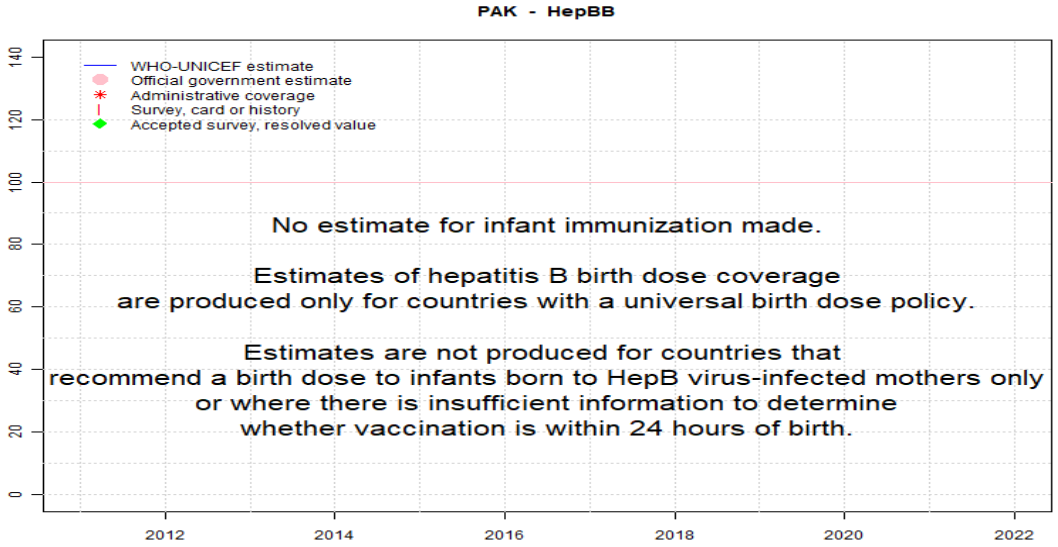
●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

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

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

Pakistan - HepBB



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

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

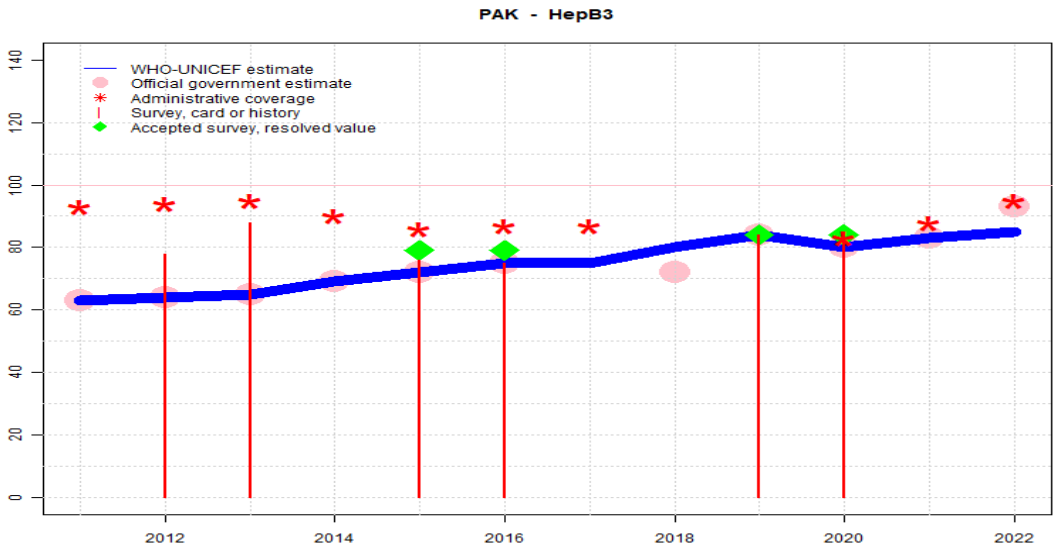
●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

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

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

Pakistan - HepB3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	63	64	65	69	72	75	75	80	84	80	83	85
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	63	64	65	69	72	75	NA	72	84	80	83	93
Administrative	93	94	95	90	86	87	87	NA	NA	83	88	95
Survey	NA	78	88	NA	76	75	NA	NA	84	84	NA	NA

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

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

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

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

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

Description:

2022: Estimate informed by DTP3 estimated coverage. Official estimates based on adjusted data using the 2022 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-R-

2021: Estimate informed by reported data. Official estimates based on adjusted data using the 2021 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2020: Estimate informed by reported data supported by survey. Survey evidence of 84 percent based on 1 survey(s). Official estimates for 2019 and 2020 based on the results of TPVICS, a large vaccination coverage survey conducted in early 2021. Monthly coverage data showed a significant decline in coverage from March to May 2020 followed by increases as a result of intensive catch-up vaccination activities. Vaccine stockout of unspecified duration. Estimate of 80 percent changed from previous revision value of 77 percent. Estimate challenged by: D-

2019: Estimate informed by reported data supported by survey. Survey evidence of 84 percent based on 1 survey(s). Programme reports a nine percent increase in the target population from 2018 to 2019 which may be related to a transition towards data from the 2017 census results. Census derived age-specific results were not available at the time of reporting. GoC=Assigned by working group. Consistency with DTP3.

2018: Estimate informed by estimated DTP3 coverage. Reported data excluded. As the reported number of doses administered increased from 2017 to 2018, observed declines in reported coverage may be artificial and the result of a larger year-to-year increase in the target population that observed in prior years.Reported data excluded due to decline in reported coverage from 87 percent to 72 percent with increase to 84 percent. Estimate of 80 percent changed from previous revision value of 81 percent. GoC=Assigned by working group. Consistency across vaccines in presence of no accepted empirical data.

2017: Estimate informed by estimated DTP3 coverage. Reported data excluded due to an increase from 75 percent to 87 percent with decrease 72 percent. The official estimates for Pakistan were determined through an exercise conducted with technical assistance from WHO and UNICEF in consultation with all provinces and areas using locally available survey data, data quality assessment results, administrative reports and data from the polio programme. Estimate of 75 percent changed from previous revision value of 78 percent. Estimate challenged by: D-R-

2016: Estimate informed by reported data supported by survey. Survey evidence of 79 percent based on 1 survey(s). Pakistan Demographic and Health Survey 2017-2018 card or history results of 75 percent modifed for recall bias to 79 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 63 percent and 3rd dose card only coverage of 58 percent. Estimate challenged by: D-

2015: Estimate informed by reported data supported by survey. Survey evidence of 79 percent based on 1 survey(s). Pakistan Demographic and Health Survey 2017-2018 card or history results of 76 percent modifed for recall bias to 79 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 47 percent and 3rd dose

card only coverage of 45 percent. Estimate challenged by: D-

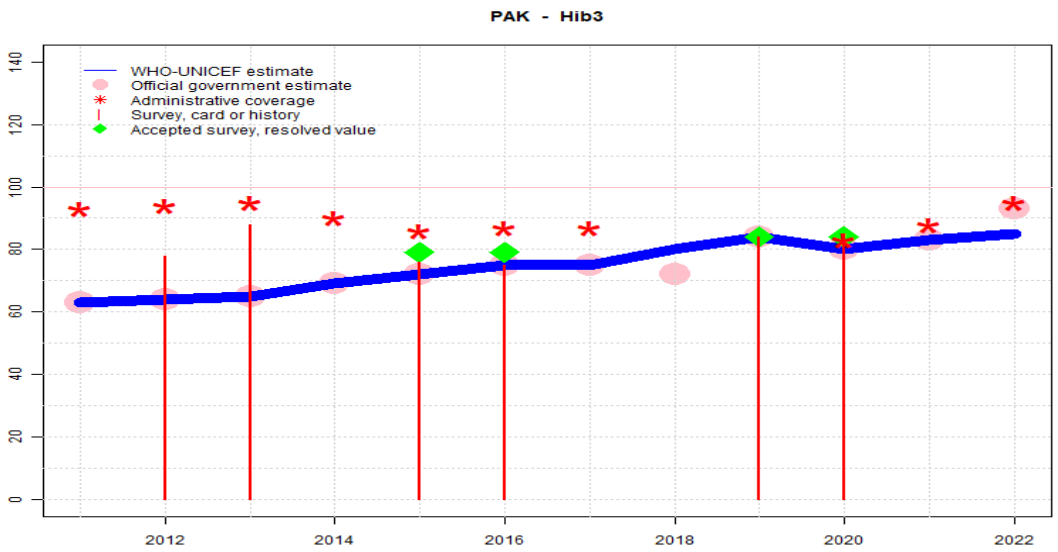
2014: Estimate informed by reported data. Estimate challenged by: D-

2013: Estimate informed by reported data. Survey results ignored. Sample size 0 less than 300. Pakistan Social and Living Standards Measurement Survey (PSLM), 2014-15 card or history results of 88 percent modifed for recall bias to 89 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 65 percent and 3rd dose card only coverage of 65 percent. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, t Estimate challenged by: D-S-

2012: Estimate informed by reported data. Survey results ignored. Sample size 0 less than 300. Pakistan Social and Living Standards Measurement Survey (PSLM), 2013-14 card or history results of 78 percent modifed for recall bias to 80 percent based on 1st dose card or history coverage of 81 percent, 1st dose card only coverage of 62 percent and 3rd dose card only coverage of 61 percent. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, the report suggests exceptionally low drop-out for multi-dose vaccines. Estimate challenged by: D-

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

Pakistan - Hib3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	63	64	65	69	72	75	75	80	84	80	83	85
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	63	64	65	69	72	75	75	72	84	80	83	93
Administrative	93	94	95	90	86	87	87	NA	NA	83	88	95
Survey	NA	78	88	NA	76	75	NA	NA	84	84	NA	NA

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

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

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

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

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

Description:

2022: Estimate informed by DTP3 estimated coverage. Official estimates based on adjusted data using the 2022 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-R-

2021: Estimate informed by reported data. Official estimates based on adjusted data using the 2021 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2020: Estimate informed by reported data supported by survey. Survey evidence of 84 percent based on 1 survey(s). Official estimates for 2019 and 2020 based on the results of TPVICS, a large vaccination coverage survey conducted in early 2021. Monthly coverage data showed a significant decline in coverage from March to May 2020 followed by increases as a result of intensive catch-up vaccination activities. Vaccine stockout of unspecified duration. Estimate of 80 percent changed from previous revision value of 77 percent. Estimate challenged by: D-

2019: Estimate informed by reported data supported by survey. Survey evidence of 84 percent based on 1 survey(s). Programme reports a nine percent increase in the target population from 2018 to 2019 which may be related to a transition towards data from the 2017 census results. Census derived age-specific results were not available at the time of reporting. GoC=Assigned by working group. Consistency with DTP3.

2018: Estimate informed by interpolation between reported data. Reported data excluded. As the reported number of doses administered increased from 2017 to 2018, observed declines in reported coverage may be artificial and the result of a larger year-to-year increase in the target population that observed in prior years. GoC=Assigned by working group. Consistency across vaccines in presence of no accepted empirical data.

2017: Estimate informed by reported data. The official estimates for Pakistan were determined through an exercise conducted with technical assistance from WHO and UNICEF in consultation with all provinces and areas using locally available survey data, data quality assessment results, administrative reports and data from the polio programme. Estimate challenged by: D-

2016: Estimate informed by reported data supported by survey. Survey evidence of 79 percent based on 1 survey(s). Pakistan Demographic and Health Survey 2017-2018 card or history results of 75 percent modifed for recall bias to 79 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 63 percent and 3rd dose card only coverage of 58 percent. Estimate challenged by: D-

2015: Estimate informed by reported data supported by survey. Survey evidence of 79 percent based on 1 survey(s). Pakistan Demographic and Health Survey 2017-2018 card or history results of 76 percent modifed for recall bias to 79 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 47 percent and 3rd dose card only coverage of 45 percent. Estimate challenged by: D-

2014: Estimate informed by reported data. Reported target population increase from 2013 to 2014, which was larger than any prior year-to-year change, is also unexplained while the number of children vaccinated remained largely unchanged from 2013 to 2014. Estimate

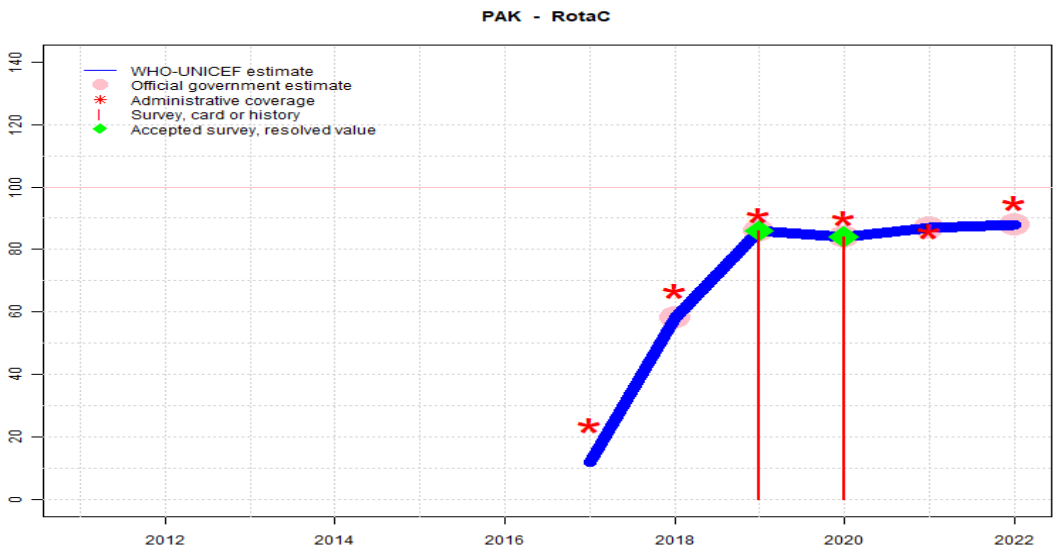
challenged by: D-

2013: Estimate informed by reported data. Survey results ignored. Sample size 0 less than 300. Pakistan Social and Living Standards Measurement Survey (PSLM), 2014-15 card or history results of 88 percent modifed for recall bias to 89 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 65 percent and 3rd dose card only coverage of 65 percent. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, t Estimate challenged by: D-S-

2012: Estimate informed by reported data. Survey results ignored. Sample size 0 less than 300. Pakistan Social and Living Standards Measurement Survey (PSLM), 2013-14 card or history results of 78 percent modifed for recall bias to 80 percent based on 1st dose card or history coverage of 81 percent, 1st dose card only coverage of 62 percent and 3rd dose card only coverage of 61 percent. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, the report suggests exceptionally low drop-out for multi-dose vaccines. Estimate challenged by: D-

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

Pakistan - RotaC



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	NA	12	58	86	84	87	88
Estimate GoC	NA	NA	NA	NA	NA	NA	•	•	•	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	58	86	84	87	88
Administrative	NA	NA	NA	NA	NA	NA	24	67	91	90	86	95
Survey	NA	NA	NA	NA	NA	NA	NA	NA	86	84	NA	NA

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

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

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

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

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

Description:

2022: Estimate informed by reported data. Official estimates based on adjusted data using the 2022 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2021: Estimate informed by reported data. Official estimates based on adjusted data using the 2021 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

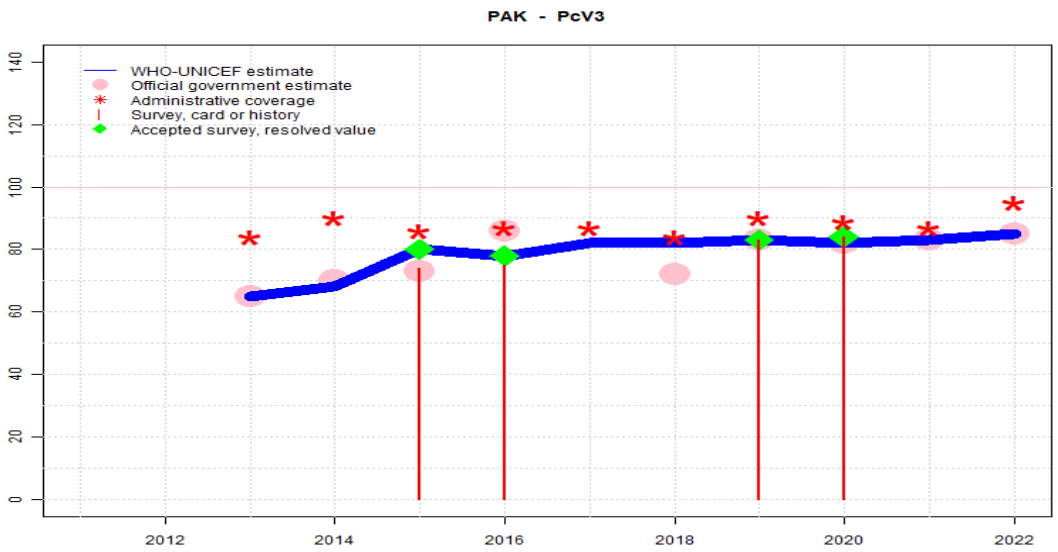
2020: Estimate informed by reported data supported by survey. Survey evidence of 84 percent based on 1 survey(s). Official estimates for 2019 and 2020 based on the results of TPVICS, a large vaccination coverage survey conducted in early 2021. Monthly coverage data showed a significant decline in coverage from March to May 2020 followed by increases as a result of intensive catch-up vaccination activities. Estimate challenged by: D-

2019: Estimate informed by reported data supported by survey. Survey evidence of 86 percent based on 1 survey(s). Programme reports a nine percent increase in the target population from 2018 to 2019 which may be related to a transition towards data from the 2017 census results. Census derived age-specific results were not available at the time of reporting. Estimate challenged by: D-

2018: Estimate based on reported data during period of introduction. Reported data excluded. As the reported number of doses administered increased from 2017 to 2018, observed declines in reported coverage may be artificial and the result of a larger year-to-year increase in the target population that observed in prior years. GoC=Assigned by working group. Consistency across vaccines in presence of no accepted empirical data.

2017: Rotavirus vaccine was introduced in 2017. Programme reports 24 percent coverage achieved in 51 percent of the national target population. Estimate is based on annualized coverage achieved in the national target population. Estimates exceptionally based on administrative coverage as it was an introduction year and no other data was available. The official estimates for Pakistan were determined through an exercise conducted with technical assistance from WHO and UNICEF in consultation with all provinces and areas using locally available survey data, data quality assessment results, administrative reports and data from the polio programme. Estimate challenged by: R-S-

Pakistan - PcV3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	65	68	80	78	82	82	83	82	83	85
Estimate GoC	NA	NA	•	•	•	•	•	•	•	•	•	•
Official	NA	NA	65	70	73	86	NA	72	83	82	83	85
Administrative	NA	NA	84	90	86	87	87	84	90	89	87	95
Survey	NA	NA	NA	NA	74	75	NA	NA	83	84	NA	NA

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

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

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

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

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

Description:

2022: Estimate informed by reported data. Official estimates based on adjusted data using the 2022 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2021: Estimate informed by reported data. Official estimates based on adjusted data using the 2021 Third Party Verification of Immunization Coverage Survey. Estimate challenged by: D-

2020: Estimate informed by reported data supported by survey. Survey evidence of 84 percent based on 1 survey(s). Official estimates for 2019 and 2020 based on the results of TPVICS, a large vaccination coverage survey conducted in early 2021. Monthly coverage data showed a significant decline in coverage from March to May 2020 followed by increases as a result of intensive catch-up vaccination activities. Estimate challenged by: D-

2019: Estimate based on official coverage reported. Programme reports a nine percent increase in the target population from 2018 to 2019 which may be related to a transition towards data from the 2017 census results. Census derived age-specific results were not available at the time of reporting. Estimate challenged by: D-

2018: Reported data calibrated to 2016 and 2019 levels. Reported data excluded. As the reported number of doses administered increased from 2017 to 2018, observed declines in reported coverage may be artificial and the result of a larger year-to-year increase in the target population that observed in prior years.Reported data excluded due to decline in reported coverage from 87 percent to 72 percent with increase to 83 percent. GoC=Assigned by working group. Consistency across vaccines in presence of no accepted empirical data.

2017: Reported data calibrated to 2016 and 2019 levels. The official estimates for Pakistan were determined through an exercise conducted with technical assistance from WHO and UNICEF in consultation with all provinces and areas using locally available survey data, data quality assessment results, administrative reports and data from the polio programme. Estimate challenged by: R-

2016: Estimate of 78 percent assigned by working group. Estimate is based on survey result adjusted for recall bias. Pakistan Demographic and Health Survey 2017-2018 card or history results of 75 percent modifed for recall bias to 78 percent based on 1st dose card or history coverage of 85 percent, 1st dose card only coverage of 63 percent and 3rd dose card only coverage of 58 percent. Estimate challenged by: D-R-

2015: Estimate of 80 percent assigned by working group. Estimate is based on survey result adjusted for recall bias. Pakistan Demographic and Health Survey 2017-2018 card or history results of 74 percent modifed for recall bias to 80 percent based on 1st dose card or history coverage of 82 percent, 1st dose card only coverage of 46 percent and 3rd dose card only coverage of 45 percent. Estimate challenged by: R-

2014: Estimate is based on DTP3 coverage. Estimate is likely an overestimate. Reported target population increase from 2013 to 2014, which was larger than any prior year-to-year change, is also unexplained while the number of children vaccinated remained largely unchanged from 2013 to 2014. Estimate challenged by: D-R-S-

2013: Estimate is based on reported data during introduction. The Pakistan Social and Living Standards Measurement Survey report does not include the sample size (number of children aged 12-23 m) from which coverage is estimated. Report also does not include prevalence of home-based record ownership. In addition, t GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

Pakistan - survey details

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

2020 Third-Party Verification Immunization Coverage Survey Round Two (TPVICS R-II) 2022

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	94.7	12-23 m	95217	66
DTP1	Card or History	90.2	12-23 m	95217	66
DTP3	Card or History	84.4	12-23 m	95217	66
HepB1	Card or History	90.2	12-23 m	95217	66
HepB3	Card or History	84.4	12-23 m	95217	66
Hib1	Card or History	90.2	12-23 m	95217	66
Hib3	Card or History	84.4	12-23 m	95217	66
IPV1	Card or History	83.4	12-23 m	95217	66
MCV1	Card or History	81.3	12-23 m	95217	66
PCV1	Card or History	89.7	12-23 m	95217	66
PCV3	Card or History	84.2	12-23 m	95217	66
Pol1	Card or History	91.2	12-23 m	95217	66
Pol3	Card or History	85.3	12-23 m	95217	66
RotaC	Card or History	84.5	12-23 m	95217	66

2019 Third-party Verification Immunization Coverage Survey (TPVICS) 2021

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	93.3	12-23 m	110905	66
DTP1	Card or History	90.5	12-23 m	110905	66
DTP3	Card or History	83.6	12-23 m	110905	66
HepB1	Card or History	90.5	12-23 m	110905	66
HepB3	Card or History	83.6	12-23 m	110905	66
Hib1	Card or History	90.5	12-23 m	110905	66
Hib3	Card or History	83.6	12-23 m	110905	66
IPV1	Card or History	84.4	12-23 m	110905	66
MCV1	Card or History	80.6	12-23 m	110905	66
PCV1	Card or History	90.2	12-23 m	110905	66
PCV3	Card or History	82.9	12-23 m	110905	66
Pol1	Card or History	91.4	12-23 m	110905	66
Pol3	Card or History	84.3	12-23 m	110905	66
RotaC	Card or History	85.5	12-23 m	110905	66

2016 Pakistan Demographic and Health Survey 2017-2018

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	87	12-23 m	1975	63
BCG	Card	63	12-23 m	1252	63
BCG	Card or History	87.9	12-23 m	1975	63
BCG	History	24.9	12-23 m	723	63
DTP1	C or H <12 months	85	12-23 m	1975	63
DTP1	Card	62.9	12-23 m	1252	63
DTP1	Card or History	86.3	12-23 m	1975	63
DTP1	History	23.5	12-23 m	723	63
DTP3	C or H <12 months	73.8	12-23 m	1975	63
DTP3	Card	58.5	12-23 m	1252	63
DTP3	Card or History	75.4	12-23 m	1975	63
DTP3	History	16.8	12-23 m	723	63
HepB1	C or H <12 months	85	12-23 m	1975	63
HepB1	Card	62.9	12-23 m	1252	63
HepB1	Card or History	86.3	12-23 m	1975	63
HepB1	History	23.5	12-23 m	723	63
HepB3	C or H <12 months	73.8	12-23 m	1975	63
HepB3	Card	58.5	12-23 m	1252	63
HepB3	Card or History	75.4	12-23 m	1975	63
HepB3	History	16.8	12-23 m	723	63
Hib1	C or H <12 months	85	12-23 m	1975	63
Hib1	Card	62.9	12-23 m	1252	63
Hib1	Card or History	86.3	12-23 m	1975	63

Hib1	History	23.5	12-23 m	723	63
Hib3	C or H <12 months	73.8	12-23 m	1975	63
Hib3	Card	58.5	12-23 m	1252	63
Hib3	Card or History	75.4	12-23 m	1975	63
Hib3	History	16.8	12-23 m	723	63
IPV1	C or H <12 months	62.6	12-23 m	1975	63
IPV1	Card	47.7	12-23 m	1252	63
IPV1	Card or History	63.8	12-23 m	1975	63
IPV1	History	16.1	12-23 m	723	63
MCV1	C or H <12 months	66.9	12-23 m	1975	63
MCV1	Card	55.3	12-23 m	1252	63
MCV1	Card or History	73.2	12-23 m	1975	63
MCV1	History	17.9	12-23 m	723	63
MCV2	C or H <24 months	64.6	24-35 m	1919	63
MCV2	Card	38.8	24-35 m	920	63
MCV2	Card or History	66.6	24-35 m	1919	63
MCV2	History	27.8	24-35 m	999	63
PcV1	C or H <12 months	83.8	12-23 m	1975	63
PcV1	Card	62.6	12-23 m	1252	63
PcV1	Card or History	85.2	12-23 m	1975	63
PcV1	History	22.6	12-23 m	723	63
PcV3	C or H <12 months	73.1	12-23 m	1975	63
PcV3	Card	58.2	12-23 m	1252	63
PcV3	Card or History	74.7	12-23 m	1975	63
PcV3	History	16.5	12-23 m	723	63
Pol1	C or H <12 months	93.4	12-23 m	1975	63
Pol1	Card	62.7	12-23 m	1252	63
Pol1	Card or History	94.9	12-23 m	1975	63
Pol1	History	32.2	12-23 m	723	63
Pol3	C or H <12 months	84.2	12-23 m	1975	63
Pol3	Card	58.5	12-23 m	1252	63
Pol3	Card or History	85.9	12-23 m	1975	63
Pol3	History	27.4	12-23 m	723	63

2015 Pakistan Demographic and Health Survey 2017-2018

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	84.4	24-35 m	1919	63
BCG	Card	47.2	24-35 m	920	63
BCG	Card or History	85.7	24-35 m	1919	63
BCG	History	38.5	24-35 m	999	63
DTP1	C or H <12 months	81.7	24-35 m	1919	63
DTP1	Card	47	24-35 m	920	63
DTP1	Card or History	83	24-35 m	1919	63
DTP1	History	36	24-35 m	999	63
DTP3	C or H <12 months	72.4	24-35 m	1919	63
DTP3	Card	45.2	24-35 m	920	63
DTP3	Card or History	75.7	24-35 m	1919	63
DTP3	History	30.4	24-35 m	999	63
HepB1	C or H <12 months	81.7	24-35 m	1919	63
HepB1	Card	47	24-35 m	920	63
HepB1	Card or History	83	24-35 m	1919	63
HepB1	History	36	24-35 m	999	63
HepB3	C or H <12 months	72.4	24-35 m	1919	63
HepB3	Card	45.2	24-35 m	920	63
HepB3	Card or History	75.7	24-35 m	1919	63
HepB3	History	30.4	24-35 m	999	63
Hib1	C or H <12 months	81.7	24-35 m	1919	63
Hib1	Card	47	24-35 m	920	63
Hib1	Card or History	83	24-35 m	1919	63
Hib1	History	36	24-35 m	999	63
Hib3	C or H <12 months	72.4	24-35 m	1919	63
Hib3	Card	45.2	24-35 m	920	63
Hib3	Card or History	75.7	24-35 m	1919	63
Hib3	History	30.4	24-35 m	999	63
IPV1	C or H <12 months	52.6	24-35 m	1919	63
IPV1	Card	30.8	24-35 m	920	63
IPV1	Card or History	55.6	24-35 m	1919	63
IPV1	History	24.8	24-35 m	999	63
MCV1	C or H <12 months	66.1	24-35 m	1919	63
MCV1	Card	43.2	24-35 m	920	63
MCV1	Card or History	75.3	24-35 m	1919	63
MCV1	History	32.1	24-35 m	999	63
PcV1	C or H <12 months	80.7	24-35 m	1919	63
PcV1	Card	46.5	24-35 m	920	63
PcV1	Card or History	81.7	24-35 m	1919	63
PcV1	History	35.2	24-35 m	999	63
PcV3	C or H <12 months	71.1	24-35 m	1919	63
PcV3	Card	44.6	24-35 m	920	63

PcV3	Card or History	74.1	24-35 m	1919	63
PcV3	History	29.5	24-35 m	999	63
Pol1	C or H <12 months	93.3	24-35 m	1919	63
Pol1	Card	47.2	24-35 m	920	63
Pol1	Card or History	94.6	24-35 m	1919	63
Pol1	History	47.3	24-35 m	999	63
Pol3	C or H <12 months	83.8	24-35 m	1919	63
Pol3	Card	45.4	24-35 m	920	63
Pol3	Card or History	87.5	24-35 m	1919	63
Pol3	History	42.1	24-35 m	999	63

2013 Pakistan Social and Living Standards Measurement Survey (PSLM), 2014-15

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	65	12-23 m	-	-
BCG	Card or History	89	12-23 m	-	-
DTP1	Card	65	12-23 m	-	-
DTP1	Card or History	89	12-23 m	-	-
DTP3	Card	65	12-23 m	-	-
DTP3	Card or History	88	12-23 m	-	-
HepB1	Card	65	12-23 m	-	-
HepB1	Card or History	89	12-23 m	-	-
HepB3	Card	65	12-23 m	-	-
HepB3	Card or History	88	12-23 m	-	-
Hib1	Card	65	12-23 m	-	-
Hib1	Card or History	89	12-23 m	-	-
Hib3	Card	65	12-23 m	-	-
Hib3	Card or History	88	12-23 m	-	-
MCV1	Card	61	12-23 m	-	-
MCV1	Card or History	83	12-23 m	-	-
Pol1	Card	65	12-23 m	-	-
Pol1	Card or History	98	12-23 m	-	-
Pol3	Card	65	12-23 m	-	-
Pol3	Card or History	97	12-23 m	-	-

2012 Pakistan Demographic and Health Survey 2012-2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	83.2	12-23 m	2074	36
BCG	Card	35.9	12-23 m	748	36
BCG	Card or History	85.2	12-23 m	2074	36
BCG	History	49.3	12-23 m	1327	36
DTP1	C or H <12 months	76.8	12-23 m	2074	36
DTP1	Card	35.1	12-23 m	748	36
DTP1	Card or History	78.8	12-23 m	2074	36
DTP1	History	43.7	12-23 m	1327	36
DTP3	C or H <12 months	62.5	12-23 m	2074	36
DTP3	Card	32.2	12-23 m	748	36
DTP3	Card or History	65.2	12-23 m	2074	36
DTP3	History	33	12-23 m	1327	36
MCV1	C or H <12 months	49.7	12-23 m	2074	36
MCV1	Card	28.7	12-23 m	748	36
MCV1	Card or History	61.4	12-23 m	2074	36
MCV1	History	32.7	12-23 m	1327	36
Pol1	C or H <12 months	90.2	12-23 m	2074	36
Pol1	Card	35.3	12-23 m	748	36
Pol1	Card or History	92.3	12-23 m	2074	36
Pol1	History	57	12-23 m	1327	36
Pol3	C or H <12 months	82.1	12-23 m	2074	36
Pol3	Card	32.8	12-23 m	748	36
Pol3	Card or History	85.3	12-23 m	2074	36
Pol3	History	52.5	12-23 m	1327	36

2012 Pakistan Social and Living Standards Measurement Survey (PSLM), 2013-14

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	62	12-23 m	-	-
BCG	Card or History	82	12-23 m	-	-
DTP1	Card	62	12-23 m	-	-
DTP1	Card or History	81	12-23 m	-	-
DTP3	Card	61	12-23 m	-	-
DTP3	Card or History	78	12-23 m	-	-
HepB1	Card	62	12-23 m	-	-
HepB1	Card or History	81	12-23 m	-	-

HepB3	Card	61	12-23 m	-	-
HepB3	Card or History	78	12-23 m	-	-
Hib1	Card	62	12-23 m	-	-
Hib1	Card or History	81	12-23 m	-	-
Hib3	Card or History	78	12-23 m	-	-
HIb3	Card	61	12-23 m	-	-
MCV1	Card	59	12-23 m	-	-
MCV1	Card or History	77	12-23 m	-	-
Pol1	Card	62	12-23 m	-	-
Pol1	Card or History	98	12-23 m	-	-
Pol3	Card	62	12-23 m	-	-
Pol3	Card or History	96	12-23 m	-	-

2010 National Nutrition Survey Pakistan 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	31.5	6-49 m	-	-
BCG	History	86.6	6-49 m	-	-
DTP3	Card	90	6-49 m	-	-
DTP3	Card Or History	76	6-49 m	-	-
HepB3	C or H <12 Months	76	6-49 m	-	-
HepB3	Card	90	6-49 m	-	-
Hib3	Card	90	6-49 m	-	-
Hib3	History	76	6-49 m	-	-
MCV1	Card	23.1	6-49 m	-	-
MCV1	History	64.6	6-49 m	-	-
Pol3	Card	27.2	6-49 m	-	-
Pol3	Card Or History	95	6-49 m	-	-

2010 Pakistan Social and Living Standards Measurement Survey 2010-2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	57	12-23 m	76546	-
BCG	Card or History	88	12-23 m	76546	-
DTP1	Card	57	12-23 m	76546	-
DTP1	Card or History	88	12-23 m	76546	-
DTP3	Card	56	12-23 m	76546	-
DTP3	Card or History	85	12-23 m	76546	-
MCV1	Card	53	12-23 m	76546	-
MCV1	Card or History	82	12-23 m	76546	-
Pol1	Card	54	12-23 m	76546	-
Pol1	Card or History	81	12-23 m	76546	-
Pol3	Card	53	12-23 m	76546	-
Pol3	Card or History	79	12-23 m	76546	-

2007 Pakistan Social and Living Standards Measurement Survey 2008-2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	52	12-23 m	75188	-
BCG	Card or History	87	12-23 m	75188	-
DTP1	Card	52	12-23 m	75188	-
DTP1	Card or History	87	12-23 m	75188	-
DTP3	Card	51	12-23 m	75188	-
DTP3	Card or History	84	12-23 m	75188	-
MCV1	Card	51	12-23 m	75188	-
MCV1	Card or History	79	12-23 m	75188	-
Pol1	Card	51	12-23 m	75188	-
Pol1	Card or History	83	12-23 m	75188	-
Pol3	Card	50	12-23 m	75188	-
Pol3	Card or History	81	12-23 m	75188	-

2006 Pakistan Social and Living Standards Measurement Survey 2007-2008

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	82	12-23 m	-	-
DTP1	Card	83	12-23 m	-	-
DTP3	Card	79	12-23 m	-	-
MCV1	Card	76	12-23 m	-	-
Pol1	Card	95	12-23 m	-	-
Pol3	Card	93	12-23 m	-	-

2005 Pakistan Demographic and Health Survey 2006-07

Pakistan - survey details

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	77.6	12-23 m	1522	24
BCG	Card	23.6	12-23 m	1522	24
BCG	Card or History	80.3	12-23 m	1522	24
BCG	History	56.8	12-23 m	1522	24
DTP1	C or H <12 months	71.7	12-23 m	1522	24
DTP1	Card	23.3	12-23 m	1522	24
DTP1	Card or History	74.8	12-23 m	1522	24
DTP1	History	51.5	12-23 m	1522	24
DTP3	C or H <12 months	56.1	12-23 m	1522	24
DTP3	Card	20.9	12-23 m	1522	24
DTP3	Card or History	58.5	12-23 m	1522	24
DTP3	History	37.5	12-23 m	1522	24
HepB1	C or H <12 months	68.2	12-23 m	1522	24
HepB1	Card	23.1	12-23 m	1522	24
HepB1	Card or History	71	12-23 m	1522	24
HepB1	History	48	12-23 m	1522	24
HepB3	C or H <12 months	54.5	12-23 m	1522	24
HepB3	Card	20.8	12-23 m	1522	24
HepB3	Card or History	57.3	12-23 m	1522	24
HepB3	History	36.5	12-23 m	1522	24
MCV1	C or H <12 months	50.2	12-23 m	1522	24
MCV1	Card	19.2	12-23 m	1522	24
MCV1	Card or History	59.9	12-23 m	1522	24
MCV1	History	40.7	12-23 m	1522	24
Pol1	C or H <12 months	89.1	12-23 m	1522	24
Pol1	Card	23.4	12-23 m	1522	24
Pol1	Card or History	93	12-23 m	1522	24
Pol1	History	69.7	12-23 m	1522	24
Pol3	C or H <12 months	78.6	12-23 m	1522	24
Pol3	Card	21	12-23 m	1522	24
Pol3	Card or History	83.1	12-23 m	1522	24
Pol3	History	62.1	12-23 m	1522	24

2004 EPI Coverage Evaluation Survey, Draft Report, Pakistan 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	10.2	12-23 m	72280	11
BCG	Card or History	77.7	12-23 m	72280	11
BCG	History	67.5	12-23 m	72280	11
DTP1	Card	10.2	12-23 m	72280	11
DTP1	Card or History	74.6	12-23 m	72280	11
DTP1	History	64.4	12-23 m	72280	11
DTP3	Card	9.2	12-23 m	72280	11
DTP3	Card or History	64.5	12-23 m	72280	11
DTP3	History	55.3	12-23 m	72280	11
HepB1	Card	9.8	12-23 m	72280	11
HepB1	Card or History	68.8	12-23 m	72280	11
HepB1	History	59	12-23 m	72280	11
HepB3	Card	8.9	12-23 m	72280	11
HepB3	Card or History	60.7	12-23 m	72280	11
HepB3	History	51.7	12-23 m	72280	11
MCV1	Card	8.6	12-23 m	72280	11
MCV1	Card or History	62.6	12-23 m	72280	11
MCV1	History	54	12-23 m	72280	11
Pol1	Card	10	12-23 m	72280	11
Pol1	Card or History	73.7	12-23 m	72280	11
Pol1	History	63.7	12-23 m	72280	11
Pol3	Card	9.1	12-23 m	72280	11
Pol3	Card or History	64.4	12-23 m	72280	11
Pol3	History	55.3	12-23 m	72280	11

2003 Pakistan Social and Living Standards Measurement Survey 2004-2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	82	12-23 m	-	-
BCG	Card	51	12-23 m	-	-
DTP1	C or H <12 months	82	12-23 m	-	-
DTP1	Card	51	12-23 m	-	-
DTP3	C or H <12 months	80	12-23 m	-	-
DTP3	Card	50	12-23 m	-	-
MCV1	C or H <12 months	78	12-23 m	-	-
MCV1	Card	49	12-23 m	-	-
Pol1	C or H <12 months	82	12-23 m	-	-
Pol1	Card	51	12-23 m	-	-
Pol3	C or H <12 months	81	12-23 m	-	-
Pol3	Card	50	12-23 m	-	-

Pakistan - survey details

2000 Pakistan Integrated Household Survey, 2002

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	34	12-23 m	-	-
BCG	Card or History	67	12-23 m	-	-
DTP1	Card	36	12-23 m	-	-
DTP1	Card or History	71	12-23 m	-	-
DTP3	Card	33	12-23 m	-	-
DTP3	Card or History	63	12-23 m	-	-
MCV1	Card	30	12-23 m	-	-
MCV1	Card or History	57	12-23 m	-	-
Pol1	Card	34	12-23 m	-	-
Pol1	Card or History	68	12-23 m	-	-
Pol3	Card	36	12-23 m	-	-
Pol3	Card or History	89	12-23 m	-	-

1998 Assessment of Immunization Coverage, Pakistan February - April 1999

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or Scar	72.5	12-23 m	3664	37
MCV1	Card or History	54	12-23 m	3664	37
Pol3	Card or History	58.4	12-23 m	3664	37

1997 Pakistan Integrated Household Survey, 2002

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	39	12-23 m	-	-
BCG	Card or History	65	12-23 m	-	-
DTP1	Card	41	12-23 m	-	-
DTP1	Card or History	67	12-23 m	-	-
DTP3	Card	37	12-23 m	-	-
DTP3	Card or History	58	12-23 m	-	-
MCV1	Card	36	12-23 m	-	-
MCV1	Card or History	55	12-23 m	-	-
Pol1	Card	42	12-23 m	-	-
Pol1	Card or History	77	12-23 m	-	-
Pol3	Card	39	12-23 m	-	-
Pol3	Card or History	70	12-23 m	-	-

Pakistan - survey details

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