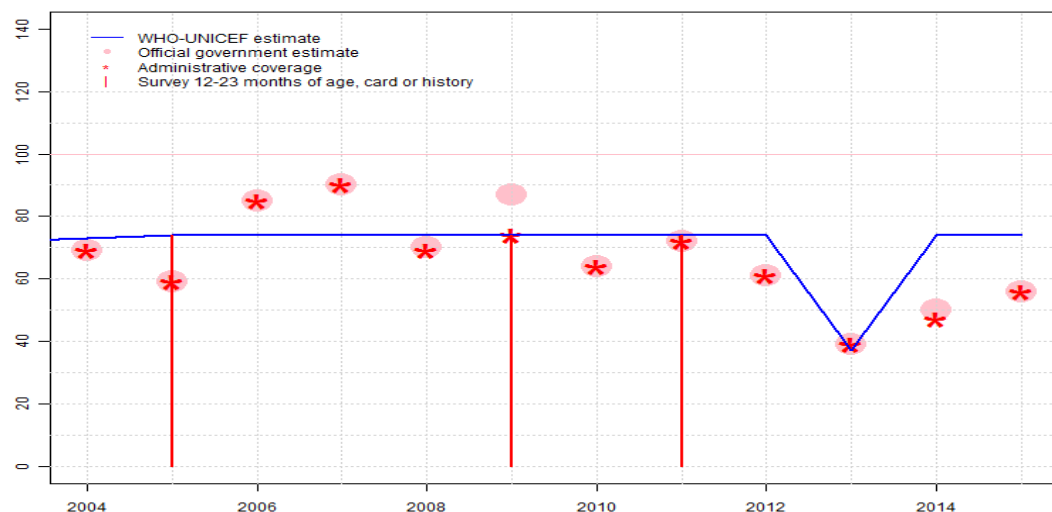


Central African Republic - BCG

CAF - BCG



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	73	74	74	74	74	74	74	74	74	37	74	74
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	69	59	85	90	70	87	64	72	61	39	50	56
Administrative	69	59	85	90	69	74	64	72	61	39	47	56
Survey	NA	74	NA	NA	NA	74	NA	74	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: 2015 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:

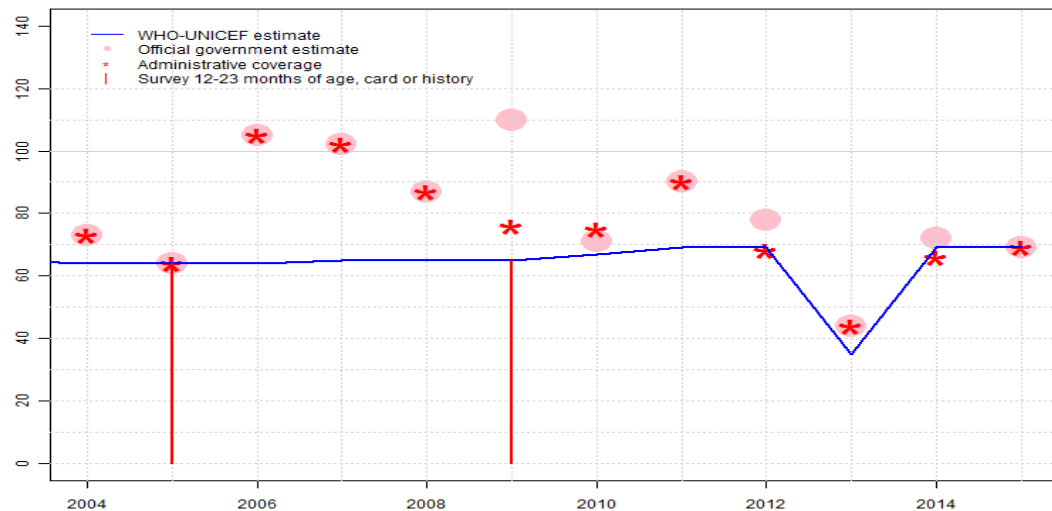
- 2004: Estimate based on interpolation between 2001 and 2005 levels. Immunization records prior to 2003 were compromised during 2002-2003 civil unrest. Fluctuation in nationally reported data suggests poor recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2005: Based on survey results for children vaccinated by 23 months of age. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2006: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2007: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2008: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 90 percent to 70 percent with increase to 87 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2009: Based on survey results for children vaccinated by 23 months of age. Reported data excluded. Unexplained increase from 70 percent to 87 percent with decrease 64 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2010: Estimate based on interpolation between 2009 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2011: Based on survey results for children vaccinated by 23 months of age. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2012: Estimate is based on extrapolation from survey. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in

WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

- 2013: Decline in coverage associated with the interruption of health services during period of civil unrest. National immunization programme and partners estimate that civil unrest have resulted in a 50 percent decrease in coverage from prior annual performance. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 61 percent to 39 percent with increase to 50 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2014: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Government reports the conduct of multiple routine intensification activities during 2014. Reported coverage increased from 2013 level, however the number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2015: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Programme reports two months national level stock-out. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. The reported number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. WHO and UNICEF are aware of a planned Multiple Indicator Cluster Survey in 2016. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

Central African Republic - DTP1

CAF - DTP1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	64	64	64	65	65	65	67	69	69	35	69	69
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	73	64	105	102	87	110	71	90	78	44	72	69
Administrative	73	64	105	102	87	76	75	90	68	44	66	69
Survey	NA	64	NA	NA	NA	65	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: 2015 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:

- 2004: Estimate based on interpolation between 2001 and 2005 levels. Immunization records prior to 2003 were compromised during 2002-2003 civil unrest. Fluctuation in nationally reported data suggests poor recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2005: Based on survey results for children vaccinated by 23 months of age. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2006: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. 105 percent greater than 100 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2007: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. 102 percent greater than 100 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2008: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 102 percent to 87 percent with increase to 110 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2009: Based on survey results for children vaccinated by 23 months of age. Reported data excluded. 110 percent greater than 100 percent. Reported data excluded. Unexplained increase from 87 percent to 110 percent with decrease 71 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2010: Estimate based on interpolation between 2009 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 110 percent to 71 percent with increase to 90 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2011: RMF, based on survey results for DTP3 with children vaccinated by 23 months of age. Reported data excluded. Unexplained increase from 71

percent to 90 percent with decrease 78 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

2012: Reported data calibrated to 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

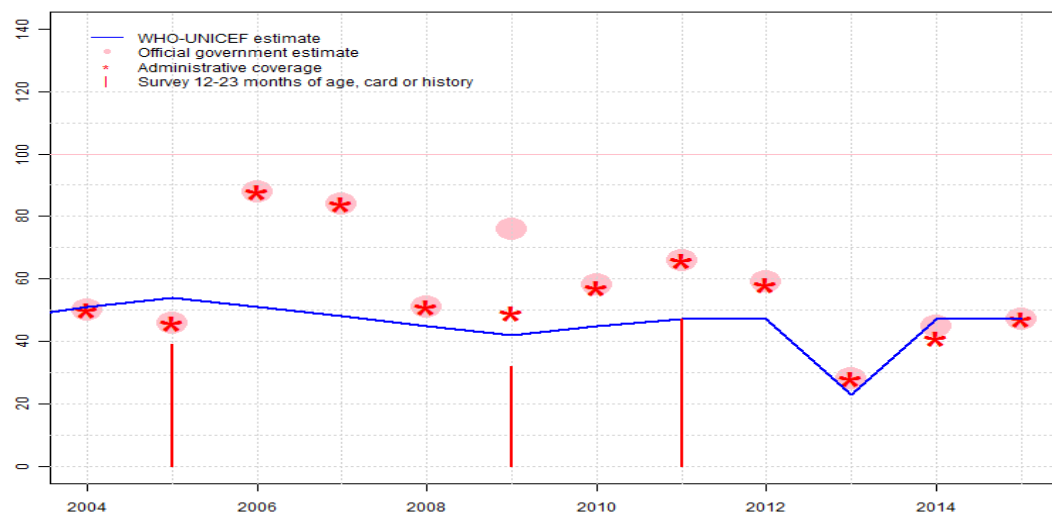
2013: Decline in coverage associated with the interruption of health services during period of civil unrest. National immunization programme and partners estimate that civil unrest have resulted in a 50 percent decrease in coverage from prior annual performance. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 78 percent to 44 percent with increase to 72 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

2014: Reported data calibrated to 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Government reports the conduct of multiple routine intensification activities during 2014. Reported coverage increased from 2013 level, however the number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

2015: Reported data calibrated to 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. The reported number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. WHO and UNICEF are aware of a planned Multiple Indicator Cluster Survey in 2016. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

Central African Republic - DTP3

CAF - DTP3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	51	54	51	48	45	42	45	47	47	23	47	47
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	50	46	88	84	51	76	58	66	59	28	45	47
Administrative	50	46	88	84	51	49	57	66	58	28	41	47
Survey	NA	39	NA	NA	NA	32	NA	47	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: 2015 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.

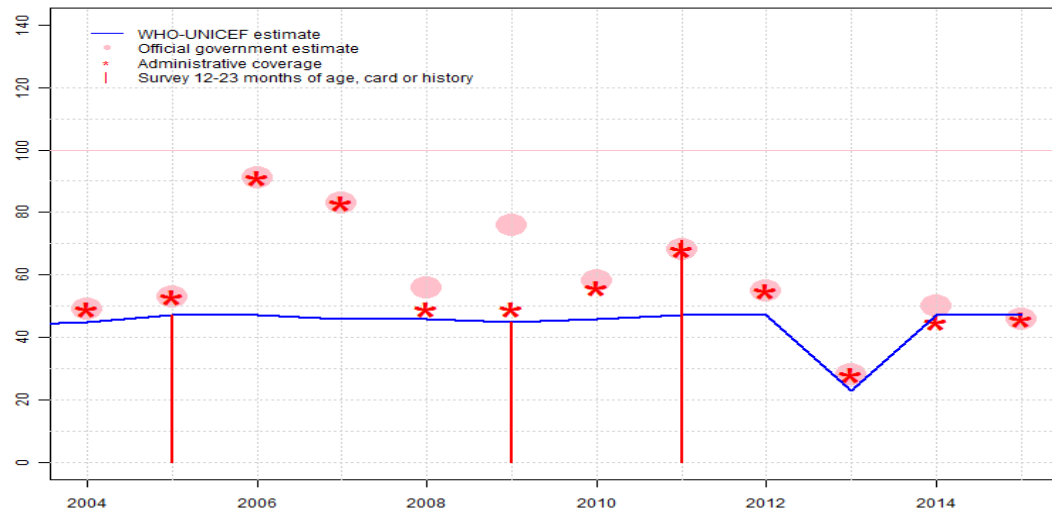
Description:

- 2004: Estimate based on interpolation between 2001 and 2005 levels. Immunization records prior to 2003 were compromised during 2002-2003 civil unrest. Fluctuation in nationally reported data suggests poor recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2005: Based on survey results for children vaccinated by 23 months of age. Central African Republic Multiple Indicator Cluster Survey (MICS-3), 2006 card or history results of 39 percent modified for recall bias to 54 percent based on 1st dose card or history coverage of 64 percent, 1st dose card only coverage of 32 percent and 3d dose card only coverage of 27 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2006: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2007: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2008: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 84 percent to 51 percent with increase to 76 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2009: Based on survey results for children vaccinated by 23 months of age. Central African Republic Multiple Indicator Cluster Survey 2010 card or history results of 32 percent modified for recall bias to 42 percent based on 1st dose card or history coverage of 65 percent, 1st dose card only coverage of 25 percent and 3d dose card only coverage of 16 percent. Reported data excluded. Unexplained increase from 51 percent to 76 percent with decrease 58 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2010: Estimate based on interpolation between 2009 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and

- UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2011: Based on survey results for children vaccinated by 23 months of age. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2012: Estimate is based on extrapolation from survey. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2013: Decline in coverage associated with the interruption of health services during period of civil unrest. National immunization programme and partners estimate that civil unrest have resulted in a 50 percent decrease in coverage from prior annual performance. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 59 percent to 28 percent with increase to 45 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2014: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Government reports the conduct of multiple routine intensification activities during 2014. Reported coverage increased from 2013 level, however the number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2015: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. The reported number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. WHO and UNICEF are aware of a planned Multiple Indicator Cluster Survey in 2016. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

Central African Republic - Pol3

CAF - Pol3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	45	47	47	46	46	45	46	47	47	23	47	47
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	49	53	91	83	56	76	58	68	55	28	50	46
Administrative	49	53	91	83	49	49	56	68	55	28	45	46
Survey	NA	47	NA	NA	NA	45	NA	71	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: 2015 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.

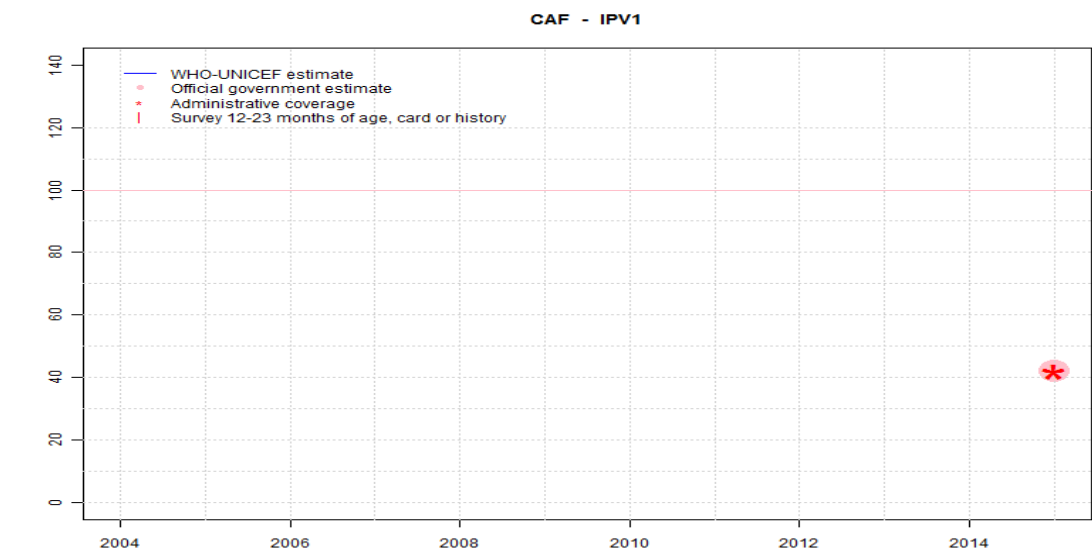
Description:

- 2004: Estimate based on interpolation between 2001 and 2005 levels. Immunization records prior to 2003 were compromised during 2002-2003 civil unrest. Fluctuation in nationally reported data suggests poor recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2005: Based on survey results for children vaccinated by 23 months of age. Central African Republic Multiple Indicator Cluster Survey (MICS-3), 2006 card or history results of 47 percent modified for recall bias to 68 percent based on 1st dose card or history coverage of 81 percent, 1st dose card only coverage of 32 percent and 3d dose card only coverage of 27 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2006: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2007: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2008: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 83 percent to 56 percent with increase to 76 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2009: Based on survey results for children vaccinated by 23 months of age. Central African Republic Multiple Indicator Cluster Survey 2010 card or history results of 45 percent modified for recall bias to 54 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 23 percent and 3d dose card only coverage of 15 percent. Reported data excluded. Unexplained increase from 56 percent to 76 percent with decrease 58 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2010: Estimate based on interpolation between 2009 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and

UNICEF estimates due to conflicting and inconsistent data from national reports.

- 2011: Based on survey results of DTP3 coverage for children vaccinated by 23 months of age. Survey results for polio likely include campaign doses. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2012: Estimate is based on extrapolation from survey. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2013: Decline in coverage associated with the interruption of health services during period of civil unrest. National immunization programme and partners estimate that civil unrest have resulted in a 50 percent decrease in coverage from prior annual performance. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 55 percent to 28 percent with increase to 50 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2014: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Government reports the conduct of multiple routine intensification activities during 2014. Reported coverage increased from 2013 level, however the number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2015: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. The reported number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. WHO and UNICEF are aware of a planned Multiple Indicator Cluster Survey in 2016. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

Central African Republic - IPV1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 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.

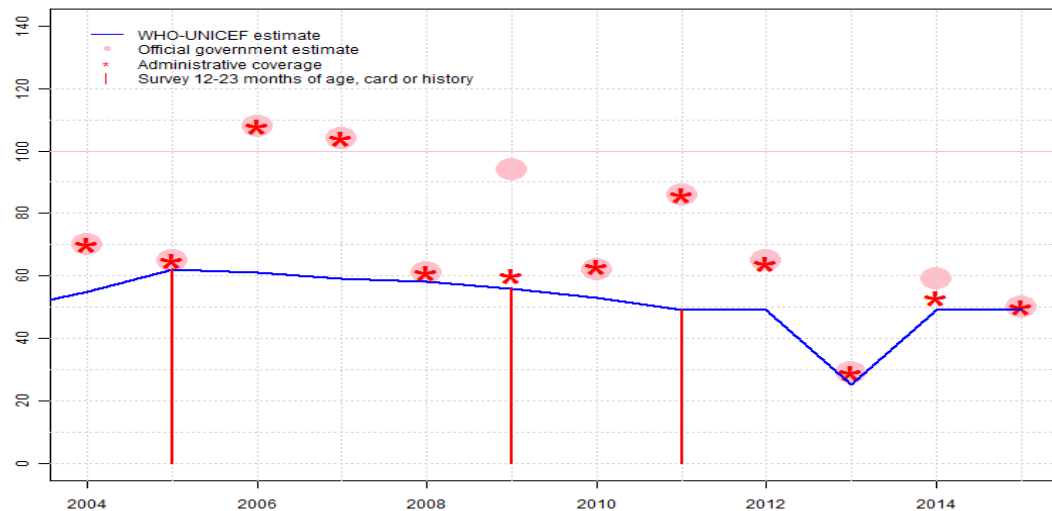
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2015: IPV introduced in September 2015. Programme reports 42 percent coverage in 6 percent of the target population. Estimate is based on coverage acheived in the total annual national target population. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

Central African Republic - MCV1

CAF - MCV1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	55	62	61	59	58	56	53	49	49	25	49	49
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	70	65	108	104	61	94	62	86	65	29	59	50
Administrative	70	65	108	104	61	60	63	86	64	29	53	50
Survey	NA	62	NA	NA	NA	56	NA	49	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: 2015 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.

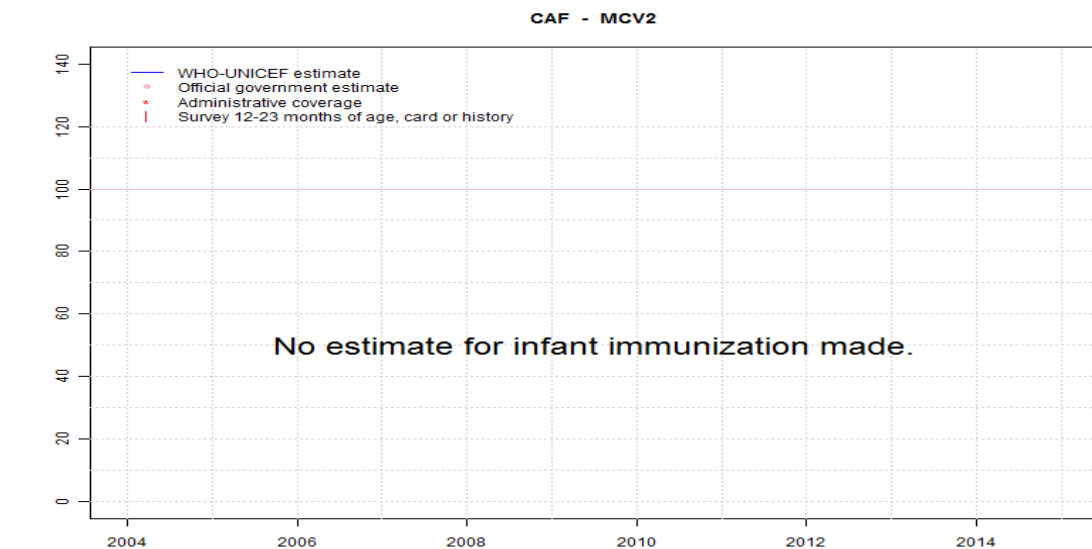
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Estimate based on interpolation between 2001 and 2005 levels. Immunization records prior to 2003 were compromised during 2002-2003 civil unrest. Fluctuation in nationally reported data suggests poor recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2005: Based on survey results for children vaccinated by 23 months of age. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2006: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. 108 percent greater than 100 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2007: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. 104 percent greater than 100 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2008: Estimate based on interpolation between 2005 and 2009 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 104 percent to 61 percent with increase to 94 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2009: Based on survey results for children vaccinated by 23 months of age. Reported data excluded. Unexplained increase from 61 percent to 94 percent with decrease 62 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2010: Estimate based on interpolation between 2009 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 94 percent to 62 percent with increase to 86 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2011: Based on survey results for children vaccinated by 23 months of age. Reported data excluded. Unexplained increase from 62 percent to 86 percent with decrease 65 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

- 2012: Reported data calibrated to 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2013: Decline in coverage associated with the interruption of health services during period of civil unrest. National immunization programme and partners estimate that civil unrest have resulted in a 50 percent decrease in coverage from prior annual performance. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 65 percent to 29 percent with increase to 59 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2014: Reported data calibrated to 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Government reports the conduct of multiple routine intensification activities during 2014. Reported coverage increased from 2013 level, however the number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2015: Reported data calibrated to 2011 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. The reported number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. WHO and UNICEF are aware of a planned Multiple Indicator Cluster Survey in 2016. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

Central African Republic - MCV2

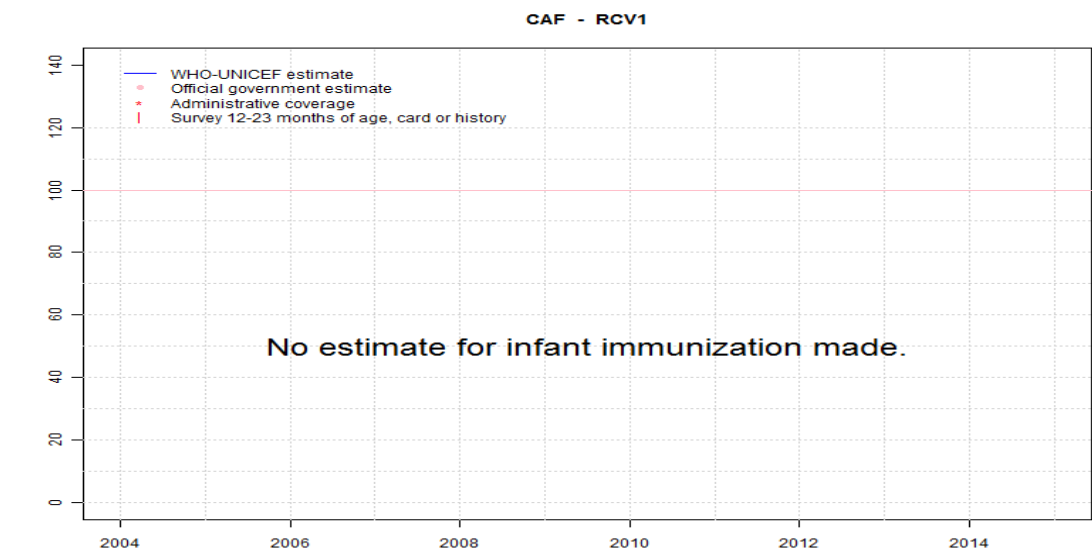


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 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.



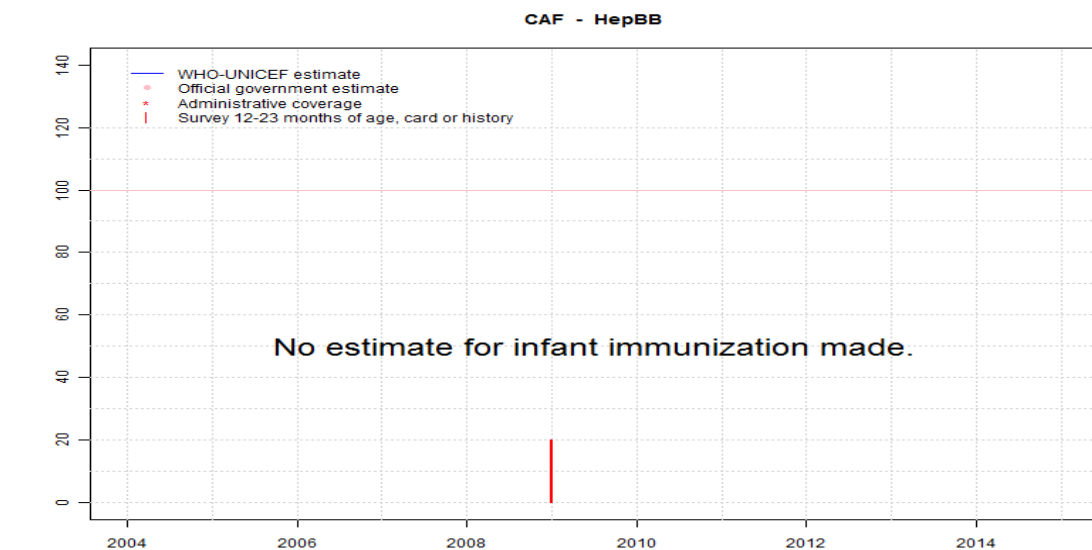
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 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.

Central African Republic - HepBB



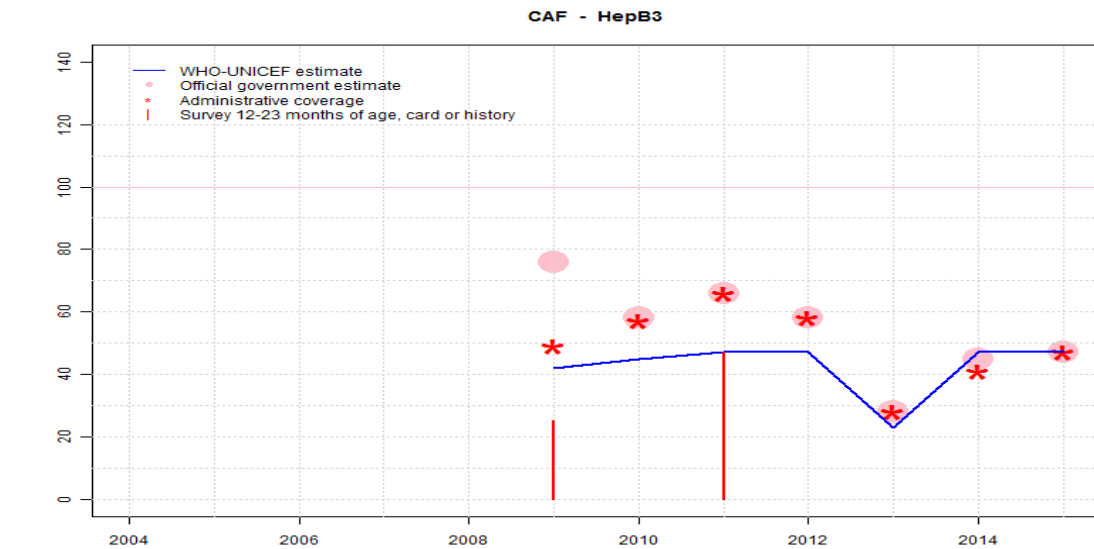
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	20	NA	NA	NA	NA	NA	NA

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: 2015 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.

Central African Republic - HepB3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	42	45	47	47	23	47	47
Estimate GoC	NA	NA	NA	NA	NA	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	NA	76	58	66	58	28	45	47
Administrative	NA	NA	NA	NA	NA	49	57	66	58	28	41	47
Survey	NA	NA	NA	NA	NA	25	NA	47	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: 2015 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:

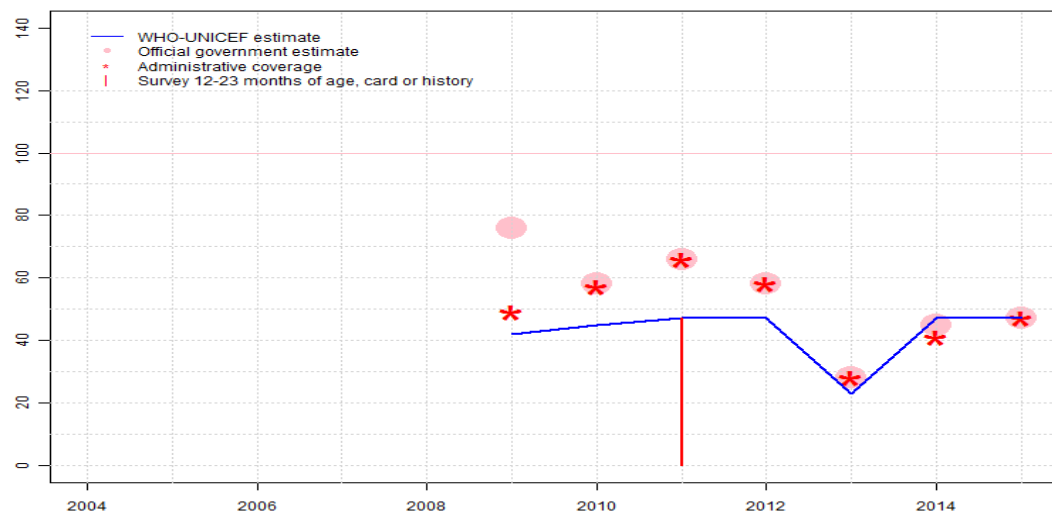
- 2009: Estimate follows DTP3 coverage levels. Central African Republic Multiple Indicator Cluster Survey 2010 card or history results of 25 percent modified for recall bias to 35 percent based on 1st dose card or history coverage of 54 percent, 1st dose card only coverage of 25 percent and 3d dose card only coverage of 16 percent. HepB vaccine introduced in 2008. Reporting started in 2009. Vaccine presentation is DTP-HepB-Hib. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2010: Estimate based on interpolation between 2009 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2011: Estimate follows DTP3 coverage levels. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2012: Estimate is based on third dose DTP containing vaccine coverage. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2013: Decline in coverage associated with the interruption of health services during period of civil unrest. National immunization programme and partners estimate that civil unrest have resulted in a 50 percent decrease in coverage from prior annual performance. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 58 percent to 28 percent with increase to 45 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2014: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Government reports the conduct of multiple routine intensification activities during 2014. Reported coverage increased from 2013 level, however the number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

Central African Republic - HepB3

2015: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. The reported number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. WHO and UNICEF are aware of a planned Multiple Indicator Cluster Survey in 2016. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

Central African Republic - Hib3

CAF - Hib3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	42	45	47	47	23	47	47
Estimate GoC	NA	NA	NA	NA	NA	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	NA	76	58	66	58	28	45	47
Administrative	NA	NA	NA	NA	NA	49	57	66	58	28	41	47
Survey	NA	NA	NA	NA	NA	NA	NA	47	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: 2015 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.

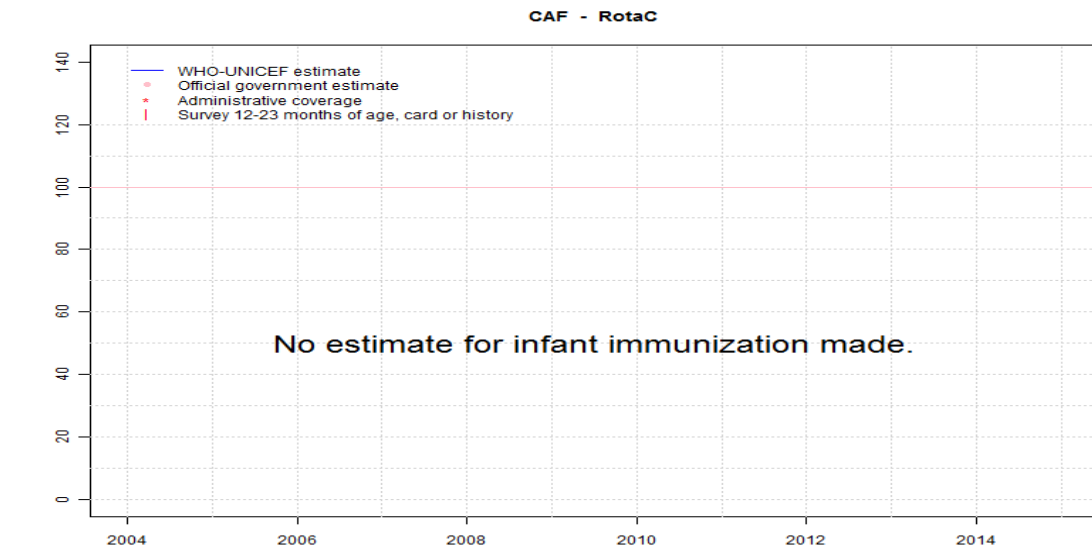
Description:

- 2009: Estimate follows DTP3 coverage levels. Hib vaccine introduced in 2008. Reporting started in 2009. Vaccine presentation is DTP-HepB-Hib. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2010: Estimate based on interpolation between 2009 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2011: Estimate follows DTP3 coverage levels. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2012: Estimate is based on third dose DTP containing vaccine coverage. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2013: Decline in coverage associated with the interruption of health services during period of civil unrest. National immunization programme and partners estimate that civil unrest have resulted in a 50 percent decrease in coverage from prior annual performance. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 58 percent to 28 percent with increase to 45 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2014: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Government reports the conduct of multiple routine intensification activities during 2014. Reported coverage increased from 2013 level, however the number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2015: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. The reported

Central African Republic - Hib3

number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. WHO and UNICEF are aware of a planned Multiple Indicator Cluster Survey in 2016. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

Central African Republic - RotaC



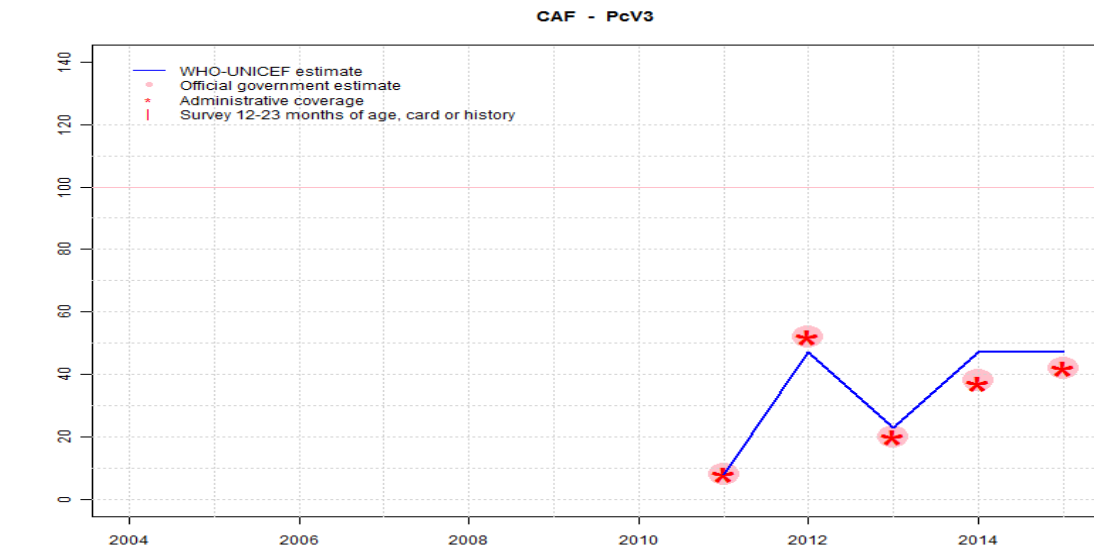
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 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.

Central African Republic - PcV3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	8	47	23	47	47
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	•	•	•	•	•
Official	NA	NA	NA	NA	NA	NA	NA	8	52	20	38	42
Administrative	NA	NA	NA	NA	NA	NA	NA	8	52	20	37	42
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 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.

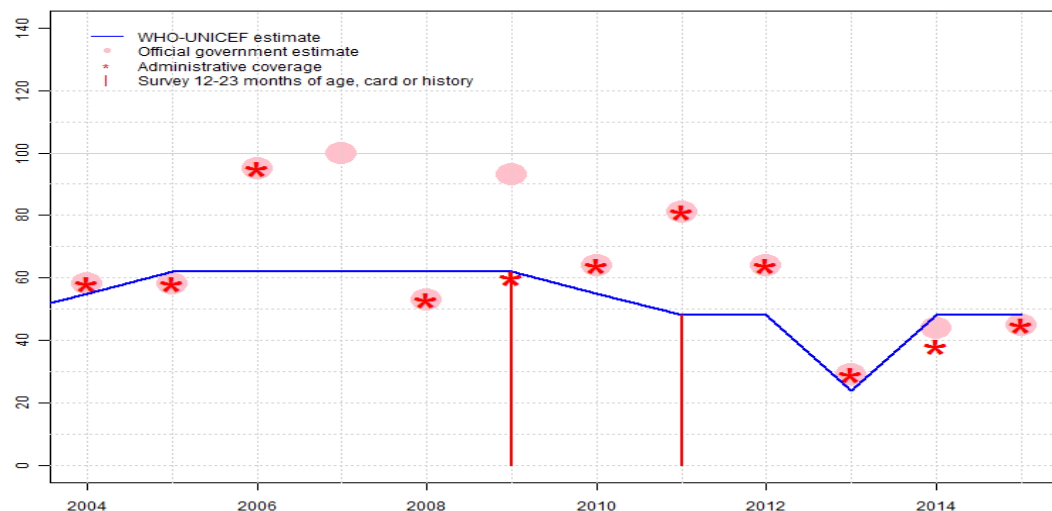
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2011: Pneumococcal conjugate vaccine was introduced in 2011. Estimate based on reported data. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2012: Estimate follows DTP3 coverage level Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Unexplained increase from 8 percent to 52 percent with decrease 20 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2013: Decline in coverage associated with the interruption of health services during period of civil unrest. National immunization programme and partners estimate that civil unrest have resulted in a 50 percent decrease in coverage from prior annual performance. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 52 percent to 20 percent with increase to 38 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2014: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Government reports the conduct of multiple routine intensification activities during 2014. Reported coverage increased from 2013 level, however the number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2015: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

Central African Republic - YFV

CAF - YFV



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	55	62	62	62	62	62	55	48	48	24	48	48
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	58	58	95	100	53	93	64	81	64	29	44	45
Administrative	58	58	95	NA	53	60	64	81	64	29	38	45
Survey	NA	NA	NA	NA	NA	62	NA	48	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: 2015 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:

- 2004: Estimate follows MCV coverage levels. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2005: Estimate follows MCV coverage levels. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2006: Estimate follows MCV coverage levels. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2007: Estimate follows MCV coverage levels. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2008: Estimate follows MCV coverage levels. Reported data excluded. Decline in reported coverage from 100 percent to 53 percent with increase to 93 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2009: Estimate follows MCV coverage levels. Reported data excluded. Unexplained increase from 53 percent to 93 percent with decrease 64 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2010: Estimate based on interpolation between 2009 and 2011 levels. Fluctuations in reported data suggest poor quality administrative recording and reporting. Reported data excluded. Decline in reported coverage from 93 percent to 64 percent with increase to 81 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2011: Estimate follows MCV coverage levels. Reported data excluded. Unexplained increase from 64 percent to 81 percent with decrease 64 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2012: Estimate is based on extrapolation from survey. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.
- 2013: Decline in coverage associated with the interruption of health services during period of civil unrest. National immunization programme and partners estimate that civil unrest have resulted in a 50 percent decrease in coverage from prior annual performance. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and report-

ing. Reported data excluded. Decline in reported coverage from 64 percent to 29 percent with increase to 44 percent. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

2014: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Government reports the conduct of multiple routine intensification activities during 2014. Reported coverage increased from 2013 level, however the number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. Programme reports two months yellow fever stock-out at national level. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

2015: Reported data calibrated to 2012 levels. Reported data excluded. Fluctuations in reported data suggest poor quality administrative recording and reporting. Given concerns with the quality of reported data, the estimate is based on pre-conflict levels determined by the 2012 survey. The reported number of children vaccinated has not returned to levels observed during 2011, prior to the decrease in coverage. WHO and UNICEF encourage continued efforts to improve delivery of immunization services. WHO and UNICEF are aware of a planned Multiple Indicator Cluster Survey in 2016. GoC=Assigned by working group. Low confidence in WHO and UNICEF estimates due to conflicting and inconsistent data from national reports.

Central African Republic - survey details

2011 République Centrafricaine Enquête de Couverture Vaccinale 2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	39	12-23 m	1774	50
BCG	Card or History	74	12-23 m	1774	50
DTP3	Card	41	12-23 m	1774	50
DTP3	Card or History	47	12-23 m	1774	50
HepB3	Card	41	12-23 m	1774	50
HepB3	Card or History	47	12-23 m	1774	50
Hib3	Card	41	12-23 m	1774	50
Hib3	Card or History	47	12-23 m	1774	50
MCV1	Card	34	12-23 m	1774	50
MCV1	Card or History	49	12-23 m	1774	50
Pol3	Card	28	12-23 m	1774	50
Pol3	Card or History	71	12-23 m	1774	50
YFV	Card	34	12-23 m	1774	50
YFV	Card or History	48	12-23 m	1774	50

2009 République Centrafricaine, Enquête par grappes à indicateurs multiples, 2010

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	72	12-23 m	-	32
BCG	Card	24	12-23 m	-	32
BCG	Card or History	74	12-23 m	2105	32
BCG	History	50	12-23 m	-	32
DTP1	C or H <12 months	63	12-23 m	-	32
DTP1	Card	25	12-23 m	-	32
DTP1	Card or History	65	12-23 m	2105	32
DTP1	History	40	12-23 m	-	32
DTP3	C or H <12 months	31	12-23 m	-	32
DTP3	Card	16	12-23 m	-	32
DTP3	Card or History	32	12-23 m	2105	32
DTP3	History	16	12-23 m	-	32
HepB1	C or H <12 months	52	12-23 m	-	32
HepB1	Card	25	12-23 m	-	32
HepB1	Card or History	54	12-23 m	2105	32

HepB1	History	29	12-23 m	-	32
HepB3	C or H <12 months	24	12-23 m	-	32
HepB3	Card	16	12-23 m	-	32
HepB3	Card or History	25	12-23 m	2105	32
HepB3	History	8	12-23 m	-	32
HepBB	C or H <12 months	19	12-23 m	-	32
HepBB	Card	9	12-23 m	-	32
HepBB	Card or History	20	12-23 m	2105	32
HepBB	History	11	12-23 m	-	32
MCV1	C or H <12 months	50	12-23 m	-	32
MCV1	Card	13	12-23 m	-	32
MCV1	Card or History	56	12-23 m	2105	32
MCV1	History	42	12-23 m	-	32
Pol1	C or H <12 months	80	12-23 m	-	32
Pol1	Card	23	12-23 m	-	32
Pol1	Card or History	83	12-23 m	2105	32
Pol1	History	60	12-23 m	-	32
Pol3	C or H <12 months	44	12-23 m	-	32
Pol3	Card	15	12-23 m	-	32
Pol3	Card or History	45	12-23 m	2105	32
Pol3	History	30	12-23 m	-	32
YFV	C or H <12 months	46	12-23 m	-	32
YFV	Card	16	12-23 m	-	32
YFV	Card or History	62	12-23 m	2105	32
YFV	History	46	12-23 m	-	32

2005 République Centrafricaine, Enquête par Grappe à Indicateurs Multiples, couplée avec la Sérologie VIH et Anémie, 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	71	12-23 m	1844	37
BCG	Card	34	12-23 m	1844	37
BCG	Card or History	74	12-23 m	1844	37
BCG	History	40	12-23 m	1844	37
DTP1	C or H <12 months	60	12-23 m	1844	37
DTP1	Card	32	12-23 m	1844	37
DTP1	Card or History	64	12-23 m	1844	37

Central African Republic - survey details

DTP1	History	32	12-23 m	1844	37
DTP3	C or H <12 months	34	12-23 m	1844	37
DTP3	Card	27	12-23 m	1844	37
DTP3	Card or History	39	12-23 m	1844	37
DTP3	History	12	12-23 m	1844	37
MCV1	C or H <12 months	50	12-23 m	1844	37
MCV1	Card	28	12-23 m	1844	37
MCV1	Card or History	62	12-23 m	1844	37
MCV1	History	34	12-23 m	1844	37
Pol1	C or H <12 months	75	12-23 m	1844	37
Pol1	Card	32	12-23 m	1844	37
Pol1	Card or History	81	12-23 m	1844	37
Pol1	History	48	12-23 m	1844	37
Pol3	C or H <12 months	40	12-23 m	1844	37
Pol3	Card	27	12-23 m	1844	37
Pol3	Card or History	47	12-23 m	1844	37
Pol3	History	20	12-23 m	1844	37

2001 Rapport Final de la Revue externe du PEV en Republique Centrafricaine 2002

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	70	12-23 m	-	58
DTP1	C or H <12 months	65	12-23 m	-	58
DTP3	C or H <12 months	40	12-23 m	-	58
MCV1	C or H <12 months	35	12-23 m	-	58
Pol1	C or H <12 months	63	12-23 m	-	58
Pol3	C or H <12 months	40	12-23 m	-	58

1999 Enquête à Indicateurs Multiples en Republique Centrafricaine, 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	62	12-23 m	2932	39
DTP1	C or H <12 months	55	12-23 m	2932	39
DTP3	C or H <12 months	33	12-23 m	2932	39
MCV1	C or H <12 months	37	12-23 m	2932	39
Pol1	C or H <12 months	66	12-23 m	2932	39
Pol3	C or H <12 months	36	12-23 m	2932	39

Further information and estimates for previous years are available at:

<http://www.data.unicef.org/child-health/immunization>

http://www.who.int/immunization/monitoring_surveillance/routine/coverage/en/index4.html

Central African Republic

WHO/UNICEF Estimates of Protection at Birth (PAB) against tetanus

In countries where tetanus is recommended for girls and women coverage is usually reported as "TT2+", i.e. the proportion of (pregnant) women who have received their second or superior TT dose in a given year. TT2 + coverage, however, can under-represent the actual proportion of births that are protected against tetanus as it does not include women who have previously received protective doses, women who received one dose without documentation of previous doses, and women who received doses in TT (or Td) supplemental immunization activities (SIA). In addition, girls who have received DTP in their childhood and are entering childbearing age, may be protected with TT booster doses.

WHO and UNICEF have developed a model that takes into account the above scenarios, and calculates the proportion of births in a given year that can be considered as having been protected against tetanus - "Protection at Birth".

In this model, annual cohorts of women are followed from infancy through their life. A proportion receives DTP in infancy (estimated based on the WHO-UNICEF estimates of DTP3 coverage). In addition some of these women also receive TT through routine services when they are pregnant and may also receive TT during SIAs. The model also adjusts reported data, taking into account coverage patterns in other years, and/or results available through surveys. The duration of protection is then calculated, based on WHO estimates of the duration of protection by doses ever received. The proportion of births that are protected against tetanus as a result of maternal immunization reflects the tetanus immunization received by the mother throughout her life rather than simply the TT immunizations received during the current pregnancy.

The model was used in the mid to late 2000. Currently, the coverage series developed by the model is used as the baseline, and efforts are made to obtain data from all sources that include the JRF and reported trend over the years, routine PAB reporting and its trend over the years, data from surveys (DHS, MICS, EPI), whether countries have been validated for the attainment of maternal and neonatal tetanus elimination and what the TT coverage figures are from the survey etc and all the information is used to arrive at an estimate of the protection-at-birth from TT vaccination.

Year	PAB coverage estimate (%)
2004	35
2005	48
2006	52
2007	54
2008	86
2009	86
2010	86
2011	80
2012	66
2013	66
2014	60
2015	60

¹ This model is described in: Griffiths U., Wolfson L., Quddus A., Younus M., Hafiz R.. Incremental cost-effectiveness of supplementary immunization activities to prevent neo-natal tetanus in Pakistan. Bulletin of the World Health Organization 2004; 82:643-651.