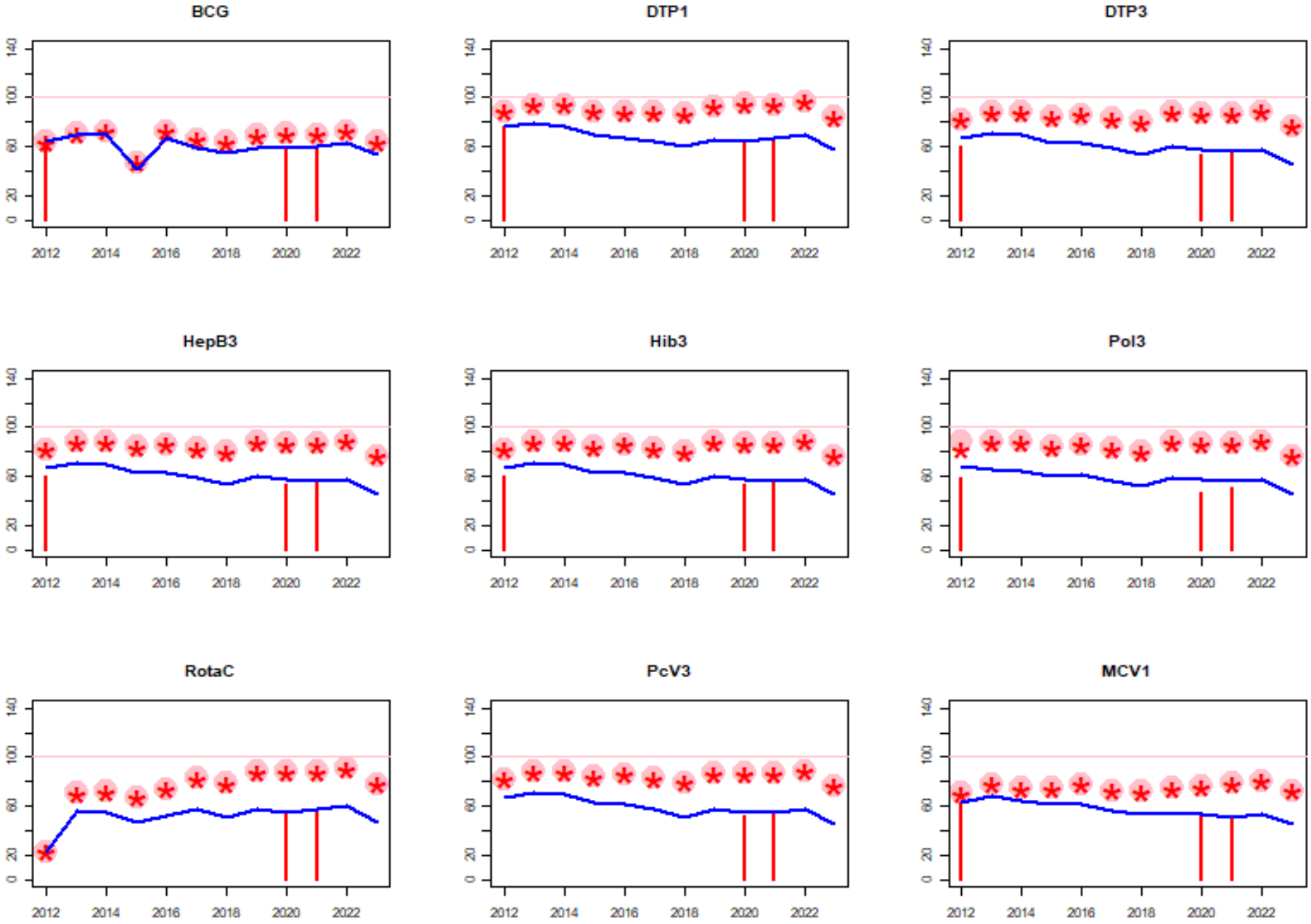

BCG
DTP1
DTP3
HepB3
Hib3
Pol3
RotaC
PcV3
MCV1
0
20
60
100
140
2012
2014
2016
2018
2020
2022

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

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

*Burton et al. 2009. Bull World Health Organ.
*Burton et al. 2012. PLoS One.
*Danovaro-Holliday et al. 2021. Gates Open Res.

DATA SOURCES.

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

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

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

ABBREVIATIONS

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

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

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

IPV1: percentage of surviving infants who received at least one dose of inactivated polio vaccine. In countries utilizing an immunization schedule recommending either (i) a primary series of three doses of oral polio vaccine (OPV) plus at least one dose of IPV where OPV is included in routine immunization and/or campaign or (ii) a sequential schedule of IPV followed by OPV, WHO and UNICEF estimates for IPV1 reflect coverage with at least one routine dose of IPV among infants <1 year of age. For countries utilizing IPV containing vaccine only, i.e., no recommended dose of OPV, WHO and UNICEF estimate for IPV1 corresponds to coverage for the 1st dose of IPV. Production of IPV coverage estimates, which begins in 2015, results in no change of the estimated coverage levels for the 3rd dose of polio (Pol3). For countries recommending routine immunization with a primary series of three doses of IPV alone, WHO and UNICEF estimated Pol3 coverage is equivalent to estimated coverage with three doses of IPV. For countries with a sequential schedule, estimated Pol3 coverage is based on that for the 3rd dose of polio vaccine regardless of vaccine type.

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

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

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

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

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

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

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

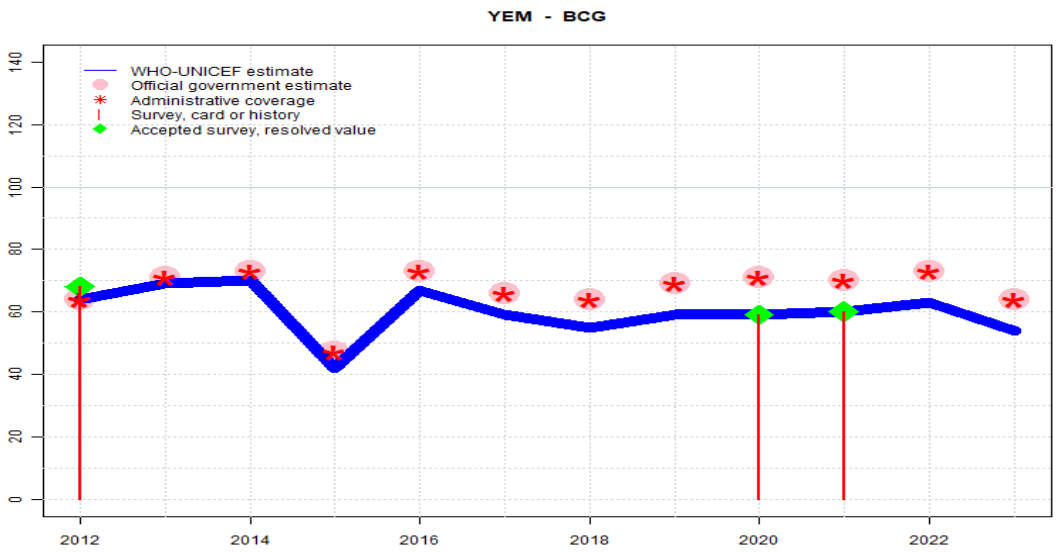
RotaC: percentage of surviving infants who received the final recommended dose of rotavirus vaccine, which can be either the 2nd or the 3rd dose depending on the vaccine.

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

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

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

Yemen - BCG



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	64	69	70	42	67	59	55	59	59	60	63	54
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	64	71	73	47	73	66	64	69	71	70	73	64
Administrative	64	71	73	47	73	66	64	69	71	70	73	64
Survey	68	NA	NA	NA	NA	NA	NA	NA	59	60	NA	NA

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

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

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

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

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

Description:

2023: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: R-

2022: Reported data calibrated to 2021 levels. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained with an increase in the reported number of children vaccinated in the last four years. Large and disruptive measles and vaccine-derived poliovirus outbreaks are ongoing. Estimate of 63 percent changed from previous revision value of 73 percent. Estimate challenged by: R-

2021: Estimate of 60 percent assigned by working group. Estimate based on survey results. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained. Government indicates that official estimates are derived from the administrative coverage and that vaccination sites continue to send monthly reports to the district. Estimate of 60 percent changed from previous revision value of 70 percent. Estimate challenged by: R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 59 percent based on 1 survey(s). Estimate of 59 percent changed from previous revision value of 71 percent. Estimate challenged by: R-

2019: Reported data calibrated to 2012 and 2020 levels. Disruptions to health services have been reported with about half of the health facilities non-functional but vaccination outreach rounds are being conducted. Estimate of 59 percent changed from previous revision value of 69 percent. Estimate challenged by: R-

2018: Reported data calibrated to 2012 and 2020 levels. Estimate of 55 percent changed from previous revision value of 64 percent. GoC=Assigned by working group. Vaccine-to-vaccine consistency.

2017: Reported data calibrated to 2012 and 2020 levels. Reports suggest larger declines in coverage [El Bcheraoui C, Jumaan AO, Collison ML, Daoud F, Mokdad AH. Health in Yemen: losing ground in war time. Global Health. 2018 Apr 25;14(1):42. doi: 10.1186/s12992-018-03]. Estimate of 59 percent changed from previous revision value of 66 percent. GoC=Assigned by working group. Vaccine-to-vaccine consistency.

2016: Reported data calibrated to 2012 and 2020 levels. Estimate reflects recovery from stockout in 2015. Estimate of 67 percent changed from previous revision value of 73 percent. GoC=Assigned by working group. Vaccine-to-vaccine consistency.

2015: Reported data calibrated to 2012 and 2020 levels. Programme reports six month vaccine stockout at national level. Estimate of 42 percent changed from previous revision value of 47 percent. GoC=Assigned by working group. Vaccine-to-vaccine consistency.

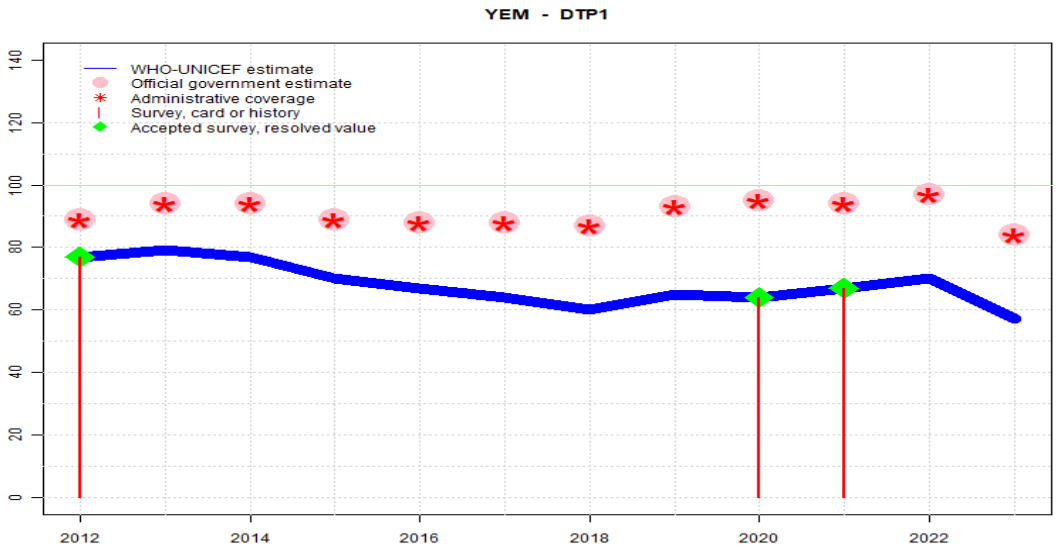
2014: Reported data calibrated to 2012 and 2020 levels. Estimate of 70 percent changed from previous revision value of 73 percent. GoC=Assigned by working group. Vaccine-to-vaccine consistency.

2013: Reported data calibrated to 2012 and 2020 levels. Estimate of 69 percent changed from previous revision value of 71 percent. GoC=Assigned by working group. Vaccine-to-vaccine consistency.

2012: Estimate informed by reported data supported by survey. Survey evidence of 68 percent

based on 1 survey(s). GoC=Assigned by working group. Vaccine-to-vaccine consistency.

Yemen - DTP1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	77	79	77	70	67	64	60	65	64	67	70	57
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	89	94	94	89	88	88	87	93	95	94	97	84
Administrative	89	94	94	89	88	88	87	93	95	94	97	84
Survey	77	NA	NA	NA	NA	NA	NA	NA	64	67	NA	NA

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

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

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

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

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

Description:

2023: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-

2022: Reported data calibrated to 2021 levels. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained with an increase in the reported number of children vaccinated in the last four years. Large and disruptive measles and vaccine-derived poliovirus outbreaks are ongoing. Estimate of 70 percent changed from previous revision value of 85 percent. Estimate challenged by: D-R-

2021: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 67 percent based on 1 survey(s). Despite the ongoing humanitarian crisis, reported coverage levels have been sustained. Government indicates that official estimates are derived from the administrative coverage and that vaccination sites continue to send monthly reports to the district. Estimate of 67 percent changed from previous revision value of 82 percent. Estimate challenged by: D-R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 64 percent based on 1 survey(s). Estimate of 64 percent changed from previous revision value of 83 percent. Estimate challenged by: D-R-

2019: Reported data calibrated to 2012 and 2020 levels. Disruptions to health services have been reported with about half of the health facilities non-functional but vaccination outreach rounds are being conducted. Estimate of 65 percent changed from previous revision value of 81 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2012 and 2020 levels. Estimate of 60 percent changed from previous revision value of 75 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2012 and 2020 levels. Reports suggest larger declines in coverage [El Bcheraoui C, Jumaan AO, Collison ML, Daoud F, Mokdad AH. Health in Yemen: losing ground in war time. Global Health. 2018 Apr 25;14(1):42. doi: 10.1186/s12992-018-03]. Estimate of 64 percent changed from previous revision value of 76 percent. Estimate challenged by: D-R-

2016: Reported data calibrated to 2012 and 2020 levels. Estimate of 67 percent changed from previous revision value of 76 percent. Estimate challenged by: R-

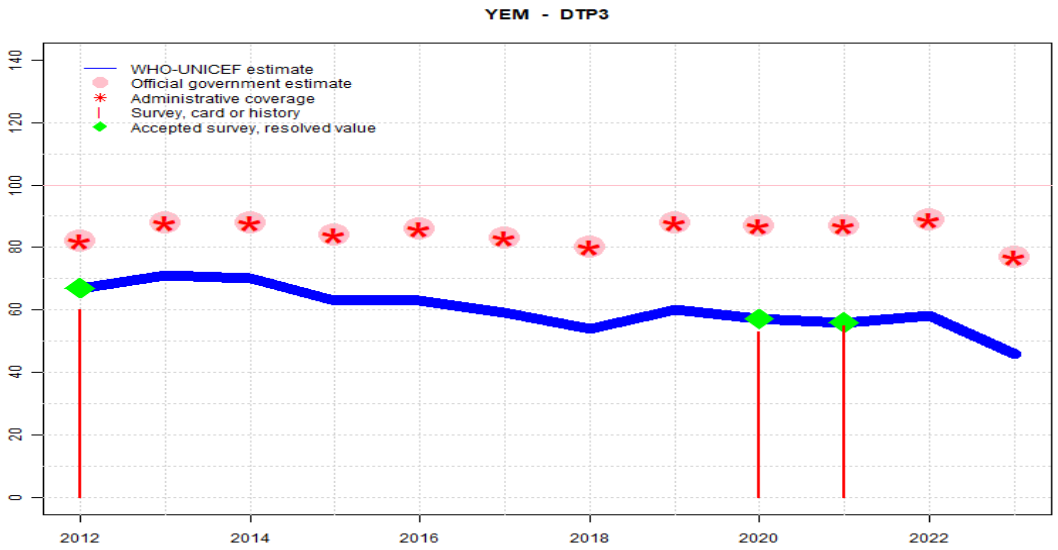
2015: Reported data calibrated to 2012 and 2020 levels. Government reports that official estimates are derived from the administrative coverage. Civil unrest began in February-March 2015 but exceptionally does not appear to have impacted delivery of immunization services in spite of disruptions to other health areas. Programme reports that vaccination sites continue to send monthly reports to the district. Estimate of 70 percent changed from previous revision value of 77 percent. Estimate challenged by: R-

2014: Reported data calibrated to 2012 and 2020 levels. Estimate of 77 percent changed from previous revision value of 82 percent. Estimate challenged by: R-

2013: Reported data calibrated to 2012 and 2020 levels. Estimate of 79 percent changed from previous revision value of 82 percent. Estimate challenged by: R-

2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 77 percent based on 1 survey(s). Estimate challenged by: R-

Yemen - DTP3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	67	71	70	63	63	59	54	60	57	56	58	46
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	82	88	88	84	86	83	80	88	87	87	89	77
Administrative	82	88	88	84	86	83	80	88	87	87	89	77
Survey	60	NA	NA	NA	NA	NA	NA	NA	53	55	NA	NA

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

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

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

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

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

Description:

2023: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-

2022: Reported data calibrated to 2021 levels. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained with an increase in the reported number of children vaccinated in the last four years. Large and disruptive measles and vaccine-derived poliovirus outbreaks are ongoing. Estimate of 58 percent changed from previous revision value of 74 percent. Estimate challenged by: D-R-

2021: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 56 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 card or history results of 55 percent modifed for recall bias to 56 percent based on 1st dose card or history coverage of 67 percent, 1st dose card only coverage of 56 percent and 3rd dose card only coverage of 47 percent. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained. Government indicates that official estimates are derived from the administrative coverage and that vaccination sites continue to send monthly reports to the district. Estimate of 56 percent changed from previous revision value of 72 percent. Estimate challenged by: D-R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 57 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 card or history results of 53 percent modifed for recall bias to 57 percent based on 1st dose card or history coverage of 64 percent, 1st dose card only coverage of 47 percent and 3rd dose card only coverage of 42 percent. Estimate of 57 percent changed from previous revision value of 72 percent. Estimate challenged by: D-R-

2019: Reported data calibrated to 2012 and 2020 levels. Disruptions to health services have been reported with about half of the health facilities non-functional but vaccination outreach rounds are being conducted. Estimate of 60 percent changed from previous revision value of 73 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2012 and 2020 levels. Estimate of 54 percent changed from previous revision value of 65 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2012 and 2020 levels. Reports suggest larger declines in coverage [El Bcheraoui C, Jumaan AO, Collison ML, Daoud F, Mokdad AH. Health in Yemen: losing ground in war time. Global Health. 2018 Apr 25;14(1):42. doi: 10.1186/s12992-018-03]. Estimate of 59 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2016: Reported data calibrated to 2012 and 2020 levels. Estimate of 63 percent changed from previous revision value of 71 percent. Estimate challenged by: R-

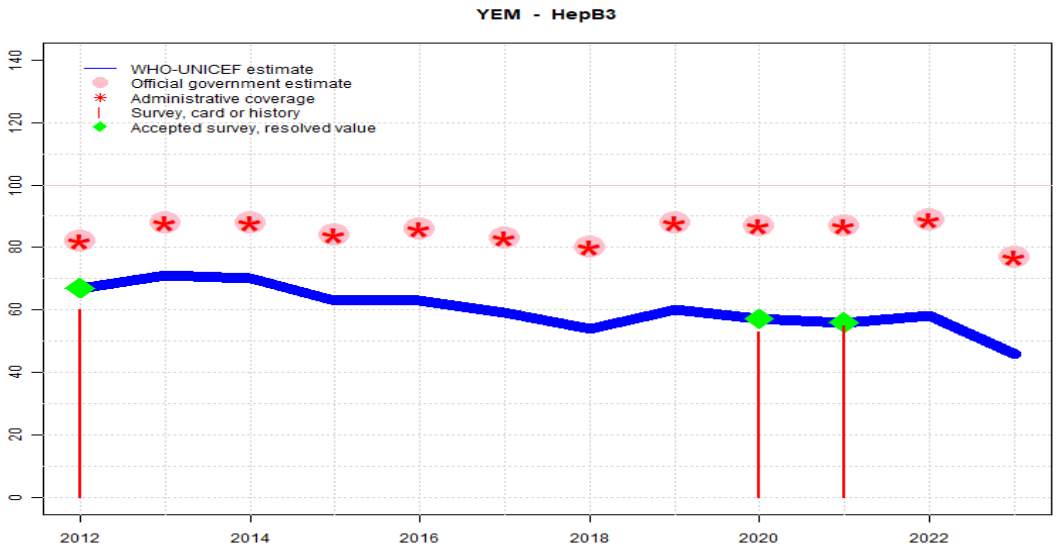
2015: Reported data calibrated to 2012 and 2020 levels. Government reports that official estimates are derived from the administrative coverage. Civil unrest began in February-March 2015 but exceptionally does not appear to have impacted delivery of immunization services in spite of disruptions to other health areas. Programme reports that vaccination sites continue to send monthly reports to the district. Estimate of 63 percent changed from previous revision value of 69 percent. Estimate challenged by: R-

2014: Reported data calibrated to 2012 and 2020 levels. Estimate of 70 percent changed from previous revision value of 73 percent. Estimate challenged by: R-

2013: Reported data calibrated to 2012 and 2020 levels. Estimate of 71 percent changed from previous revision value of 73 percent. Estimate challenged by: R-

2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 67 percent based on 1 survey(s). Yemen National Health and Demographic Survey, 2013 card or history results of 60 percent modifed for recall bias to 67 percent based on 1st dose card or history coverage of 77 percent, 1st dose card only coverage of 46 percent and 3rd dose card only coverage of 40 percent. Estimate challenged by: R-

Yemen - HepB3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	67	71	70	63	63	59	54	60	57	56	58	46
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	82	88	88	84	86	83	80	88	87	87	89	77
Administrative	82	88	88	84	86	83	80	88	87	87	89	77
Survey	60	NA	NA	NA	NA	NA	NA	NA	53	55	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.

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Description:

2023: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-

2022: Reported data calibrated to 2021 levels. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained with an increase in the reported number of children vaccinated in the last four years. Large and disruptive measles and vaccine-derived poliovirus outbreaks are ongoing. Estimate of 58 percent changed from previous revision value of 74 percent. Estimate challenged by: D-R-

2021: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 56 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 card or history results of 55 percent modifed for recall bias to 56 percent based on 1st dose card or history coverage of 67 percent, 1st dose card only coverage of 56 percent and 3rd dose card only coverage of 47 percent. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained. Government indicates that official estimates are derived from the administrative coverage and that vaccination sites continue to send monthly reports to the district. Estimate of 56 percent changed from previous revision value of 72 percent. Estimate challenged by: D-R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 57 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 card or history results of 53 percent modifed for recall bias to 57 percent based on 1st dose card or history coverage of 64 percent, 1st dose card only coverage of 47 percent and 3rd dose card only coverage of 42 percent. Estimate of 57 percent changed from previous revision value of 72 percent. Estimate challenged by: D-R-

2019: Reported data calibrated to 2012 and 2020 levels. Disruptions to health services have been reported with about half of the health facilities non-functional but vaccination outreach rounds are being conducted. Estimate of 60 percent changed from previous revision value of 73 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2012 and 2020 levels. Estimate of 54 percent changed from previous revision value of 65 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2012 and 2020 levels. Reports suggest larger declines in coverage [El Bcheraoui C, Jumaan AO, Collison ML, Daoud F, Mokdad AH. Health in Yemen: losing ground in war time. Global Health. 2018 Apr 25;14(1):42. doi: 10.1186/s12992-018-03]. Estimate of 59 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2016: Reported data calibrated to 2012 and 2020 levels. Estimate of 63 percent changed from previous revision value of 71 percent. Estimate challenged by: R-

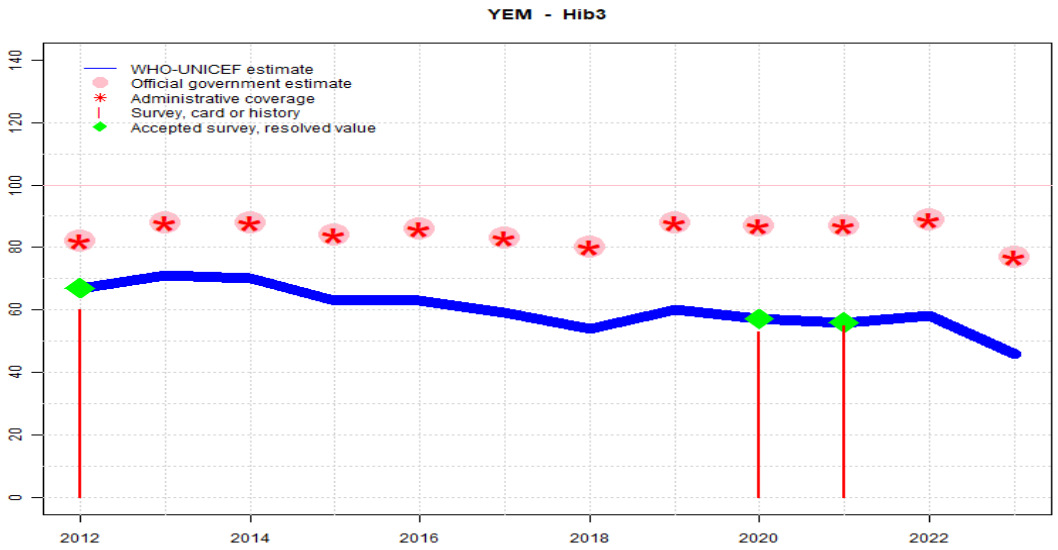
2015: Reported data calibrated to 2012 and 2020 levels. Estimate of 63 percent changed from previous revision value of 69 percent. Estimate challenged by: R-

2014: Reported data calibrated to 2012 and 2020 levels. Estimate of 70 percent changed from previous revision value of 73 percent. Estimate challenged by: R-

2013: Reported data calibrated to 2012 and 2020 levels. Estimate of 71 percent changed from previous revision value of 73 percent. Estimate challenged by: R-

2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 67 percent based on 1 survey(s). Yemen National Health and Demographic Survey, 2013 card or history results of 60 percent modifed for recall bias to 67 percent based on 1st dose card or history coverage of 77 percent, 1st dose card only coverage of 46 percent and 3rd dose card only coverage of 40 percent. Estimate challenged by: R-

Yemen - Hib3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	67	71	70	63	63	59	54	60	57	56	58	46
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	82	88	88	84	86	83	80	88	87	87	89	77
Administrative	82	88	88	84	86	83	80	88	87	87	89	77
Survey	60	NA	NA	NA	NA	NA	NA	NA	53	55	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.

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Description:

2023: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-

2022: Reported data calibrated to 2021 levels. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained with an increase in the reported number of children vaccinated in the last four years. Large and disruptive measles and vaccine-derived poliovirus outbreaks are ongoing. Estimate of 58 percent changed from previous revision value of 74 percent. Estimate challenged by: D-R-

2021: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 56 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 card or history results of 55 percent modifed for recall bias to 56 percent based on 1st dose card or history coverage of 67 percent, 1st dose card only coverage of 56 percent and 3rd dose card only coverage of 47 percent. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained. Government indicates that official estimates are derived from the administrative coverage and that vaccination sites continue to send monthly reports to the district. Estimate of 56 percent changed from previous revision value of 72 percent. Estimate challenged by: D-R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 57 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 card or history results of 53 percent modifed for recall bias to 57 percent based on 1st dose card or history coverage of 64 percent, 1st dose card only coverage of 47 percent and 3rd dose card only coverage of 42 percent. Estimate of 57 percent changed from previous revision value of 72 percent. Estimate challenged by: D-R-

2019: Reported data calibrated to 2012 and 2020 levels. Disruptions to health services have been reported with about half of the health facilities non-functional but vaccination outreach rounds are being conducted. Estimate of 60 percent changed from previous revision value of 73 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2012 and 2020 levels. Estimate of 54 percent changed from previous revision value of 65 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2012 and 2020 levels. Reports suggest larger declines in coverage [El Bcheraoui C, Jumaan AO, Collison ML, Daoud F, Mokdad AH. Health in Yemen: losing ground in war time. Global Health. 2018 Apr 25;14(1):42. doi: 10.1186/s12992-018-03]. Estimate of 59 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2016: Reported data calibrated to 2012 and 2020 levels. Estimate of 63 percent changed from previous revision value of 71 percent. Estimate challenged by: R-

2015: Reported data calibrated to 2012 and 2020 levels. Estimate of 63 percent changed from previous revision value of 69 percent. Estimate challenged by: R-

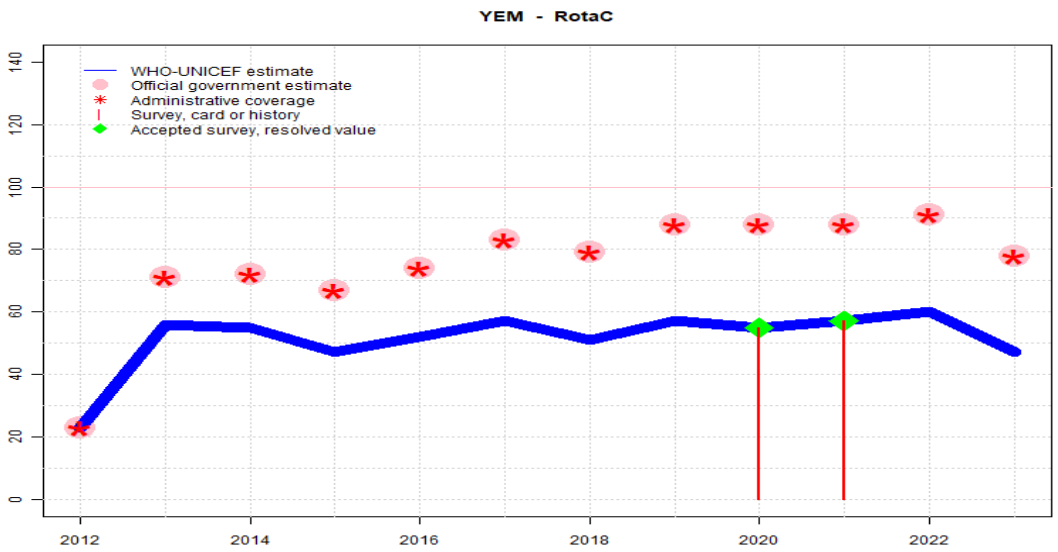
2014: Reported data calibrated to 2012 and 2020 levels. Estimate of 70 percent changed from previous revision value of 73 percent. Estimate challenged by: R-

2013: Reported data calibrated to 2012 and 2020 levels. Estimate of 71 percent changed from previous revision value of 73 percent. Estimate challenged by: R-

Yemen - Hib3

2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 67 percent based on 1 survey(s). Yemen National Health and Demographic Survey, 2013 card or history results of 60 percent modifed for recall bias to 67 percent based on 1st dose card or history coverage of 77 percent, 1st dose card only coverage of 46 percent and 3rd dose card only coverage of 40 percent. Estimate challenged by: R-

Yemen - RotaC



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	23	56	55	47	52	57	51	57	55	57	60	47
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	23	71	72	67	74	83	79	88	88	88	91	78
Administrative	23	71	72	67	74	83	79	88	88	88	91	78
Survey	NA	NA	NA	NA	NA	NA	NA	NA	55	57	NA	NA

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

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

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

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

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

Description:

2023: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-

2022: Reported data calibrated to 2021 levels. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained with an increase in the reported number of children vaccinated in the last four years. Large and disruptive measles and vaccine-derived poliovirus outbreaks are ongoing. Estimate of 60 percent changed from previous revision value of 76 percent. Estimate challenged by: D-R-

2021: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 57 percent based on 1 survey(s). Despite the ongoing humanitarian crisis, reported coverage levels have been sustained. Government indicates that official estimates are derived from the administrative coverage and that vaccination sites continue to send monthly reports to the district. Estimate of 57 percent changed from previous revision value of 73 percent. Estimate challenged by: D-R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 55 percent based on 1 survey(s). Estimate of 55 percent changed from previous revision value of 73 percent. Estimate challenged by: D-R-

2019: Reported data calibrated to 2013 and 2020 levels. Disruptions to health services have been reported with about half of the health facilities non-functional but vaccination outreach rounds are being conducted. Estimate of 57 percent changed from previous revision value of 73 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2013 and 2020 levels. Estimate of 51 percent changed from previous revision value of 64 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2013 and 2020 levels. Reports suggest larger declines in coverage [El Bcheraoui C, Jumaan AO, Collison ML, Daoud F, Mokdad AH. Health in Yemen: losing ground in war time. Global Health. 2018 Apr 25;14(1):42. doi: 10.1186/s12992-018-03]. Estimate of 57 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2016: Reported data calibrated to 2013 and 2020 levels. Estimate of 52 percent changed from previous revision value of 59 percent. Estimate challenged by: D-R-

2015: Reported data calibrated to 2013 and 2020 levels. Government reports that official estimates are derived from the administrative coverage. Civil unrest began in February-March 2015 but exceptionally does not appear to have impacted delivery of immunization services in spite of disruptions to other health areas. Programme reports that vaccination sites continue to send monthly reports to the district. Estimate of 47 percent changed from previous revision value of 52 percent. Estimate challenged by: R-

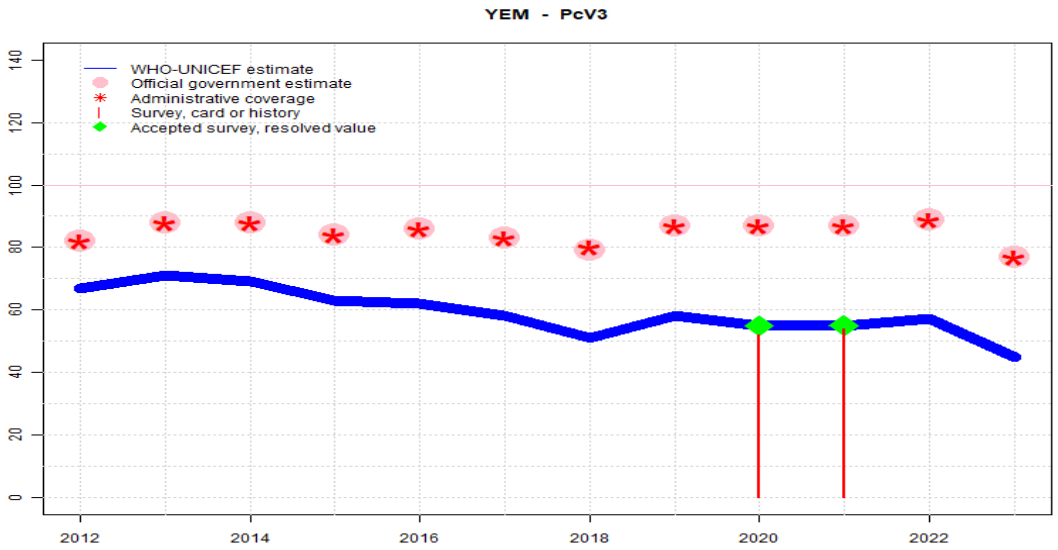
2014: Reported data calibrated to 2013 and 2020 levels. Estimate of 55 percent changed from previous revision value of 57 percent. Estimate challenged by: R-

2013: Estimate of 56 percent assigned by working group. Estimate is based on adjustment to reported coverage level based on difference between estimated and reported coverage levels for DTP3. Estimate challenged by: R-

2012: Estimate is based on reported coverage during introduction. Rotavirus vaccine was in-

troduced in 2012. GoC=Assigned by working group. Low confidence in coverage during introduction year.

Yemen - PcV3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	67	71	69	63	62	58	51	58	55	55	57	45
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	82	88	88	84	86	83	79	87	87	87	89	77
Administrative	82	88	88	84	86	83	80	87	87	87	89	77
Survey	NA	NA	NA	NA	NA	NA	NA	NA	52	54	NA	NA

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

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

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

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

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

Description:

2023: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-

2022: Reported data calibrated to 2021 levels. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained with an increase in the reported number of children vaccinated in the last four years. Large and disruptive measles and vaccine-derived poliovirus outbreaks are ongoing. Estimate of 57 percent changed from previous revision value of 74 percent. Estimate challenged by: D-R-

2021: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 55 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 card or history results of 54 percent modifed for recall bias to 55 percent based on 1st dose card or history coverage of 66 percent, 1st dose card only coverage of 56 percent and 3rd dose card only coverage of 47 percent. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained. Government indicates that official estimates are derived from the administrative coverage and that vaccination sites continue to send monthly reports to the district. Estimate of 55 percent changed from previous revision value of 72 percent. Estimate challenged by: D-R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 55 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 card or history results of 52 percent modifed for recall bias to 55 percent based on 1st dose card or history coverage of 62 percent, 1st dose card only coverage of 47 percent and 3rd dose card only coverage of 42 percent. Estimate of 55 percent changed from previous revision value of 72 percent. Estimate challenged by: D-R-

2019: Reported data calibrated to 2012 and 2020 levels. Disruptions to health services have been reported with about half of the health facilities non-functional but vaccination outreach rounds are being conducted. Estimate of 58 percent changed from previous revision value of 72 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2012 and 2020 levels. Estimate of 51 percent changed from previous revision value of 64 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2012 and 2020 levels. Reports suggest larger declines in coverage [El Bcheraoui C, Jumaan AO, Collison ML, Daoud F, Mokdad AH. Health in Yemen: losing ground in war time. Global Health. 2018 Apr 25;14(1):42. doi: 10.1186/s12992-018-03]. Estimate of 58 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2016: Reported data calibrated to 2012 and 2020 levels. Estimate of 62 percent changed from previous revision value of 71 percent. Estimate challenged by: D-R-

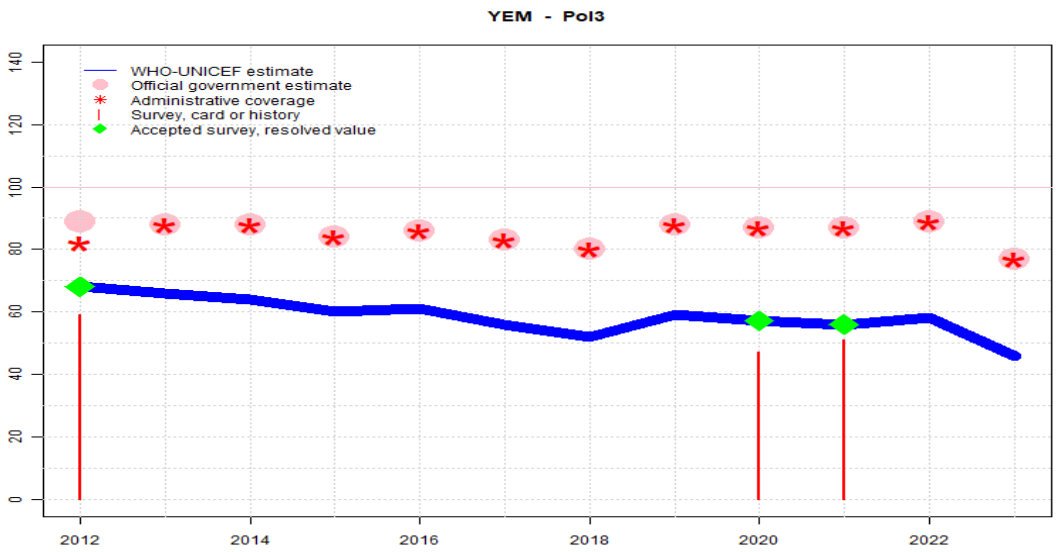
2015: Reported data calibrated to 2012 and 2020 levels. Government reports that official estimates are derived from the administrative coverage. Civil unrest began in February-March 2015 but exceptionally does not appear to have impacted delivery of immunization services in spite of disruptions to other health areas. Programme reports that vaccination sites continue to send monthly reports to the district. Estimate of 63 percent changed from previous revision value of 69 percent. Estimate challenged by: R-

2014: Reported data calibrated to 2012 and 2020 levels. Estimate of 69 percent changed from previous revision value of 73 percent. Estimate challenged by: R-

2013: Reported data calibrated to 2012 and 2020 levels. Estimate of 71 percent changed from previous revision value of 73 percent. Estimate challenged by: R-

2012: Estimate of 67 percent assigned by working group. Estimate is based on adjustment to reported coverage level based on difference between estimated and reported coverage levels for DTP3. Estimate challenged by: R-

Yemen - Pol3



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	68	66	64	60	61	56	52	59	57	56	58	46
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	89	88	88	84	86	83	80	88	87	87	89	77
Administrative	82	88	88	84	86	83	80	88	87	87	89	77
Survey	59	NA	NA	NA	NA	NA	NA	NA	47	51	NA	NA

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

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

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

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

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

Description:

2023: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-

2022: Reported data calibrated to 2021 levels. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained with an increase in the reported number of children vaccinated in the last four years. Large and disruptive measles and vaccine-derived poliovirus outbreaks are ongoing. Estimate of 58 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2021: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 56 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 card or history results of 51 percent modifed for recall bias to 56 percent based on 1st dose card or history coverage of 67 percent, 1st dose card only coverage of 56 percent and 3rd dose card only coverage of 47 percent. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained. Government indicates that official estimates are derived from the administrative coverage and that vaccination sites continue to send monthly reports to the district. Estimate of 56 percent changed from previous revision value of 66 percent. Estimate challenged by: D-R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 57 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 card or history results of 47 percent modifed for recall bias to 57 percent based on 1st dose card or history coverage of 64 percent, 1st dose card only coverage of 47 percent and 3rd dose card only coverage of 42 percent. Estimate of 57 percent changed from previous revision value of 66 percent. Estimate challenged by: D-R-

2019: Reported data calibrated to 2012 and 2020 levels. Disruptions to health services have been reported with about half of the health facilities non-functional but vaccination outreach rounds are being conducted. Estimate of 59 percent changed from previous revision value of 67 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2012 and 2020 levels. Estimate of 52 percent changed from previous revision value of 59 percent. Estimate challenged by: D-R-

2017: Reported data calibrated to 2012 and 2020 levels. Reports suggest larger declines in coverage [El Bcheraoui C, Jumaan AO, Collison ML, Daoud F, Mokdad AH. Health in Yemen: losing ground in war time. Global Health. 2018 Apr 25;14(1):42. doi: 10.1186/s12992-018-03]. Estimate of 56 percent changed from previous revision value of 62 percent. Estimate challenged by: D-R-

2016: Reported data calibrated to 2012 and 2020 levels. Estimate of 61 percent changed from previous revision value of 65 percent. Estimate challenged by: D-R-

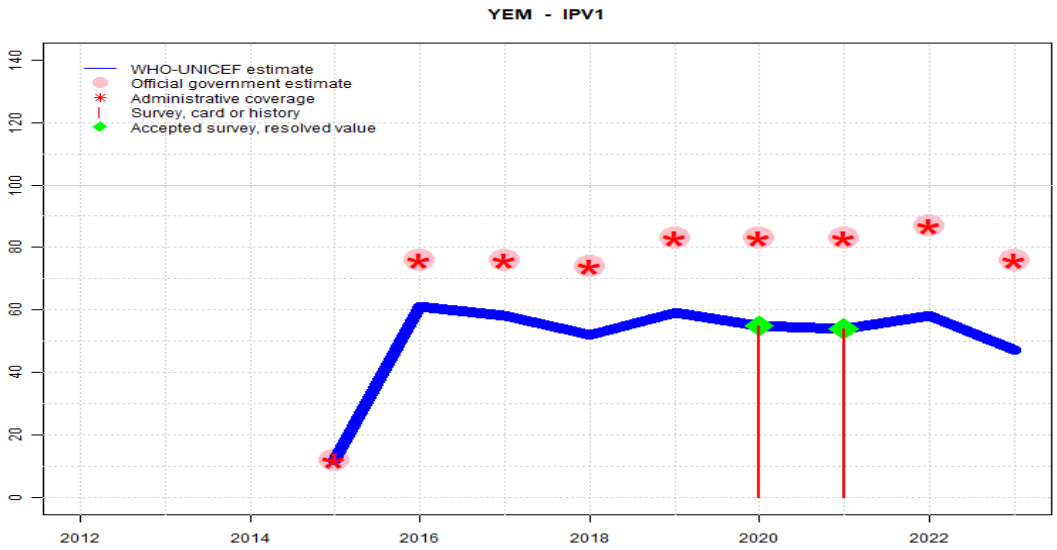
2015: Reported data calibrated to 2012 and 2020 levels. Government reports that official estimates are derived from the administrative coverage. Civil unrest began in February-March 2015 but exceptionally does not appear to have impacted delivery of immunization services in spite of disruptions to other health areas. Programme reports that vaccination sites continue to send monthly reports to the district. Estimate of 60 percent changed from previous revision value of 63 percent. Estimate challenged by: D-R-

2014: Reported data calibrated to 2012 and 2020 levels. Estimate of 64 percent changed from previous revision value of 67 percent. Estimate challenged by: D-R-

2013: Reported data calibrated to 2012 and 2020 levels. Estimate of 66 percent changed from previous revision value of 67 percent. Estimate challenged by: D-R-

2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 68 percent based on 1 survey(s). Yemen National Health and Demographic Survey, 2013 card or history results of 59 percent modifed for recall bias to 68 percent based on 1st dose card or history coverage of 76 percent, 1st dose card only coverage of 46 percent and 3rd dose card only coverage of 41 percent. Estimate challenged by: R-

Yemen - IPV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	12	61	58	52	59	55	54	58	47
Estimate GoC	NA	NA	NA	•	•	•	•	•	•	•	•	•
Official	NA	NA	NA	12	76	76	74	83	83	83	87	76
Administrative	NA	NA	NA	12	76	76	74	83	83	83	87	76
Survey	NA	NA	NA	NA	NA	NA	NA	NA	55	54	NA	NA

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

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

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

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

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

Description:

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

2023: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-

2022: Reported data calibrated to 2021 levels. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained with an increase in the reported number of children vaccinated in the last four years. Large and disruptive measles and vaccine-derived poliovirus outbreaks are ongoing. Estimate of 58 percent changed from previous revision value of 72 percent. Estimate challenged by: D-R-

2021: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 54 percent based on 1 survey(s). Despite the ongoing humanitarian crisis, reported coverage levels have been sustained. Government indicates that official estimates are derived from the administrative coverage and that vaccination sites continue to send monthly reports to the district. Estimate of 54 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 55 percent based on 1 survey(s). Estimate of 55 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2019: Reported data calibrated to 2016 and 2020 levels. Disruptions to health services have been reported with about half of the health facilities non-functional but vaccination outreach rounds are being conducted. Estimate of 59 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2018: Reported data calibrated to 2016 and 2020 levels. Estimate of 52 percent changed from previous revision value of 59 percent. Estimate challenged by: D-R-

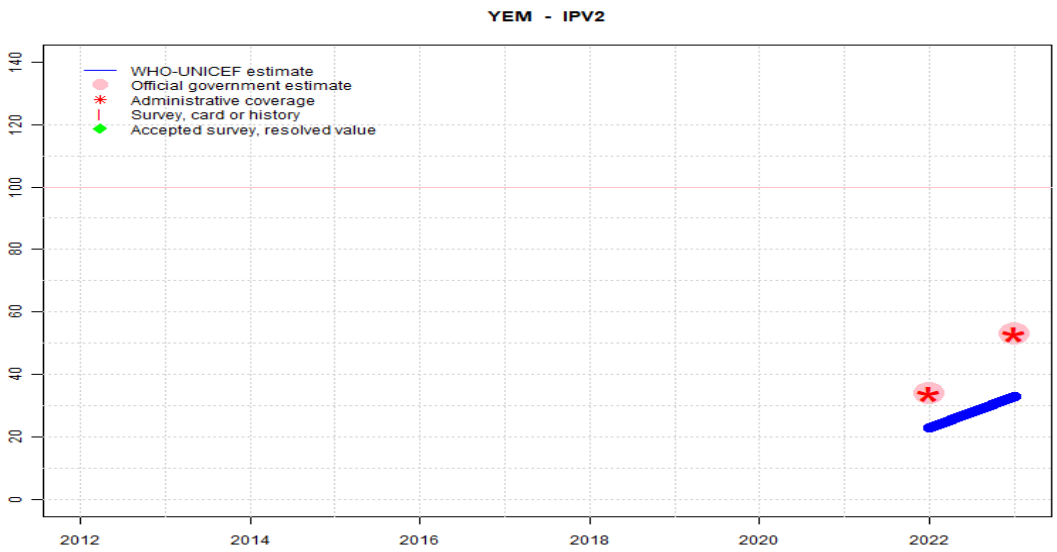
2017: Reported data calibrated to 2016 and 2020 levels. Reports suggest larger declines in coverage [El Bcheraoui C, Jumaan AO, Collison ML, Daoud F, Mokdad AH. Health in Yemen: losing ground in war time. Global Health. 2018 Apr 25;14(1):42. doi: 10.1186/s12992-018-03]. Estimate of 58 percent changed from previous revision value of 61 percent. Estimate challenged by: R-

2016: Estimate of 61 percent assigned by working group. Estimate is based on the difference between estimated and reported DTP3 coverage level. Estimate is based on reported data following introduction. Estimate challenged by: R-

2015: Estimate is based on reported coverage during introduction. Inactivated polio vaccine introduced during November 2015. Government reports that official estimates are derived from the administrative coverage. Civil unrest began in February-March 2015 but exceptionally does not appear to have impacted delivery of immunization services in spite of

disruptions to other health areas. Programme reports that vaccination sites continue to send monthly reports to the district. GoC=Assigned by working group. GoC assigned to maintain consistency across vaccines.

Yemen - IPV2



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23	33
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34	53
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34	53
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

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

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

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

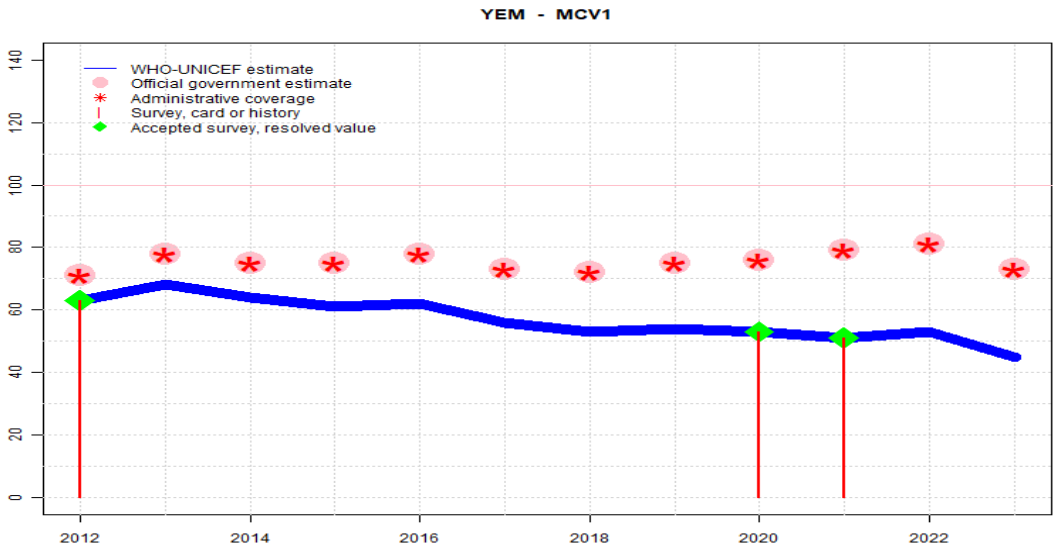
Description:

Estimates for a second dose of inactivated polio vaccine (IPV) begin in 2021 following a Strategic Advisory Group of Experts on Immunization (SAGE) recommendation in October 2020 that a second IPV dose increases protection against all polioviruses, including protection against paralysis caused by vaccine derived polio virus (type 2) (VDPV2). The addition of IPV2 is the next step towards complete OPV withdrawal. IPV2 coverage estimates produced for OPV using countries.

2023: Estimate based on relative relationship between estimated and reported IPV1 coverage and reported IPV2 coverage. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-

2022: Estimate based on relative relationship between estimated and reported IPV1 coverage and reported IPV2 coverage. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained with an increase in the reported number of children vaccinated in the last four years. Large and disruptive measles and vaccine-derived poliovirus outbreaks are ongoing. Second dose of inactivated polio vaccine introduced during 2021 and reporting began in 2022. Estimate challenged by: R-

Yemen - MCV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	63	68	64	61	62	56	53	54	53	51	53	45
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	71	78	75	75	78	73	72	75	76	79	81	73
Administrative	71	78	75	75	78	73	72	75	76	79	81	73
Survey	63	NA	NA	NA	NA	NA	NA	NA	53	51	NA	NA

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

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

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

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

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

Description:

2023: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-

2022: Reported data calibrated to 2021 levels. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained with an increase in the reported number of children vaccinated in the last four years. Large and disruptive measles and vaccine-derived poliovirus outbreaks are ongoing. Estimate of 53 percent changed from previous revision value of 73 percent. Estimate challenged by: D-R-

2021: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 51 percent based on 1 survey(s). Despite the ongoing humanitarian crisis, reported coverage levels have been sustained. Government indicates that official estimates are derived from the administrative coverage and that vaccination sites continue to send monthly reports to the district. Estimate of 51 percent changed from previous revision value of 71 percent. Estimate challenged by: D-R-

2020: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 53 percent based on 1 survey(s). Estimate of 53 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2019: Reported data calibrated to 2012 and 2020 levels. Disruptions to health services have been reported with about half of the health facilities non-functional but vaccination outreach rounds are being conducted. Estimate of 54 percent changed from previous revision value of 67 percent. Estimate challenged by: R-

2018: Reported data calibrated to 2012 and 2020 levels. Estimate of 53 percent changed from previous revision value of 64 percent. Estimate challenged by: R-

2017: Reported data calibrated to 2012 and 2020 levels. Reports suggest larger declines in coverage [El Bcheraoui C, Jumaan AO, Collison ML, Daoud F, Mokdad AH. Health in Yemen: losing ground in war time. Global Health. 2018 Apr 25;14(1):42. doi: 10.1186/s12992-018-03]. Estimate of 56 percent changed from previous revision value of 65 percent. Estimate challenged by: R-

2016: Reported data calibrated to 2012 and 2020 levels. Estimate of 62 percent changed from previous revision value of 70 percent. Estimate challenged by: R-

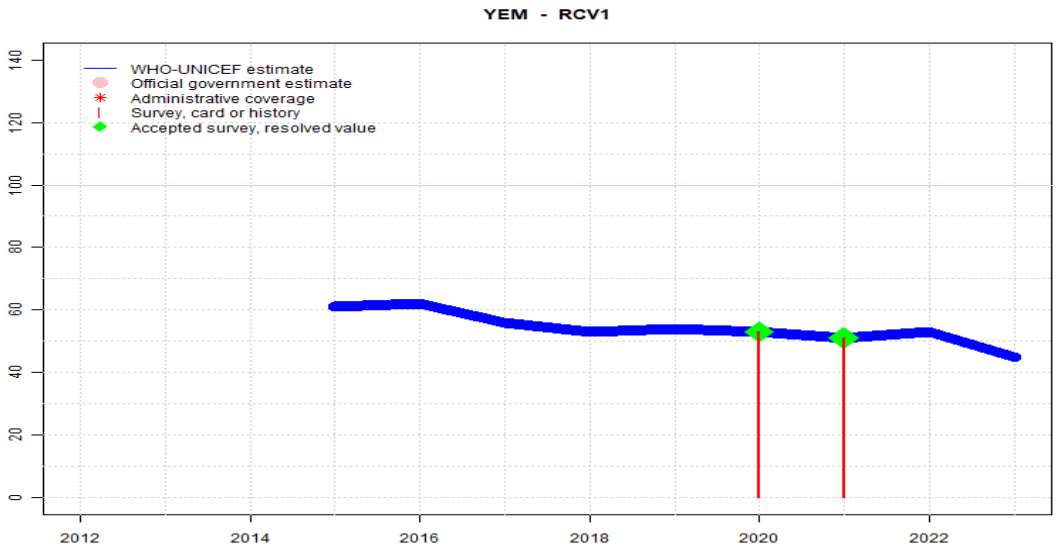
2015: Reported data calibrated to 2012 and 2020 levels. Government reports that official estimates are derived from the administrative coverage. Civil unrest began in February-March 2015 but exceptionally does not appear to have impacted delivery of immunization services in spite of disruptions to other health areas. Programme reports that vaccination sites continue to send monthly reports to the district. Estimate of 61 percent changed from previous revision value of 67 percent. Estimate challenged by: R-

2014: Reported data calibrated to 2012 and 2020 levels. Estimate of 64 percent changed from previous revision value of 67 percent. Estimate challenged by: R-

2013: Reported data calibrated to 2012 and 2020 levels. Estimate of 68 percent changed from previous revision value of 70 percent. Estimate challenged by: R-

2012: Estimate of 63 percent assigned by working group. Estimate based on survey result. Estimate challenged by: R-

Yemen - RCV1



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	NA	NA	NA	61	62	56	53	54	53	51	53	45
Estimate GoC	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	53	51	NA	NA

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

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

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

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

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

Description:

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

2023: Estimate based on estimated MCV1. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-

2022: Estimate based on estimated MCV1. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained with an increase in the reported number of children vaccinated in the last four years. Large and disruptive measles and vaccine-derived poliovirus outbreaks are ongoing. Estimate of 53 percent changed from previous revision value of 73 percent. Estimate challenged by: D-R-

2021: Estimate based on estimated MCV1. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained. Government indicates that official estimates are derived from the administrative coverage and that vaccination sites continue to send monthly reports to the district. Estimate of 51 percent changed from previous revision value of 71 percent. Estimate challenged by: D-R-

2020: Estimate based on estimated MCV1. Estimate of 53 percent changed from previous revision value of 68 percent. Estimate challenged by: D-R-

2019: Estimate based on estimated MCV1. Disruptions to health services have been reported with about half of the health facilities non-functional but vaccination outreach rounds are being conducted. Estimate of 54 percent changed from previous revision value of 67 percent. Estimate challenged by: R-

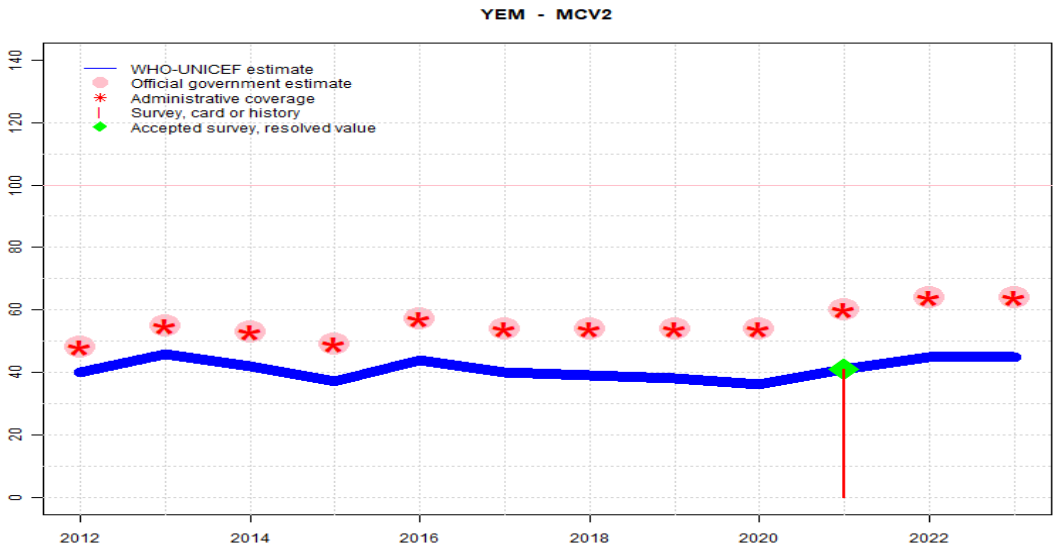
2018: Estimate based on estimated MCV1. Estimate of 53 percent changed from previous revision value of 64 percent. Estimate challenged by: R-

2017: Estimate based on estimated MCV1. Reports suggest larger declines in coverage [El Bcheraoui C, Jumaan AO, Collison ML, Daoud F, Mokdad AH. Health in Yemen: losing ground in war time. Global Health. 2018 Apr 25;14(1):42. doi: 10.1186/s12992-018-03]. Estimate of 56 percent changed from previous revision value of 65 percent. Estimate challenged by: R-

2016: Estimate based on estimated MCV1. Estimate of 62 percent changed from previous revision value of 70 percent. Estimate challenged by: R-

2015: Estimate based on estimated MCV1. Rubella containing vaccine introduced during 2015 using measles rubella combination vaccine. Government reports that official estimates are derived from the administrative coverage. Civil unrest began in February-March 2015 but exceptionally does not app Estimate of 61 percent changed from previous revision value of 67 percent. Estimate challenged by: R-

Yemen - MCV2



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Estimate	40	46	42	37	44	40	39	38	36	41	45	45
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	48	55	53	49	57	54	54	54	54	60	64	64
Administrative	48	55	53	49	57	54	54	54	54	60	64	64
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	41	NA	NA

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

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

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

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

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

Description:

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

2023: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-

2022: Reported data calibrated to 2021 levels. Despite the ongoing humanitarian crisis, reported coverage levels have been sustained with an increase in the reported number of children vaccinated in the last four years. Large and disruptive measles and vaccine-derived poliovirus outbreaks are ongoing. Estimate of 45 percent changed from previous revision value of 56 percent. Estimate challenged by: R-

2021: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 41 percent based on 1 survey(s). Despite the ongoing humanitarian crisis, reported coverage levels have been sustained. Government indicates that official estimates are derived from the administrative coverage and that vaccination sites continue to send monthly reports to the district. Estimate of 41 percent changed from previous revision value of 52 percent. Estimate challenged by: D-R-

2020: Reported data calibrated to 2012 and 2021 levels. Estimate of 36 percent changed from previous revision value of 46 percent. Estimate challenged by: D-R-

2019: Reported data calibrated to 2012 and 2021 levels. Disruptions to health services have been reported with about half of the health facilities non-functional but vaccination outreach rounds are being conducted. Estimate of 38 percent changed from previous revision value of 46 percent. Estimate challenged by: R-

2018: Reported data calibrated to 2012 and 2021 levels. Estimate of 39 percent changed from previous revision value of 46 percent. Estimate challenged by: R-

2017: Reported data calibrated to 2012 and 2021 levels. Reports suggest larger declines in coverage [El Bcheraoui C, Jumaan AO, Collison ML, Daoud F, Mokdad AH. Health in Yemen: losing ground in war time. Global Health. 2018 Apr 25;14(1):42. doi: 10.1186/s12992-018-03]. Estimate of 40 percent changed from previous revision value of 46 percent. Estimate challenged by: R-

2016: Reported data calibrated to 2012 and 2021 levels. Estimate of 44 percent changed from previous revision value of 49 percent. Estimate challenged by: R-

2015: Reported data calibrated to 2012 and 2021 levels. Government reports that official estimates are derived from the administrative coverage. Civil unrest began in February-March 2015 but exceptionally does not appear to have impacted delivery of immunization services in spite of disruptions to other health areas. Programme reports that vaccination sites continue to send monthly reports to the district. Estimate of 37 percent changed from previous revision value of 41 percent. Estimate challenged by: R-

2014: Reported data calibrated to 2012 and 2021 levels. Estimate of 42 percent changed from previous revision value of 45 percent. Estimate challenged by: R-

2013: Reported data calibrated to 2012 and 2021 levels. Estimate of 46 percent changed from previous revision value of 47 percent. Estimate challenged by: R-

2012: Estimate of 40 percent assigned by working group. Estimate is based on adjustment to reported coverage level based on difference between estimated and reported coverage levels for MCV1. Estimate challenged by: R-

Yemen - survey details

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

2021 Yemen Multiple Indicator Cluster Survey 2022-2023

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	59	12-23 m	3927	58
BCG	Card	48.5	12-23 m	3927	58
BCG	Card or History	60	12-23 m	3927	58
BCG	History	11.5	12-23 m	3927	58
DTP1	C or H <12 months	65.2	12-23 m	3927	58
DTP1	Card	55.8	12-23 m	3927	58
DTP1	Card or History	67.1	12-23 m	3927	58
DTP1	History	11.3	12-23 m	3927	58
DTP3	C or H <12 months	51.1	12-23 m	3927	58
DTP3	Card	47.4	12-23 m	3927	58
DTP3	Card or History	54.6	12-23 m	3927	58
DTP3	History	7.3	12-23 m	3927	58
HepB1	C or H <12 months	65.2	12-23 m	3927	58
HepB1	Card	55.8	12-23 m	3927	58
HepB1	Card or History	67.1	12-23 m	3927	58
HepB1	History	11.3	12-23 m	3927	58
HepB3	C or H <12 months	51.1	12-23 m	3927	58
HepB3	Card	47.4	12-23 m	3927	58
HepB3	Card or History	54.6	12-23 m	3927	58
HepB3	History	7.3	12-23 m	3927	58
Hib1	C or H <12 months	65.2	12-23 m	3927	58
Hib1	Card	55.8	12-23 m	3927	58
Hib1	Card or History	67.1	12-23 m	3927	58
Hib1	History	11.3	12-23 m	3927	58
Hib3	C or H <12 months	51.1	12-23 m	3927	58
Hib3	Card	47.4	12-23 m	3927	58
Hib3	Card or History	54.6	12-23 m	3927	58
Hib3	History	7.3	12-23 m	3927	58
IPV1	C or H <12 months	51.7	12-23 m	3927	58
IPV1	Card	43.6	12-23 m	3927	58
IPV1	Card or History	54.5	12-23 m	3927	58
IPV1	History	11	12-23 m	3927	58
MCV1	C or H <12 months	44.9	12-23 m	3927	58
MCV1	Card	40.8	12-23 m	3927	58
MCV1	Card or History	50.7	12-23 m	3927	58
MCV1	History	9.9	12-23 m	3927	58
MCV2	C or H <12 months	38.3	24-35 m	4119	49
MCV2	Card	30.3	24-35 m	4119	49
MCV2	Card or History	41.4	24-35 m	4119	49
MCV2	History	11.1	24-35 m	4119	49
PcV1	C or H <12 months	64	12-23 m	3927	58
PcV1	Card	55.6	12-23 m	3927	58
PcV1	Card or History	65.8	12-23 m	3927	58
PcV1	History	10.2	12-23 m	3927	58
PcV3	C or H <12 months	50.6	12-23 m	3927	58
PcV3	Card	47.2	12-23 m	3927	58
PcV3	Card or History	54	12-23 m	3927	58
PcV3	History	6.9	12-23 m	3927	58
Pol1	C or H <12 months	65.1	12-23 m	3927	58
Pol1	Card	55.8	12-23 m	3927	58
Pol1	Card or History	66.6	12-23 m	3927	58
Pol1	History	10.7	12-23 m	3927	58
Pol3	C or H <12 months	47.5	12-23 m	3927	58
Pol3	Card	46.8	12-23 m	3927	58
Pol3	Card or History	50.6	12-23 m	3927	58
Pol3	History	3.7	12-23 m	3927	58
RotaC	C or H <12 months	53.9	12-23 m	3927	58
RotaC	Card	48.6	12-23 m	3927	58
RotaC	Card or History	57.4	12-23 m	3927	58
RotaC	History	8.9	12-23 m	3927	58

2020 Yemen Multiple Indicator Cluster Survey 2022-2023

Yemen - survey details

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	57.4	24-35 m	4119	49
BCG	Card	41.9	24-35 m	4119	49
BCG	Card or History	59.4	24-35 m	4119	49
BCG	History	17.5	24-35 m	4119	49
DTP1	C or H <12 months	60.6	24-35 m	4119	49
DTP1	Card	46.9	24-35 m	4119	49
DTP1	Card or History	63.8	24-35 m	4119	49
DTP1	History	16.8	24-35 m	4119	49
DTP3	C or H <12 months	47.5	24-35 m	4119	49
DTP3	Card	41.5	24-35 m	4119	49
DTP3	Card or History	53.4	24-35 m	4119	49
DTP3	History	11.9	24-35 m	4119	49
HepB1	C or H <12 months	60.6	24-35 m	4119	49
HepB1	Card	46.9	24-35 m	4119	49
HepB1	Card or History	63.8	24-35 m	4119	49
HepB1	History	16.8	24-35 m	4119	49
HepB3	C or H <12 months	47.5	24-35 m	4119	49
HepB3	Card	41.5	24-35 m	4119	49
HepB3	Card or History	53.4	24-35 m	4119	49
HepB3	History	11.9	24-35 m	4119	49
Hib1	C or H <12 months	60.6	24-35 m	4119	49
Hib1	Card	46.9	24-35 m	4119	49
Hib1	Card or History	63.8	24-35 m	4119	49
Hib1	History	16.8	24-35 m	4119	49
Hib3	C or H <12 months	47.5	24-35 m	4119	49
Hib3	Card	41.5	24-35 m	4119	49
Hib3	Card or History	53.4	24-35 m	4119	49
Hib3	History	11.9	24-35 m	4119	49
IPV1	C or H <12 months	50.7	24-35 m	4119	49
IPV1	Card	38.1	24-35 m	4119	49
IPV1	Card or History	55.2	24-35 m	4119	49
IPV1	History	17	24-35 m	4119	49
MCV1	C or H <12 months	41.8	24-35 m	4119	49
MCV1	Card	38.3	24-35 m	4119	49
MCV1	Card or History	53.4	24-35 m	4119	49
MCV1	History	15.1	24-35 m	4119	49
PcV1	C or H <12 months	59	24-35 m	4119	49
PcV1	Card	46.8	24-35 m	4119	49
PcV1	Card or History	62.4	24-35 m	4119	49
PcV1	History	15.6	24-35 m	4119	49
PcV3	C or H <12 months	46.2	24-35 m	4119	49
PcV3	Card	41.7	24-35 m	4119	49
PcV3	Card or History	52.2	24-35 m	4119	49
PcV3	History	10.5	24-35 m	4119	49
Pol1	C or H <12 months	61.4	24-35 m	4119	49
Pol1	Card	47.1	24-35 m	4119	49
Pol1	Card or History	64.4	24-35 m	4119	49
Pol1	History	17.3	24-35 m	4119	49
Pol3	C or H <12 months	42.2	24-35 m	4119	49
Pol3	Card	41.5	24-35 m	4119	49
Pol3	Card or History	46.9	24-35 m	4119	49
Pol3	History	5.4	24-35 m	4119	49
RotaC	C or H <12 months	49.3	24-35 m	4119	49
RotaC	Card	42.6	24-35 m	4119	49
RotaC	Card or History	55.3	24-35 m	4119	49
RotaC	History	12.6	24-35 m	4119	49

2012 Yemen National Health and Demographic Survey, 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	66.9	12-23 m	3028	47
BCG	Card	40.4	12-23 m	1427	47
BCG	Card or History	67.6	12-23 m	3028	47
BCG	History	27.1	12-23 m	1601	47
DTP1	C or H <12 months	75.3	12-23 m	3028	47
DTP1	Card	46	12-23 m	1427	47
DTP1	Card or History	76.6	12-23 m	3028	47
DTP1	History	30.6	12-23 m	1601	47
DTP3	C or H <12 months	57.6	12-23 m	3028	47
DTP3	Card	40.4	12-23 m	1427	47
DTP3	Card or History	59.6	12-23 m	3028	47
DTP3	History	19.3	12-23 m	1601	47
HepB1	C or H <12 months	75.3	12-23 m	3028	47
HepB1	Card	46	12-23 m	1427	47
HepB1	Card or History	76.6	12-23 m	3028	47
HepB1	History	30.6	12-23 m	1601	47
HepB3	C or H <12 months	57.6	12-23 m	3028	47
HepB3	Card	40.4	12-23 m	1427	47

HepB3	Card or History	59.6	12-23 m	3028	47
HepB3	History	19.3	12-23 m	1601	47
Hib1	C or H <12 months	75.3	12-23 m	3028	47
Hib1	Card	46	12-23 m	1427	47
Hib1	Card or History	76.6	12-23 m	3028	47
Hib1	History	30.6	12-23 m	1601	47
Hib3	C or H <12 months	57.6	12-23 m	3028	47
Hib3	Card	40.4	12-23 m	1427	47
Hib3	Card or History	59.6	12-23 m	3028	47
Hib3	History	19.3	12-23 m	1601	47
MCV1	C or H <12 months	51.4	12-23 m	3028	47
MCV1	Card	39.3	12-23 m	1427	47
MCV1	Card or History	63.3	12-23 m	3028	47
MCV1	History	24	12-23 m	1601	47
PcV1	Card	43.9	12-23 m	1427	47
PcV1	Card <12 months	42.9	12-23 m	3028	47
PcV3	Card	38.4	12-23 m	1427	47
PcV3	Card <12 months	37	12-23 m	3028	47
Pol1	C or H <12 months	74.5	12-23 m	3028	47
Pol1	Card	46.4	12-23 m	1427	47
Pol1	Card or History	76.1	12-23 m	3028	47
Pol1	History	29.7	12-23 m	1601	47
Pol3	C or H <12 months	56.7	12-23 m	3028	47
Pol3	Card	40.8	12-23 m	1427	47
Pol3	Card or History	58.7	12-23 m	3028	47
Pol3	History	17.9	12-23 m	1601	47

2011 Yemen National Social Protection Monitoring Survey (NSPMS): 2012-2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
DTP1	C or H <12 months	60	12-23 m	5178	59
DTP1	Card or History	79	12-23 m	5178	59
DTP3	C or H <12 months	50	12-23 m	5178	59
DTP3	Card or History	69	12-23 m	5178	59
HepB1	C or H <12 months	60	12-23 m	5178	59
HepB1	Card or History	79	12-23 m	5178	59
HepB3	C or H <12 months	50	12-23 m	5178	59
HepB3	Card or History	69	12-23 m	5178	59
Hib1	C or H <12 months	60	12-23 m	5178	59
Hib1	Card or History	79	12-23 m	5178	59
Hib3	C or H <12 months	50	12-23 m	5178	59
Hib3	Card or History	69	12-23 m	5178	59
MCV1	C or H <12 months	40	12-23 m	5178	59
MCV1	Card or History	66	12-23 m	5178	59
Pol1	Card or History	86	12-23 m	5178	59
Pol3	Card or History	77	12-23 m	5178	59

2005 Yemen Multiple Indicator Cluster Survey 2006, Final Report

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	67.2	12-23 m	721	48
BCG	Card	37.9	12-23 m	721	48
BCG	Card or History	69	12-23 m	721	48
BCG	History	31.1	12-23 m	721	48
DTP1	C or H <12 months	76.9	12-23 m	721	48
DTP1	Card	46.8	12-23 m	721	48
DTP1	Card or History	78.4	12-23 m	721	48
DTP1	History	31.6	12-23 m	721	48
DTP3	C or H <12 months	59.7	12-23 m	721	48
DTP3	Card	39.2	12-23 m	721	48
DTP3	Card or History	61	12-23 m	721	48
DTP3	History	21.7	12-23 m	721	48
HepB1	C or H <12 months	25.5	12-23 m	721	48
HepB1	Card	11.8	12-23 m	721	48
HepB1	Card or History	28.1	12-23 m	721	48
HepB1	History	16.3	12-23 m	721	48
HepB3	C or H <12 months	18.6	12-23 m	721	48
HepB3	Card	8.7	12-23 m	721	48
HepB3	Card or History	19.4	12-23 m	721	48
HepB3	History	10.7	12-23 m	721	48
Hib1	C or H <12 months	56.9	12-23 m	721	48
Hib1	Card	32.8	12-23 m	721	48
Hib1	Card or History	58.6	12-23 m	721	48
Hib1	History	25.8	12-23 m	721	48
Hib3	C or H <12 months	40	12-23 m	721	48
Hib3	Card	26.7	12-23 m	721	48
Hib3	Card or History	42.6	12-23 m	721	48

Yemen - survey details

Hib3	History	15.9	12-23 m	721	48
MCV1	C or H <12 months	59.2	12-23 m	721	48
MCV1	Card	30.8	12-23 m	721	48
MCV1	Card or History	65.1	12-23 m	721	48
MCV1	History	34.3	12-23 m	721	48
Pol1	C or H <12 months	78.9	12-23 m	721	48
Pol1	Card	45.2	12-23 m	721	48
Pol1	Card or History	81.2	12-23 m	721	48
Pol1	History	36.1	12-23 m	721	48
Pol3	C or H <12 months	60.2	12-23 m	721	48
Pol3	Card	36.5	12-23 m	721	48
Pol3	Card or History	63	12-23 m	721	48
Pol3	History	26.6	12-23 m	721	48

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Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	54.8	12-23 m	2058	27
DTP1	Card	55.6	12-23 m	2058	27
DTP3	Card	44.7	12-23 m	2058	27
MCV1	Card	44.8	12-23 m	2058	27
Pol1	Card	62.2	12-23 m	2058	27
Pol3	Card	47.4	12-23 m	2058	27

Yemen - 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