

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

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

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

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

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

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

#### **D**ATA SOURCES.

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

#### ABBREVIATIONS

 ${\bf BCG:}\,$  percentage of births who received one dose of Bacillus Calmette Guerin vaccine.

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

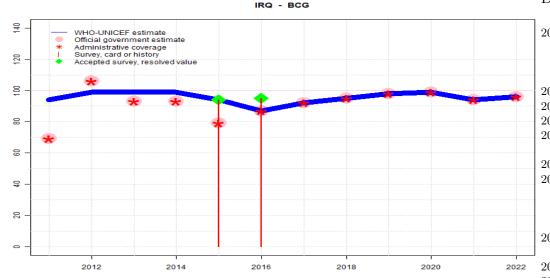
immunization and/or campaign or (ii) a sequential schedule of IPV followed by OPV, WHO and UNICEF estimates for IPV1 reflect coverage with at least one routine dose of IPV among infants <1 year of age among countries. For countries utilizing IPV containing vaccine use only, i.e., no recommended dose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

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

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

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## Iraq - BCG



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	94	99	99	99	94	87	92	95	98	99	94	96
Estimate GoC	•	•	•	•	•	•	•••	•••	••	••	••	••
Official	69	106	93	93	79	87	92	95	98	99	94	96
Administrative	69	106	93	93	79	87	92	95	98	99	94	96
Survey	NA	NA	NA	NA	94	95	NA	NA	NA	NA	NA	NA

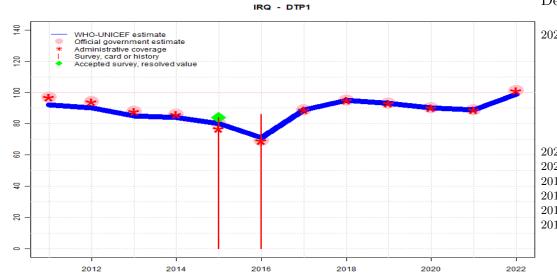
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- 2022: Estimate informed by reported data. No nationally representative survey during the most recent five year period. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage, with a particular interest in validating catch-up activities. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. Programme reports two months vaccine stockout at national level. GoC=R+ S+ D+
- 2017: Estimate informed by reported data. GoC=R+ S+ D+
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 95 percent based on 1 survey(s). Programme reports an unexplained decline in the target population of 15 percent from that reported in 2015. Programme reports four months vaccine stockout at national level. Estimate challenged by: D-
- 2015: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 94 percent based on 1 survey(s). Estimate challenged by: R-
- 2014: Reported data calibrated to 2010 and 2015 levels. Estimate challenged by: R-S-
- 2013: Reported data calibrated to 2010 and 2015 levels. Estimate challenged by: R-
- 2012: Reported data calibrated to 2010 and 2015 levels. Reported data excluded because 106 percent greater than 100 percent. Reported data excluded due to an increase from 69 percent to 106 percent with decrease 93 percent. Estimate challenged by: D-R-
- 2011: Reported data calibrated to 2010 and 2015 levels. Reported data excluded due to decline in reported coverage from 86 percent to 69 percent with increase to 106 percent. Estimate challenged by: D-R-

### Iraq - DTP1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	92	90	85	84	80	71	89	95	93	90	89	99
Estimate GoC	•	•	•	•	•••	•	•••	••	••	••	••	••
Official	97	94	88	86	80	69	89	95	93	90	89	101
Administrative	97	94	88	86	77	69	89	95	93	90	89	101
Survey	NA	NA	NA	NA	84	86	NA	NA	NA	NA	NA	NA

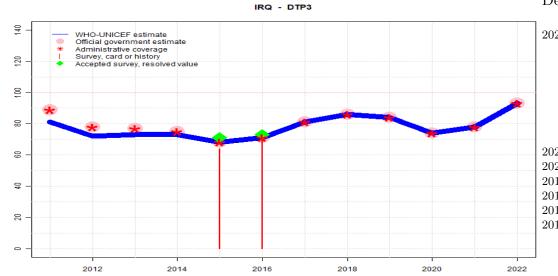
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- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
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- 2021: Estimate informed by reported data. GoC=R+D+
- 2020: Estimate informed by reported data. GoC=R+D+
- 2019: Estimate informed by reported data. GoC=R+D+
- 2018: Estimate informed by reported data. GoC=R+D+
- 2017: Estimate informed by reported data. GoC=R+S+D+
- 2016: Reported DTP1 lower than DTP3. Estimate based on estimated DTP3 and assumes no dropout. Programme reports five month vaccine stockout at national level. Iraq Multiple Indicator Cluster Survey 2018 results ignored by working group. Survey may no reflect 2016 vaccine stockout.Reported data excluded due to decline in reported coverage from 80 percent to 69 percent with increase to 89 percent. Programme reports an unexplained decline in the target population of 15 percent from that reported in 2015. Estimate challenged by: R-S-
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 84 percent based on 1 survey(s). Programme reports a five months national level stockout of DTP-HepB-Hib vaccine. GoC=R+ S+ D+
- 2014: Reported data calibrated to 2010 and 2015 levels. Programme reports four months stockout at national level. Reported number of children vaccinated is increasing since 2012 but continues to fall short of the reported number of children vaccinated with DTP containing vaccines during 2011. Estimate challenged by: R-
- 2013: Reported data calibrated to 2010 and 2015 levels. Estimate challenged by: D-R-
- 2012: Reported data calibrated to 2010 and 2015 levels. DTP-HepB-Hib pentavalent and DTP-Hib tetravalent vaccines introduced in 2012. Estimate challenged by: D-R-
- 2011: Reported data calibrated to 2010 and 2015 levels. Estimate challenged by: D-R-

### Iraq - DTP3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	81	72	73	73	68	71	81	86	84	74	78	93
Estimate GoC	•	•	•	•	•••	•••	•••	•	••	••	••	••
Official	89	78	77	75	68	71	81	86	84	74	78	93
Administrative	89	78	77	75	68	71	81	86	84	74	78	93
Survey	NA	NA	NA	NA	64	69	NA	NA	NA	NA	NA	NA

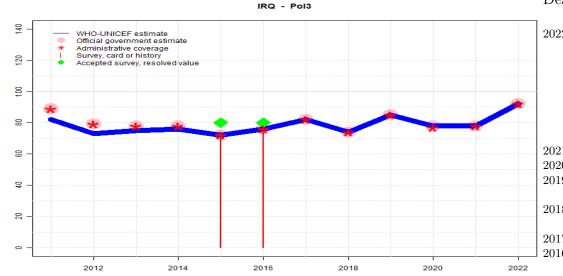
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
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- 2021: Estimate informed by reported data. GoC=R+D+
- 2020: Estimate informed by reported data. GoC=R+D+
- 2019: Estimate informed by reported data. GoC=R+D+
- 2018: Estimate informed by reported data. Estimate challenged by: S-
- 2017: Estimate informed by reported data. GoC=R+ S+ D+
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 73 percent based on 1 survey(s). Iraq Multiple Indicator Cluster Survey 2018 card or history results of 69 percent modifed for recall bias to 73 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 73 percent and 3rd dose card only coverage of 62 percent. Programme reports an unexplained decline in the target population of 15 percent from that reported in 2015. Programme reports five month vaccine stockout at national level. GoC=R+ S+ D+
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 71 percent based on 1 survey(s). Iraq Multiple Indicator Cluster Survey 2018 card or history results of 64 percent modifed for recall bias to 71 percent based on 1st dose card or history coverage of 84 percent, 1st dose card only coverage of 59 percent and 3rd dose card only coverage of 50 percent. Programme reports a five months national level stockout of DTP-HepB-Hib vaccine. GoC=R+ S+ D+
- 2014: Reported data calibrated to 2010 and 2015 levels. Programme reports four months stockout at national level. Reported number of children vaccinated is increasing since 2012 but continues to fall short of the reported number of children vaccinated with DTP containing vaccines during 2011. Estimate challenged by: R-
- 2013: Reported data calibrated to 2010 and 2015 levels. Estimate challenged by: D-R-
- 2012: Reported data calibrated to 2010 and 2015 levels. DTP-HepB-Hib pentavalent and DTP-Hib tetravalent vaccines introduced in 2012. Estimate challenged by: D-R-
- 2011: Reported data calibrated to 2010 and 2015 levels. Estimate challenged by: D-R-

# Iraq - Pol3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	82	73	75	76	72	76	82	74	85	78	78	92
Estimate GoC	•	•	•	•	•••	•••	•••	•••	••	••	••	••
Official	89	79	78	78	72	76	82	74	85	78	78	92
Administrative	89	79	78	78	72	76	82	74	85	77	78	92
Survey	NA	NA	NA	NA	71	74	NA	NA	NA	NA	NA	NA

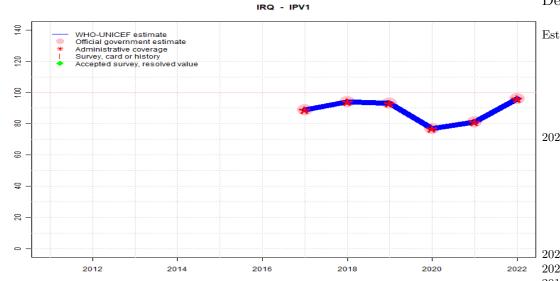
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- ••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2022 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
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- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. Reported data suggests recovery following vaccine supply disruption. GoC=R+ D+
- 2018: Estimate informed by reported data. Programme reports three months vaccine stockout at national level. GoC=R+ S+ D+
- 2017: Estimate informed by reported data. GoC=R+ S+ D+
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 80 percent based on 1 survey(s). Iraq Multiple Indicator Cluster Survey 2018 card or history results of 74 percent modifed for recall bias to 80 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 74 percent and 3rd dose card only coverage of 65 percent. Programme reports an unexplained decline in the target population of 15 percent from that reported in 2015. Programme reports one month vaccine stockout at national level. GoC=R+ S+ D+
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 80 percent based on 1 survey(s). Iraq Multiple Indicator Cluster Survey 2018 card or history results of 71 percent modifed for recall bias to 80 percent based on 1st dose card or history coverage of 90 percent, 1st dose card only coverage of 62 percent and 3rd dose card only coverage of 55 percent. GoC=R+S+D+
- 2014: Reported data calibrated to 2010 and 2015 levels. Estimate challenged by: R-
- 2013: Reported data calibrated to 2010 and 2015 levels. Estimate challenged by: D-R-
- 2012: Reported data calibrated to 2010 and 2015 levels. Estimate challenged by: D-R-
- 2011: Reported data calibrated to 2010 and 2015 levels. Estimate challenged by: D-R-

## Iraq - IPV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	NA	89	94	93	77	81	96
Estimate GoC	NA	NA	NA	NA	NA	NA	••	••	••	••	••	••
Official	NA	NA	NA	NA	NA	NA	89	94	93	77	81	96
Administrative	NA	NA	NA	NA	NA	NA	89	94	93	77	81	96
Survey	NA											

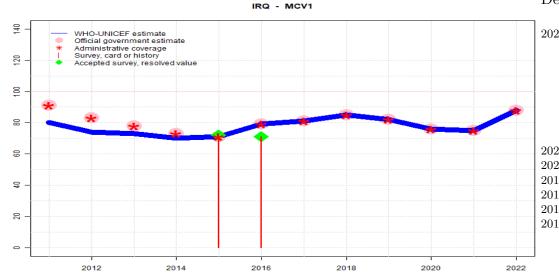
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- Estimates for a dose of inactivated polio vaccine (IPV) begin in 2015 following the Global Polio Eradication Initiative's Polio Eradication and Endgame Strategic Plan: 2013-2018 which recommended at least one full dose or two fractional doses of IPV into routine immunization schedules as a strategy to mitigate the potential consequences should any re-emergence of type 2 poliovirus occur following the planned withdrawal of Sabin type 2 strains from oral polio vaccine (OPV).
- 2022: Estimate informed by reported data. No nationally representative survey during the most recent five year period. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage, with a particular interest in validating catch-up activities. Programme notes implementation of intensification of integrated service activities to deliver both routine and catch-up doses during 2022. The administrative recording and reporting system does not allow for differentiating routine from catch-up doses and thus estimated coverage likely reflects a combination of both routine and catch-up doses and thus may overestimate actual routine coverage. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. . GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by reported data. GoC=R+ D+

## Iraq - MCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	80	74	73	70	71	79	81	85	82	76	75	88
Estimate GoC	•	•	•	•	•••	•••	•••	•	••	••	••	••
Official	91	83	78	73	71	79	81	85	82	76	75	88
Administrative	91	83	78	73	71	79	81	85	82	76	75	88
Survey	NA	NA	NA	NA	72	71	NA	NA	NA	NA	NA	NA

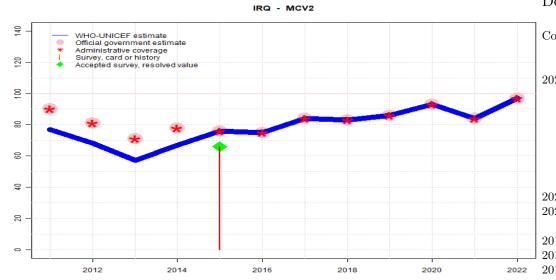
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- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. Estimate challenged by: S-
- 2017: Estimate informed by reported data. GoC=R+ S+ D+
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 71 percent based on 1 survey(s). Programme reports an unexplained decline in the target population of 15 percent from that reported in 2015. Programme reports three months vaccine stockout at national level. GoC=R+S+D+
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 72 percent based on 1 survey(s). GoC=R+ S+ D+
- 2014: Reported data calibrated to 2010 and 2015 levels. Programme reports five months stockout of measles containing vaccine at national level. Estimate challenged by: R-
- 2013: Reported data calibrated to 2010 and 2015 levels. Estimate challenged by: D-R-
- 2012: Reported data calibrated to 2010 and 2015 levels. Estimate challenged by: D-R-
- 2011: Reported data calibrated to 2010 and 2015 levels. Estimate challenged by: D-R-

### Iraq - MCV2



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	77	68	57	67	76	75	84	83	86	93	84	97
Estimate GoC	•	•	•	•	•••	•••	•	••	••	••	••	••
Official	90	81	71	78	76	75	84	83	86	93	84	97
Administrative	90	81	71	78	76	75	84	83	86	93	84	97
Survey	NA	NA	NA	NA	66	NA						

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

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

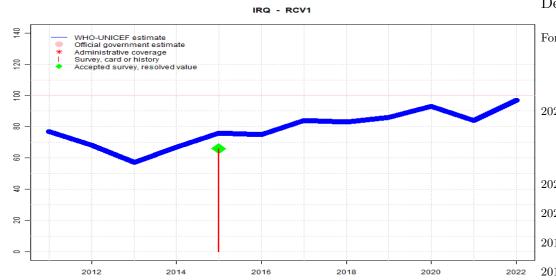
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

### Description:

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

- 2022: Estimate informed by reported data. No nationally representative survey during the most recent five year period. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage, with a particular interest in validating catch-up activities. Programme notes implementation of intensification of integrated service activities to deliver both routine and catch-up doses during 2022. The administrative recording and reporting system does not allow for differentiating routine from catch-up doses and thus estimated coverage likely reflects a combination of both routine and catch-up doses and thus may overestimate actual routine coverage. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. Coverage may include MCV1 doses, country reports that information system does not allow recording delayed MCV1 doses. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+ D+
- 2018: Estimate informed by reported data. GoC=R+ D+
- 2017: Estimate informed by reported data. Estimate challenged by: S-
- 2016: Estimate informed by reported data. Programme reports an unexplained decline in the target population of 15 percent from that reported in 2015. GoC=R+S+D+
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 66 percent based on 1 survey(s). GoC=R+ S+ D+
- 2014: Reported data calibrated to 2013 and 2015 levels. Reported data excluded. Programme reports five months stockout of measles containing vaccine at national level. There is no apparent impact of the stockout on reported coverage. In fact, counterintuitively the reported administrative coverage increased. Estimate challenged by: D-R-
- 2013: Estimate of 57 percent assigned by working group. Estimate follows reported data calibrated based on MCV adjustment factor. Estimate challenged by: D-R-
- 2012: Estimate of 68 percent assigned by working group. Estimate follows reported data calibrated based on MCV adjustment factor. Estimate challenged by: D-R-
- 2011: Estimate of 77 percent assigned by working group. Estimate follows reported data calibrated based on MCV adjustment factor. Estimate challenged by: D-R-

## Iraq - RCV1



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	77	68	57	67	76	75	84	83	86	93	84	97
Estimate GoC	•	•	•	•	•••	•••	•	••	••	••	••	••
Official	NA											
Administrative	NA											
Survey	NA	NA	NA	NA	66	NA						

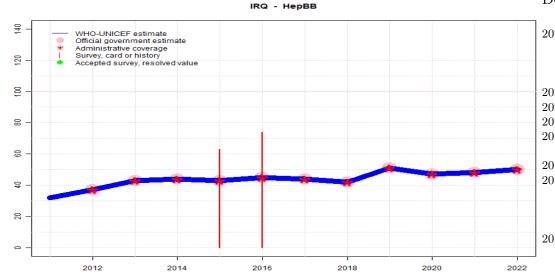
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- For this revision, coverage estimates for the first dose of rubella containing vaccine are based on WHO and UNICEF estimates of coverage of measles containing vaccine. Nationally reported coverage of rubella containing vaccine is not taken into consideration nor are they represented in the the accompanying graph and data table.
- 2022: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate No nationally representative survey during the most recent five year period. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage, with a particular interest in validating catch-up activities. GoC=R+D+
- 2021: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate GoC=R+ D+
- 2020: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate GoC=R+ D+
- 2019: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate GoC=R+ D+
- 2018: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate GoC=R+ D+
- 2017: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate Estimate challenged by: S-
- 2016: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate Programme reports an unexplained decline in the target population of 15 percent from that reported in 2015. GoC=R+ S+ D+
- 2015: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate GoC=R+ S+ D+
- 2014: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate Estimate challenged by: D-R-
- 2013: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate Estimate challenged by: D-R-
- 2012: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate Estimate challenged by: D-R-
- 2011: First dose of rubella vaccine given with second dose of measles containing vaccine. Estimate based on MCV2 estimate Estimate challenged by: D-R-

### Iraq - HepBB



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	32	37	43	44	43	45	44	42	51	47	48	50
Estimate GoC	•	••	••	••	••	••	••	••	••	••	••	••
Official	NA	37	43	44	43	45	44	42	51	47	48	50
Administrative	NA	37	43	44	43	45	44	42	51	47	48	50
Survey	NA	NA	NA	NA	63	74	NA	NA	NA	NA	NA	NA

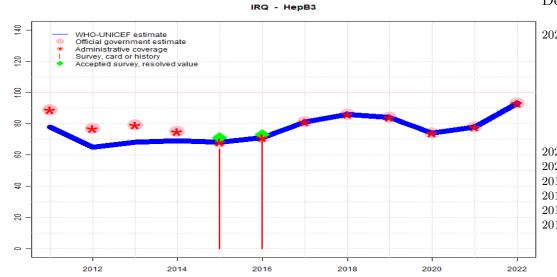
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- 2022: Estimate informed by reported data. No nationally representative survey during the most recent five year period. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage, with a particular interest in validating catch-up activities. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. GoC=R+
- 2018: Estimate informed by reported data. Programme reports one month vaccine stockout at national level. GoC=R+ D+
- 2017: Estimate informed by reported data. GoC=R+ D+
- 2016: Estimate informed by reported data. Iraq Multiple Indicator Cluster Survey 2018 results ignored by working group. Survey may not differentiate from doses given within 24hrs to other doses. Programme reports an unexplained decline in the target population of 15 percent from that reported in 2015. GoC=R+ D+
- 2015: Estimate informed by reported data. Iraq Multiple Indicator Cluster Survey 2018 results ignored by working group. Survey may not differentiate from doses given within 24hrs to other doses. GoC=R+ D+
- 2014: Estimate informed by reported data. GoC=R+ D+
- 2013: Estimate informed by reported data. GoC=R+ D+
- 2012: Estimate informed by reported data. GoC=R+ D+
- 2011: Estimate informed by interpolation between reported data. GoC=No accepted empirical data

### Iraq - HepB3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	78	65	68	69	68	71	81	86	84	74	78	93
Estimate GoC	•	•	•	•	•••	•••	•••	•	••	••	••	••
Official	89	77	79	75	68	71	81	86	84	74	78	93
Administrative	89	77	79	75	68	71	81	86	84	74	78	93
Survey	NA	NA	NA	NA	64	69	NA	NA	NA	NA	NA	NA

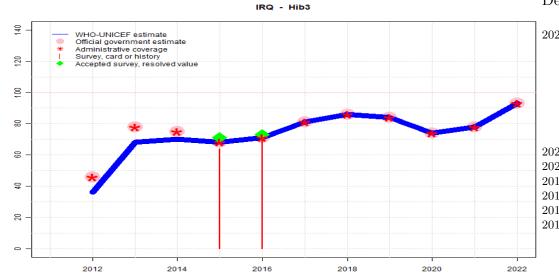
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- 2022: Estimate informed by reported data. No nationally representative survey during the most recent five year period. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage, with a particular interest in validating catch-up activities. Programme notes implementation of intensification of integrated service activities to deliver both routine and catch-up doses during 2022. The administrative recording and reporting system does not allow for differentiating routine from catch-up doses and thus estimated coverage likely reflects a combination of both routine and catch-up doses and thus may overestimate actual routine coverage. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+D+
- 2020: Estimate informed by reported data. GoC=R+
- 2019: Estimate informed by reported data. GoC=R+D+
- 2018: Estimate informed by reported data. Estimate challenged by: S-
- 2017: Estimate informed by reported data. GoC=R+ S+ D+
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 73 percent based on 1 survey(s). Iraq Multiple Indicator Cluster Survey 2018 card or history results of 69 percent modifed for recall bias to 73 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 73 percent and 3rd dose card only coverage of 62 percent. Programme reports an unexplained decline in the target population of 15 percent from that reported in 2015. Programme reports five month vaccine stockout at national level. GoC=R+S+D+
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 71 percent based on 1 survey(s). Iraq Multiple Indicator Cluster Survey 2018 card or history results of 64 percent modifed for recall bias to 71 percent based on 1st dose card or history coverage of 84 percent, 1st dose card only coverage of 59 percent and 3rd dose card only coverage of 50 percent. Programme reports a five months national level stockout of DTP-HepB-Hib vaccine. GoC=R+ S+ D+
- 2014: Reported data calibrated to 2013 and 2015 levels. Programme reports four months stockout at national level. Estimate challenged by: R-
- 2013: Estimate of 68 percent assigned by working group. Estimate based on DTP3 estimate. Estimate challenged by: D-R-
- 2012: Reported data calibrated to 2010 and 2013 levels. DTP-HepB-Hib pentavalent vaccine introduced in 2012. Estimate challenged by: D-R-
- 2011: Reported data calibrated to 2010 and 2013 levels. Estimate challenged by: D-R-

# Iraq - Hib3



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	36	68	70	68	71	81	86	84	74	78	93
Estimate GoC	NA	•	•	•	•••	•••	•••	•	••	••	••	••
Official	NA	46	78	75	68	71	81	86	84	74	78	93
Administrative	NA	46	78	75	68	71	81	86	84	74	78	93
Survey	NA	NA	NA	NA	64	69	NA	NA	NA	NA	NA	NA

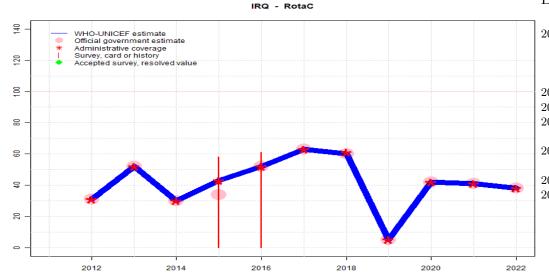
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- 2022: Estimate informed by reported data. No nationally representative survey during the most recent five year period. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage, with a particular interest in validating catch-up activities. Programme notes implementation of intensification of integrated service activities to deliver both routine and catch-up doses during 2022. The administrative recording and reporting system does not allow for differentiating routine from catch-up doses and thus estimated coverage likely reflects a combination of both routine and catch-up doses and thus may overestimate actual routine coverage. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+
- 2019: Estimate informed by reported data. GoC=R+D+
- 2018: Estimate informed by reported data. Estimate challenged by: S-
- 2017: Estimate informed by reported data. GoC=R+ S+ D+
- 2016: Estimate informed by reported data supported by survey. Survey evidence of 73 percent based on 1 survey(s). Iraq Multiple Indicator Cluster Survey 2018 card or history results of 69 percent modifed for recall bias to 73 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 73 percent and 3rd dose card only coverage of 62 percent. Programme reports an unexplained decline in the target population of 15 percent from that reported in 2015. Programme reports five month vaccine stockout at national level. GoC=R+ S+ D+
- 2015: Estimate informed by reported data supported by survey. Survey evidence of 71 percent based on 1 survey(s). Iraq Multiple Indicator Cluster Survey 2018 card or history results of 64 percent modifed for recall bias to 71 percent based on 1st dose card or history coverage of 84 percent, 1st dose card only coverage of 59 percent and 3rd dose card only coverage of 50 percent. Programme reports a five months national level stockout of DTP-HepB-Hib vaccine. GoC=R+ S+ D+
- 2014: Reported data calibrated to 2013 and 2015 levels. Programme reports four months stockout at national level. Estimate challenged by: R-
- 2013: Estimate of 68 percent assigned by working group. Estimate is based on DTP3 coverage level. Estimate challenged by: D-R-
- 2012: Reported data calibrated to 2013 levels. Hib vaccine introduced in 2012. The presentations are DTP-Hib and DTP-HepB-Hib. Estimate challenged by: D-R-

### Iraq - RotaC



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	31	52	30	43	52	63	60	5	42	41	38
Estimate GoC	NA	••	••	••	••	••	••	••	••	••	••	••
Official	NA	31	52	30	34	52	63	60	5	42	41	38
Administrative	NA	31	52	30	43	52	63	61	5	42	41	38
Survey	NA	NA	NA	NA	58	61	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.

- 2022: Estimate informed by reported data. No nationally representative survey during the most recent five year period. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage, with a particular interest in validating catch-up activities. GoC=R+ D+
- 2021: Estimate informed by reported data. GoC=R+ D+
- 2020: Estimate informed by reported data. GoC=R+ D+
- 2019: Estimate informed by reported data. Programme reports a 10 month vaccine stockout at national and district levels. GoC=R+ D+
- 2018: Estimate informed by reported data. Programme reports seven month vaccine stockout at national level. GoC=R+ D+
- 2017: Estimate informed by reported data. GoC=R+ D+
- 2016: Estimate informed by reported data. Iraq Multiple Indicator Cluster Survey 2018 results ignored by working group. Survey results inconsistent with reported data and contextual information suggesting the occurrence of vaccine stockout during the survey period. Programme reports an unexplained decline in the target population of 15 percent from that reported in 2015. Programme reports two months vaccine stockout at national level. GoC=R+
- 2015: Estimate informed by reported administrative data. Iraq Multiple Indicator Cluster Survey 2018 results ignored by working group. Survey results inconsistent with reported data and contextual information suggesting the occurrence of vaccine stockout during the survey period. . GoC=R+ D+
- 2014: Estimate informed by reported administrative data. Estimate is based on reported data. Programme reports five months stockout at national level. GoC=R+D+
- 2013: Estimate informed by reported data. Estimate is based on reported data. GoC=R+D+
- 2012: Estimate informed by reported data. Rotavirus vaccine introduced in 2012. GoC=R+ D+

### Iraq - PcV3

IRQ - PcV3 8 WHO-UNICEF estimate Official government estimate Administrative coverage Survey, card or history 20 Accepted survey, resolved value 8 8 8 육 8 2012 2014 2016 2018 2020 2022

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Estimate	NA	NA	NA	NA	NA	NA	33	33	37	0	0	0
Estimate GoC	NA	NA	NA	NA	NA	NA	••	••	••	••	••	•
Official	NA	NA	NA	NA	NA	NA	33	33	37	0	0	NA
Administrative	NA	NA	NA	NA	NA	NA	33	33	37	0	0	NA
Survey	NA	NA	NA	NA	15	29	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.

- 2022: Programme reports vaccine stockout of unspecified duration. Estimate informed by prior year estimate. No nationally representative survey during the most recent five year period. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage, with a particular interest in validating catch-up activities. GoC=No accepted empirical data
- 2021: Estimate informed by reported data. Programme reports a vaccine stockout of unspecified duration. GoC=R+
- 2020: Estimate informed by reported data. Programme reports a 12-month vaccine stockout. GoC=R+
- 2019: Estimate informed by reported data. Programme reports a 12 month vaccine stockout at national and district levels. GoC=R+ D+
- 2018: Estimate informed by reported data. Programme reports six month vaccine stockout at national level. GoC=R+ D+
- 2017: Estimate informed by reported data. Pneumococcal conjugate vaccine introduced March 2017. GoC=R+ D+

### Iraq - survey details

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

#### 2016 Iraq Multiple Indicator Cluster Survey 2018

Vaccine	Confirmation n	nethod	Coverage .	Age o	cohort	Sample	Cards seen
vaconic	Commination is	nounou	Coverage .			Dampio	Carab boon

vacunc	Commination method	Coverage	rige conort	Dampic	Carus
BCG	C or H ${<}12$ months	94.3	$12\text{-}23~\mathrm{m}$	3167	79
BCG	Card	77.4	$12\text{-}23~\mathrm{m}$	3167	79
BCG	Card or History	94.7	$12\text{-}23~\mathrm{m}$	3167	79
BCG	History	17.2	$12\text{-}23 \mathrm{\ m}$	3167	79
DTP1	C or H ${<}12$ months	84.6	$12\text{-}23~\mathrm{m}$	3167	79
DTP1	Card	73.3	$12\text{-}23~\mathrm{m}$	3167	79
DTP1	Card or History	85.9	$12\text{-}23~\mathrm{m}$	3167	79
DTP1	History	12.6	$12\text{-}23 \mathrm{\ m}$	3167	79
DTP3	C or H ${<}12$ months	64.3	$12\text{-}23~\mathrm{m}$	3167	79
DTP3	Card	62.5	$12\text{-}23~\mathrm{m}$	3167	79
DTP3	Card or History	68.8	$12\text{-}23~\mathrm{m}$	3167	79
DTP3	History	6.3	$12\text{-}23 \mathrm{\ m}$	3167	79
HepB1	C or H ${<}12$ months	84.6	$12\text{-}23~\mathrm{m}$	3167	79
HepB1	Card	73.3	$12\text{-}23~\mathrm{m}$	3167	79
HepB1	Card or History	85.9	$12\text{-}23~\mathrm{m}$	3167	79
HepB1	History	12.6	$12\text{-}23 \mathrm{\ m}$	3167	79
HepB3	C or H ${<}12 \text{ months}$	64.3	$12\text{-}23~\mathrm{m}$	3167	79
HepB3	Card	62.5	$12\text{-}23~\mathrm{m}$	3167	79
HepB3	Card or History	68.8	$12\text{-}23~\mathrm{m}$	3167	79
HepB3	History	6.3	$12\text{-}23 \mathrm{\ m}$	3167	79
HepBB	C or H ${<}12$ months	74.4	$12\text{-}23~\mathrm{m}$	3167	79
HepBB	Card	72.5	$12\text{-}23~\mathrm{m}$	3167	79
HepBB	Card or History	74.4	$12\text{-}23~\mathrm{m}$	3167	79
HepBB	History	1.9	$12\text{-}23~\mathrm{m}$	3167	79

II:L1	C = 11 < 10 months	91 C	10.00 m	2167	70
Hib1	C or H $< 12$ months	84.6	12-23 m	3167	79 70
Hib1	Card	73.3	12-23 m	3167	79 70
Hib1	Card or History	85.9	12-23 m	3167	79 70
Hib1	History	12.6	12-23 m	3167	79
Hib3	C or H $< 12$ months	64.3	12-23  m	3167	79
Hib3	Card	62.5	$12-23 \mathrm{m}$	3167	79
Hib3	Card or History	68.8	$12-23 \mathrm{m}$	3167	79
Hib3	History	6.3	$12-23 \mathrm{m}$	3167	79
MCV1	C or H $< 12$ months	65.6	$12-23 \mathrm{m}$	3167	79
MCV1	Card	60.4	12-23  m	3167	79
MCV1	Card or History	71	$12-23 \mathrm{m}$	3167	79
MCV1	History	10.6	$12-23 \mathrm{m}$	3167	79
PcV1	C or H $< 12$ months	37.3	$12-23 \mathrm{m}$	3167	79
PcV1	Card	32.1	$12-23 \mathrm{m}$	3167	79
PcV1	Card or History	38.1	$12-23 \mathrm{m}$	3167	79
PcV1	History	6	12-23 m	3167	79
PcV3	C or $H < 12$ months	27	12-23 m	3167	79
PcV3	Card	25.8	12-23 m	3167	79
PcV3	Card or History	28.6	12-23 m	3167	79
PcV3	History	2.9	12-23 m	3167	79
Pol1	C  or  H < 12  months	89.5	12-23 m	3167	79
Pol1	Card	74.5	12-23 m	3167	79
Pol1	Card or History	90.9	12-23 m	3167	79
Pol1	History	16.4	12-23 m	3167	79
Pol3	C  or  H < 12  months	69.1	12-23 m	3167	79
Pol3	Card	64.9	12-23 m	3167	79
Pol3	Card or History	73.6	12-23 m	3167	79
Pol3	History	8.7	12-23 m	3167	79
RotaC	C or H $< 12$ months	59.8	12-23 m	3167	79
RotaC	Card	50.0 54	12-23 m	3167	79
RotaC	Card or History	60.6	12-23 m	3167	79
RotaC	History	6.6	12-23 m 12-23 m	3167	79
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2015 Iraq Multiple Indicator Cluster Survey 2018

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H ${<}12$ months	93.3	24-35 m	3089	79
BCG	Card	65.1	$24\text{-}35~\mathrm{m}$	3089	79
BCG	Card or History	93.9	$24\text{-}35~\mathrm{m}$	3089	79

BCG	History	28.8	$24\text{-}35~\mathrm{m}$	3089	79
DTP1	C or H ${<}12$ months	81.3	$24\text{-}35~\mathrm{m}$	3089	79
DTP1	Card	59.1	$24\text{-}35~\mathrm{m}$	3089	79
DTP1	Card or History	83.6	$24\text{-}35~\mathrm{m}$	3089	79
DTP1	History	24.5	$24\text{-}35~\mathrm{m}$	3089	79
DTP3	C or H $< 12$ months	57.7	$24\text{-}35~\mathrm{m}$	3089	79
DTP3	Card	50.2	$24\text{-}35~\mathrm{m}$	3089	79
DTP3	Card or History	63.5	$24\text{-}35~\mathrm{m}$	3089	79
DTP3	History	13.3	$24\text{-}35~\mathrm{m}$	3089	79
HepB1	C or H $< 12$ months	81.3	$24\text{-}35~\mathrm{m}$	3089	79
HepB1	Card	59.1	$24\text{-}35~\mathrm{m}$	3089	79
HepB1	Card or History	83.6	$24\text{-}35~\mathrm{m}$	3089	79
HepB1	History	24.5	$24\text{-}35~\mathrm{m}$	3089	79
HepB3	C or H $< 12$ months	57.7	$24\text{-}35~\mathrm{m}$	3089	79
HepB3	Card	50.2	$24\text{-}35~\mathrm{m}$	3089	79
HepB3	Card or History	63.5	$24\text{-}35~\mathrm{m}$	3089	79
HepB3	History	13.3	$24\text{-}35~\mathrm{m}$	3089	79
HepBB	C or H $< 12$ months	62.5	$24\text{-}35~\mathrm{m}$	3089	79
HepBB	Card	61.7	$24\text{-}35~\mathrm{m}$	3089	79
HepBB	Card or History	62.9	$24\text{-}35~\mathrm{m}$	3089	79
HepBB	History	1.1	$24\text{-}35~\mathrm{m}$	3089	79
Hib1	C or H $< 12$ months	81.3	$24\text{-}35~\mathrm{m}$	3089	79
Hib1	Card	59.1	$24\text{-}35~\mathrm{m}$	3089	79
Hib1	Card or History	83.6	$24\text{-}35~\mathrm{m}$	3089	79
Hib1	History	24.5	$24\text{-}35~\mathrm{m}$	3089	79
Hib3	C or H ${<}12$ months	57.7	$24\text{-}35~\mathrm{m}$	3089	79
Hib3	Card	50.2	$24\text{-}35~\mathrm{m}$	3089	79
Hib3	Card or History	63.5	$24\text{-}35~\mathrm{m}$	3089	79
Hib3	History	13.3	$24\text{-}35~\mathrm{m}$	3089	79
MCV1	C or H ${<}12$ months	63.3	$24\text{-}35~\mathrm{m}$	3089	79
MCV1	Card	51	$24\text{-}35~\mathrm{m}$	3089	79
MCV1	Card or History	71.9	$24\text{-}35~\mathrm{m}$	3089	79
MCV1	History	20.9	$24\text{-}35~\mathrm{m}$	3089	79
MCV2	C or H $<\!24$ months	63.1	$24\text{-}35~\mathrm{m}$	3089	79
MCV2	Card	48	$24\text{-}35~\mathrm{m}$	3089	79
MCV2	Card or History	66.4	$24\text{-}35~\mathrm{m}$	3089	79
MCV2	History	18.5	$24\text{-}35~\mathrm{m}$	3089	79
PcV1	C or H $< 12$ months	22.6	$24\text{-}35~\mathrm{m}$	3089	79
PcV1	Card	13.9	$24\text{-}35~\mathrm{m}$	3089	79
PcV1	Card or History	23.9	$24\text{-}35~\mathrm{m}$	3089	79

PcV1	History	10	$24\text{-}35~\mathrm{m}$	3089	79
PcV3	C or H $< 12$ months	13.6	$24\text{-}35~\mathrm{m}$	3089	79
PcV3	Card	11.6	$24\text{-}35~\mathrm{m}$	3089	79
PcV3	Card or History	15.4	$24\text{-}35~\mathrm{m}$	3089	79
PcV3	History	3.8	$24\text{-}35~\mathrm{m}$	3089	79
Pol1	C or H $< 12$ months	87.2	$24\text{-}35~\mathrm{m}$	3089	79
Pol1	Card	61.7	$24\text{-}35~\mathrm{m}$	3089	79
Pol1	Card or History	89.5	$24\text{-}35~\mathrm{m}$	3089	79
Pol1	History	27.8	$24\text{-}35~\mathrm{m}$	3089	79
Pol3	C or H $< 12$ months	65	$24\text{-}35~\mathrm{m}$	3089	79
Pol3	Card	54.7	$24\text{-}35~\mathrm{m}$	3089	79
Pol3	Card or History	70.9	$24\text{-}35~\mathrm{m}$	3089	79
Pol3	History	16.2	$24\text{-}35~\mathrm{m}$	3089	79
RotaC	C or H $< 12$ months	56.5	$24\text{-}35~\mathrm{m}$	3089	79
RotaC	Card	45.3	$24\text{-}35~\mathrm{m}$	3089	79
RotaC	Card or History	58.4	$24\text{-}35~\mathrm{m}$	3089	79
RotaC	History	13	$24\text{-}35~\mathrm{m}$	3089	79

2010 Iraq Multiple Indicator Cluster Survey 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H ${<}12$ months	89.7	$12\text{-}23~\mathrm{m}$	-	70
BCG	Card	68.3	$12\text{-}23~\mathrm{m}$	-	70
BCG	Card or History	90.4	$12\text{-}23~\mathrm{m}$	7487	70
BCG	History	22.1	$12\text{-}23~\mathrm{m}$	-	70
DTP1	C or H ${<}12$ months	84.9	$12\text{-}23~\mathrm{m}$	-	70
DTP1	Card	66.5	$12\text{-}23~\mathrm{m}$	-	70
DTP1	Card or History	86.1	12-23 m	7487	70
DTP1	History	19.6	12-23 m	-	70
DTP3	C or H $< 12$ months	64.8	12-23 m	-	70
DTP3	Card	57	12-23 m	-	70
DTP3	Card or History	70.1	$12\text{-}23~\mathrm{m}$	7487	70
DTP3	History	13.1	12-23 m	-	70
HepB1	C or H $< 12$ months	88.2	12-23 m	-	70
HepB1	Card	69.7	12-23 m	-	70
HepB1	Card or History	88.9	12-23 m	7487	70
HepB1	History	19.1	12-23 m	-	70
HepB3	C or $H < 12$ months	61	12-23 m	-	70
HepB3	Card	56.9	12-23 m	-	70

HepB3	Card or History	66.1	12-23 m	7487	70
HepB3	History	9.2	12-23 m	-	70
MCV1	C  or  H < 12  months	65.8	12-23 m	-	70
MCV1	Card	54	$12-23 \mathrm{~m}$	-	70
MCV1	Card or History	75.4	$12\text{-}23~\mathrm{m}$	7487	70
MCV1	History	21.3	$12\text{-}23~\mathrm{m}$	-	70
Pol1	C or H ${<}12$ months	89.6	$12\text{-}23~\mathrm{m}$	-	70
Pol1	Card	66.6	$12\text{-}23~\mathrm{m}$	-	70
Pol1	Card or History	90.8	$12\text{-}23~\mathrm{m}$	7487	70
Pol1	History	24.2	$12-23 \mathrm{m}$	-	70
Pol3	C or H ${<}12$ months	70.6	$12\text{-}23~\mathrm{m}$	-	70
Pol3	Card	57.2	$12-23 \mathrm{m}$	-	70
Pol3	Card or History	76.4	$12-23 \mathrm{~m}$	7487	70
Pol3	History	19.2	$12-23 \mathrm{~m}$	-	70

2009 Iraq Multiple Indicator Cluster Survey 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H ${<}12$ months	91.2	$18\text{-}29~\mathrm{m}$	-	70
BCG	Card	65	$18\text{-}29~\mathrm{m}$	-	70
BCG	Card or History	92.4	$18\text{-}29~\mathrm{m}$	7524	70
BCG	History	27.4	$18\text{-}29~\mathrm{m}$	-	70
DTP1	C or H ${<}12$ months	85.8	$18\text{-}29~\mathrm{m}$	-	70
DTP1	Card	63.3	$18\text{-}29~\mathrm{m}$	-	70
DTP1	Card or History	88	$18\text{-}29~\mathrm{m}$	7524	70
DTP1	History	24.7	$18\text{-}29~\mathrm{m}$	-	70
DTP3	C or H ${<}12$ months	65.1	$18\text{-}29~\mathrm{m}$	-	70
DTP3	Card	55.5	$18\text{-}29~\mathrm{m}$	-	70
DTP3	Card or History	73.2	$18\text{-}29~\mathrm{m}$	7524	70
DTP3	History	17.8	$18\text{-}29~\mathrm{m}$	-	70
HepB1	C or H ${<}12$ months	89.1	$18\text{-}29~\mathrm{m}$	-	70
HepB1	Card	65.9	$18\text{-}29~\mathrm{m}$	-	70
HepB1	Card or History	90.1	$18\text{-}29~\mathrm{m}$	7524	70
HepB1	History	24.3	$18\text{-}29~\mathrm{m}$	-	70
HepB3	C or H ${<}12$ months	60.2	$18\text{-}29~\mathrm{m}$	-	70
HepB3	Card	55.1	$18\text{-}29~\mathrm{m}$	-	70
HepB3	Card or History	67.7	$18\text{-}29~\mathrm{m}$	7524	70
HepB3	History	12.6	$18\text{-}29~\mathrm{m}$	-	70
MCV1	C or H $< 18$ months	76.7	$18\text{-}29~\mathrm{m}$	-	70

MCV1	Card	55.3	$18\text{-}29~\mathrm{m}$	-	70
MCV1	Card or History	81.3	$18\text{-}29~\mathrm{m}$	7524	70
MCV1	History	26	$18\text{-}29~\mathrm{m}$	-	70
Pol1	C or H ${<}12$ months	90.2	$18\text{-}29~\mathrm{m}$	-	70
Pol1	Card	63.2	$18\text{-}29~\mathrm{m}$	-	70
Pol1	Card or History	92.4	$18\text{-}29~\mathrm{m}$	7524	70
Pol1	History	29.2	$18\text{-}29~\mathrm{m}$	-	70
Pol3	C or H ${<}12$ months	70.4	$18\text{-}29~\mathrm{m}$	-	70
Pol3	Card	55.7	$18\text{-}29~\mathrm{m}$	-	70
Pol3	Card or History	79.1	$18\text{-}29~\mathrm{m}$	7524	70
Pol3	History	23.4	$18\text{-}29~\mathrm{m}$	-	70

2004 Iraq Multiple Indicator Cluster Survey 2006

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Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen	
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BCG	C or H ${<}12$ months	91.4	$18\text{-}29~\mathrm{m}$	3329	55
BCG	Card	53.5	$18\text{-}29~\mathrm{m}$	3329	55
BCG	Card or History	92.3	$18\text{-}29~\mathrm{m}$	3329	55
BCG	History	38.8	$18\text{-}29~\mathrm{m}$	3329	55
DTP1	C or H ${<}12$ months	81.9	$18\text{-}29~\mathrm{m}$	3329	55
DTP1	Card	49	$18\text{-}29~\mathrm{m}$	3329	55
DTP1	Card or History	84.5	$18\text{-}29~\mathrm{m}$	3329	55
DTP1	History	35.5	$18\text{-}29~\mathrm{m}$	3329	55
DTP3	C or H ${<}12$ months	52.8	$18\text{-}29~\mathrm{m}$	3329	55
DTP3	Card	37.9	$18\text{-}29~\mathrm{m}$	3329	55
DTP3	Card or History	61.5	$18\text{-}29~\mathrm{m}$	3329	55
DTP3	History	23.6	$18\text{-}29~\mathrm{m}$	3329	55
HepB1	C or H ${<}12$ months	87.1	$18\text{-}29~\mathrm{m}$	3329	55
HepB1	Card	53.8	$18\text{-}29~\mathrm{m}$	3329	55
HepB1	Card or History	88.3	$18\text{-}29~\mathrm{m}$	3329	55
HepB1	History	34.5	$18\text{-}29~\mathrm{m}$	3329	55
HepB3	C or H ${<}12$ months	49.4	$18\text{-}29~\mathrm{m}$	3329	55
HepB3	Card	38.2	$18\text{-}29~\mathrm{m}$	3329	55
HepB3	Card or History	57.6	$18\text{-}29~\mathrm{m}$	3329	55
HepB3	History	19.4	$18\text{-}29~\mathrm{m}$	3329	55
MCV1	Card	38.7	$18\text{-}29~\mathrm{m}$	3329	55
MCV1	Card or History	69.3	$18\text{-}29~\mathrm{m}$	3329	55
MCV1	History	30.6	$18\text{-}29~\mathrm{m}$	3329	55
Pol1	C or H ${<}12$ months	87.7	$18\text{-}29~\mathrm{m}$	3329	55

Pol1	Card	49.2	$18\text{-}29~\mathrm{m}$	3329	55
Pol1	Card or History	90.8	$18\text{-}29~\mathrm{m}$	3329	55
Pol1	History	41.6	$18\text{-}29~\mathrm{m}$	3329	55
Pol3	C or H ${<}12$ months	57	$18\text{-}29~\mathrm{m}$	3329	55
Pol3	Card	37.4	$18\text{-}29~\mathrm{m}$	3329	55
Pol3	Card or History	65.6	$18\text{-}29~\mathrm{m}$	3329	55
Pol3	History	28.2	$18\text{-}29~\mathrm{m}$	3329	55

1999 Iraq Multiple Indicator Cluster Survey 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	92.7	$12\text{-}23~\mathrm{m}$	434	78
DTP1	Card or History	93	$12\text{-}23~\mathrm{m}$	434	78
DTP3	Card or History	81.1	$12\text{-}23~\mathrm{m}$	434	78
MCV1	Card or History	90	$12\text{-}23~\mathrm{m}$	434	78
Pol1	Card or History	96	$12\text{-}23~\mathrm{m}$	434	78
Pol3	Card or History	87.2	12-23 m	434	78

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