

Somalia: 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.

HEPB3: 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.

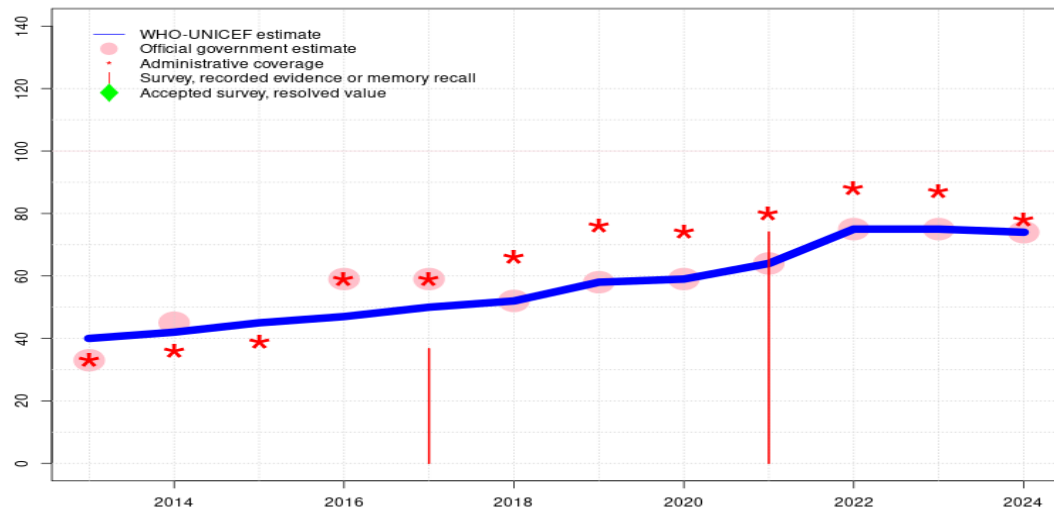
YFV: percentage of surviving infants who received one dose of yellow fever vaccine in countries where YFV is part of the national immunization schedule for children or is recommended in at risk areas; coverage estimates are annualized for the entire cohort of surviving infants.

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.

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Somalia - BCG

SOM - BCG



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	40	42	45	47	50	52	58	59	64	75	75	74
Estimate GoC	•	•	•	•	•	••	••	••	••	••	••	••
Official	33	45	-	59	59	52	58	59	64	75	75	74
Administrative	33	36	39	59	59	66	76	74	80	88	87	78
Survey	-	-	-	-	37	-	-	-	74	-	-	-

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 informed by reported data. In 2024, Somalia launched a nationwide data quality improvement initiative with technical support from national and subnational authorities, WHO and UNICEF. This involved a thorough review of reported data from facilities providing immunization services from 2018 to 2024. For numerators, the analysis focused on reporting completeness, consistency, and detection and revision of outliers. For denominators, multiple sources were reviewed and triangulated including UN population estimates, polio microplanning data, and the 2023 post-campaign coverage survey to estimate the most plausible district-level target populations. This data review led to the official coverage estimates from 2018 to 2024. GoC=R+ D+
- 2023: Estimate informed by reported data. See comment for year 2024. Estimate of 75 percent changed from previous revision value of 37 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. Vaccine stockout reported for all vaccines at the subnational level. Availability of robust, independent data that assess coverage, as well as the quality of recording and reporting system, are lacking. See comment for year 2024. Programme reported vaccine stock-out at the subnational level. Estimate of 75 percent changed from previous revision value of 37 percent. GoC=R+ D+
- 2021: Estimate informed by reported data. Somalia PCCS and Routine Immunization Coverage Evaluation Survey, 2023 results ignored by working group. Subnational survey covering accessible areas in 6 states and excluding Somaliland suggests similar coverage level to country official estimates. See comment for year 2024. Estimate of 64 percent changed from previous revision value of 37 percent. GoC=R+ D+
- 2020: Estimate informed by reported data. Incomplete reporting noted by the country. See comment for year 2024. Programme reports a two months vaccine stockout at national and subnational levels. Estimate of 59 percent changed from previous revision value of 37 percent. GoC=R+ D+
- 2019: Estimate informed by reported data. See comment for year 2024. Estimate of 58 percent changed from previous revision value of 37 percent. GoC=R+ D+
- 2018: See comment for year 2024. Programme reported vaccine stock-out at the subnational level. Estimate of 52 percent changed from previous revision value of 37 percent. GoC=R+ D+
- 2017: Estimate informed by interpolation between 2012 and 2018 levels. The Somali Health and Demographic Survey 2020 results ignored by working group. Lower vaccination coverage levels suggested by the survey for the 2017 cohort are consistent with challenges in funding around delivery of the country's Essential Package of Health Services through the Somali Joint Health and Nutrition Program (JHNP), a multi-donor fund managed by UNICEF that aimed to strengthen the health system and service delivery across Somalia. The JHNP ended in December 2016. Survey results are based mostly on respondent recall of vaccination history given only four percent with available documented evidence in a home-based record. In contrast to prior surveys noted here, the 2017 survey incorporated three strata within the sampling process targeting urban, rural and nomadic communities. Exceptionally low vaccination coverage estimates among children residing

in nomadic communities is observed and thus lowers the national coverage levels. Reported data excluded. Survey coverage for BCG vaccine is unusually high given levels of home birth in Somalia accompanied by weak and fragmented primary healthcare service delivery. Estimate of 50 percent changed from previous revision value of 37 percent. Estimate challenged by: R-

2016: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Estimate of 47 percent changed from previous revision value of 37 percent. Estimate challenged by: R-

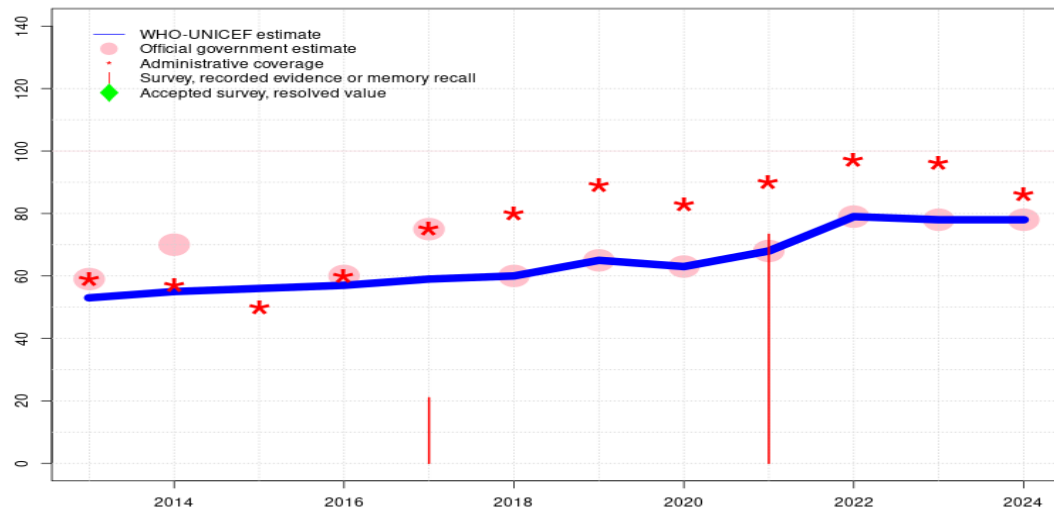
2015: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Unexplained increase in target population compared to 2014. Programme reports a national level stockout of two months. Estimate of 45 percent changed from previous revision value of 37 percent. GoC=Assigned by working group. Unexplained increase in target population between 2014 and 2015.

2014: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Decline in coverage is due in part to incomplete reporting. Programme reports a two months stockout at national level. Estimate of 42 percent changed from previous revision value of 37 percent. GoC=Assigned by working group. Unexplained increase in target population between 2014 and 2015.

2013: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Decline in reported coverage reflects incomplete reporting from the Central-South zone. Estimate of 40 percent changed from previous revision value of 37 percent. Estimate challenged by: D-R-

Somalia - DTP1

SOM - DTP1



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	53	55	56	57	59	60	65	63	68	79	78	78
Estimate GoC	•	•	•	•	•	•	•	•	•	••	••	••
Official	59	70	-	60	75	60	65	63	68	79	78	78
Administrative	59	57	50	60	75	80	89	83	90	97	96	86
Survey	-	-	-	-	21	-	-	-	73	-	-	-

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.

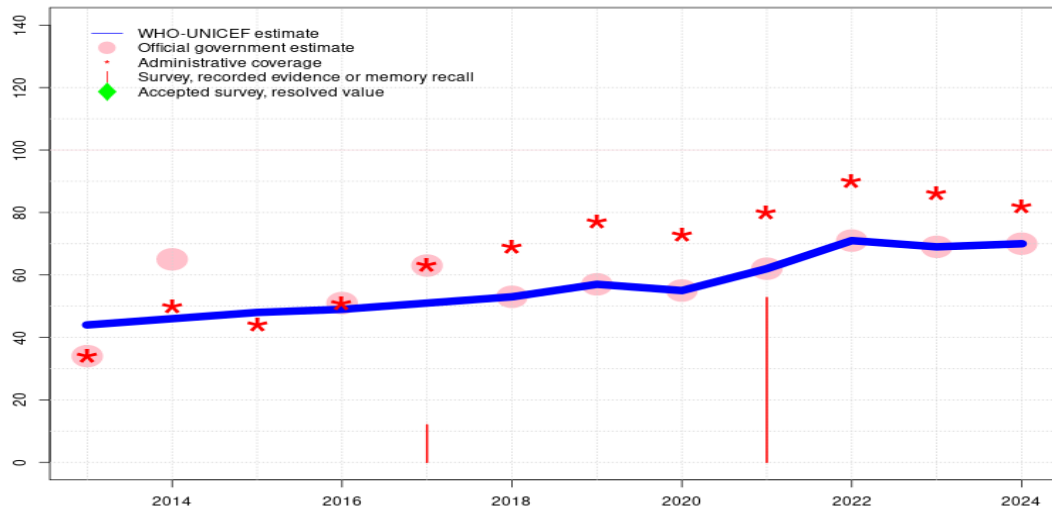
Description:

- 2024: Estimate informed by reported data. In 2024, Somalia launched a nationwide data quality improvement initiative with technical support from national and subnational authorities, WHO and UNICEF. This involved a thorough review of reported data from facilities providing immunization services from 2018 to 2024. For numerators, the analysis focused on reporting completeness, consistency, and detection and revision of outliers. For denominators, multiple sources were reviewed and triangulated including UN population estimates, polio microplanning data, and the 2023 post-campaign coverage survey to estimate the most plausible district-level target populations. This data review led to the official coverage estimates from 2018 to 2024. GoC=R+ D+
- 2023: Estimate informed by reported data. See comment for year 2024. Estimate of 78 percent changed from previous revision value of 52 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. Vaccine stockout reported for all vaccines at the subnational level. Availability of robust, independent data that assess coverage, as well as the quality of recording and reporting system, are lacking. See comment for year 2024. Programme reported vaccine stock-out at the subnational level. Estimate of 79 percent changed from previous revision value of 52 percent. GoC=R+ D+
- 2021: Estimate informed by reported data. Somalia PCCS and Routine Immunization Coverage Evaluation Survey, 2023 results ignored by working group. Subnational survey covering accessible areas in 6 states and excluding Somaliland suggests similar coverage level to country official estimates. See comment for year 2024. Estimate of 68 percent changed from previous revision value of 52 percent. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Programme reports a two months vaccine stockout at national and subnational levels. Incomplete reporting noted by the country. See comment for year 2024. Estimate of 63 percent changed from previous revision value of 52 percent. Estimate challenged by: D-
- 2019: Estimate informed by reported data. See comment for year 2024. Estimate of 65 percent changed from previous revision value of 52 percent. Estimate challenged by: D-
- 2018: See comment for year 2024. Estimate of 60 percent changed from previous revision value of 52 percent. Estimate challenged by: D-
- 2017: Estimate informed by interpolation between 2012 and 2018 levels. The Somali Health and Demographic Survey 2020 results ignored by working group. Lower vaccination coverage levels suggested by the survey for the 2017 cohort are consistent with challenges in funding around delivery of the country's Essential Package of Health Services through the Somali Joint Health and Nutrition Program (JHNP), a multi-donor fund managed by UNICEF that aimed to strengthen the health system and service delivery across Somalia. The JHNP ended in December 2016. Survey results are based mostly on respondent recall of vaccination history given only four percent with available documented evidence in a home-based record. In contrast to prior surveys noted here, the 2017 survey incorporated three strata within the sampling process targeting urban, rural and nomadic communities. Exceptionally low vaccination coverage estimates among children residing in nomadic communities is observed and thus lowers the national coverage levels. Re-

- ported data excluded. Reported data excluded due to an increase from 60 percent to 75 percent with decrease to 60 percent. Estimate of 59 percent changed from previous revision value of 52 percent. Estimate challenged by: R-
- 2016: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Estimate of 57 percent changed from previous revision value of 52 percent. Estimate challenged by: D-R-
- 2015: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Unexplained increase in target population compared to 2014. Estimate of 56 percent changed from previous revision value of 52 percent. GoC=Assigned by working group. Unexplained increase in target population between 2014 and 2015.
- 2014: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Decline in coverage is due in part to incomplete reporting. Reported data excluded due to an increase from 59 percent to 70 percent with decrease to 50 percent. Estimate of 55 percent changed from previous revision value of 52 percent. GoC=Assigned by working group. Unexplained increase in target population between 2014 and 2015.
- 2013: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Decline in reported coverage reflects incomplete reporting from the Central-South zone. Reported data excluded due to decline in reported coverage from 76 percent to 59 percent with increase to 70 percent. DTP-HepB-Hib pentavalent vaccine introduced in April 2013. Decline in reported coverage reflects a reduction in scope of Child Health Days and incomplete reporting from the Central-South zone. Estimate of 53 percent changed from previous revision value of 52 percent. Estimate challenged by: D-R-

Somalia - DTP3

SOM - DTP3



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	44	46	48	49	51	53	57	55	62	71	69	70
Estimate GoC	●	●	●	●	●	●●	●	●●	●●	●	●●	●●
Official	34	65	-	51	63	53	57	55	62	71	69	70
Administrative	34	50	44	51	63	69	77	73	80	90	86	82
Survey	-	-	-	-	12	-	-	-	53	-	-	-

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.
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Description:

- 2024: Estimate informed by reported data. In 2024, Somalia launched a nationwide data quality improvement initiative with technical support from national and subnational authorities, WHO and UNICEF. This involved a thorough review of reported data from facilities providing immunization services from 2018 to 2024. For numerators, the analysis focused on reporting completeness, consistency, and detection and revision of outliers. For denominators, multiple sources were reviewed and triangulated including UN population estimates, polio microplanning data, and the 2023 post-campaign coverage survey to estimate the most plausible district-level target populations. This data review led to the official coverage estimates from 2018 to 2024. GoC=R+ D+
- 2023: Estimate informed by reported data. See comment for year 2024. Estimate of 69 percent changed from previous revision value of 42 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. Vaccine stockout reported for all vaccines at the subnational level. Availability of robust, independent data that assess coverage, as well as the quality of recording and reporting system, are lacking. See comment for year 2024. Programme reported vaccine stock-out at the subnational level. Estimate of 71 percent changed from previous revision value of 42 percent. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Somalia PCCS and Routine Immunization Coverage Evaluation Survey, 2023 results ignored by working group. Subnational survey covering accessible areas in 6 states and excluding Somaliland suggests similar coverage level to country official estimates. Somalia PCCS and Routine Immunization Coverage Evaluation Survey, 2023 record or recall results of 53 percent modified for recall bias to 68 percent based on 1st dose record or recall coverage of 73 percent, 1st dose record only coverage of 15 percent and 3rd dose record only coverage of 14 percent. See comment for year 2024. Estimate of 62 percent changed from previous revision value of 42 percent. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports a two months vaccine stockout at national and subnational levels. Incomplete reporting noted by the country. See comment for year 2024. Estimate of 55 percent changed from previous revision value of 42 percent. GoC=R+ D+
- 2019: Estimate informed by reported data. See comment for year 2024. Estimate of 57 percent changed from previous revision value of 42 percent. Estimate challenged by: D-
- 2018: See comment for year 2024. Estimate of 53 percent changed from previous revision value of 42 percent. GoC=R+ D+
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in a home-based record. In contrast to prior surveys noted here, the 2017 survey incorporated three strata within the sampling process targeting urban, rural and nomadic communities. Exceptionally low vaccination coverage estimates among children residing in nomadic communities is observed and thus lowers the national coverage levels. Reported data excluded. Estimate of 51 percent changed from previous revision value of 42 percent. Estimate challenged by: R-

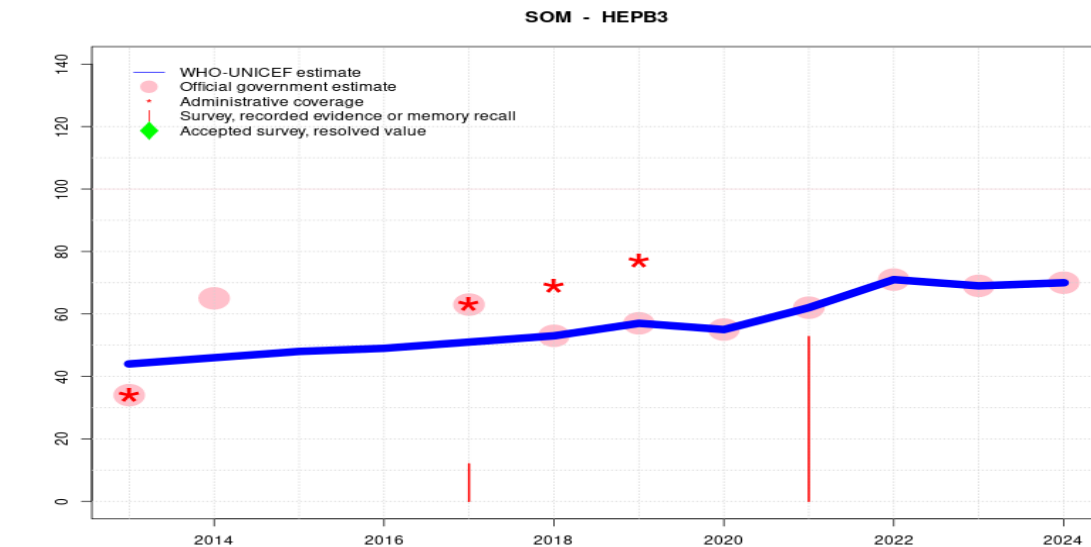
2016: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Estimate of 49 percent changed from previous revision value of 42 percent. Estimate challenged by: D-R-

2015: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Unexplained increase in target population compared to 2014. Estimate of 48 percent changed from previous revision value of 42 percent. GoC=Assigned by working group. Unexplained increase in target population between 2014 and 2015.

2014: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Decline in coverage is due in part to incomplete reporting. Reported data excluded due to an increase from 34 percent to 65 percent with decrease to 44 percent. Estimate of 46 percent changed from previous revision value of 42 percent. GoC=Assigned by working group. Unexplained increase in target population between 2014 and 2015.

2013: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Decline in reported coverage reflects incomplete reporting from the Central-South zone. Reported data excluded due to decline in reported coverage from 61 percent to 34 percent with increase to 65 percent. DTP-HepB-Hib pentavalent vaccine introduced in April 2013. Decline in reported coverage reflects a reduction in scope of Child Health Days and incomplete reporting from the Central-South zone. Estimate of 44 percent changed from previous revision value of 42 percent. Estimate challenged by: D-R-

Somalia - HEPB3



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	44	46	48	49	51	53	57	55	62	71	69	70
Estimate GoC	●	●	●	●	●	●●	●	●●	●●	●●	●●	●●
Official	34	65	-	-	63	53	57	55	62	71	69	70
Administrative	34	-	-	-	63	69	77	-	-	-	-	-
Survey	-	-	-	-	12	-	-	-	53	-	-	-

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2023: Estimate informed by reported data. See comment for year 2024. Estimate of 69 percent changed from previous revision value of 42 percent. GoC=R+

2022: Estimate informed by reported data. Vaccine stockout reported for all vaccines at the subnational level. Availability of robust, independent data that assess coverage, as well as the quality of recording and reporting system, are lacking. See comment for year 2024. Programme reported vaccine stock-out at the subnational level. Estimate of 71 percent changed from previous revision value of 42 percent. GoC=R+

2021: Estimate informed by reported data. Somalia PCCS and Routine Immunization Coverage Evaluation Survey, 2023 results ignored by working group. Subnational survey covering accessible areas in 6 states and excluding Somaliland suggests similar coverage level to country official estimates. Somalia PCCS and Routine Immunization Coverage Evaluation Survey, 2023 record or recall results of 53 percent modified for recall bias to 68 percent based on 1st dose record or recall coverage of 73 percent, 1st dose record only coverage of 15 percent and 3rd dose record only coverage of 14 percent. See comment for year 2024. Estimate of 62 percent changed from previous revision value of 42 percent. GoC=R+

2020: Estimate informed by reported data. Programme reports a two months vaccine stockout at national and subnational levels. Incomplete reporting noted by the country. See comment for year 2024. Estimate of 55 percent changed from previous revision value of 42 percent. GoC=R+

2019: Estimate informed by reported data. See comment for year 2024. Estimate of 57 percent changed from previous revision value of 42 percent. Estimate challenged by: D-

2018: See comment for year 2024. Estimate of 53 percent changed from previous revision value of 42 percent. GoC=R+ D+

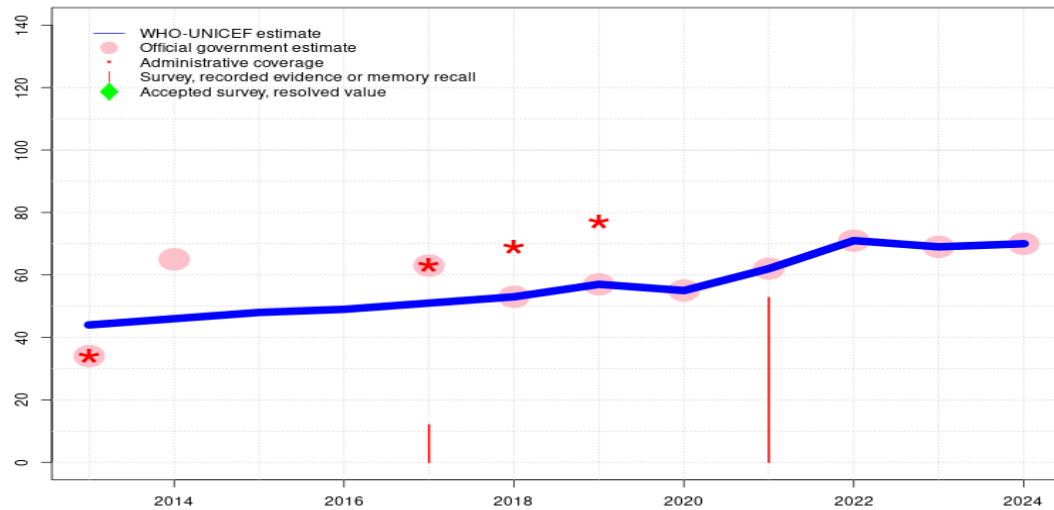
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- 2014: Estimate informed by interpolation between 2013 and 2018 levels. Reported data excluded. Decline in coverage is due in part to incomplete reporting. Estimate of 46 percent changed from previous revision value of 42 percent. GoC=Assigned by working group. Unexplained increase in target population between 2014 and 2015.
- 2013: Estimate of 44 percent assigned by working group. Estimate informed by estimated DTP3 coverage. Reported data excluded. Decline in reported coverage reflects incomplete reporting from the Central-South zone. DTP-HepB-Hib pentavalent vaccine introduced in April 2013. DTP3 estimate is higher reflecting use of existing trivalent DTP vaccine during January-March 2013. Estimate of 44 percent changed from previous revision value of 42 percent. Estimate challenged by: D-R-

Somalia - HIB3

SOM - HIB3



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	44	46	48	49	51	53	57	55	62	71	69	70
Estimate GoC	•	•	•	•	•	••	•	••	••	••	••	••
Official	34	65	-	-	63	53	57	55	62	71	69	70
Administrative	34	-	-	-	63	69	77	-	-	-	-	-
Survey	-	-	-	-	12	-	-	-	53	-	-	-

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 informed by reported data. In 2024, Somalia launched a nationwide data quality improvement initiative with technical support from national and subnational authorities, WHO and UNICEF. This involved a thorough review of reported data from facilities providing immunization services from 2018 to 2024. For numerators, the analysis focused on reporting completeness, consistency, and detection and revision of outliers. For denominators, multiple sources were reviewed and triangulated including UN population estimates, polio microplanning data, and the 2023 post-campaign coverage survey to estimate the most plausible district-level target populations. This data review led to the official coverage estimates from 2018 to 2024. GoC=R+

2023: Estimate informed by reported data. See comment for year 2024. Estimate of 69 percent changed from previous revision value of 42 percent. GoC=R+

2022: Estimate informed by reported data. Vaccine stockout reported for all vaccines at the subnational level. Availability of robust, independent data that assess coverage, as well as the quality of recording and reporting system, are lacking. See comment for year 2024. Programme reported vaccine stock-out at the subnational level. Estimate of 71 percent changed from previous revision value of 42 percent. GoC=R+

2021: Estimate informed by reported data. Somalia PCCS and Routine Immunization Coverage Evaluation Survey, 2023 results ignored by working group. Subnational survey covering accessible areas in 6 states and excluding Somaliland suggests similar coverage level to country official estimates. Somalia PCCS and Routine Immunization Coverage Evaluation Survey, 2023 record or recall results of 53 percent modified for recall bias to 68 percent based on 1st dose record or recall coverage of 73 percent, 1st dose record only coverage of 15 percent and 3rd dose record only coverage of 14 percent. See comment for year 2024. Estimate of 62 percent changed from previous revision value of 42 percent. GoC=R+

2020: Estimate informed by reported data. Programme reports a two months vaccine stockout at national and subnational levels. Incomplete reporting noted by the country. See comment for year 2024. Estimate of 55 percent changed from previous revision value of 42 percent. GoC=R+

2019: Estimate informed by reported data. See comment for year 2024. Estimate of 57 percent changed from previous revision value of 42 percent. Estimate challenged by: D-

2018: See comment for year 2024. Estimate of 53 percent changed from previous revision value of 42 percent. GoC=R+ D+

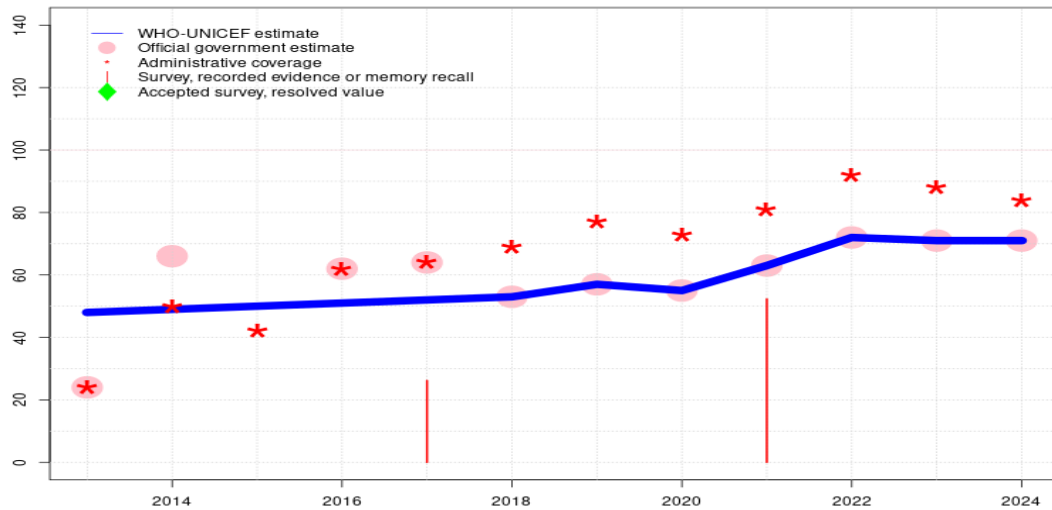
2017: Estimate informed by interpolation between 2013 and 2018 levels. The Somali Health and Demographic Survey 2020 results ignored by working group. Lower vaccination coverage levels suggested by the survey for the 2017 cohort are consistent with challenges in funding around delivery of the country's Essential Package of Health Services through the Somali Joint Health and Nutrition Program (JHNP), a multi-donor fund managed by UNICEF that aimed to strengthen the health system and service delivery across Somalia. The JHNP ended in December 2016. Survey results are based mostly on respondent recall of vaccination history given only four percent with available documented evidence

in a home-based record. In contrast to prior surveys noted here, the 2017 survey incorporated three strata within the sampling process targeting urban, rural and nomadic communities. Exceptionally low vaccination coverage estimates among children residing in nomadic communities is observed and thus lowers the national coverage levels. Reported data excluded. Estimate of 51 percent changed from previous revision value of 42 percent. Estimate challenged by: R-

- 2016: Estimate informed by interpolation between 2013 and 2018 levels. Estimate of 49 percent changed from previous revision value of 42 percent. GoC=No accepted empirical data
- 2015: Estimate informed by interpolation between 2013 and 2018 levels. Estimate of 48 percent changed from previous revision value of 42 percent. GoC=Assigned by working group. Unexplained increase in target population between 2014 and 2015.
- 2014: Estimate informed by interpolation between 2013 and 2018 levels. Reported data excluded. Decline in coverage is due in part to incomplete reporting. Estimate of 46 percent changed from previous revision value of 42 percent. GoC=Assigned by working group. Unexplained increase in target population between 2014 and 2015.
- 2013: Estimate of 44 percent assigned by working group. Estimate informed by estimated DTP3 coverage. Reported data excluded. Decline in reported coverage reflects incomplete reporting from the Central-South zone. DTP-HepB-Hib pentavalent vaccine introduced in April 2013. DTP3 estimate is higher reflecting use of existing trivalent DTP vaccine during January-March 2013. Estimate of 44 percent changed from previous revision value of 42 percent. Estimate challenged by: D-R-

Somalia - POL3

SOM - POL3



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	48	49	50	51	52	53	57	55	63	72	71	71
Estimate GoC	●	●	●	●	●	●●	●	●●	●●	●	●●	●●
Official	24	66	-	62	64	53	57	55	63	72	71	71
Administrative	24	50	42	62	64	69	77	73	81	92	88	84
Survey	-	-	-	-	26	-	-	-	52	-	-	-

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 informed by reported data. In 2024, Somalia launched a nationwide data quality improvement initiative with technical support from national and subnational authorities, WHO and UNICEF. This involved a thorough review of reported data from facilities providing immunization services from 2018 to 2024. For numerators, the analysis focused on reporting completeness, consistency, and detection and revision of outliers. For denominators, multiple sources were reviewed and triangulated including UN population estimates, polio microplanning data, and the 2023 post-campaign coverage survey to estimate the most plausible district-level target populations. This data review led to the official coverage estimates from 2018 to 2024. GoC=R+ D+
- 2023: Estimate informed by reported data. See comment for year 2024. Estimate of 71 percent changed from previous revision value of 47 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. Vaccine stockout reported for all vaccines at the subnational level. Availability of robust, independent data that assess coverage, as well as the quality of recording and reporting system, are lacking. See comment for year 2024. Programme reported vaccine stock-out at the subnational level. Estimate of 72 percent changed from previous revision value of 47 percent. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Somalia PCCS and Routine Immunization Coverage Evaluation Survey, 2023 results ignored by working group. Subnational survey covering accessible areas in 6 states and excluding Somaliland suggests similar coverage level to country official estimates. Somalia PCCS and Routine Immunization Coverage Evaluation Survey, 2023 record or recall results of 52 percent modified for recall bias to 74 percent based on 1st dose record or recall coverage of 79 percent, 1st dose record only coverage of 15 percent and 3rd dose record only coverage of 14 percent. See comment for year 2024. Estimate of 63 percent changed from previous revision value of 47 percent. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports a two months vaccine stockout at national and subnational levels. Incomplete reporting noted by the country. See comment for year 2024. Estimate of 55 percent changed from previous revision value of 47 percent. GoC=R+ D+
- 2019: Estimate informed by reported data. See comment for year 2024. Estimate of 57 percent changed from previous revision value of 47 percent. Estimate challenged by: D-
- 2018: See comment for year 2024. Estimate of 53 percent changed from previous revision value of 47 percent. GoC=R+ D+
- 2017: Estimate informed by interpolation between 2012 and 2018 levels. The Somali Health and Demographic Survey 2020 results ignored by working group. Lower vaccination coverage levels suggested by the survey for the 2017 cohort are consistent with challenges in funding around delivery of the country's Essential Package of Health Services through the Somali Joint Health and Nutrition Program (JHNP), a multi-donor fund managed by UNICEF that aimed to strengthen the health system and service delivery across Somalia. The JHNP ended in December 2016. Survey results are based mostly on respondent recall of vaccination history given only four percent with available documented evidence

in a home-based record. In contrast to prior surveys noted here, the 2017 survey incorporated three strata within the sampling process targeting urban, rural and nomadic communities. Exceptionally low vaccination coverage estimates among children residing in nomadic communities is observed and thus lowers the national coverage levels. Reported data excluded. Survey coverage for polio vaccine is unusual given polio campaigns reported to have taken place in the country around this time. Estimate of 52 percent changed from previous revision value of 47 percent. Estimate challenged by: R-

2016: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Programme reports district level stockouts. Estimate of 51 percent changed from previous revision value of 47 percent. GoC=Assigned by working group. Consistency with other antigens.

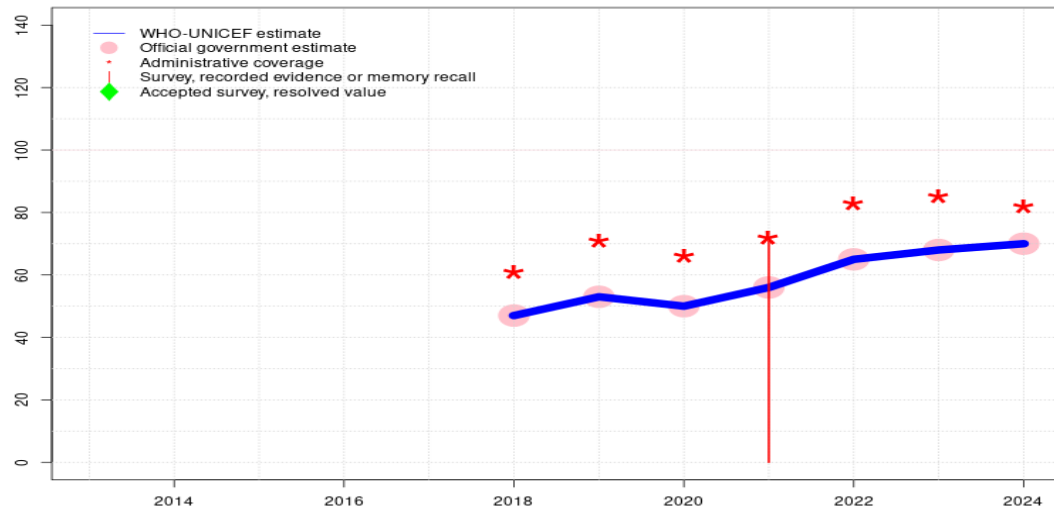
2015: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Unexplained increase in target population compared to 2014. Reported data excluded due to decline in reported coverage from 66 percent to 42 percent with increase to 62 percent. Estimate of 50 percent changed from previous revision value of 47 percent. GoC=Assigned by working group. Unexplained increase in target population between 2014 and 2015.

2014: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Decline in coverage is due in part to incomplete reporting. Reported data excluded due to an increase from 24 percent to 66 percent with decrease to 42 percent. Estimate of 49 percent changed from previous revision value of 47 percent. GoC=Assigned by working group. Unexplained increase in target population between 2014 and 2015.

2013: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Decline in reported coverage reflects incomplete reporting from the Central-South zone. Reported data excluded due to decline in reported coverage from 47 percent to 24 percent with increase to 66 percent. Estimate of 48 percent changed from previous revision value of 47 percent. Estimate challenged by: D-R-

Somalia - IPV1

SOM - IPV1



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	-	-	-	-	-	47	53	50	56	65	68	70
Estimate GoC	-	-	-	-	-	••	••	••	••	••	••	••
Official	-	-	-	-	-	47	53	50	56	65	68	70
Administrative	-	-	-	-	-	61	71	66	72	83	85	82
Survey	-	-	-	-	-	-	-	-	71	-	-	-

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.

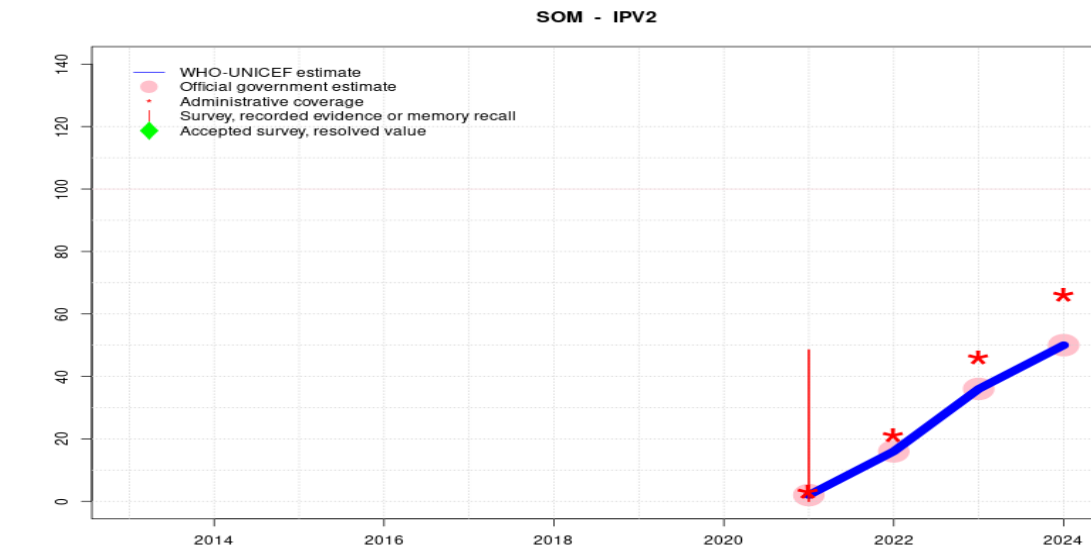
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2024 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk 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 informed by reported data. In 2024, Somalia launched a nationwide data quality improvement initiative with technical support from national and subnational authorities, WHO and UNICEF. This involved a thorough review of reported data from facilities providing immunization services from 2018 to 2024. For numerators, the analysis focused on reporting completeness, consistency, and detection and revision of outliers. For denominators, multiple sources were reviewed and triangulated including UN population estimates, polio microplanning data, and the 2023 post-campaign coverage survey to estimate the most plausible district-level target populations. This data review led to the official coverage estimates from 2018 to 2024. GoC=R+ D+
- 2023: Estimate informed by reported data. See comment for year 2024. Estimate of 68 percent changed from previous revision value of 42 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. Vaccine stockout reported for all vaccines at the subnational level. Availability of robust, independent data that assess coverage, as well as the quality of recording and reporting system, are lacking. See comment for year 2024. Programme reported vaccine stock-out at the subnational level. Estimate of 65 percent changed from previous revision value of 42 percent. GoC=R+ D+
- 2021: Estimate informed by reported data. Somalia PCCS and Routine Immunization Coverage Evaluation Survey, 2023 results ignored by working group. Subnational survey covering accessible areas in 6 states and excluding Somaliland suggests similar coverage level to country official estimates. See comment for year 2024. Estimate of 56 percent changed from previous revision value of 42 percent. GoC=R+ D+
- 2020: Estimate informed by reported data. Programme reports a two months vaccine stockout at national and subnational levels. Incomplete reporting noted by the country. See comment for year 2024. Estimate of 50 percent changed from previous revision value of 42 percent. GoC=R+ D+
- 2019: Estimate informed by reported data. See comment for year 2024. Estimate of 53 percent changed from previous revision value of 42 percent. GoC=R+ D+
- 2018: See comment for year 2024. Estimate of 47 percent changed from previous revision value of 42 percent. GoC=R+ D+

Somalia - IPV2



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	-	-	-	-	-	-	-	-	2	16	36	50
Estimate GoC	-	-	-	-	-	-	-	-	••	••	••	•
Official	-	-	-	-	-	-	-	-	2	16	36	50
Administrative	-	-	-	-	-	-	-	-	3	21	46	66
Survey	-	-	-	-	-	-	-	-	48	-	-	-

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.

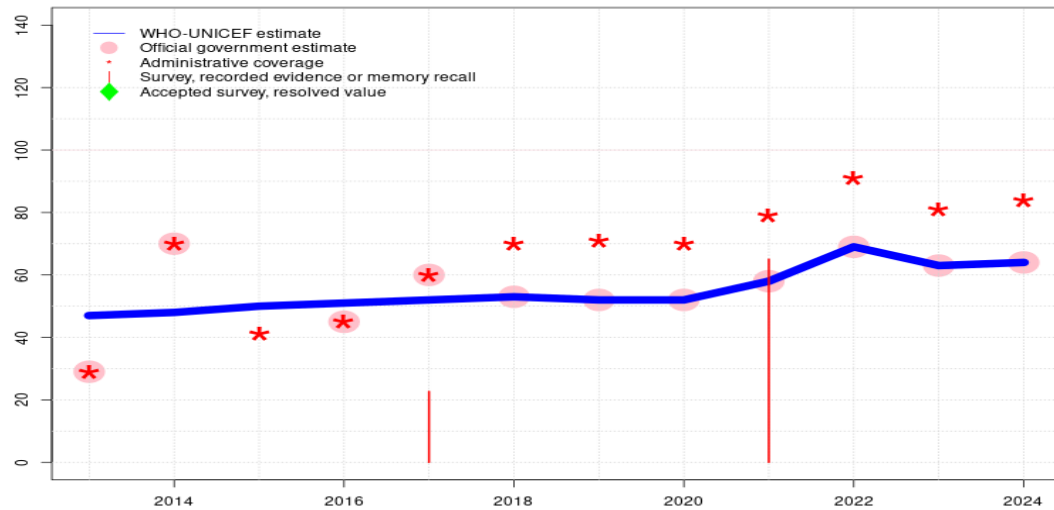
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2024: Estimate informed by reported data. In 2024, Somalia launched a nationwide data quality improvement initiative with technical support from national and subnational authorities, WHO and UNICEF. This involved a thorough review of reported data from facilities providing immunization services from 2018 to 2024. For numerators, the analysis focused on reporting completeness, consistency, and detection and revision of outliers. For denominators, multiple sources were reviewed and triangulated including UN population estimates, polio microplanning data, and the 2023 post-campaign coverage survey to estimate the most plausible district-level target populations. This data review led to the official coverage estimates from 2018 to 2024. Estimate challenged by: D-
- 2023: Estimate informed by reported data. See comment for year 2024. Estimate of 36 percent changed from previous revision value of 26 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. Vaccine stockout reported for all vaccines at the subnational level. Availability of robust, independent data that assess coverage, as well as the quality of recording and reporting system, are lacking. See comment for year 2024. Estimate of 16 percent changed from previous revision value of 11 percent. GoC=R+ D+
- 2021: Estimate informed by reported data. Somalia PCCS and Routine Immunization Coverage Evaluation Survey, 2023 results ignored by working group. Subnational survey covering accessible areas in 6 states and excluding Somaliland suggests similar coverage level to country official estimates. Second dose of inactivated polio vaccine introduced in 2021. See comment for year 2024. Estimate of 2 percent changed from previous revision value of 3 percent. GoC=R+ D+

Somalia - MCV1

SOM - MCV1



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	47	48	50	51	52	53	52	52	58	69	63	64
Estimate GoC	•	•	•	•	•	••	•	••	•	•	•	•
Official	29	70	-	45	60	53	52	52	58	69	63	64
Administrative	29	70	41	45	60	70	71	70	79	91	81	84
Survey	-	-	-	-	23	-	-	-	65	-	-	-

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.

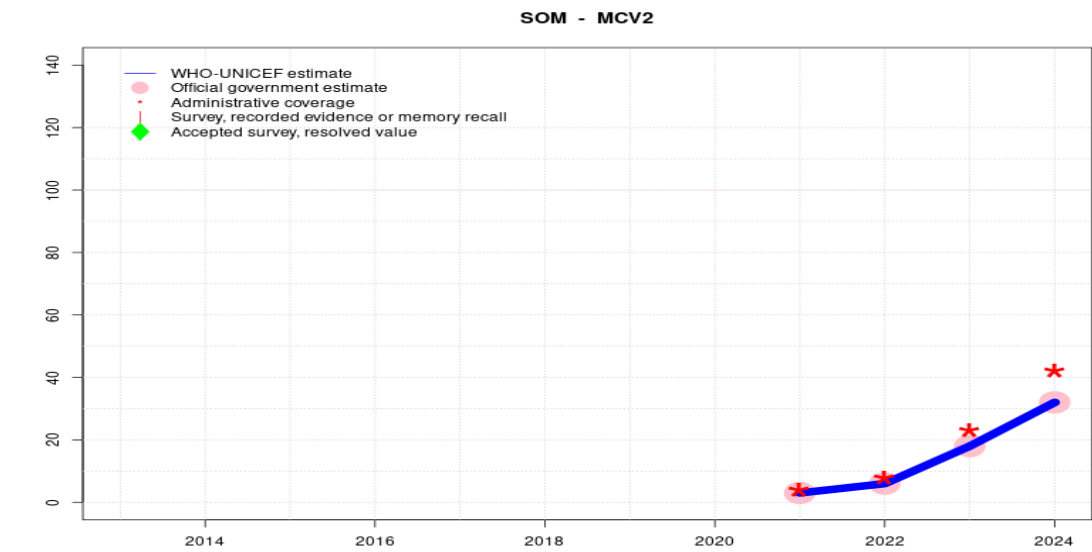
Description:

- 2024: Estimate informed by reported data. In 2024, Somalia launched a nationwide data quality improvement initiative with technical support from national and subnational authorities, WHO and UNICEF. This involved a thorough review of reported data from facilities providing immunization services from 2018 to 2024. For numerators, the analysis focused on reporting completeness, consistency, and detection and revision of outliers. For denominators, multiple sources were reviewed and triangulated including UN population estimates, polio microplanning data, and the 2023 post-campaign coverage survey to estimate the most plausible district-level target populations. This data review led to the official coverage estimates from 2018 to 2024. Estimate challenged by: D-
- 2023: Estimate informed by reported data. See comment for year 2024. Estimate of 63 percent changed from previous revision value of 46 percent. Estimate challenged by: D-
- 2022: Estimate informed by reported data. Vaccine stockout reported for all vaccines at the subnational level. Availability of robust, independent data that assess coverage, as well as the quality of recording and reporting system, are lacking. See comment for year 2024. Programme reported vaccine stock-out at the subnational level. Estimate of 69 percent changed from previous revision value of 46 percent. Estimate challenged by: D-
- 2021: Estimate informed by reported data. Somalia PCCS and Routine Immunization Coverage Evaluation Survey, 2023 results ignored by working group. Subnational survey covering accessible areas in 6 states and excluding Somaliland suggests similar coverage level to country official estimates. See comment for year 2024. Estimate of 58 percent changed from previous revision value of 46 percent. Estimate challenged by: D-
- 2020: Estimate informed by reported data. Incomplete reporting noted by the country. See comment for year 2024. Estimate of 52 percent changed from previous revision value of 46 percent. GoC=R+ D+
- 2019: Estimate informed by reported data. See comment for year 2024. Estimate of 52 percent changed from previous revision value of 46 percent. Estimate challenged by: D-
- 2018: See comment for year 2024. Estimate of 53 percent changed from previous revision value of 46 percent. GoC=R+ D+
- 2017: Estimate informed by interpolation between 2012 and 2018 levels. The Somali Health and Demographic Survey 2020 results ignored by working group. Lower vaccination coverage levels suggested by the survey for the 2017 cohort are consistent with challenges in funding around delivery of the country's Essential Package of Health Services through the Somali Joint Health and Nutrition Program (JHNP), a multi-donor fund managed by UNICEF that aimed to strengthen the health system and service delivery across Somalia. The JHNP ended in December 2016. Survey results are based mostly on respondent recall of vaccination history given only four percent with available documented evidence in a home-based record. In contrast to prior surveys noted here, the 2017 survey incorporated three strata within the sampling process targeting urban, rural and nomadic communities. Exceptionally low vaccination coverage estimates among children residing in nomadic communities is observed and thus lowers the national coverage levels. Reported data excluded. Estimate of 52 percent changed from previous revision value of 46

Somalia - MCV1

- percent. Estimate challenged by: R-
- 2016: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Estimate of 51 percent changed from previous revision value of 46 percent. Estimate challenged by: D-R-
- 2015: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Unexplained increase in target population compared to 2014. Estimate of 50 percent changed from previous revision value of 46 percent. GoC=Assigned by working group. Unexplained increase in target population between 2014 and 2015.
- 2014: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Decline in coverage is due in part to incomplete reporting. Reported data excluded due to an increase from 29 percent to 70 percent with decrease to 41 percent. Estimate of 48 percent changed from previous revision value of 46 percent. GoC=Assigned by working group. Unexplained increase in target population between 2014 and 2015.
- 2013: Estimate informed by interpolation between 2012 and 2018 levels. Reported data excluded. Decline in reported coverage reflects incomplete reporting from the Central-South zone. Reported data excluded due to decline in reported coverage from 49 percent to 29 percent with increase to 70 percent. Estimate of 47 percent changed from previous revision value of 46 percent. Estimate challenged by: D-R-

Somalia - MCV2



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimate	-	-	-	-	-	-	-	-	3	6	18	32
Estimate GoC	-	-	-	-	-	-	-	-	••	••	••	••
Official	-	-	-	-	-	-	-	-	3	6	18	32
Administrative	-	-	-	-	-	-	-	-	4	8	23	42
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.

Description:

- 2024: Estimate informed by reported data. In 2024, Somalia launched a nationwide data quality improvement initiative with technical support from national and subnational authorities, WHO and UNICEF. This involved a thorough review of reported data from facilities providing immunization services from 2018 to 2024. For numerators, the analysis focused on reporting completeness, consistency, and detection and revision of outliers. For denominators, multiple sources were reviewed and triangulated including UN population estimates, polio microplanning data, and the 2023 post-campaign coverage survey to estimate the most plausible district-level target populations. This data review led to the official coverage estimates from 2018 to 2024. GoC=R+ D+
- 2023: Estimate informed by reported data. See comment for year 2024. Estimate of 18 percent changed from previous revision value of 13 percent. GoC=R+ D+
- 2022: Estimate informed by reported data. Vaccine stockout reported for all vaccines at the subnational level. Availability of robust, independent data that assess coverage, as well as the quality of recording and reporting system, are lacking. See comment for year 2024. Programme reported vaccine stock-out at the subnational level. Estimate of 6 percent changed from previous revision value of 8 percent. GoC=R+ D+
- 2021: Estimate informed by reported data. See comment for year 2024. Estimate of 3 percent changed from previous revision value of 4 percent. GoC=R+ D+

Somalia - 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 Somalia PCCS and Routine Immunization Coverage Evaluation Survey, 2023

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
BCG	Recall	57.8	12-23 m	6749	25
BCG	Record	15.2	12-23 m	6749	25
BCG	Record or Recall	74.1	12-23 m	6749	25
DTP1	Recall	57.9	12-23 m	6749	25
DTP1	Record	14.7	12-23 m	6749	25
DTP1	Record or Recall	73.4	12-23 m	6749	25
DTP3	Recall	38.9	12-23 m	6749	25
DTP3	Record	13.5	12-23 m	6749	25
DTP3	Record or Recall	52.8	12-23 m	6749	25
HEPB1	Recall	57.9	12-23 m	6749	25
HEPB1	Record	14.7	12-23 m	6749	25
HEPB1	Record or Recall	73.4	12-23 m	6749	25
HEPB3	Recall	38.9	12-23 m	6749	25
HEPB3	Record	13.5	12-23 m	6749	25
HEPB3	Record or Recall	52.8	12-23 m	6749	25
HIB1	Recall	57.9	12-23 m	6749	25
HIB1	Record	14.7	12-23 m	6749	25
HIB1	Record or Recall	73.4	12-23 m	6749	25

HIB3	Recall	38.9	12-23 m	6749	25
HIB3	Record	13.5	12-23 m	6749	25
HIB3	Record or Recall	52.8	12-23 m	6749	25
IPV1	Recall	55.1	12-23 m	6749	25
IPV1	Record	14.4	12-23 m	6749	25
IPV1	Record or Recall	70.8	12-23 m	6749	25
IPV2	Recall	33.5	12-23 m	6749	25
IPV2	Record	13.5	12-23 m	6749	25
IPV2	Record or Recall	48.5	12-23 m	6749	25
MCV1	Recall	49.9	12-23 m	6749	25
MCV1	Record	14.5	12-23 m	6749	25
MCV1	Record or Recall	65	12-23 m	6749	25
POL1	Recall	64.1	12-23 m	6749	25
POL1	Record	14.8	12-23 m	6749	25
POL1	Record or Recall	79.3	12-23 m	6749	25
POL3	Recall	38.2	12-23 m	6749	25
POL3	Record	14	12-23 m	6749	25
POL3	Record or Recall	52.3	12-23 m	6749	25

2017 The Somali Health and Demographic Survey 2020

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
BCG	Record or Recall	36.7	12-23 m	2240	4
DTP1	Record or Recall	21	12-23 m	2240	4
DTP3	Record or Recall	12	12-23 m	2240	4
HEPB1	Record or Recall	21	12-23 m	2240	4
HEPB3	Record or Recall	12	12-23 m	2240	4
HIB1	Record or Recall	21	12-23 m	2240	4
HIB3	Record or Recall	12	12-23 m	2240	4
MCV1	Record or Recall	22.7	12-23 m	2240	4
POL1	Record or Recall	29.6	12-23 m	2240	4
POL3	Record or Recall	26.2	12-23 m	2240	4

2010 Northeast Zone, Somalia Multiple Indicator Cluster Survey 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
BCG	Recall	16.6	12-23 m	792	13

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BCG	Record	6.4	12-23 m	792	13
BCG	Record or Recall	23	12-23 m	792	13
BCG	Record or Recall<12m	16.6	12-23 m	792	13
DTP1	Recall	15.6	12-23 m	792	13
DTP1	Record	8.5	12-23 m	792	13
DTP1	Record or Recall	24.1	12-23 m	792	13
DTP1	Record or Recall<12m	18.8	12-23 m	792	13
DTP3	Recall	5.3	12-23 m	792	13
DTP3	Record	4.1	12-23 m	792	13
DTP3	Record or Recall	9.4	12-23 m	792	13
DTP3	Record or Recall<12m	7.2	12-23 m	792	13
MCV1	Recall	16.2	12-23 m	792	13
MCV1	Record	9.3	12-23 m	792	13
MCV1	Record or Recall	25.4	12-23 m	792	13
MCV1	Record or Recall<12m	16.6	12-23 m	792	13
POL1	Recall	19.5	12-23 m	792	13
POL1	Record	7	12-23 m	792	13
POL1	Record or Recall	26.5	12-23 m	792	13
POL1	Record or Recall<12m	19.2	12-23 m	792	13
POL3	Recall	7.2	12-23 m	792	13
POL3	Record	2.4	12-23 m	792	13
POL3	Record or Recall	9.7	12-23 m	792	13
POL3	Record or Recall<12m	8.3	12-23 m	792	13

2010 Somaliland Multiple Indicator Cluster Survey 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
BCG	Recall	26	12-23 m	771	20
BCG	Record	10	12-23 m	771	20
BCG	Record or Recall	36	12-23 m	771	20
BCG	Record or Recall<12m	26.8	12-23 m	771	20
DTP1	Recall	24.1	12-23 m	771	20
DTP1	Record	15	12-23 m	771	20
DTP1	Record or Recall	39.1	12-23 m	771	20
DTP1	Record or Recall<12m	29.4	12-23 m	771	20
DTP3	Recall	6.6	12-23 m	771	20
DTP3	Record	6.9	12-23 m	771	20
DTP3	Record or Recall	13.4	12-23 m	771	20
DTP3	Record or Recall<12m	10.8	12-23 m	771	20

MCV1	Recall	22.8	12-23 m	771	20
MCV1	Record	15	12-23 m	771	20
MCV1	Record or Recall	37.8	12-23 m	771	20
MCV1	Record or Recall<12m	25.8	12-23 m	771	20
POL1	Recall	31.6	12-23 m	771	20
POL1	Record	13.9	12-23 m	771	20
POL1	Record or Recall	45.5	12-23 m	771	20
POL1	Record or Recall<12m	33	12-23 m	771	20
POL3	Recall	14.4	12-23 m	771	20
POL3	Record	6.2	12-23 m	771	20
POL3	Record or Recall	20.6	12-23 m	771	20
POL3	Record or Recall<12m	16.5	12-23 m	771	20

2005 Somalia Multiple Indicator Cluster Survey 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen
BCG	Recall	21.9	12-23 m	1086	8
BCG	Record	8	12-23 m	1086	8
BCG	Record or Recall	29.9	12-23 m	1086	8
BCG	Record or Recall<12m	25.7	12-23 m	1086	8
DTP1	Recall	16.3	12-23 m	1086	8
DTP1	Record	8.1	12-23 m	1086	8
DTP1	Record or Recall	24.4	12-23 m	1086	8
DTP1	Record or Recall<12m	20.4	12-23 m	1086	8
DTP3	Recall	6.7	12-23 m	1086	8
DTP3	Record	7.4	12-23 m	1086	8
DTP3	Record or Recall	14.2	12-23 m	1086	8
DTP3	Record or Recall<12m	12.2	12-23 m	1086	8
MCV1	Recall	22.3	12-23 m	1086	8
MCV1	Record	7.1	12-23 m	1086	8
MCV1	Record or Recall	29.4	12-23 m	1086	8
MCV1	Record or Recall<12m	18.9	12-23 m	1086	8
POL1	Recall	53.9	12-23 m	1086	8
POL1	Record	8	12-23 m	1086	8
POL1	Record or Recall	61.9	12-23 m	1086	8
POL1	Record or Recall<12m	51.5	12-23 m	1086	8
POL3	Recall	31.1	12-23 m	1086	8
POL3	Record	7.5	12-23 m	1086	8
POL3	Record or Recall	38.6	12-23 m	1086	8

POL3	Record or Recall<12m	34.8	12-23 m	1086	8							
1999 MICS Somalia, 1999						DTP1	Record or Recall	58.7	12-23 m	490	-	
						DTP3	Record	35.6	12-23 m	490	-	
						DTP3	Record or Recall	35.6	12-23 m	490	-	
						MCV1	Record	37.5	12-23 m	490	-	
						MCV1	Record or Recall	37.5	12-23 m	490	-	
						POL1	Record	59.6	12-23 m	490	-	
						POL1	Record or Recall	59.6	12-23 m	490	-	
Vaccine	Confirmation method	Coverage	Age cohort	Sample	Evidence seen	POL3	Record	40	12-23 m	490	-	
BCG	Record	70.8	12-23 m	490	-	POL3	Record or Recall	40	12-23 m	490	-	
BCG	Record or Recall	70.8	12-23 m	490	-							
DTP1	Record	58.7	12-23 m	490	-							

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