

Yemen: WHO and UNICEF estimates of immunization coverage: 2024 revision

BACKGROUND NOTE Each year WHO and UNICEF jointly review reports submitted by Member States regarding national immunization coverage, finalized survey reports as well as data from 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.
* Brown et al. 2013. Open Pub Health Journal. * 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 6-11, 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 AND DEFINITIONS

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. Coverage estimates are based on WHO and UNICEF estimates of coverage for the dose of measles containing vaccine that corresponds to the first measles-rubella combination vaccine. Nationally reported coverage of RCV is not taken into consideration in the production of the estimate.

HEPB: 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 if coverage for the booster dose is not reported.

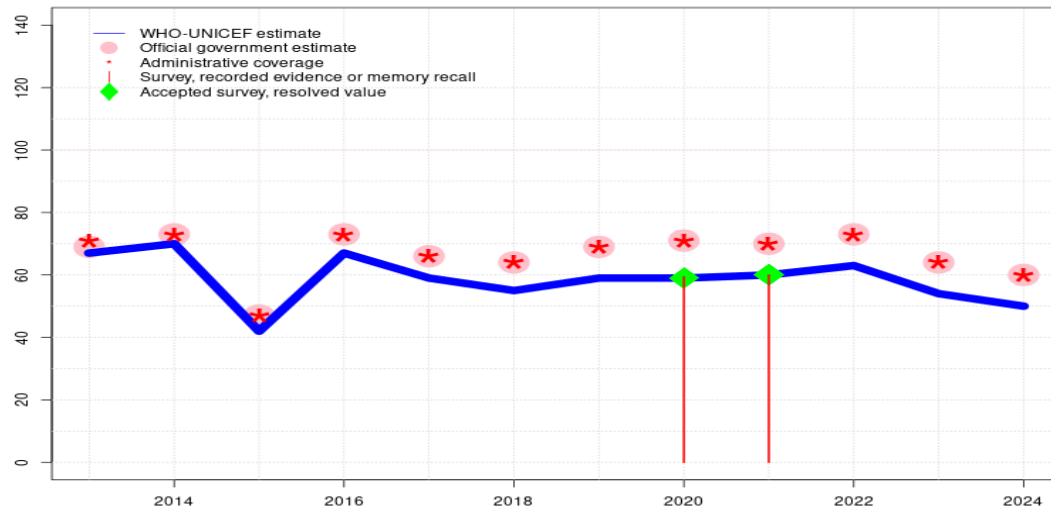
YFV: percentage of surviving infants who received one dose of yellow fever vaccine in countries where YFV is part of the national immunization schedule for children or is recommended in at risk areas; coverage estimates are annualized for the entire cohort of surviving infants.

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.

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.

Yemen - BCG

YEM - BCG



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	67	70	42	67	59	55	59	59	60	63	54	50
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	69	73	47	73	66	64	69	71	70	73	64	60
Administrative	71	73	47	73	66	64	69	71	70	73	64	60
Survey	-	-	-	-	-	-	-	59	60	-	-	-

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: 2024 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.

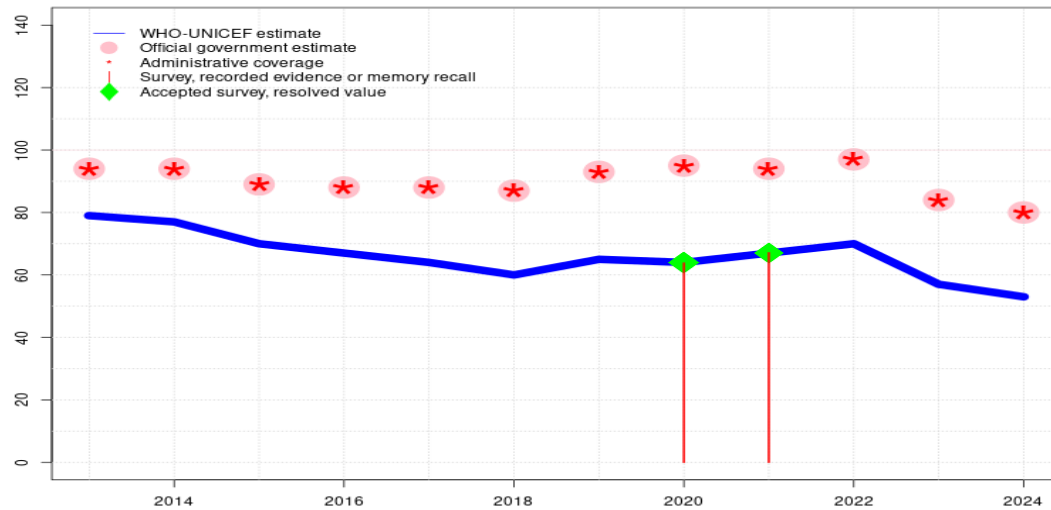
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2024: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: R-
- 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 challenged by: R-
- 2021: Estimate of 60 percent assigned by working group. Estimate informed by 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 challenged by: R-
- 2020: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 59 percent based on 1 survey(s). 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 challenged by: R-
- 2018: Reported data calibrated to 2012 and 2020 levels. 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]. 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. 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. GoC=Assigned by working group. Vaccine-to-vaccine consistency.
- 2014: Reported data calibrated to 2012 and 2020 levels. GoC=Assigned by working group. Vaccine-to-vaccine consistency.
- 2013: Reported data calibrated to 2012 and 2020 levels. Estimate of 67 percent changed from previous revision value of 69 percent. GoC=Assigned by working group. Vaccine-to-vaccine consistency.

Yemen - DTP1

YEM - DTP1



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	79	77	70	67	64	60	65	64	67	70	57	53
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	94	94	89	88	88	87	93	95	94	97	84	80
Administrative	94	94	89	88	88	87	93	95	94	97	84	80
Survey	-	-	-	-	-	-	-	64	67	-	-	-

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: 2024 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.

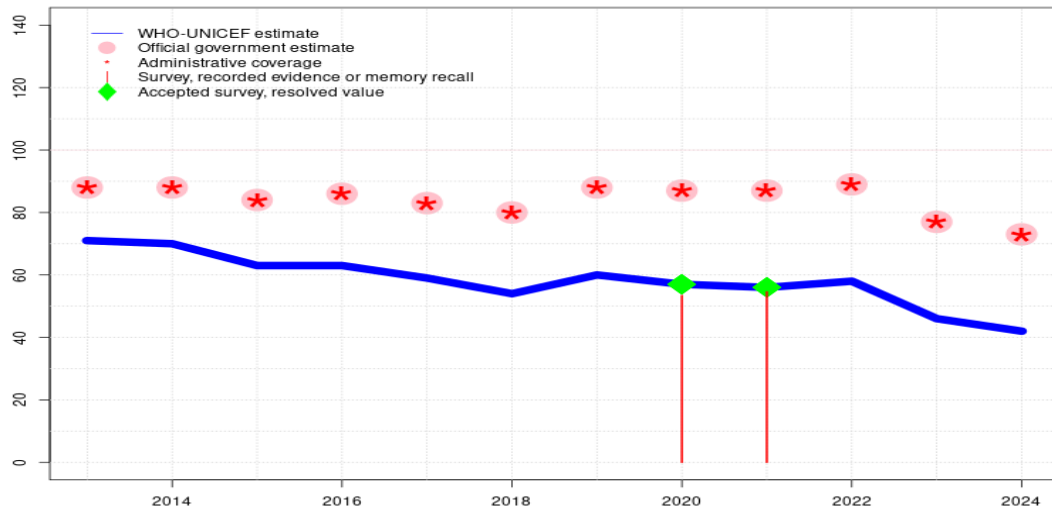
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2024: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-
- 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 challenged by: D-R-
- 2021: Survey evidence does not support reported data. Estimate based on survey result. 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 challenged by: D-R-
- 2020: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 64 percent based on 1 survey(s). 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 challenged by: D-R-
- 2018: Reported data calibrated to 2012 and 2020 levels. 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 challenged by: D-R-
- 2016: Reported data calibrated to 2012 and 2020 levels. 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 challenged by: R-
- 2014: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-
- 2013: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-

Yemen - DTP3

YEM - DTP3



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	71	70	63	63	59	54	60	57	56	58	46	42
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	88	88	84	86	83	80	88	87	87	89	77	73
Administrative	88	88	84	86	83	80	88	87	87	89	77	73
Survey	-	-	-	-	-	-	-	53	55	-	-	-

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: 2024 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.

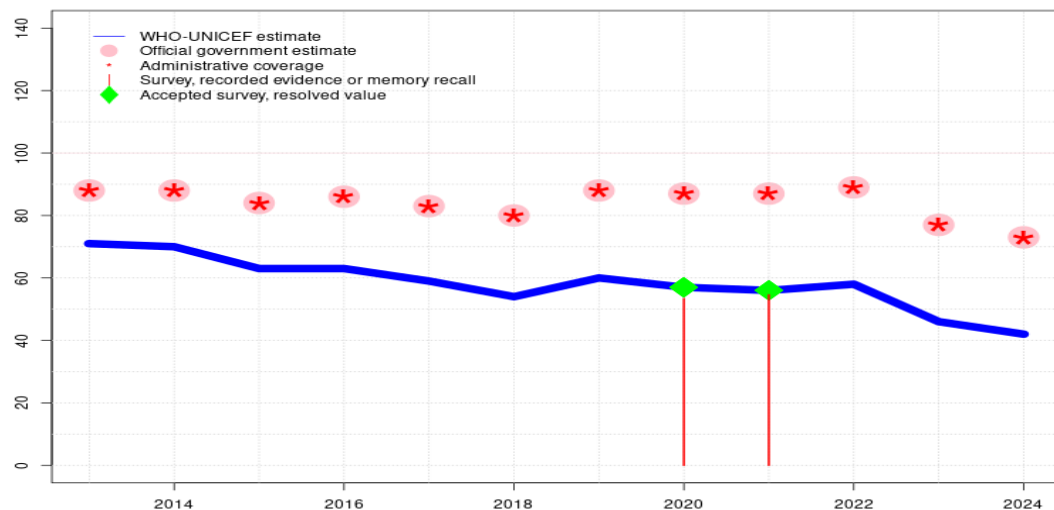
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2024: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-
- 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 challenged by: D-R-
- 2021: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 56 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 record or recall results of 55 percent modified for recall bias to 56 percent based on 1st dose record or recall coverage of 67 percent, 1st dose record only coverage of 56 percent and 3rd dose record 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 challenged by: D-R-
- 2020: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 57 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 record or recall results of 53 percent modified for recall bias to 57 percent based on 1st dose record or recall coverage of 64 percent, 1st dose record only coverage of 47 percent and 3rd dose record only coverage of 42 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 challenged by: D-R-
- 2018: Reported data calibrated to 2012 and 2020 levels. 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 challenged by: D-R-
- 2016: Reported data calibrated to 2012 and 2020 levels. 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 challenged by: R-
- 2014: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-
- 2013: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-

Yemen - HEPB3

YEM - HEPB3



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	71	70	63	63	59	54	60	57	56	58	46	42
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	88	88	84	86	83	80	88	87	87	89	77	73
Administrative	88	88	84	86	83	80	88	87	87	89	77	73
Survey	-	-	-	-	-	-	-	53	55	-	-	-

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: 2024 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.

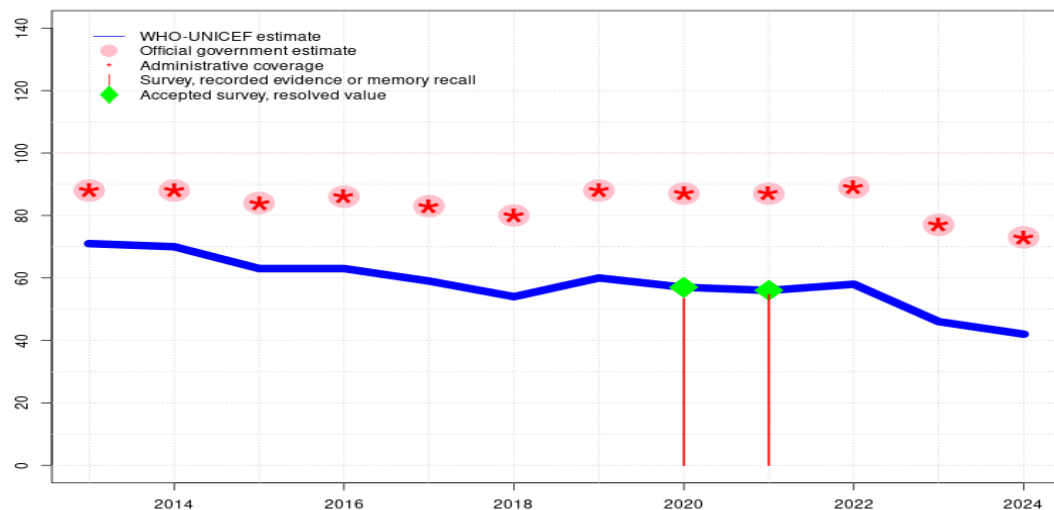
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2024: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-
- 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 challenged by: D-R-
- 2021: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 56 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 record or recall results of 55 percent modified for recall bias to 56 percent based on 1st dose record or recall coverage of 67 percent, 1st dose record only coverage of 56 percent and 3rd dose record 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 challenged by: D-R-
- 2020: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 57 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 record or recall results of 53 percent modified for recall bias to 57 percent based on 1st dose record or recall coverage of 64 percent, 1st dose record only coverage of 47 percent and 3rd dose record only coverage of 42 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 challenged by: D-R-
- 2018: Reported data calibrated to 2012 and 2020 levels. 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 challenged by: D-R-
- 2016: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-
- 2015: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-
- 2014: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-
- 2013: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-

Yemen - Hib3

YEM - Hib3



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	71	70	63	63	59	54	60	57	56	58	46	42
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	88	88	84	86	83	80	88	87	87	89	77	73
Administrative	88	88	84	86	83	80	88	87	87	89	77	73
Survey	-	-	-	-	-	-	-	53	55	-	-	-

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: 2024 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.

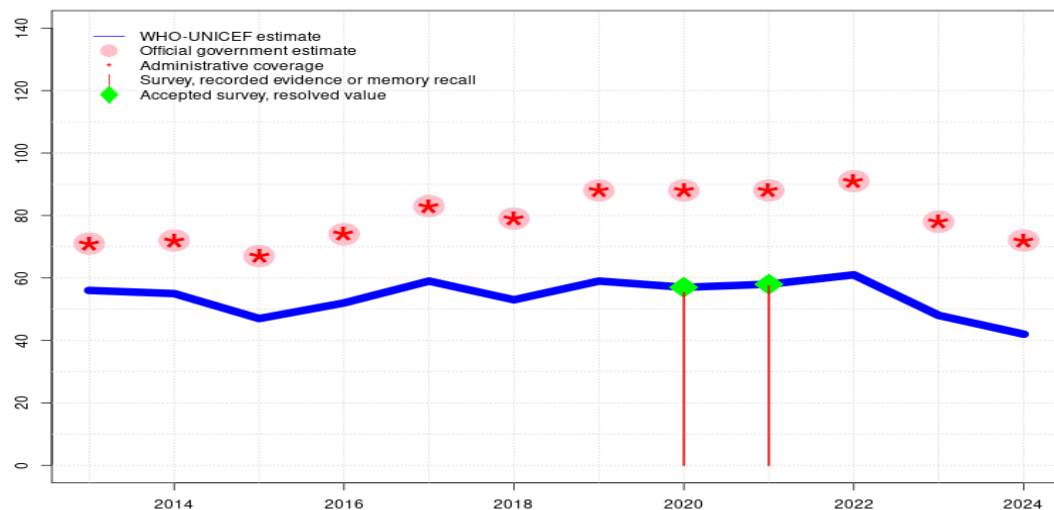
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2024: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-
- 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 challenged by: D-R-
- 2021: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 56 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 record or recall results of 55 percent modified for recall bias to 56 percent based on 1st dose record or recall coverage of 67 percent, 1st dose record only coverage of 56 percent and 3rd dose record 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 challenged by: D-R-
- 2020: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 57 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 record or recall results of 53 percent modified for recall bias to 57 percent based on 1st dose record or recall coverage of 64 percent, 1st dose record only coverage of 47 percent and 3rd dose record only coverage of 42 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 challenged by: D-R-
- 2018: Reported data calibrated to 2012 and 2020 levels. 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 challenged by: D-R-
- 2016: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-
- 2015: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-
- 2014: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-
- 2013: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-

Yemen - ROTAC

YEM - ROTAC



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	56	55	47	52	59	53	59	57	58	61	48	42
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	71	72	67	74	83	79	88	88	88	91	78	72
Administrative	71	72	67	74	83	79	88	88	88	91	78	72
Survey	-	-	-	-	-	-	-	55	57	-	-	-

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: 2024 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:

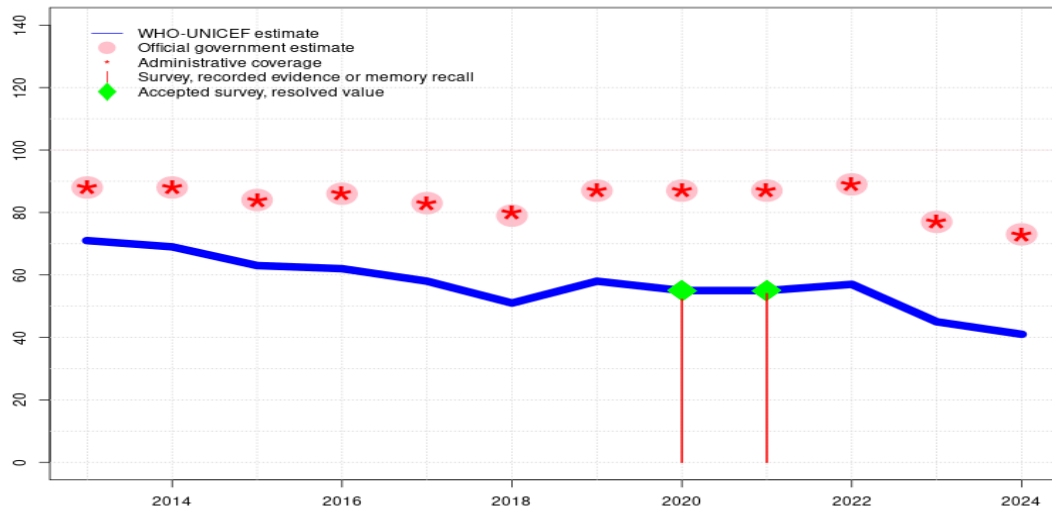
- 2024: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-
- 2023: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate of 48 percent changed from previous revision value of 47 percent. 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 61 percent changed from previous revision value of 60 percent. Estimate challenged by: D-R-
- 2021: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 58 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 record or recall results of 57 percent modified for recall bias to 58 percent based on 1st dose record or recall coverage of 64 percent, 1st dose record only coverage of 54 percent and 3rd dose record only coverage of 49 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 58 percent changed from previous revision value of 57 percent. Estimate challenged by: D-R-
- 2020: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 57 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 record or recall results of 55 percent modified for recall bias to 57 percent based on 1st dose record or recall coverage of 61 percent, 1st dose record only coverage of 46 percent and 3rd dose record only coverage of 43 percent. Estimate of 57 percent changed from previous revision value of 55 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 59 percent changed from previous revision value of 57 percent. Estimate challenged by: D-R-
- 2018: Reported data calibrated to 2013 and 2020 levels. Estimate of 53 percent changed from previous revision value of 51 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 59 percent changed from previous revision value of 57 percent. Estimate challenged by: D-R-
- 2016: Reported data calibrated to 2013 and 2020 levels. 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

Yemen - ROTAC

sites continue to send monthly reports to the district. Estimate challenged by: R-
2014: Reported data calibrated to 2013 and 2020 levels. Estimate challenged by: R-
2013: Estimate of 56 percent assigned by working group. Estimate informed by adjustment
to reported coverage level based on difference between estimated and reported coverage
levels for DTP3. Estimate challenged by: R-

Yemen - PCV3

YEM - PCV3



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	71	69	63	62	58	51	58	55	55	57	45	41
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	88	88	84	86	83	79	87	87	87	89	77	73
Administrative	88	88	84	86	83	80	87	87	87	89	77	73
Survey	-	-	-	-	-	-	-	52	54	-	-	-

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: 2024 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.

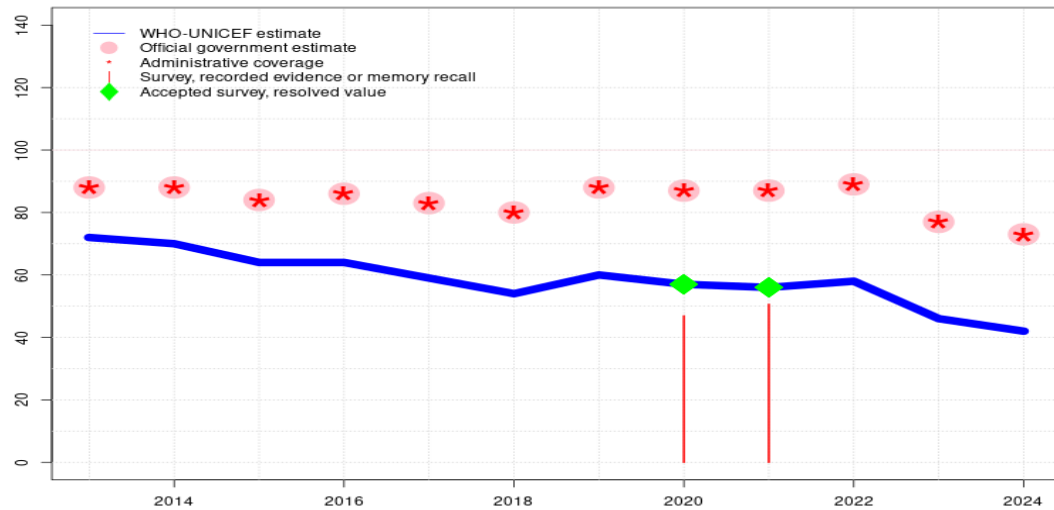
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2024: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-
- 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 challenged by: D-R-
- 2021: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 55 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 record or recall results of 54 percent modified for recall bias to 55 percent based on 1st dose record or recall coverage of 66 percent, 1st dose record only coverage of 56 percent and 3rd dose record 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 challenged by: D-R-
- 2020: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 55 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 record or recall results of 52 percent modified for recall bias to 55 percent based on 1st dose record or recall coverage of 62 percent, 1st dose record only coverage of 47 percent and 3rd dose record only coverage of 42 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 challenged by: D-R-
- 2018: Reported data calibrated to 2012 and 2020 levels. 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 challenged by: D-R-
- 2016: Reported data calibrated to 2012 and 2020 levels. 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 challenged by: R-
- 2014: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-
- 2013: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-

Yemen - POL3

YEM - POL3



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	72	70	64	64	59	54	60	57	56	58	46	42
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	88	88	84	86	83	80	88	87	87	89	77	73
Administrative	88	88	84	86	83	80	88	87	87	89	77	73
Survey	-	-	-	-	-	-	-	47	51	-	-	-

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: 2024 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:

- 2024: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-
- 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 challenged by: D-R-
- 2021: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 56 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 record or recall results of 51 percent modified for recall bias to 56 percent based on 1st dose record or recall coverage of 67 percent, 1st dose record only coverage of 56 percent and 3rd dose record 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 challenged by: D-R-
- 2020: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 57 percent based on 1 survey(s). Yemen Multiple Indicator Cluster Survey 2022-2023 record or recall results of 47 percent modified for recall bias to 57 percent based on 1st dose record or recall coverage of 64 percent, 1st dose record only coverage of 47 percent and 3rd dose record only coverage of 42 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 59 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 52 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 56 percent. Estimate challenged by: D-R-
- 2016: Reported data calibrated to 2012 and 2020 levels. Estimate of 64 percent changed from previous revision value of 61 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 64 percent changed from previous revision value of 60 percent. Estimate challenged by: R-

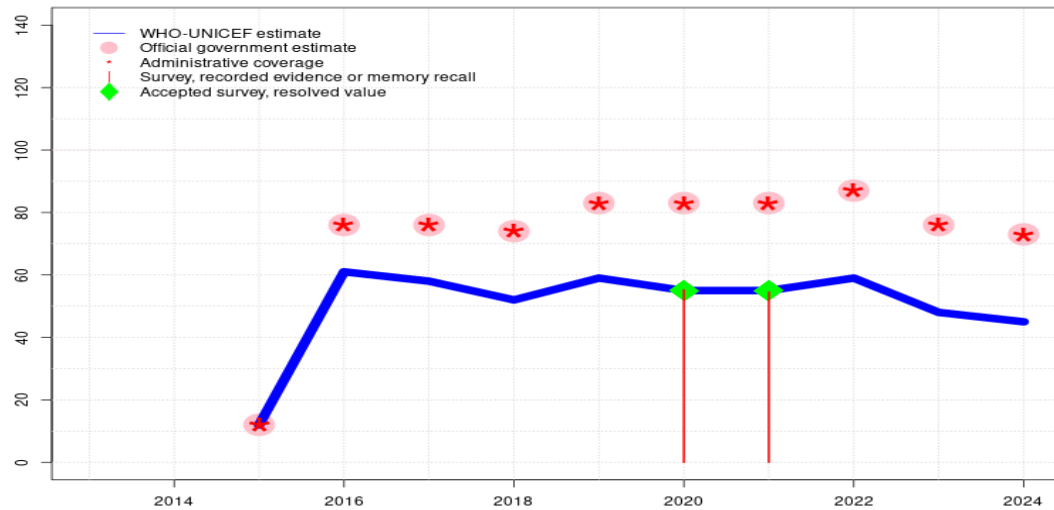
Yemen - POL3

2014: Reported data calibrated to 2012 and 2020 levels. Estimate of 70 percent changed from previous revision value of 64 percent. Estimate challenged by: R-

2013: Reported data calibrated to 2012 and 2020 levels. Estimate of 72 percent changed from previous revision value of 66 percent. Estimate challenged by: R-

Yemen - IPV1

YEM - IPV1



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	-	-	12	61	58	52	59	55	55	59	48	45
Estimate GoC	-	-	•	•	•	•	•	•	•	•	•	•
Official	-	-	12	76	76	74	83	83	83	87	76	73
Administrative	-	-	12	76	76	74	83	83	83	87	76	73
Survey	-	-	-	-	-	-	-	55	55	-	-	-

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: 2024 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.

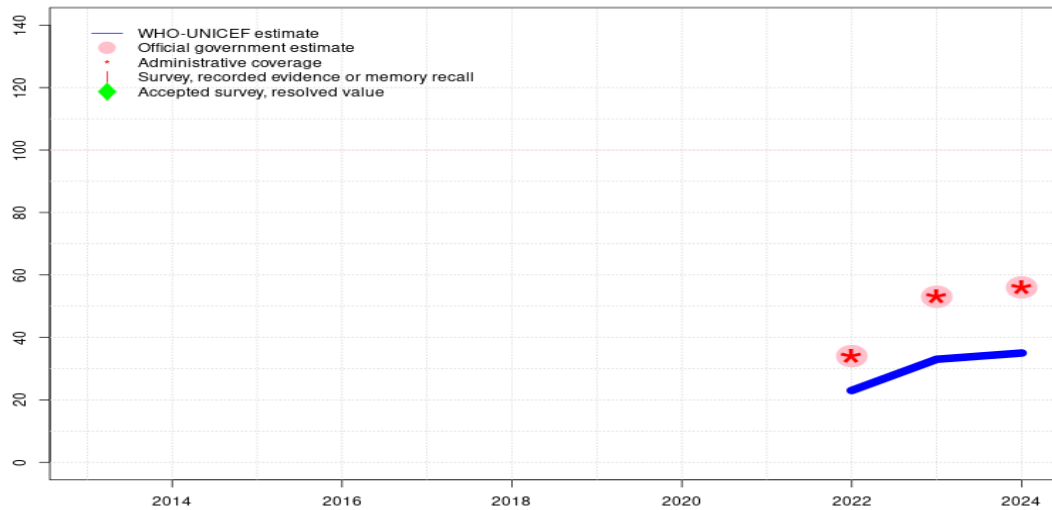
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2024: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-
- 2023: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate of 48 percent changed from previous revision value of 47 percent. 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 59 percent changed from previous revision value of 58 percent. Estimate challenged by: D-R-
- 2021: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 55 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 55 percent changed from previous revision value of 54 percent. Estimate challenged by: D-R-
- 2020: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 55 percent based on 1 survey(s). 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 challenged by: D-R-
- 2018: Reported data calibrated to 2016 and 2020 levels. 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/s12992-018-003]. Estimate challenged by: R-
- 2016: Estimate of 61 percent assigned by working group. Estimate informed by the difference between estimated and reported DTP3 coverage level. Estimate informed by reported data following introduction. Estimate challenged by: R-
- 2015: Estimate informed by reported coverage during introduction. Inactivated polio vaccine introduced in 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

YEM - IPV2



Description:

- 2024: 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-
- 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 in 2021. Reporting started in 2022. Estimate challenged by: R-

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	-	-	-	-	-	-	-	-	-	23	33	35
Estimate GoC	-	-	-	-	-	-	-	-	-	●	●	●
Official	-	-	-	-	-	-	-	-	-	34	53	56
Administrative	-	-	-	-	-	-	-	-	-	34	53	56
Survey	-	-	-	-	-	-	-	-	-	-	-	-

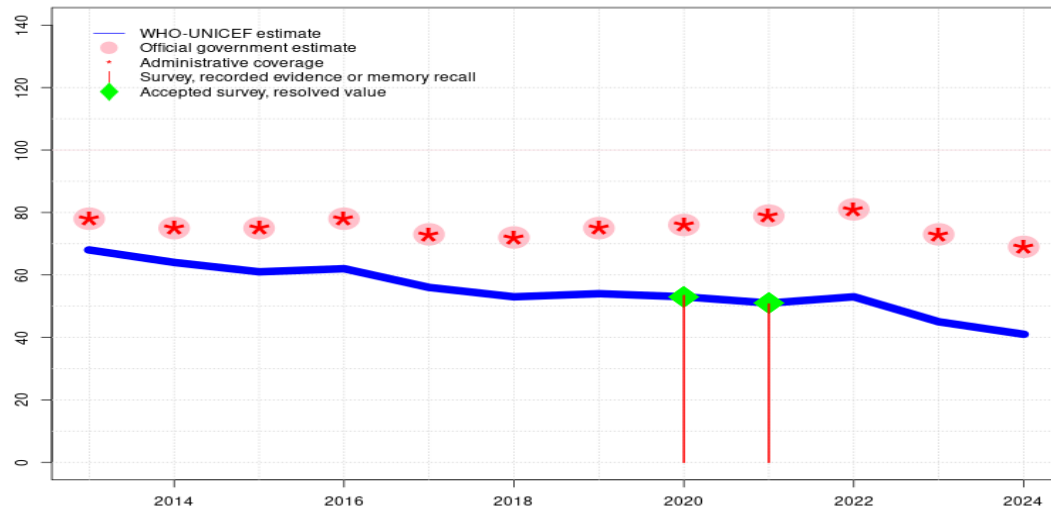
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2024 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.

Yemen - MCV1

YEM - MCV1



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	68	64	61	62	56	53	54	53	51	53	45	41
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	78	75	75	78	73	72	75	76	79	81	73	69
Administrative	78	75	75	78	73	72	75	76	79	81	73	69
Survey	-	-	-	-	-	-	-	53	51	-	-	-

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: 2024 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.

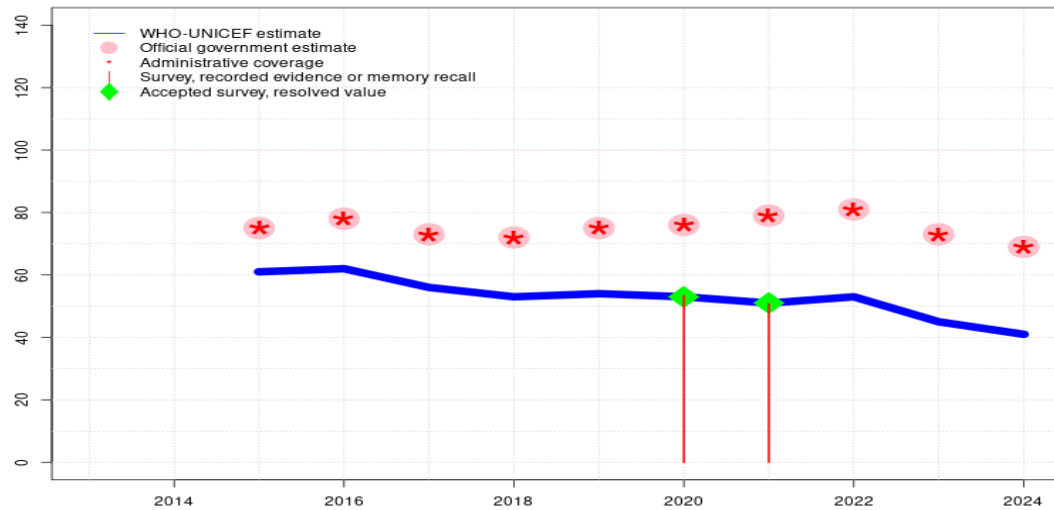
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2024: Reported data calibrated to 2021 levels. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-
- 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 challenged by: D-R-
- 2021: Survey evidence does not support reported data. Estimate based on survey result. 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 challenged by: D-R-
- 2020: Survey evidence does not support reported data. Estimate based on survey result. Survey evidence of 53 percent based on 1 survey(s). 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 challenged by: R-
- 2018: Reported data calibrated to 2012 and 2020 levels. 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 challenged by: R-
- 2016: Reported data calibrated to 2012 and 2020 levels. 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 challenged by: R-
- 2014: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-
- 2013: Reported data calibrated to 2012 and 2020 levels. Estimate challenged by: R-

Yemen - RCV1

YEM - RCV1



Description:

- 2024: Estimate based on estimated MCV1. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-
- 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 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 challenged by: D-R-
- 2020: Estimate based on estimated MCV1. 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 challenged by: R-
- 2018: Estimate based on estimated MCV1. 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 challenged by: R-
- 2016: Estimate based on estimated MCV1. Estimate challenged by: R-
- 2015: Estimate based on estimated MCV1. Rubella containing vaccine introduced in 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 challenged by: R-

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	-	-	61	62	56	53	54	53	51	53	45	41
Estimate GoC	-	-	•	•	•	•	•	•	•	•	•	•
Official	-	-	75	78	73	72	75	76	79	81	73	69
Administrative	-	-	75	78	73	72	75	76	79	81	73	69
Survey	-	-	-	-	-	-	-	53	51	-	-	-

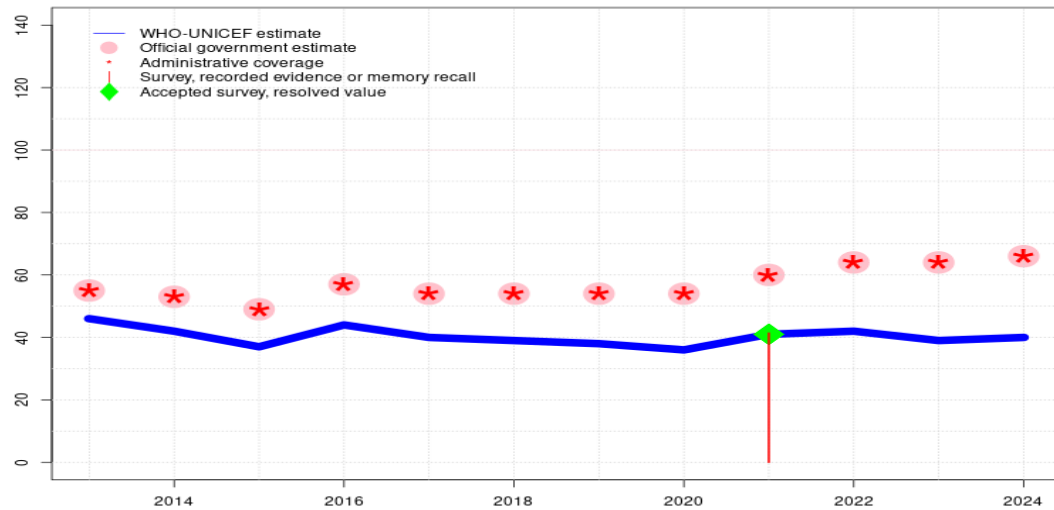
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2024 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.

Yemen - MCV2

YEM - MCV2



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	46	42	37	44	40	39	38	36	41	42	39	40
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	55	53	49	57	54	54	54	54	60	64	64	66
Administrative	55	53	49	57	54	54	54	54	60	64	64	66
Survey	-	-	-	-	-	-	-	-	41	-	-	-

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: 2024 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:

- 2024: Estimate is based on the relationship between reported official coverage for MCV1 and MCV2 applied to the MCV1 estimated coverage. Country reported less supervisory visits in conflict affected areas. Estimate challenged by: D-R-
- 2023: Estimate is based on the relationship between reported official coverage for MCV1 and MCV2 applied to the MCV1 estimated coverage. Country reported less supervisory visits in conflict affected areas. Estimate of 39 percent changed from previous revision value of 45 percent. Estimate challenged by: D-R-
- 2022: Estimate is based on the relationship between reported official coverage for MCV1 and MCV2 applied to the MCV1 estimated 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. Estimate of 42 percent changed from previous revision value of 45 percent. Estimate challenged by: D-R-
- 2021: Survey evidence does not support reported data. Estimate based on survey result. 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 challenged by: D-R-
- 2020: Reported data calibrated to 2012 and 2021 levels. 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 challenged by: R-
- 2018: Reported data calibrated to 2012 and 2021 levels. 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/s12992-018-003]. Estimate challenged by: R-
- 2016: Reported data calibrated to 2012 and 2021 levels. 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 challenged by: R-
- 2014: Reported data calibrated to 2012 and 2021 levels. Estimate challenged by: R-
- 2013: Reported data calibrated to 2012 and 2021 levels. 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 one or two years prior to the survey field work.

The survey results below present vaccination coverage estimates by antigen, confirmation method, and child's age at the time of the survey. Coverage based on **Recall** reflects information based upon a mother's or caregiver's memory. Coverage based on **Record** reflects information drawn from documented vaccination history in home- and/or facility-based records. **Evidence seen** reflects the percentage of children in the sample with documented evidence of vaccination history seen by the survey team.

2021 Yemen Multiple Indicator Cluster Survey 2022-2023

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
BCG	Recall	11.5	12-23 m	3927	58
BCG	Record	48.5	12-23 m	3927	58
BCG	Record or Recall	60	12-23 m	3927	58
BCG	Record or Recall<12m	59	12-23 m	3927	58
DTP1	Recall	11.3	12-23 m	3927	58
DTP1	Record	55.8	12-23 m	3927	58
DTP1	Record or Recall	67.1	12-23 m	3927	58
DTP1	Record or Recall<12m	65.2	12-23 m	3927	58
DTP3	Recall	7.3	12-23 m	3927	58
DTP3	Record	47.4	12-23 m	3927	58
DTP3	Record or Recall	54.6	12-23 m	3927	58
DTP3	Record or Recall<12m	51.1	12-23 m	3927	58
HEPB1	Recall	11.3	12-23 m	3927	58
HEPB1	Record	55.8	12-23 m	3927	58
HEPB1	Record or Recall	67.1	12-23 m	3927	58
HEPB1	Record or Recall<12m	65.2	12-23 m	3927	58
HEPB3	Recall	7.3	12-23 m	3927	58
HEPB3	Record	47.4	12-23 m	3927	58
HEPB3	Record or Recall	54.6	12-23 m	3927	58

HEPB3	Record or Recall<12m	51.1	12-23 m	3927	58
HIB1	Recall	11.3	12-23 m	3927	58
HIB1	Record	55.8	12-23 m	3927	58
HIB1	Record or Recall	67.1	12-23 m	3927	58
HIB1	Record or Recall<12m	65.2	12-23 m	3927	58
HIB3	Recall	7.3	12-23 m	3927	58
HIB3	Record	47.4	12-23 m	3927	58
HIB3	Record or Recall	54.6	12-23 m	3927	58
HIB3	Record or Recall<12m	51.1	12-23 m	3927	58
IPV1	Recall	11	12-23 m	3927	58
IPV1	Record	43.6	12-23 m	3927	58
IPV1	Record or Recall	54.5	12-23 m	3927	58
IPV1	Record or Recall<12m	51.7	12-23 m	3927	58
MCV1	Recall	9.9	12-23 m	3927	58
MCV1	Record	40.8	12-23 m	3927	58
MCV1	Record or Recall	50.7	12-23 m	3927	58
MCV1	Record or Recall<12m	44.9	12-23 m	3927	58
MCV2	Recall	11.1	24-35 m	4119	49
MCV2	Record	30.3	24-35 m	4119	49
MCV2	Record or Recall	41.4	24-35 m	4119	49
MCV2	Record or Recall<12m	38.3	24-35 m	4119	49
PCV1	Recall	10.2	12-23 m	3927	58
PCV1	Record	55.6	12-23 m	3927	58
PCV1	Record or Recall	65.8	12-23 m	3927	58
PCV1	Record or Recall<12m	64	12-23 m	3927	58
PCV3	Recall	6.9	12-23 m	3927	58
PCV3	Record	47.2	12-23 m	3927	58
PCV3	Record or Recall	54	12-23 m	3927	58
PCV3	Record or Recall<12m	50.6	12-23 m	3927	58
POL1	Recall	10.7	12-23 m	3927	58
POL1	Record	55.8	12-23 m	3927	58
POL1	Record or Recall	66.6	12-23 m	3927	58
POL1	Record or Recall<12m	65.1	12-23 m	3927	58
POL3	Recall	3.7	12-23 m	3927	58
POL3	Record	46.8	12-23 m	3927	58
POL3	Record or Recall	50.6	12-23 m	3927	58
POL3	Record or Recall<12m	47.5	12-23 m	3927	58
RCV1	Recall	9.9	12-23 m	3927	58
RCV1	Record	40.8	12-23 m	3927	58
RCV1	Record or Recall	50.7	12-23 m	3927	58

Yemen - Survey Details

RCV1	Record or Recall<12m	44.9	12-23 m	3927	58
ROTAC	Recall	8.9	12-23 m	3927	58
ROTAC	Record	48.6	12-23 m	3927	58
ROTAC	Record or Recall	57.4	12-23 m	3927	58
ROTAC	Record or Recall<12m	53.9	12-23 m	3927	58

2020 Yemen Multiple Indicator Cluster Survey 2022-2023

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
BCG	Recall	17.5	24-35 m	4119	49
BCG	Record	41.9	24-35 m	4119	49
BCG	Record or Recall	59.4	24-35 m	4119	49
BCG	Record or Recall<12m	57.4	24-35 m	4119	49
DTP1	Recall	16.8	24-35 m	4119	49
DTP1	Record	46.9	24-35 m	4119	49
DTP1	Record or Recall	63.8	24-35 m	4119	49
DTP1	Record or Recall<12m	60.6	24-35 m	4119	49
DTP3	Recall	11.9	24-35 m	4119	49
DTP3	Record	41.5	24-35 m	4119	49
DTP3	Record or Recall	53.4	24-35 m	4119	49
DTP3	Record or Recall<12m	47.5	24-35 m	4119	49
HEPB1	Recall	16.8	24-35 m	4119	49
HEPB1	Record	46.9	24-35 m	4119	49
HEPB1	Record or Recall	63.8	24-35 m	4119	49
HEPB1	Record or Recall<12m	60.6	24-35 m	4119	49
HEPB3	Recall	11.9	24-35 m	4119	49
HEPB3	Record	41.5	24-35 m	4119	49
HEPB3	Record or Recall	53.4	24-35 m	4119	49
HEPB3	Record or Recall<12m	47.5	24-35 m	4119	49
HIB1	Recall	16.8	24-35 m	4119	49
HIB1	Record	46.9	24-35 m	4119	49
HIB1	Record or Recall	63.8	24-35 m	4119	49
HIB1	Record or Recall<12m	60.6	24-35 m	4119	49
HIB3	Recall	11.9	24-35 m	4119	49
HIB3	Record	41.5	24-35 m	4119	49
HIB3	Record or Recall	53.4	24-35 m	4119	49
HIB3	Record or Recall<12m	47.5	24-35 m	4119	49
IPV1	Recall	17	24-35 m	4119	49
IPV1	Record	38.1	24-35 m	4119	49

IPV1	Record or Recall	55.2	24-35 m	4119	49
IPV1	Record or Recall<12m	50.7	24-35 m	4119	49
MCV1	Recall	15.1	24-35 m	4119	49
MCV1	Record	38.3	24-35 m	4119	49
MCV1	Record or Recall	53.4	24-35 m	4119	49
MCV1	Record or Recall<12m	41.8	24-35 m	4119	49
PCV1	Recall	15.6	24-35 m	4119	49
PCV1	Record	46.8	24-35 m	4119	49
PCV1	Record or Recall	62.4	24-35 m	4119	49
PCV1	Record or Recall<12m	59	24-35 m	4119	49
PCV3	Recall	10.5	24-35 m	4119	49
PCV3	Record	41.7	24-35 m	4119	49
PCV3	Record or Recall	52.2	24-35 m	4119	49
PCV3	Record or Recall<12m	46.2	24-35 m	4119	49
POL1	Recall	17.3	24-35 m	4119	49
POL1	Record	47.1	24-35 m	4119	49
POL1	Record or Recall	64.4	24-35 m	4119	49
POL1	Record or Recall<12m	61.4	24-35 m	4119	49
POL3	Recall	5.4	24-35 m	4119	49
POL3	Record	41.5	24-35 m	4119	49
POL3	Record or Recall	46.9	24-35 m	4119	49
POL3	Record or Recall<12m	42.2	24-35 m	4119	49
RCV1	Recall	15.1	24-35 m	4119	49
RCV1	Record	38.3	24-35 m	4119	49
RCV1	Record or Recall	53.4	24-35 m	4119	49
RCV1	Record or Recall<12m	41.8	24-35 m	4119	49
ROTAC	Recall	12.6	24-35 m	4119	49
ROTAC	Record	42.6	24-35 m	4119	49
ROTAC	Record or Recall	55.3	24-35 m	4119	49
ROTAC	Record or Recall<12m	49.3	24-35 m	4119	49

2012 Yemen National Health and Demographic Survey, 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
BCG	Recall	27.1	12-23 m	1601	47
BCG	Record	40.4	12-23 m	1427	47
BCG	Record or Recall	67.6	12-23 m	3028	47
BCG	Record or Recall<12m	66.9	12-23 m	3028	47
DTP1	Recall	30.6	12-23 m	1601	47

Yemen - Survey Details

DTP1	Record	46	12-23 m	1427	47
DTP1	Record or Recall	76.6	12-23 m	3028	47
DTP1	Record or Recall<12m	75.3	12-23 m	3028	47
DTP3	Recall	19.3	12-23 m	1601	47
DTP3	Record	40.4	12-23 m	1427	47
DTP3	Record or Recall	59.6	12-23 m	3028	47
DTP3	Record or Recall<12m	57.6	12-23 m	3028	47
HEPB1	Recall	30.6	12-23 m	1601	47
HEPB1	Record	46	12-23 m	1427	47
HEPB1	Record or Recall	76.6	12-23 m	3028	47
HEPB1	Record or Recall<12m	75.3	12-23 m	3028	47
HEPB3	Recall	19.3	12-23 m	1601	47
HEPB3	Record	40.4	12-23 m	1427	47
HEPB3	Record or Recall	59.6	12-23 m	3028	47
HEPB3	Record or Recall<12m	57.6	12-23 m	3028	47
HIB1	Recall	30.6	12-23 m	1601	47
HIB1	Record	46	12-23 m	1427	47
HIB1	Record or Recall	76.6	12-23 m	3028	47
HIB1	Record or Recall<12m	75.3	12-23 m	3028	47
HIB3	Recall	19.3	12-23 m	1601	47
HIB3	Record	40.4	12-23 m	1427	47
HIB3	Record or Recall	59.6	12-23 m	3028	47
HIB3	Record or Recall<12m	57.6	12-23 m	3028	47
MCV1	Recall	24	12-23 m	1601	47
MCV1	Record	39.3	12-23 m	1427	47
MCV1	Record or Recall	63.3	12-23 m	3028	47
MCV1	Record or Recall<12m	51.4	12-23 m	3028	47
PCV1	Record	43.9	12-23 m	1427	47
PCV1	Record<12m	42.9	12-23 m	3028	47
PCV3	Record	38.4	12-23 m	1427	47
PCV3	Record<12m	37	12-23 m	3028	47
POL1	Recall	29.7	12-23 m	1601	47
POL1	Record	46.4	12-23 m	1427	47
POL1	Record or Recall	76.1	12-23 m	3028	47
POL1	Record or Recall<12m	74.5	12-23 m	3028	47
POL3	Recall	17.9	12-23 m	1601	47
POL3	Record	40.8	12-23 m	1427	47
POL3	Record or Recall	58.7	12-23 m	3028	47
POL3	Record or Recall<12m	56.7	12-23 m	3028	47

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

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
DTP1	Record or Recall	79	12-23 m	5178	59
DTP1	Record or Recall<12m	60	12-23 m	5178	59
DTP3	Record or Recall	69	12-23 m	5178	59
DTP3	Record or Recall<12m	50	12-23 m	5178	59
HEPB1	Record or Recall	79	12-23 m	5178	59
HEPB1	Record or Recall<12m	60	12-23 m	5178	59
HEPB3	Record or Recall	69	12-23 m	5178	59
HEPB3	Record or Recall<12m	50	12-23 m	5178	59
HIB1	Record or Recall	79	12-23 m	5178	59
HIB1	Record or Recall<12m	60	12-23 m	5178	59
HIB3	Record or Recall	69	12-23 m	5178	59
HIB3	Record or Recall<12m	50	12-23 m	5178	59
MCV1	Record or Recall	66	12-23 m	5178	59
MCV1	Record or Recall<12m	40	12-23 m	5178	59
POL1	Record or Recall	86	12-23 m	5178	59
POL3	Record or Recall	77	12-23 m	5178	59

2005 Yemen Multiple Indicator Cluster Survey 2006, Final Report

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
BCG	Recall	31.1	12-23 m	721	48
BCG	Record	37.9	12-23 m	721	48
BCG	Record or Recall	69	12-23 m	721	48
BCG	Record or Recall<12m	67.2	12-23 m	721	48
DTP1	Recall	31.6	12-23 m	721	48
DTP1	Record	46.8	12-23 m	721	48
DTP1	Record or Recall	78.4	12-23 m	721	48
DTP1	Record or Recall<12m	76.9	12-23 m	721	48
DTP3	Recall	21.7	12-23 m	721	48
DTP3	Record	39.2	12-23 m	721	48
DTP3	Record or Recall	61	12-23 m	721	48
DTP3	Record or Recall<12m	59.7	12-23 m	721	48
HEPB1	Recall	16.3	12-23 m	721	48
HEPB1	Record	11.8	12-23 m	721	48

HEPB1	Record or Recall	28.1	12-23 m	721	48
HEPB1	Record or Recall<12m	25.5	12-23 m	721	48
HEPB3	Recall	10.7	12-23 m	721	48
HEPB3	Record	8.7	12-23 m	721	48
HEPB3	Record or Recall	19.4	12-23 m	721	48
HEPB3	Record or Recall<12m	18.6	12-23 m	721	48
HIB1	Recall	25.8	12-23 m	721	48
HIB1	Record	32.8	12-23 m	721	48
HIB1	Record or Recall	58.6	12-23 m	721	48
HIB1	Record or Recall<12m	56.9	12-23 m	721	48
HIB3	Recall	15.9	12-23 m	721	48
HIB3	Record	26.7	12-23 m	721	48
HIB3	Record or Recall	42.6	12-23 m	721	48
HIB3	Record or Recall<12m	40	12-23 m	721	48
MCV1	Recall	34.3	12-23 m	721	48
MCV1	Record	30.8	12-23 m	721	48
MCV1	Record or Recall	65.1	12-23 m	721	48
MCV1	Record or Recall<12m	59.2	12-23 m	721	48
POL1	Recall	36.1	12-23 m	721	48

POL1	Record	45.2	12-23 m	721	48
POL1	Record or Recall	81.2	12-23 m	721	48
POL1	Record or Recall<12m	78.9	12-23 m	721	48
POL3	Recall	26.6	12-23 m	721	48
POL3	Record	36.5	12-23 m	721	48
POL3	Record or Recall	63	12-23 m	721	48
POL3	Record or Recall<12m	60.2	12-23 m	721	48

2002 The Family Health Survey in the Republic of Yemen 2003

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
BCG	Record	54.8	12-23 m	2058	27
DTP1	Record	55.6	12-23 m	2058	27
DTP3	Record	44.7	12-23 m	2058	27
MCV1	Record	44.8	12-23 m	2058	27
POL1	Record	62.2	12-23 m	2058	27
POL3	Record	47.4	12-23 m	2058	27

Further information and estimates for previous years are available at:

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

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