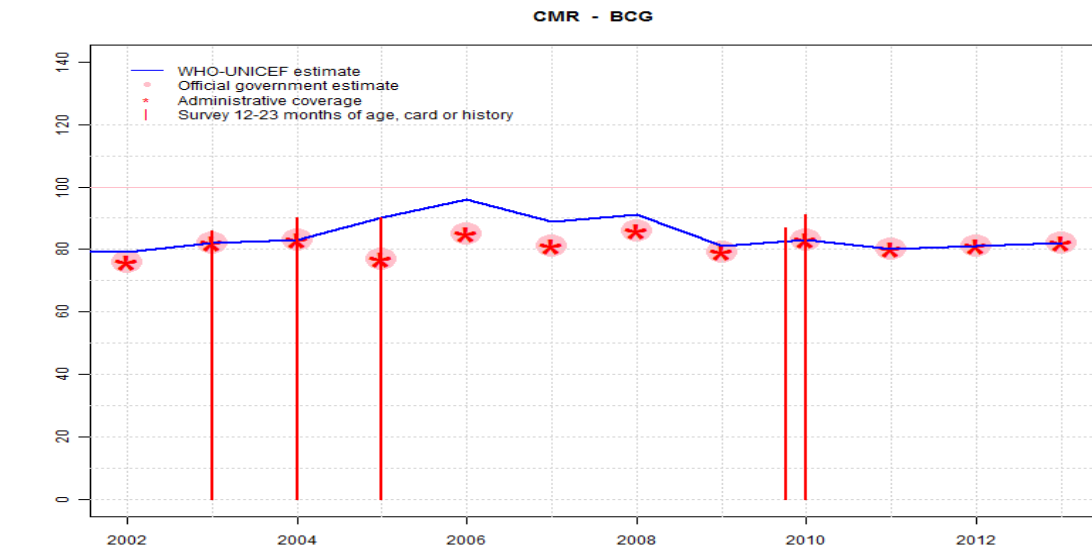


Cameroon - BCG



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	79	82	83	90	96	89	91	81	83	80	81	82
Estimate GoC	••	•••	•••	•	•	••	••	••	•	•••	•	•
Official	76	82	83	77	85	81	86	79	83	80	81	82
Administrative	76	82	83	77	85	81	86	79	83	80	81	82
Survey	NA	86	90	90	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: 2012 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.

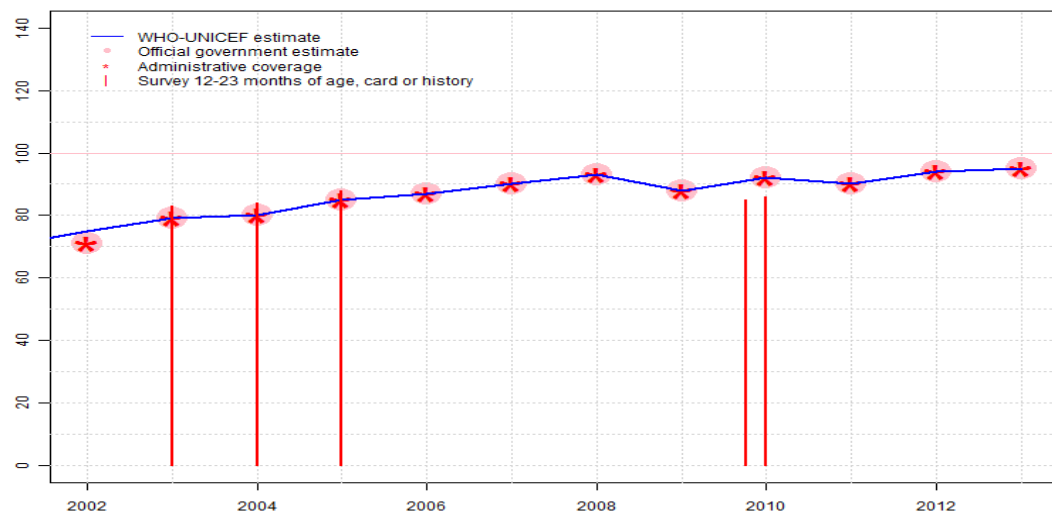
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2002: Reported data calibrated to 1999 and 2003 levels. GoC=S+ D+
- 2003: Estimate based on coverage reported by national government supported by survey. Survey evidence of 86 percent based on 1 survey(s). GoC=R+ S+ D+
- 2004: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). GoC=R+ S+ D+
- 2005: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 90 percent based on 1 survey(s). BCG estimates based on survey results. Denominator for BCG varies widely Estimate challenged by: R-
- 2006: Reported data calibrated to 2005 and 2010 levels. Estimate challenged by: D-
- 2007: Reported data calibrated to 2005 and 2010 levels. GoC=S+ D+
- 2008: Reported data calibrated to 2005 and 2010 levels. GoC=S+ D+
- 2009: Reported data calibrated to 2005 and 2010 levels. GoC=S+ D+
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 89 percent based on 2 survey(s). Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on coverage reported by national government. Estimate challenged by: D-

Cameroon - DTP1

CMR - DTP1



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	75	79	80	85	87	90	93	88	92	90	94	95
Estimate GoC	●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●
Official	71	79	80	85	87	90	93	88	92	90	94	95
Administrative	71	79	80	85	87	90	93	88	92	90	94	95
Survey	NA	83	84	88	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.

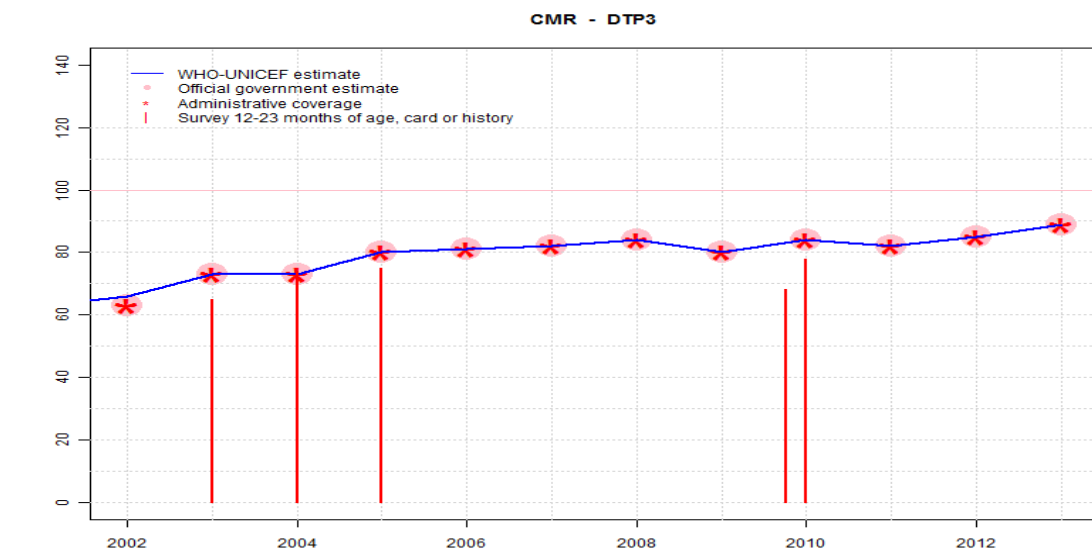
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk 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:

- 2002: Reported data calibrated to 1999 and 2003 levels. GoC=S+ D+
- 2003: Estimate based on coverage reported by national government supported by survey. Survey evidence of 83 percent based on 1 survey(s). GoC=R+ S+ D+
- 2004: Estimate based on coverage reported by national government supported by survey. Survey evidence of 84 percent based on 1 survey(s). GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 88 percent based on 1 survey(s). GoC=R+ S+ D+
- 2006: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2007: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 86 percent based on 2 survey(s). GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+

Cameroon - DTP3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	66	73	73	80	81	82	84	80	84	82	85	89
Estimate GoC	••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	••
Official	63	73	73	80	81	82	84	80	84	82	85	89
Administrative	63	73	73	80	81	82	84	80	84	82	85	89
Survey	NA	65	74	75	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: 2012 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:

- 2002: Reported data calibrated to 1999 and 2003 levels. GoC=S+ D+
- 2003: Estimate based on coverage reported by national government supported by survey. Survey evidence of 74 percent based on 1 survey(s). Cameroon Demographic and Health Survey card or history results of 65 percent modified for recall bias to 74 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 56 percent and 3d dose card only coverage of 50 percent. GoC=R+ S+ D+
- 2004: Estimate based on coverage reported by national government supported by survey. Survey evidence of 76 percent based on 1 survey(s). Cameroon National Evaluation of Immunization Coverage among Children Aged 12 to 23 Months card or history results of 74 percent modified for recall bias to 76 percent based on 1st dose card or history coverage of 84 percent, 1st dose card only coverage of 50 percent and 3d dose card only coverage of 45 percent. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 80 percent based on 1 survey(s). Cameroon Multiple Indicator Cluster Survey 2006 card or history results of 75 percent modified for recall bias to 80 percent based on 1st dose card or history coverage of 88 percent, 1st dose card only coverage of 65 percent and 3d dose card only coverage of 59 percent. GoC=R+ S+ D+
- 2006: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2007: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 76 percent based on 2 survey(s). Cameroon Demographic and Health Survey 2011 card or history results of 68 percent modified for recall bias to 75 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 56 percent and 3d dose card only coverage of 49 percent. Cameroon Post-Campaign Vaccination Coverage Survey 2011 card or history results of 78 percent modified for recall bias to 76 percent based on 1st dose card or history coverage of 85 percent, 1st dose card only coverage of 54 percent and 3d dose card only coverage of 48 percent. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ S+

Cameroon - DTP3

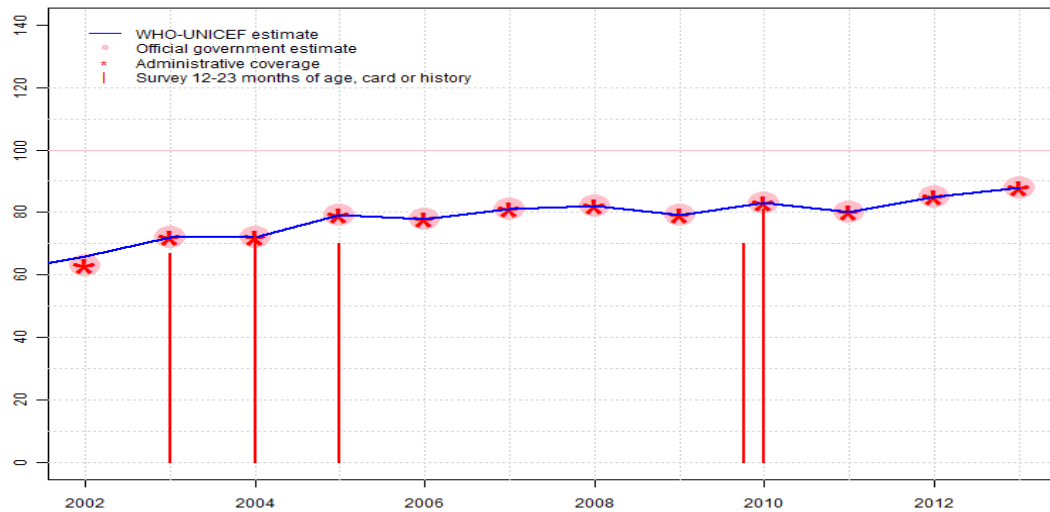
D+

2013: Estimate based on coverage reported by national government. GoC=R+

D+

Cameroon - Pol3

CMR - Pol3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	66	72	72	79	78	81	82	79	83	80	85	88
Estimate GoC	••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	••
Official	63	72	72	79	78	81	82	79	83	80	85	88
Administrative	63	72	72	79	78	81	82	79	83	80	85	88
Survey	NA	67	73	70	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: 2012 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.

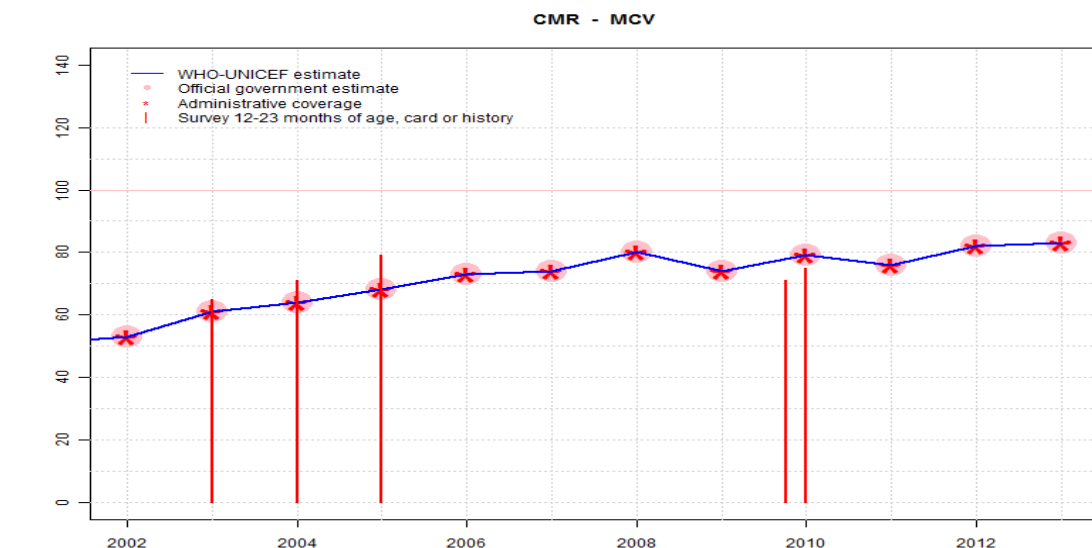
Description:

- 2002: Reported data calibrated to 1999 and 2003 levels. GoC=D+
- 2003: Vaccine to vaccine consistency Cameroon Demographic and Health Survey card or history results of 67 percent modified for recall bias to 83 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 56 percent and 3d dose card only coverage of 50 percent. GoC=R+ S+ D+
- 2004: Estimate based on coverage reported by national government supported by survey. Survey evidence of 79 percent based on 1 survey(s). Cameroon National Evaluation of Immunization Coverage among Children Aged 12 to 23 Months card or history results of 73 percent modified for recall bias to 79 percent based on 1st dose card or history coverage of 88 percent, 1st dose card only coverage of 50 percent and 3d dose card only coverage of 45 percent. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 80 percent based on 1 survey(s). Cameroon Multiple Indicator Cluster Survey 2006 card or history results of 70 percent modified for recall bias to 80 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 65 percent and 3d dose card only coverage of 56 percent. GoC=R+ S+ D+
- 2006: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2007: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 82 percent based on 2 survey(s). Cameroon Demographic and Health Survey 2011 card or history results of 70 percent modified for recall bias to 83 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 56 percent and 3d dose card only coverage of 50 percent. Cameroon Post-Campaign Vaccination Coverage Survey 2011 card or history results of 81 percent modified for recall bias to 80 percent based on 1st dose card or history coverage of 88 percent, 1st dose card only coverage of 55 percent and 3d dose card only coverage of 50 percent. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ S+ D+

Cameroon - Pol3

2013: Estimate based on coverage reported by national government. GoC=R+
D+

Cameroon - MCV



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	53	61	64	68	73	74	80	74	79	76	82	83
Estimate GoC	••	•	•	•	•	•	•••	•••	•••	•••	•••	••
Official	53	61	64	68	73	74	80	74	79	76	82	83
Administrative	53	61	64	68	73	74	80	74	79	76	82	83
Survey	NA	65	71	79	NA	NA	NA	NA	*	NA	NA	NA

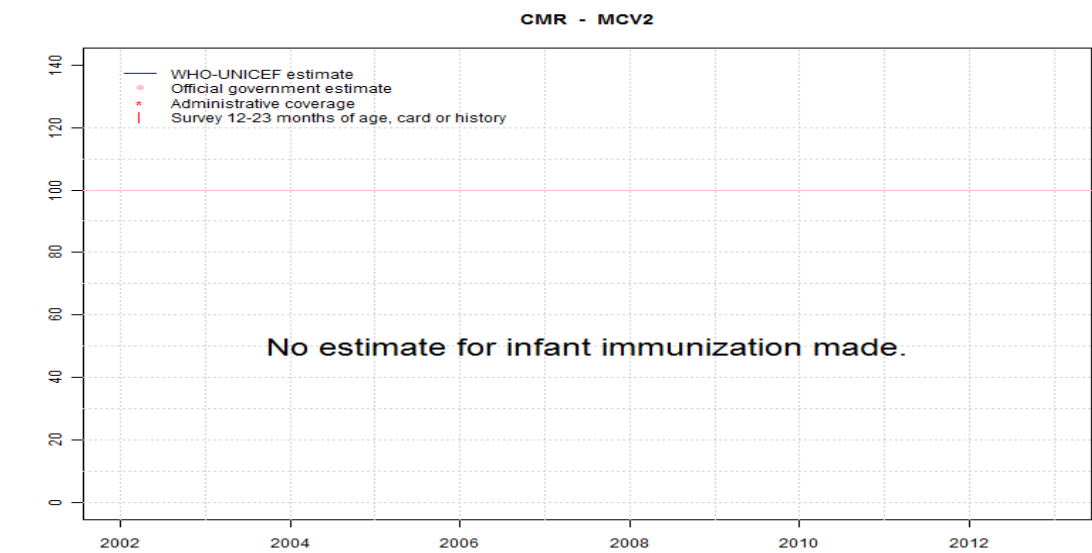
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2012 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:

- 2002: Estimate based on coverage reported by national government. GoC=R+ D+
- 2003: Estimate based on coverage reported by national government supported by survey. Survey evidence of 65 percent based on 1 survey(s). Estimate challenged by: S-
- 2004: Estimate based on coverage reported by national government supported by survey. Survey evidence of 71 percent based on 1 survey(s). Estimate challenged by: S-
- 2005: Estimate based on coverage reported by national government. Cameroon Multiple Indicator Cluster Survey 2006 results ignored by working group. Survey results most likely contain immunizations administered during measles campaigns. Estimate challenged by: S-
- 2006: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2007: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2008: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 73 percent based on 2 survey(s). GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+



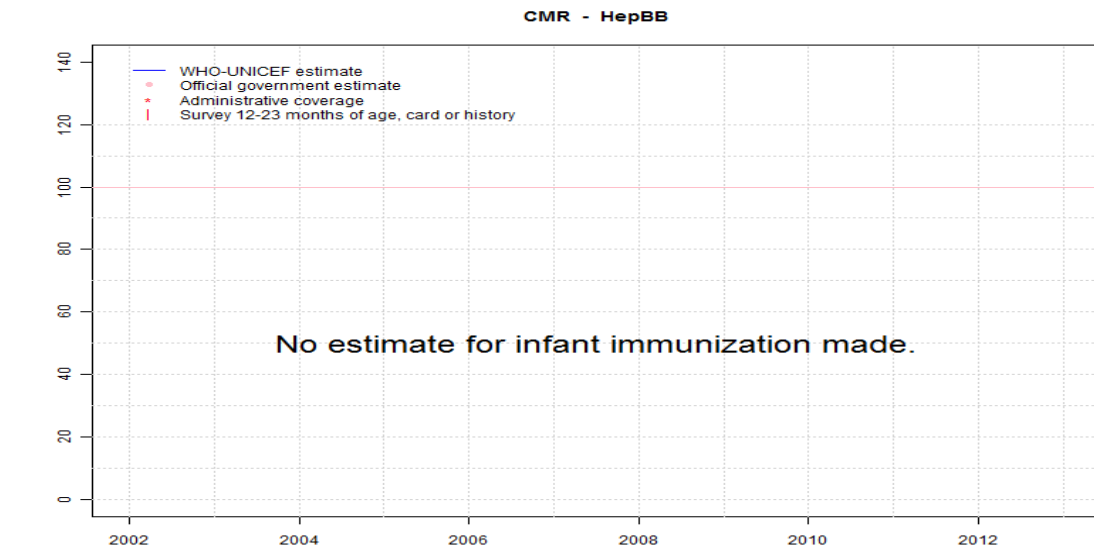
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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: 2012 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.

Cameroon - HepBB



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
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

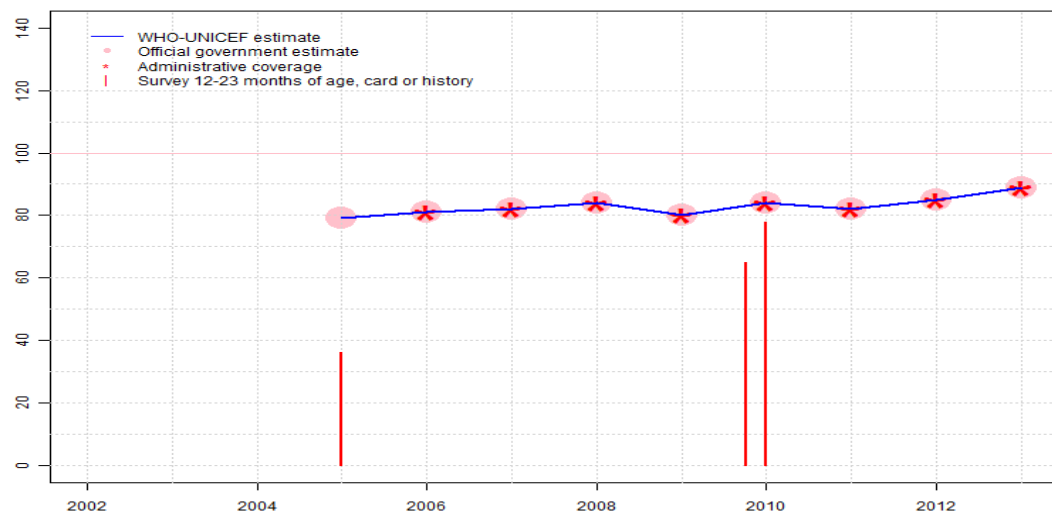
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2012 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.

Cameroon - HepB3

CMR - HepB3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	NA	NA	NA	79	81	82	84	80	84	82	85	89
Estimate GoC	NA	NA	NA	•	•	•	•	•	•	•	•	••
Official	NA	NA	NA	79	81	82	84	80	84	82	85	89
Administrative	NA	NA	NA	NA	81	82	84	80	84	82	85	89
Survey	NA	NA	NA	36	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.

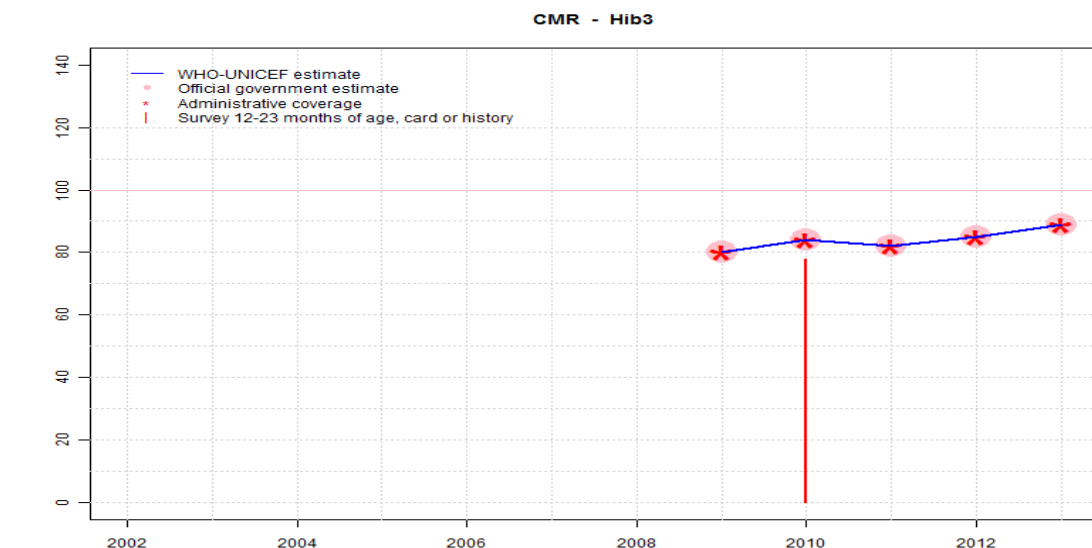
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk 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:

- 2005: Estimate based on coverage reported by national government. Cameroon Multiple Indicator Cluster Survey 2006 results ignored by working group. Survey results ignored in the first year of vaccine introduction. Cameroon Multiple Indicator Cluster Survey 2006 card or history results of 36 percent modified for recall bias to 35 percent based on 1st dose card or history coverage of 40 percent, 1st dose card only coverage of 35 percent and 3d dose card only coverage of 31 percent. HepB vaccine introduced in 2005. Vaccine presentation is DTP-HepB. Estimate challenged by: S-
- 2006: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2007: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government. Cameroon Demographic and Health Survey 2011 results ignored by working group. Survey results inconsistent with vaccine presentation. HepB is given only in DTP-HepB-Hib combination vaccine. Cameroon Post-Campaign Vaccination Coverage Survey 2011 results ignored by working group. Survey results inconsistent with vaccine presentation. HepB is given only in DTP-HepB-Hib combination vaccine. Cameroon Demographic and Health Survey 2011 card or history results of 65 percent modified for recall bias to 71 percent based on 1st dose card or history coverage of 80 percent, 1st dose card only coverage of 54 percent and 3d dose card only coverage of 48 percent. Cameroon Post-Campaign Vaccination Coverage Survey 2011 card or history results of 78 percent modified for recall bias to 76 percent based on 1st dose card or history coverage of 85 percent, 1st dose card only coverage of 54 percent and 3d dose card only coverage of 48 percent. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2013: Estimate based on coverage reported by national government. GoC=R+D+

Cameroon - Hib3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	NA	NA	NA	NA	NA	NA	NA	80	84	82	85	89
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	●●●	●●●	●●●	●●●	●●
Official	NA	NA	NA	NA	NA	NA	NA	80	84	82	85	89
Administrative	NA	NA	NA	NA	NA	NA	NA	80	84	82	85	89
Survey	NA	NA	NA	NA	NA	NA	NA	NA	78	NA	NA	NA

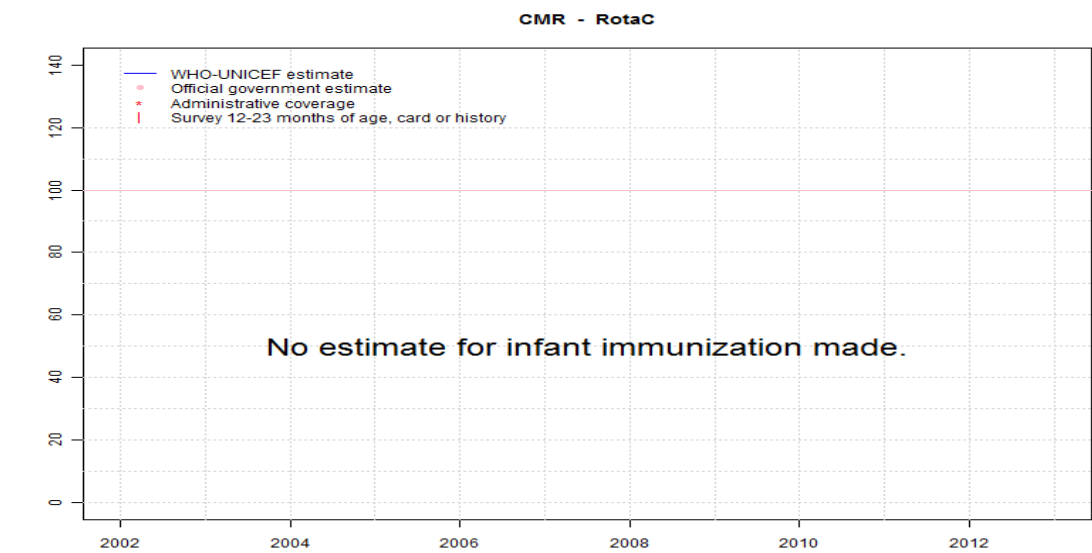
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability 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: 2012 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 based on reported data. Hib vaccine introduced in 2009. Vaccine presentation is DTP-HepB-Hib. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 76 percent based on 1 survey(s). Cameroon Post-Campaign Vaccination Coverage Survey 2011 card or history results of 78 percent modified for recall bias to 76 percent based on 1st dose card or history coverage of 85 percent, 1st dose card only coverage of 54 percent and 3d dose card only coverage of 48 percent. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+



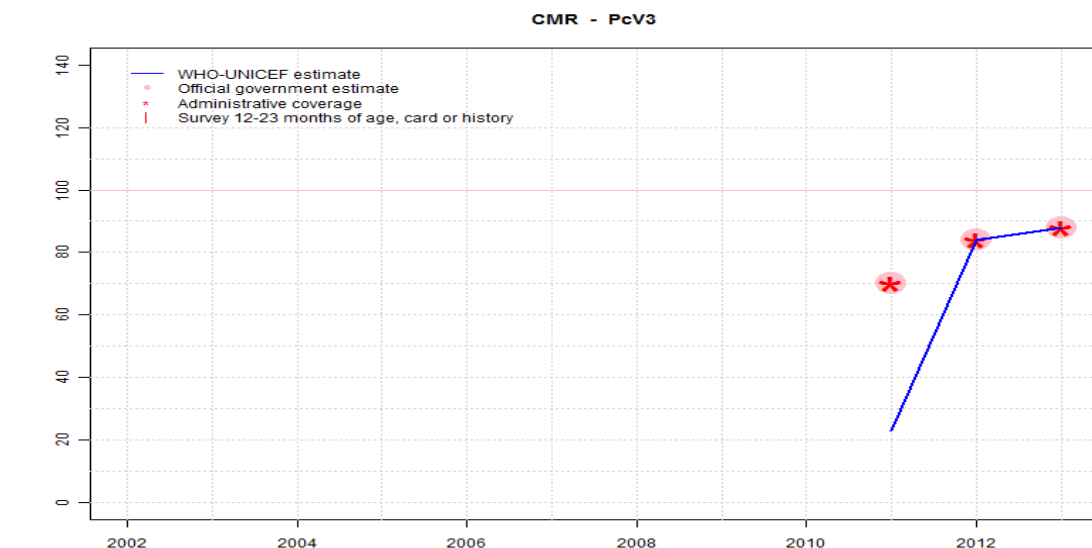
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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: 2012 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.

Cameroon - PcV3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	23	84	88
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	●	●●	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	70	84	88
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	70	84	88
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.

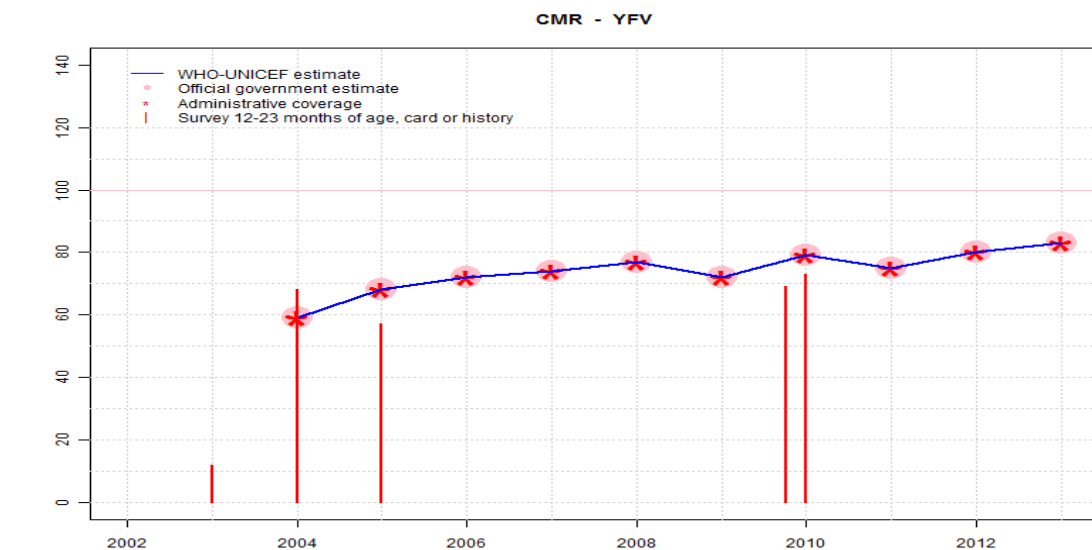
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk 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. During 2011 seventy percent coverage was achieved during the second half of 2011. Estimate challenged by: R-
- 2012: Estimate based on coverage reported by national government. GoC=R+D+
- 2013: Estimate based on coverage reported by national government. GoC=R+D+

Cameroon - YFV



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	NA	NA	59	68	72	74	77	72	79	75	80	83
Estimate GoC	NA	NA	●●●	●●●	●●●	●●	●●●	●●●	●●●	●●●	●●●	●●
Official	NA	NA	59	68	72	74	77	72	79	75	80	83
Administrative	NA	NA	59	68	72	74	77	72	79	75	80	83
Survey	NA	12	68	57	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: 2012 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 coverage reported by national government supported by survey. Survey evidence of 68 percent based on 1 survey(s). YFV introduced in 2004 GoC=R+ S+ D+
- 2005: Estimate based on reported data. Survey supports nationally reported data for other antigens. GoC=R+ S+ D+
- 2006: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2007: Estimate based on coverage reported by national government. GoC=R+ D+
- 2008: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2009: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 71 percent based on 2 survey(s). GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+

Cameroon - survey details

2010 Enquête Démographique et de Santé et à Indicateurs Multiples EDS-MICS Cameroun, 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	86	12-23 m	2265	57
BCG	Card	55	12-23 m	1291	57
BCG	Card or History	87	12-23 m	2265	57
BCG	History	32	12-23 m	974	57
DTP1	C or H <12 months	85	12-23 m	2265	57
DTP1	Card	56	12-23 m	1291	57
DTP1	Card or History	86	12-23 m	2265	57
DTP1	History	30	12-23 m	974	57
DTP3	C or H <12 months	66	12-23 m	2265	57
DTP3	Card	49	12-23 m	1291	57
DTP3	Card or History	68	12-23 m	2265	57
DTP3	History	19	12-23 m	974	57
HepB1	C or H <12 months	79	12-23 m	2265	57
HepB1	Card	54	12-23 m	1291	57
HepB1	Card or History	80	12-23 m	2265	57
HepB1	History	26	12-23 m	974	57
HepB3	C or H <12 months	63	12-23 m	2265	57
HepB3	Card	48	12-23 m	1291	57
HepB3	Card or History	65	12-23 m	2265	57
HepB3	History	16	12-23 m	974	57
MCV	C or H <12 months	64	12-23 m	2265	57
MCV	Card	45	12-23 m	1291	57
MCV	Card or History	71	12-23 m	2265	57
MCV	History	26	12-23 m	974	57
Pol1	C or H <12 months	92	12-23 m	2265	57
Pol1	Card	56	12-23 m	1291	57
Pol1	Card or History	93	12-23 m	2265	57
Pol1	History	37	12-23 m	974	57
Pol3	C or H <12 months	68	12-23 m	2265	57
Pol3	Card	50	12-23 m	1291	57
Pol3	Card or History	70	12-23 m	2265	57
Pol3	History	20	12-23 m	974	57
YFV	C or H <12 months	62	12-23 m	2265	57
YFV	Card	44	12-23 m	1291	57
YFV	Card or History	69	12-23 m	2265	57

YFV History 25 12-23 m 974 57

2010 Enquete post campagne de vaccination au Cameroun en 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	88	12-23 m	-	63
BCG	Card	56	12-23 m	-	63
BCG	Card or History	91	12-23 m	721	63
BCG	History	35	12-23 m	-	63
DTP1	C or H <12 months	84	12-23 m	-	63
DTP1	Card	54	12-23 m	-	63
DTP1	Card or History	85	12-23 m	721	63
DTP1	History	31	12-23 m	-	63
DTP3	C or H <12 months	77	12-23 m	-	63
DTP3	Card	48	12-23 m	-	63
DTP3	Card or History	78	12-23 m	721	63
DTP3	History	30	12-23 m	-	63
HepB1	C or H <12 months	84	12-23 m	-	63
HepB1	Card	54	12-23 m	-	63
HepB1	Card or History	85	12-23 m	721	63
HepB1	History	31	12-23 m	-	63
HepB3	C or H <12 months	77	12-23 m	-	63
HepB3	Card	48	12-23 m	-	63
HepB3	Card or History	78	12-23 m	721	63
HepB3	History	30	12-23 m	-	63
Hib1	C or H <12 months	84	12-23 m	-	63
Hib1	Card	54	12-23 m	-	63
Hib1	Card or History	85	12-23 m	721	63
Hib1	History	31	12-23 m	-	63
Hib3	C or H <12 months	77	12-23 m	-	63
Hib3	Card	48	12-23 m	-	63
Hib3	Card or History	78	12-23 m	721	63
Hib3	History	30	12-23 m	-	63
MCV	C or H <12 months	74	12-23 m	-	63
MCV	Card	48	12-23 m	-	63
MCV	Card or History	75	12-23 m	721	63
MCV	History	27	12-23 m	-	63
Pol1	C or H <12 months	85	12-23 m	-	63

Cameroon - survey details

Pol1	Card	55	12-23 m	-	63
Pol1	Card or History	88	12-23 m	721	63
Pol1	History	32	12-23 m	-	63
Pol3	C or H <12 months	76	12-23 m	-	63
Pol3	Card	50	12-23 m	-	63
Pol3	Card or History	81	12-23 m	721	63
Pol3	History	31	12-23 m	-	63
YFV	Card	27	12-23 m	-	63
YFV	Card or History	73	12-23 m	721	63
YFV	History	46	12-23 m	-	63

2005 Cameroun, Enquête par grappes à indicateurs multiples
2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	89	12-23 m	1320	66
BCG	Card	65	12-23 m	1320	66
BCG	Card or History	90	12-23 m	1320	66
BCG	History	25	12-23 m	1320	66
DTP1	C or H <12 months	87	12-23 m	1320	66
DTP1	Card	65	12-23 m	1320	66
DTP1	Card or History	88	12-23 m	1320	66
DTP1	History	23	12-23 m	1320	66
DTP3	C or H <12 months	72	12-23 m	1320	66
DTP3	Card	59	12-23 m	1320	66
DTP3	Card or History	75	12-23 m	1320	66
DTP3	History	16	12-23 m	1320	66
HepB1	C or H <12 months	39	12-23 m	1320	66
HepB1	Card	35	12-23 m	1320	66
HepB1	Card or History	40	12-23 m	1320	66
HepB1	History	5	12-23 m	1320	66
HepB3	C or H <12 months	34	12-23 m	1320	66
HepB3	Card	31	12-23 m	1320	66
HepB3	Card or History	36	12-23 m	1320	66
HepB3	History	5	12-23 m	1320	66
MCV	C or H <12 months	72	12-23 m	1320	66
MCV	Card	50	12-23 m	1320	66
MCV	Card or History	79	12-23 m	1320	66
MCV	History	29	12-23 m	1320	66

Pol1	C or H <12 months	92	12-23 m	1320	66
Pol1	Card	65	12-23 m	1320	66
Pol1	Card or History	93	12-23 m	1320	66
Pol1	History	28	12-23 m	1320	66
Pol3	C or H <12 months	67	12-23 m	1320	66
Pol3	Card	56	12-23 m	1320	66
Pol3	Card or History	70	12-23 m	1320	66
Pol3	History	14	12-23 m	1320	66
YFV	C or H <12 months	54	12-23 m	1320	66
YFV	Card	44	12-23 m	1320	66
YFV	Card or History	57	12-23 m	1320	66
YFV	History	14	12-23 m	2834	66

2004 Enquête nationale de couverture vaccinale des enfants de 12
à 23 mois au Cameroon

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	51	12-23 m	3520	52
BCG	Card or History	90	12-23 m	3520	52
DTP1	Card	50	12-23 m	3520	52
DTP1	Card or History	84	12-23 m	3520	52
DTP3	Card	45	12-23 m	3520	52
DTP3	Card or History	74	12-23 m	3520	52
MCV	Card	40	12-23 m	3520	52
MCV	Card or History	71	12-23 m	3520	52
Pol1	Card	50	12-23 m	3520	52
Pol1	Card or History	88	12-23 m	3520	52
Pol3	Card	45	12-23 m	3520	52
Pol3	Card or History	73	12-23 m	3520	52
YFV	Card	38	12-23 m	3520	52
YFV	Card or History	68	12-23 m	3520	52

2003 L'Enquête Démographique et de Santé au Cameroun

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	85	12-23 m	1546	57
BCG	Card	56	12-23 m	1546	57
BCG	Card or history	86	12-23 m	1546	57

Cameroon - survey details

BCG	History	30	12-23 m	1546	57
DTP1	C or H <12 months	81	12-23 m	1546	57
DTP1	Card	56	12-23 m	1546	57
DTP1	Card or history	83	12-23 m	1546	57
DTP1	History	27	12-23 m	1546	57
DTP3	C or H <12 months	63	12-23 m	1546	57
DTP3	Card	50	12-23 m	1546	57
DTP3	Card or history	65	12-23 m	1546	57
DTP3	History	16	12-23 m	1546	57
MCV	C or H <12 months	56	12-23 m	1546	57
MCV	Card	44	12-23 m	1546	57
MCV	Card or history	65	12-23 m	1546	57
MCV	History	21	12-23 m	1546	57
Pol1	C or H <12 months	91	12-23 m	1546	57
Pol1	Card	56	12-23 m	1546	57
Pol1	Card or history	93	12-23 m	1546	57
Pol1	History	37	12-23 m	1546	57
Pol3	C or H <12 months	65	12-23 m	1546	57
Pol3	Card	50	12-23 m	1546	57
Pol3	Card or history	67	12-23 m	1546	57
Pol3	History	17	12-23 m	1546	57
YFV	C or H <12 months	7	12-23 m	1546	57
YFV	Card	7	12-23 m	1546	57
YFV	Card or history	12	12-23 m	1546	57
YFV	History	5	12-23 m	1546	57

1999 Enquête à Indicateurs Multiples (MICS) au Cameroun 2000, 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	76	12-23 m	661	49
BCG	Card	41	12-23 m	661	49
BCG	Card or History	78	12-23 m	661	49
BCG	History	37	12-23 m	661	49
DTP1	C or H <12 months	66	12-23 m	661	49
DTP1	Card	42	12-23 m	661	49
DTP1	Card or History	69	12-23 m	661	49
DTP1	History	27	12-23 m	661	49
DTP3	C or H <12 months	43	12-23 m	661	49

DTP3	Card	36	12-23 m	661	49
DTP3	Card or History	45	12-23 m	661	49
DTP3	History	9	12-23 m	661	49
MCV	C or H <12 months	56	12-23 m	661	49
MCV	Card	33	12-23 m	661	49
MCV	Card or History	62	12-23 m	661	49
MCV	History	29	12-23 m	661	49
Pol1	C or H <12 months	83	12-23 m	661	49
Pol1	Card	42	12-23 m	661	49
Pol1	Card or History	86	12-23 m	661	49
Pol1	History	44	12-23 m	661	49
Pol3	C or H <12 months	47	12-23 m	661	49
Pol3	Card	35	12-23 m	661	49
Pol3	Card or History	50	12-23 m	661	49
Pol3	History	14	12-23 m	661	49

1997 Enquête Démographique et de Santé Cameroun 1998, 1999

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	72	12-23 m	748	55
BCG	Card	50	12-23 m	748	55
BCG	Card or History	75	12-23 m	748	55
BCG	History	25	12-23 m	748	55
DTP1	C or H <12 months	70	12-23 m	748	55
DTP1	Card	52	12-23 m	748	55
DTP1	Card or History	73	12-23 m	748	55
DTP1	History	21	12-23 m	748	55
DTP3	C or H <12 months	46	12-23 m	748	55
DTP3	Card	42	12-23 m	748	55
DTP3	Card or History	50	12-23 m	748	55
DTP3	History	9	12-23 m	748	55
MCV	C or H <12 months	44	12-23 m	748	55
MCV	Card	39	12-23 m	748	55
MCV	Card or History	54	12-23 m	748	55
MCV	History	16	12-23 m	748	55
Pol1	C or H <12 months	80	12-23 m	748	55
Pol1	Card	52	12-23 m	748	55
Pol1	Card or History	84	12-23 m	748	55
Pol1	History	32	12-23 m	748	55

Cameroon - survey details

Pol3	C or H <12 months	42	12-23 m	748	55
Pol3	Card	42	12-23 m	748	55
Pol3	Card or History	47	12-23 m	748	55
Pol3	History	5	12-23 m	748	55

YFV	C or H <12 months	4	12-23 m	748	55
YFV	Card	2	12-23 m	748	55
YFV	Card or History	6	12-23 m	748	55

Further information and estimates prior to 2002 are available at:

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

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

Cameroon

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 receive 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.

Year	PAB coverage estimate (%)
2002	65
2003	71
2004	73
2005	76
2006	81
2007	83
2008	86
2009	91
2010	91
2011	75
2012	85
2013	85

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.