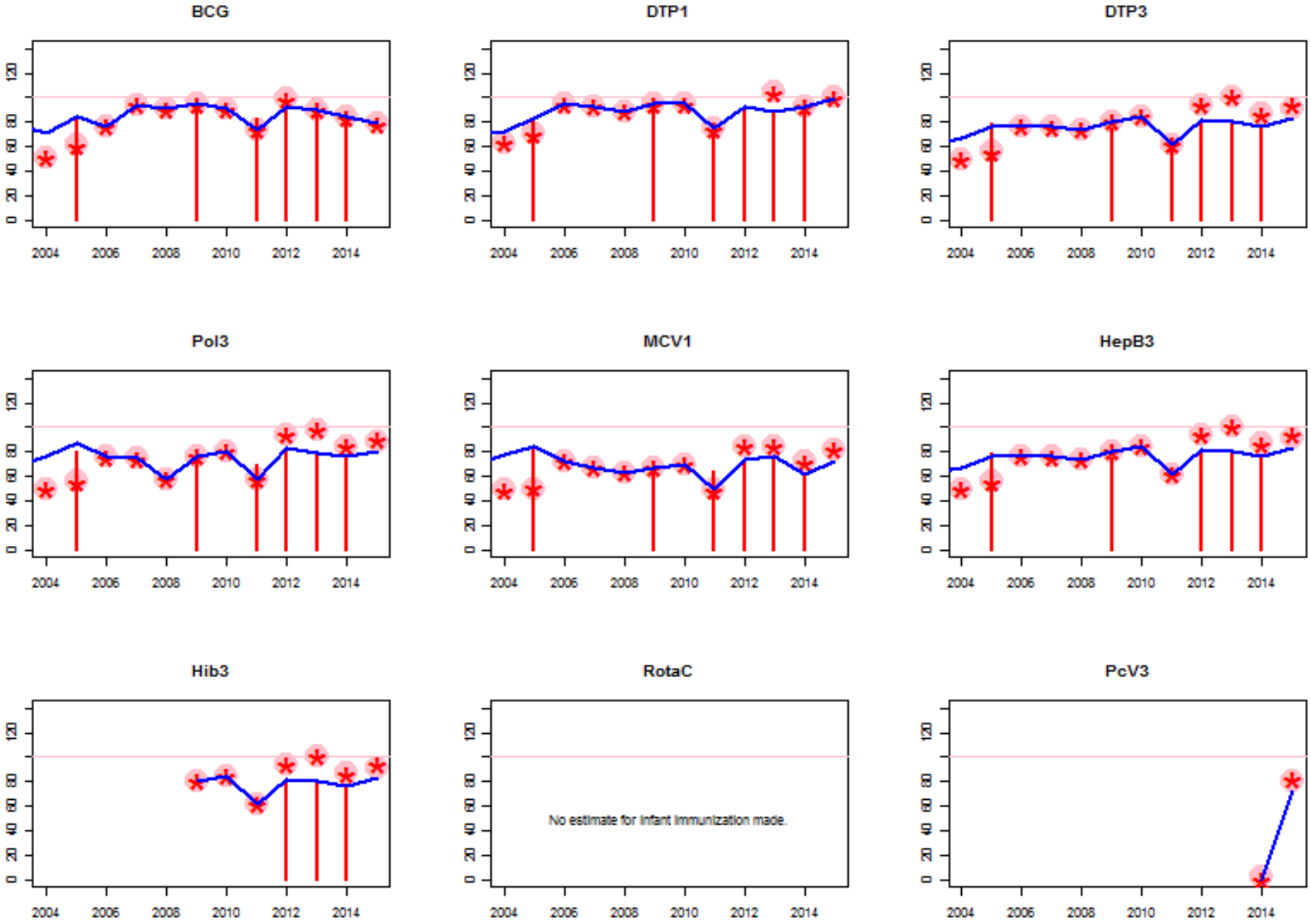
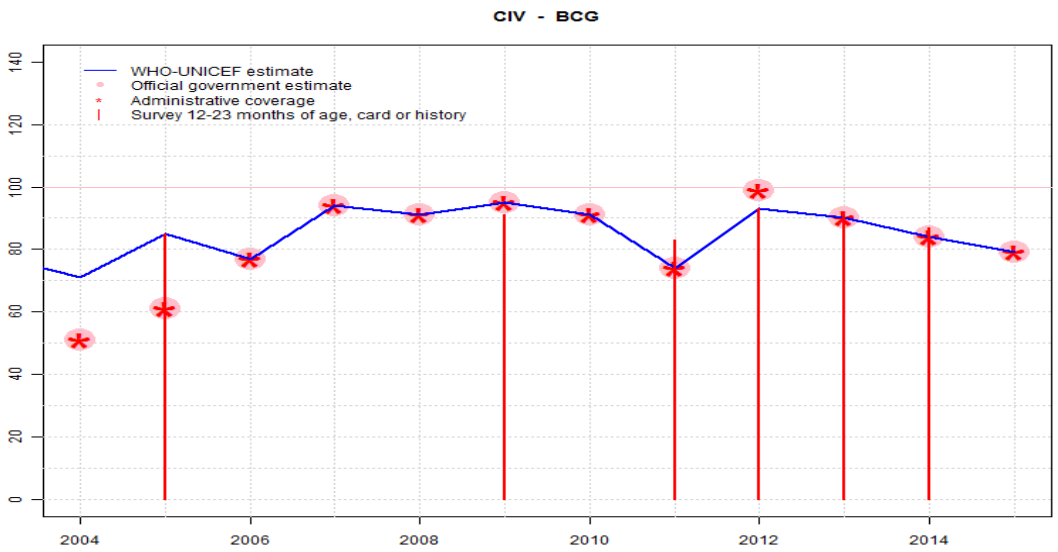

BCG
DTP1
DTP3
Pol3
MCV1
HepB3
Hib3
RotaC
No estimate for infant immunization made.
PcV3
0
20
40
60
80
120
2004
2006
2008
2010
2012
2014

Côte d'Ivoire - BCG



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	71	85	77	94	91	95	91	74	93	90	84	79
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	51	61	77	94	91	95	91	74	99	90	84	79
Administrative	51	61	77	94	91	95	91	74	99	90	84	79
Survey	NA	85	NA	NA	NA	91	NA	83	93	91	87	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: Reported data calibrated to 1999 and 2005 levels. Estimate challenged by: D-

2005: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 85 percent based on 1 survey(s). Estimate challenged by: D-R-

2006: The increase in reported coverage is attributable to revised denominator estimate. Estimate challenged by: D-

2007: Estimate based on coverage reported by national government. Estimate challenged by: D-S-

2008: Estimate based on coverage reported by national government. Estimate challenged by: D-S-

2009: Estimate based on coverage reported by national government. Côte d'Ivoire External EPI Review 2010 results ignored by working group. Survey results are preliminary. Estimate challenged by: D-S-

2010: Estimate based on coverage reported by national government. Estimate challenged by: D-S-

2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 83 percent based on 1 survey(s). Decline in coverage is attributable to vaccine shortages in 70 districts. Estimate challenged by: S-

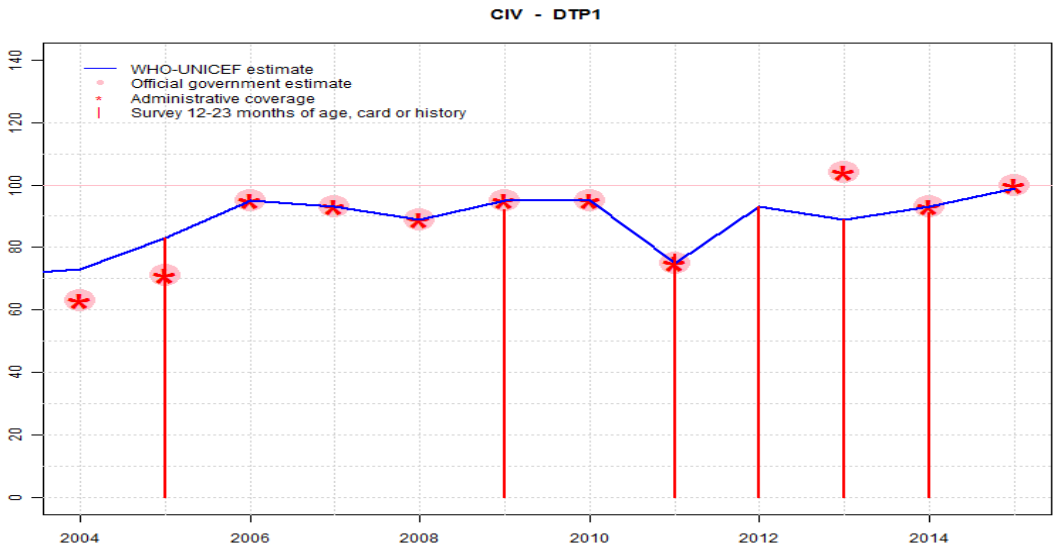
2012: Estimate is based on survey results consistent with other antigens. Reported coverage might reflect recovery activities following the vaccine shortage in 2011. Estimate challenged by: D-R-

2013: Estimate based on coverage reported by national government supported by survey. Survey evidence of 91 percent based on 1 survey(s). Programme reports a two month stock-out at national level. GoC=Assigned by working group. Consistency across vaccines.

2014: Estimate based on coverage reported by national government supported by survey. Survey evidence of 87 percent based on 1 survey(s). Programme reports four month stock-out at national level. Estimate is based on reported data. Programme reports that the conduct of supplementary immunization activities for measles and meningitis A as well as enumeration activities during the second half of 2014 was a distraction for routine immunization service delivery. GoC=Assigned by working group. Consistency across vaccines.

2015: Estimate based on reported administrative data. Programme reports three months stock-out at national level. Basis for adjustment to official coverage inconsistent with results from coverage survey. GoC=Assigned by working group. Consistency across vaccines.

Côte d'Ivoire - DTP1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	73	83	95	93	89	95	95	75	93	89	93	99
Estimate GoC	••	•	•	•	•	•	•	•	•	•	•	•
Official	63	71	95	93	89	95	95	75	NA	104	93	100
Administrative	63	71	95	93	89	95	95	75	NA	104	93	100
Survey	NA	83	NA	NA	NA	92	NA	78	93	89	91	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: Reported data calibrated to 1999 and 2005 levels. GoC=S+ D+

2005: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 83 percent based on 1 survey(s). Estimate challenged by: R-

2006: The increase in reported coverage is attributable to revised denominator estimate. Estimate challenged by: D-

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. Côte d'Ivoire External EPI Review 2010 results ignored by working group. Survey results are preliminary. Estimate challenged by: S-

2010: Estimate based on coverage reported by national government. Estimate challenged by: S-

2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 78 percent based on 1 survey(s). Decline in coverage is attributable to vaccine shortages in 70 districts. Estimate challenged by: S-

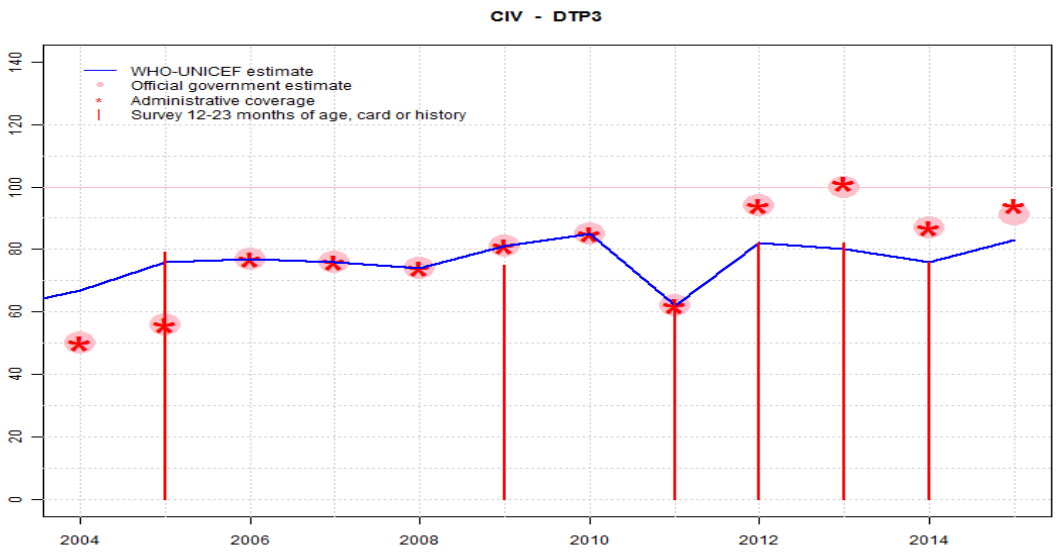
2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 93 percent based on 1 survey(s). Reported coverage might reflect recovery activities following the vaccine shortage in 2011. GoC=Assigned by working group. No reported data. Consistency with other vaccines.

2013: Estimate based on survey result. Reported data excluded. 104 percent greater than 100 percent. Estimate challenged by: D-R-

2014: Estimate based on coverage reported by national government supported by survey. Survey evidence of 91 percent based on 1 survey(s). Programme reports seven month stock-out at national level. Survey results do not reflect a decline in coverage as might be expected. Programme reports that the conduct of supplementary immunization activities for measles and meningitis A as well as enumeration activities during the second half of 2014 was a distraction for routine immunization service delivery. Estimate of 93 percent changed from previous revision value of 78 percent. GoC=Assigned by working group. Consistency across vaccines.

2015: Estimate based on reported administrative data. Basis for adjustment to official coverage inconsistent with results from coverage survey. GoC=Assigned by working group. Consistency across vaccines.

Côte d'Ivoire - DTP3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	67	76	77	76	74	81	85	62	82	80	76	83
Estimate GoC	••	•	•••	•	•	•	•	•	•	•	•	•
Official	50	56	77	76	74	81	85	62	94	100	87	91
Administrative	50	56	77	76	74	81	85	62	94	101	87	94
Survey	NA	79	NA	NA	NA	75	NA	64	82	82	76	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: Reported data calibrated to 1999 and 2005 levels. GoC=S+ D+

2005: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 76 percent based on 1 survey(s). Côte d'Ivoire Multiple Indicator Cluster Survey, 2006 card or history results of 79 percent modifed for recall bias to 76 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 72 percent and 3d dose card only coverage of 66 percent. Estimate challenged by: D-R-

2006: The increase in reported coverage is attributable to revised denominator estimate. GoC=R+ S+ D+

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. Côte d'Ivoire External EPI Review 2010 results ignored by working group. Survey results are preliminary. Estimate challenged by: S-

2010: Estimate based on coverage reported by national government. Estimate challenged by: S-

2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 67 percent based on 1 survey(s). Côte d'Ivoire Demographic and Health and Multiple Indicator Cluster Survey 2011-2012 card or history results of 64 percent modifed for recall bias to 67 percent based on 1st dose card or history coverage of 78 percent, 1st dose card only coverage of 65 percent and 3d dose card only coverage of 56 percent. Decline in coverage is attributable to vaccine shortages in 70 districts. Estimate challenged by: S-

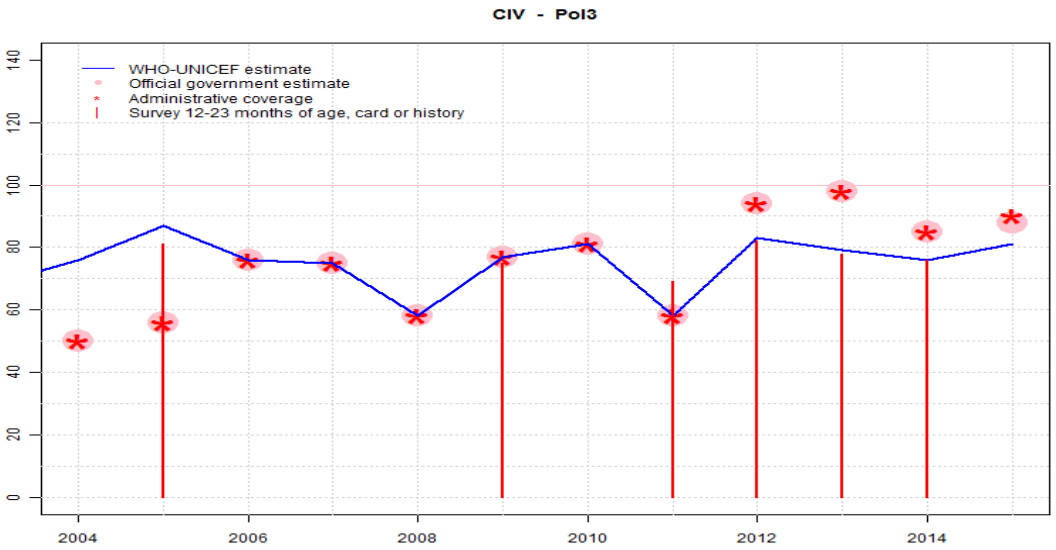
2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 82 percent based on 1 survey(s). Reported coverage might reflect recovery activities following the vaccine shortage in 2011. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 80 percent based on 1 survey(s). Final Report of Evaluation of a Vaccination Campaign against Measles, Cote d Ivoire, 2014 card or history results of 82 percent modifed for recall bias to 80 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 68 percent and 3d dose card only coverage of 61 percent. National programme reports vaccinating 100 percent of children. The programme highlights the conduct of seven weeks of intensification activities that allowed the programme to reach additional children during 2013 compared to previous years. Survey evidence for the 2013 birth cohort challenges the reported coverage level. Estimate challenged by: D-R-

2014: Estimate based on survey level. Programme reports seven month stock-out at national level. Survey results do not reflect a decline in coverage as might be expected. Government disagrees with WHO and UNICEF estimates. Programme reports that the conduct of supplementary immunization activities for measles and meningitis A as well as enumeration activities during the second half of 2014 was a distraction for routine immunization service delivery. Estimate of 76 percent changed from previous revision value of 67 percent. Estimate challenged by: D-R-

2015: Reported data calibrated to 2014 levels. Drop-out observed in the reported data is inconsistent with that observed in the most recent survey, particularly among those with HBRs where coverage levels would be expected to be highest. Basis for adjustment to official coverage inconsistent with results from coverage survey. Estimate challenged by: D-

Côte d'Ivoire - Pol3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	76	87	76	75	58	77	81	58	83	79	76	81
Estimate GoC	•	•	••	•	•	•	•	•	•	•	•	•
Official	50	56	76	75	58	77	81	58	94	98	85	88
Administrative	50	56	76	75	58	77	81	58	94	98	85	90
Survey	NA	81	NA	NA	NA	75	NA	69	82	78	76	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: Reported data calibrated to 1999 and 2005 levels. Estimate challenged by: D-

2005: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 87 percent based on 1 survey(s). Côte d'Ivoire Multiple Indicator Cluster Survey, 2006 card or history results of 81 percent modifed for recall bias to 87 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 71 percent and 3d dose card only coverage of 66 percent. Estimate challenged by: D-R-

2006: The increase in reported coverage is attributable to revised denominator estimate. GoC=R+ D+

2007: Estimate based on coverage reported by national government. Estimate challenged by: S-

2008: Estimate based on coverage reported by national government. Decline in coverage is attributed to two months shortage of vaccine. Estimate challenged by: S-

2009: Estimate based on coverage reported by national government. Côte d'Ivoire External EPI Review 2010 results ignored by working group. Survey results are preliminary. Estimate challenged by: S-

2010: Estimate based on coverage reported by national government. Estimate challenged by: S-

2011: Survey results likely contain doses administered during campaigns. Côte d'Ivoire Demographic and Health and Multiple Indicator Cluster Survey 2011-2012 card or history results of 69 percent modifed for recall bias to 77 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 71 percent and 3d dose card only coverage of 60 percent. Decline in coverage is attributable to vaccine shortages in 70 districts. Estimate challenged by: S-

2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 83 percent based on 1 survey(s). Vaccination Coverage Survey 2013 card or history results of 82 percent modifed for recall bias to 83 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 88 percent and 3d dose card only coverage of 78 percent. Reported coverage might reflect recovery activities following the vaccine shortage in 2011. Estimate challenged by: D-R-

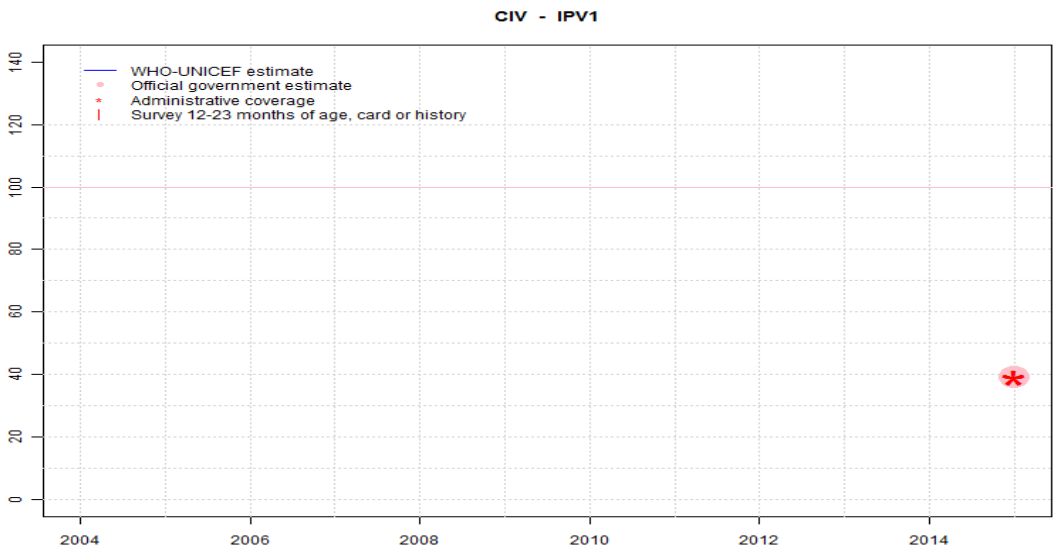
2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 79 percent based on 1 survey(s). Final Report of Evaluation of a Vaccination Campaign against Measles, Cote d Ivoire, 2014 card or history results of 78 percent modifed for recall bias to 79 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 58 percent and 3d dose card only coverage of 55 percent. Programme reports two months stockout at national level. Estimate

challenged by: D-R-

2014: Estimate based on survey level. Programme reports four month stock-out at national level. Government disagrees with WHO and UNICEF estimate. Estimate is based on trend in reported data. Programme reports that the conduct of supplementary immunization activities for measles and meningitis A as well as enumeration activities during the second half of 2014 was a distraction for routine immunization service delivery. Estimate of 76 percent changed from previous revision value of 66 percent. Estimate challenged by: D-R-

2015: Reported data calibrated to 2014 levels. Basis for adjustment to official coverage inconsistent with results from coverage survey. Estimate challenged by: D-

Côte d'Ivoire - 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	39
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	39
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39
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.

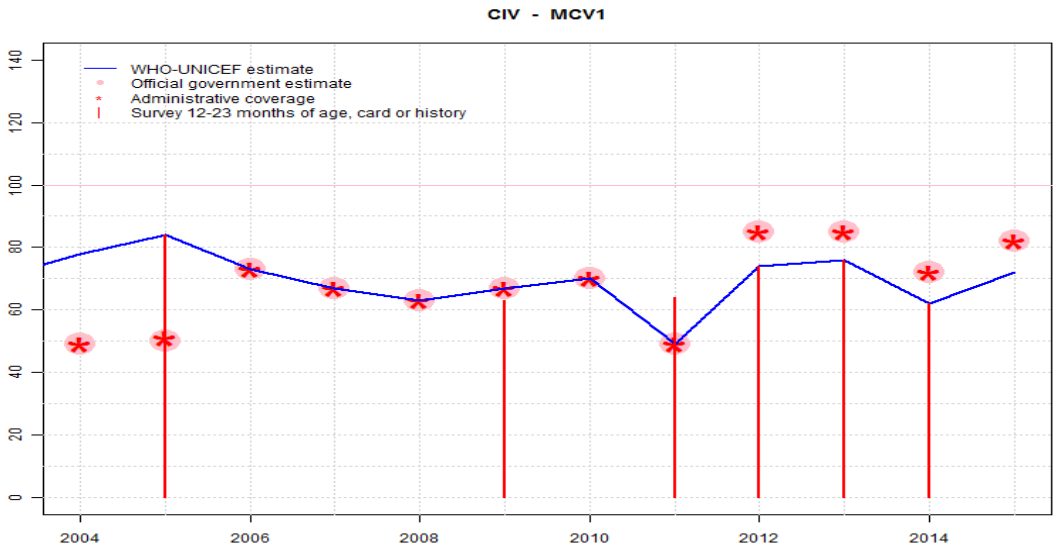
● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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: Estimate based on reported administrative estimate. IPV introduced during 2015. Basis for adjustment to official coverage inconsistent with results from coverage survey. GoC=Assigned by working group. Consistency across vaccines.

Côte d'Ivoire - MCV1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	78	84	73	67	63	67	70	49	74	76	62	72
Estimate GoC	•	•	••	•	•	•	•	•	•	•	•	•
Official	49	50	73	67	63	67	70	49	85	85	72	82
Administrative	49	51	73	67	63	67	70	49	85	85	72	82
Survey	NA	84	NA	NA	NA	63	NA	64	74	76	62	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: Reported data calibrated to 1999 and 2005 levels. Estimate challenged by: D-

2005: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 84 percent based on 1 survey(s). Estimate challenged by: D-R-

2006: The increase in reported coverage is attributable to revised denominator estimate. GoC=R+ D+

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. Côte d'Ivoire External EPI Review 2010 results ignored by working group. Survey results are preliminary. Estimate challenged by: S-

2010: Estimate based on coverage reported by national government. Estimate challenged by: S-

2011: Survey results likely contain doses administered during campaigns. Decline in coverage is attributable to vaccine shortages in 70 districts. Estimate challenged by: S-

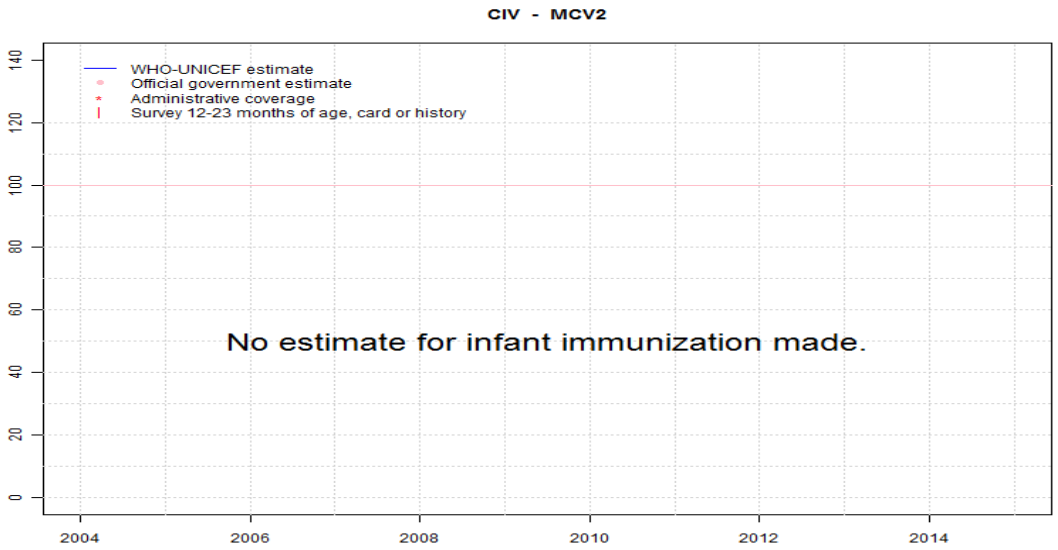
2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 74 percent based on 1 survey(s). Reported coverage might reflect recovery activities following the vaccine shortage in 2011. Estimate challenged by: D-R-

2013: Estimate based on survey result. Consistent with other antigens. Programme reports three month stockout at national level. Estimate challenged by: D-R-

2014: Estimate based on survey level. Programme reports five month stock-out at national level. Government disagrees with WHO and UNICEF estimate. Estimate is based on trend in reported data. Programme reports that the conduct of supplementary immunization activities for measles and meningitis A as well as enumeration activities during the second half of 2014 was a distraction for routine immunization service delivery. Estimate of 62 percent changed from previous revision value of 63 percent. Estimate challenged by: D-R-

2015: Reported data calibrated to 2014 levels. Basis for adjustment to official coverage inconsistent with results from coverage survey. Estimate challenged by: D-

Côte d'Ivoire - 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.

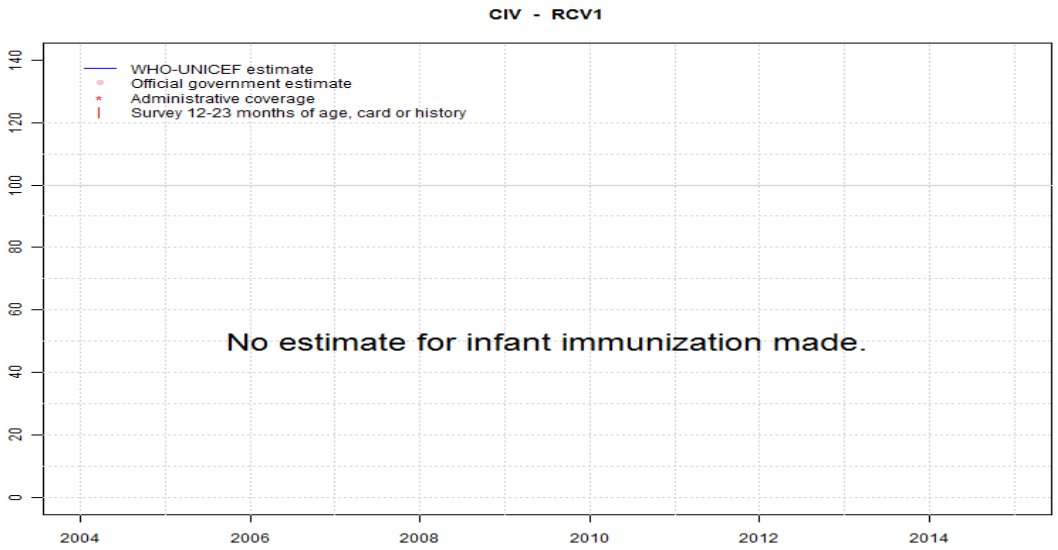
●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk 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.

Côte d'Ivoire - RCV1



	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.

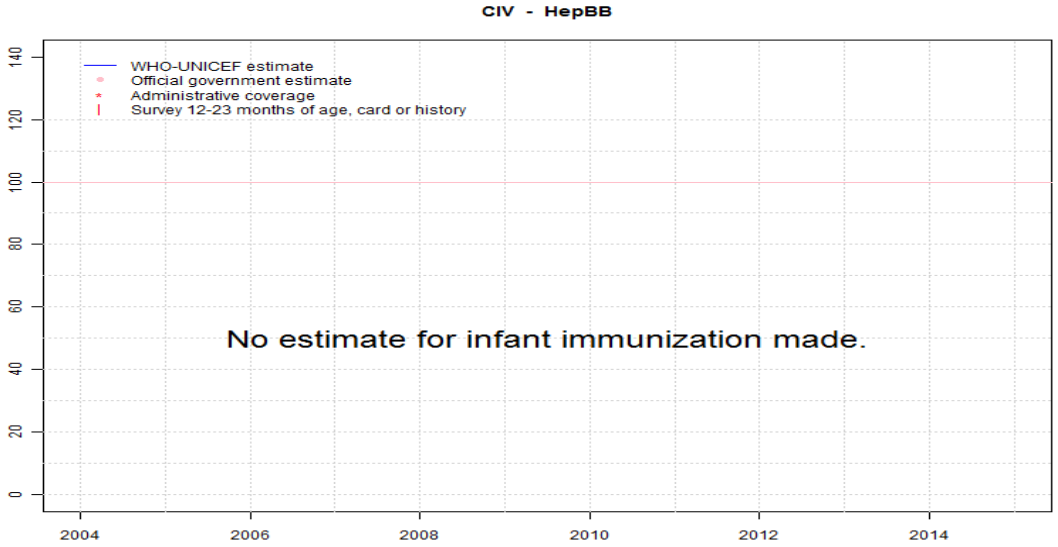
●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk 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.

Côte d'Ivoire - 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	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.

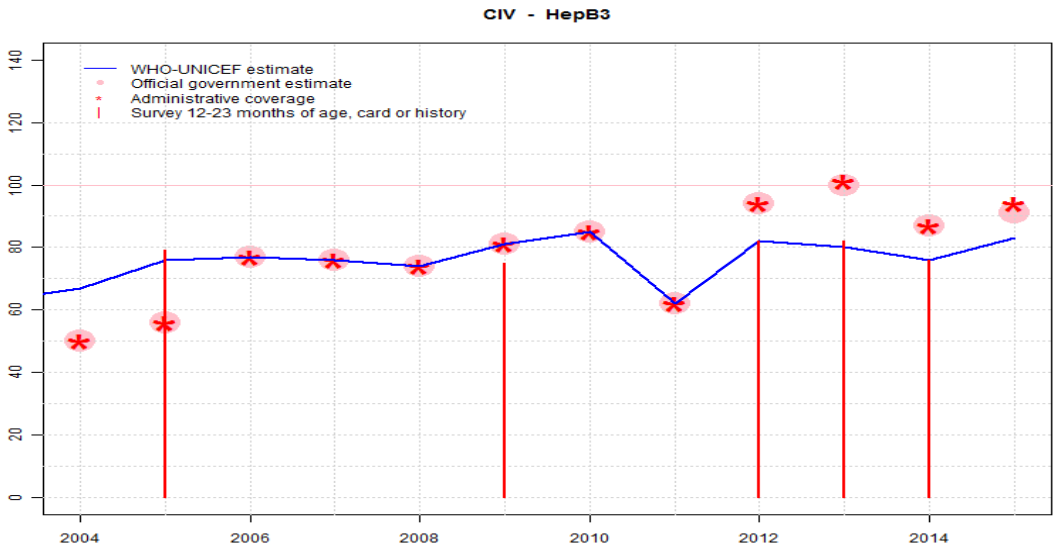
●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk 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.

Côte d'Ivoire - HepB3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	67	76	77	76	74	81	85	62	82	80	76	83
Estimate GoC	•	•	•••	•	•	•	•	•	•	•	•	•
Official	50	56	77	76	74	81	85	62	94	100	87	91
Administrative	50	56	77	76	74	81	85	62	94	101	87	94
Survey	NA	79	NA	NA	NA	75	NA	NA	82	82	76	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: DTP-HepB combination vaccine available nationally. Estimate based on DTP3 estimate. Estimate challenged by: R-

2005: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 76 percent based on 1 survey(s). Côte d'Ivoire Multiple Indicator Cluster Survey, 2006 card or history results of 79 percent modifed for recall bias to 76 percent based on 1st dose card or history coverage of 83 percent, 1st dose card only coverage of 72 percent and 3d dose card only coverage of 66 percent. Estimate challenged by: D-R-

2006: The increase in reported coverage is attributable to revised denominator estimate. GoC=R+ S+ D+

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 DTP3 coverage level. Côte d'Ivoire External EPI Review 2010 results ignored by working group. Survey results are preliminary. Estimate challenged by: S-

2010: Estimate based on coverage reported by national government. Estimate challenged by: S-

2011: Estimate based on DTP3 coverage level. Decline in coverage is attributable to vaccine shortages in 70 districts. Estimate challenged by: S-

2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 82 percent based on 1 survey(s). Reported coverage might reflect recovery activities following the vaccine shortage in 2011. Estimate challenged by: D-R-

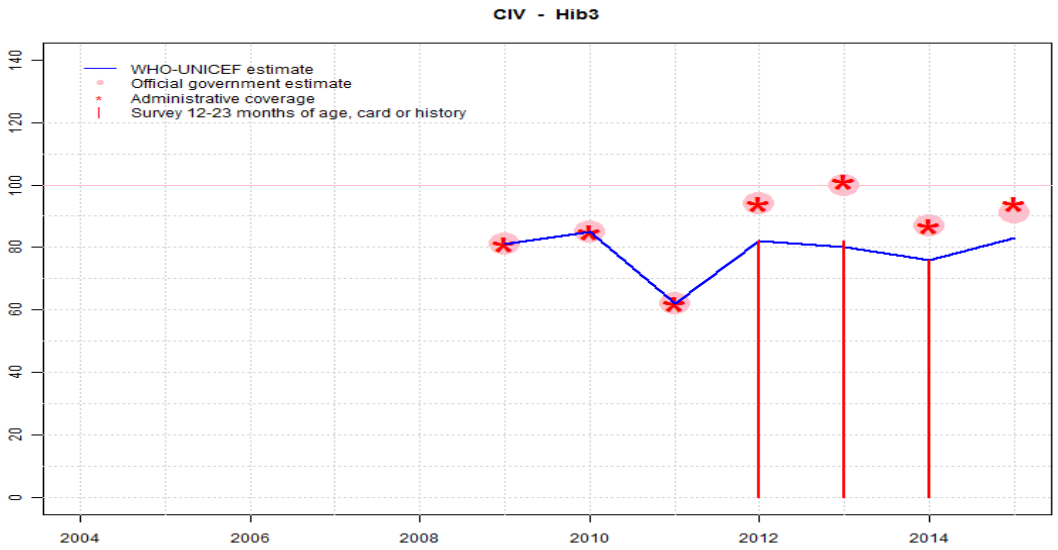
2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 80 percent based on 1 survey(s). Final Report of Evaluation of a Vaccination Campaign against Measles, Cote d Ivoire, 2014 card or history results of 82 percent modifed for recall bias to 80 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 68 percent and 3d dose card only coverage of 61 percent. National programme reports vaccinating 100 percent of children. The programme highlights the conduct of seven weeks of intensification activities that allowed the programme to reach additional children during 2013 compared to previous years. Survey evidence for the 2013 birth cohort challenges the reported coverage level. Estimate challenged by: D-R-

2014: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 76 percent based on 1 survey(s). Programme reports seven month stock-out at national level. Government disagrees with WHO and UNICEF estimates. Estimate is based on trend in reported data. Programme reports that the conduct of supplementary immuniza-

tion activities for measles and meningitis A as well as enumeration activities during the second half of 2014 was a distraction for routine immunization service delivery. Estimate of 76 percent changed from previous revision value of 67 percent. Estimate challenged by: D-R-

2015: Reported data calibrated to 2014 levels. Basis for adjustment to official coverage inconsistent with results from coverage survey. Estimate challenged by: D-

Côte d'Ivoire - Hib3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	81	85	62	82	80	76	83
Estimate GoC	NA	NA	NA	NA	NA	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	NA	81	85	62	94	100	87	91
Administrative	NA	NA	NA	NA	NA	81	85	62	94	101	87	94
Survey	NA	NA	NA	NA	NA	NA	NA	NA	82	82	76	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 based on DTP3 coverage level. Hib vaccine introduced in 2009. Vaccine presentation is DTP-HepB-Hib. Estimate challenged by: S-

2010: Estimate based on coverage reported by national government. Estimate challenged by: S-

2011: Estimate based on DTP3 coverage level. Decline in coverage is attributable to vaccine shortages in 70 districts. Estimate challenged by: S-

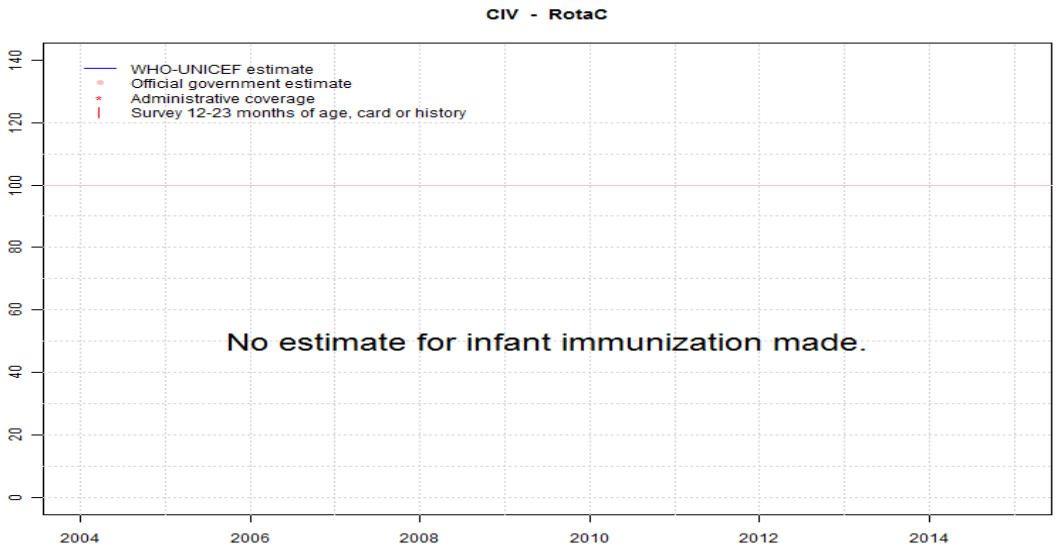
2012: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 82 percent based on 1 survey(s). Reported coverage might reflect recovery activities following the vaccine shortage in 2011. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 80 percent based on 1 survey(s). Final Report of Evaluation of a Vaccination Campaign against Measles, Cote d Ivoire, 2014 card or history results of 82 percent modifed for recall bias to 80 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 68 percent and 3d dose card only coverage of 61 percent. National programme reports vaccinating 100 percent of children. The programme highlights the conduct of seven weeks of intensification activities that allowed the programme to reach additional children during 2013 compared to previous years. Survey evidence for the 2013 birth cohort challenges the reported coverage level. Estimate challenged by: D-R-

2014: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 76 percent based on 1 survey(s). Programme reports seven month stock-out at national level. Government disagrees with WHO and UNICEF estimates. Estimate is based on trend in reported data. Programme reports that the conduct of supplementary immunization activities for measles and meningitis A as well as enumeration activities during the second half of 2014 was a distraction for routine immunization service delivery. Estimate of 76 percent changed from previous revision value of 67 percent. Estimate challenged by: D-R-

2015: Reported data calibrated to 2014 levels. Basis for adjustment to official coverage inconsistent with results from coverage survey. Estimate challenged by: D-

Côte d'Ivoire - 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.

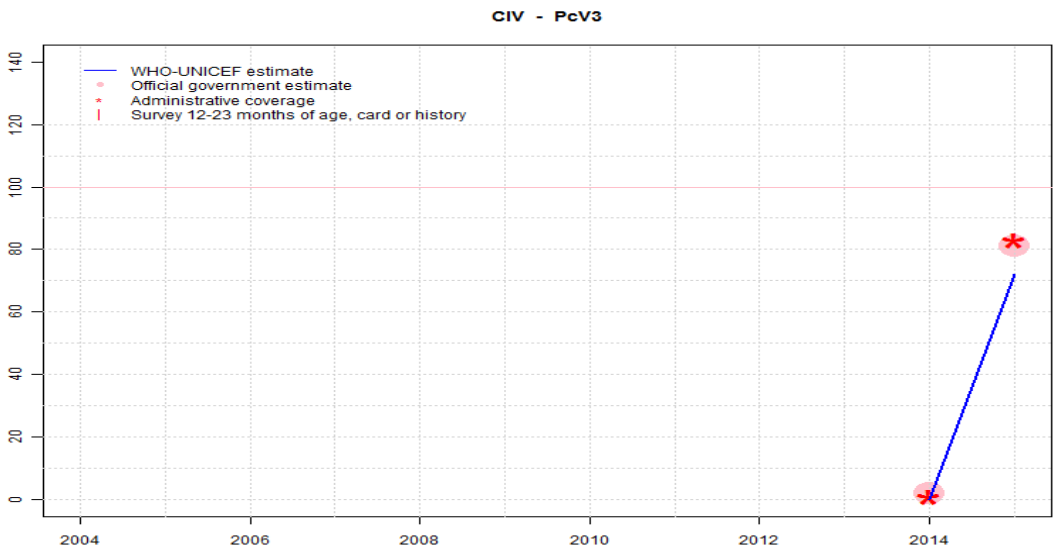
●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk 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.

Côte d'Ivoire - PcV3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	72
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	•	•
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	81
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	83
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.

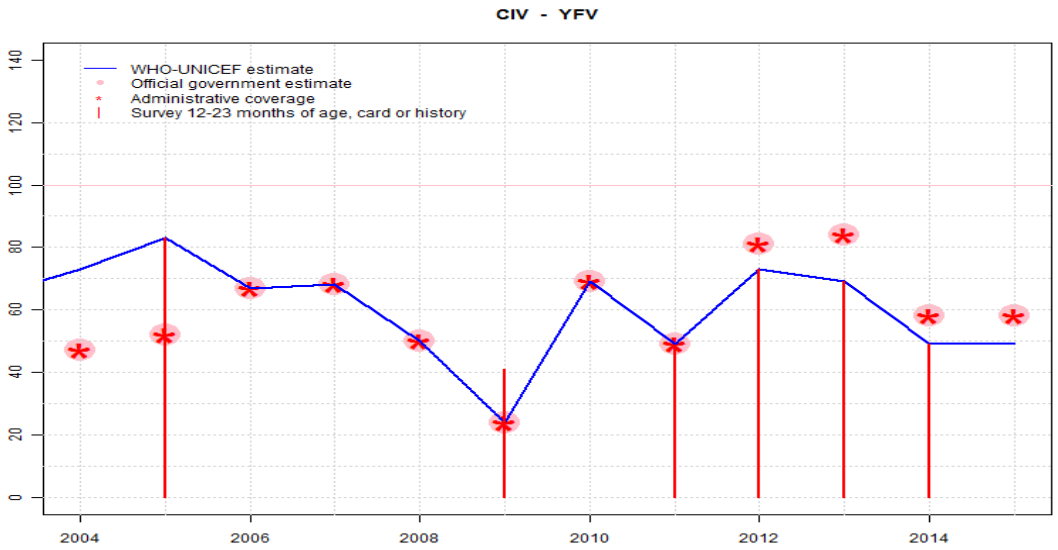
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

2014: Reported data calibrated to 2015 levels. Pneumococcal conjugate vaccine introduced during September 2014. Programme reports that the conduct of supplementary immunization activities for measles and meningitis A as well as enumeration activities during the second half of 2014 was a distraction for routine immunization service delivery. Estimate of 0 percent changed from previous revision value of 2 percent. GoC=Assigned by working group. .

2015: Estimate is based on the difference between the administrative coverage and estimate for DTP3. Basis for adjustment to official coverage inconsistent with results from coverage survey. Estimate challenged by: D-R-

Côte d'Ivoire - YFV



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	73	83	67	68	50	24	69	49	73	69	49	49
Estimate GoC	•	•	••	•	•	•	•	•	•	•	•	•
Official	47	52	67	68	50	24	69	49	81	84	58	58
Administrative	47	52	67	68	50	24	69	49	81	84	58	58
Survey	NA	83	NA	NA	NA	41	NA	48	73	69	49	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: Reported data calibrated to 1999 and 2005 levels. Estimate challenged by: D-

2005: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 83 percent based on 1 survey(s). Estimate challenged by: D-R-

2006: The increase in reported coverage is attributable to revised denominator estimate. GoC=R+ D+

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. Côte d'Ivoire External EPI Review 2010 results ignored by working group. Survey results are preliminary. Ten-month vaccine stock-out reported. Estimate challenged by: S-

2010: Estimate based on coverage reported by national government. Increased coverage likely reflects catch-up activities following stockout in the previous year. Estimate challenged by: S-

2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 48 percent based on 1 survey(s). Decline in coverage is attributable to vaccine shortages in 70 districts. Estimate challenged by: S-

2012: Estimate is based on survey results consistent with other antigens. Reported coverage might reflect recovery activities following the vaccine shortage in 2011. Estimate challenged by: D-R-

2013: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 69 percent based on 1 survey(s). Programme reports four month stockout at national level. Estimate challenged by: D-R-

2014: Estimate based on survey level. Programme reports six month stock-out at national level. Estimate is based on trend in reported data. Programme reports that the conduct of supplementary immunization activities for measles and meningitis A as well as enumeration activities during the second half of 2014 was a distraction for routine immunization service delivery. Estimate of 49 percent changed from previous revision value of 43 percent. Estimate challenged by: D-R-

2015: Reported data calibrated to 2014 levels. Programme reports three months stock-out at national level. Basis for adjustment to official coverage inconsistent with results from coverage survey. Estimate challenged by: D-

Côte d'Ivoire - survey details

2014 Revue Externe du Programme Elargi de Vaccination de Cote d'Ivoire in 2015

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	85	12-23 m	6416	91
BCG	Card or History	87	12-23 m	6416	91
DTP1	Card	84	12-23 m	6416	91
DTP1	Card or History	91	12-23 m	6416	91
DTP3	Card	70	12-23 m	6416	91
DTP3	Card or History	76	12-23 m	6416	91
HepB1	Card	84	12-23 m	6416	91
HepB1	Card or History	91	12-23 m	6416	91
HepB3	Card	70	12-23 m	6416	91
HepB3	Card or History	76	12-23 m	6416	91
Hib1	Card	84	12-23 m	6416	91
Hib1	Card or History	91	12-23 m	6416	91
Hib3	Card	70	12-23 m	6416	91
Hib3	Card or History	76	12-23 m	6416	91
MCV1	Card	57	12-23 m	6416	91
MCV1	Card or History	62	12-23 m	6416	91
Pol3	Card	70	12-23 m	6416	91
Pol3	Card or History	76	12-23 m	6416	91
YFV	Card	44	12-23 m	6416	91
YFV	Card or History	49	12-23 m	6416	91

2013 Republique de Cote d'Ivoire Evaluation de la Campagne de Vaccination contre la Rougeole 2014 (Rapport Final)

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	61	12-23 m	-	75
BCG	Card or History	91	12-23 m	8787	75
DTP1	Card	68	12-23 m	-	75
DTP1	Card or History	89	12-23 m	8787	75
DTP3	Card	61	12-23 m	-	75
DTP3	Card or History	82	12-23 m	8787	75
HepB1	Card	68	12-23 m	-	75
HepB1	Card or History	89	12-23 m	8787	75
HepB3	Card	61	12-23 m	-	75
HepB3	Card or History	82	12-23 m	8787	75
Hib1	Card	68	12-23 m	-	75
Hib1	Card or History	89	12-23 m	8787	75
Hib3	Card	61	12-23 m	-	75
Hib3	Card or History	82	12-23 m	8787	75
MCV1	Card	55	12-23 m	-	75
MCV1	Card or History	76	12-23 m	8787	75
Pol1	Card	58	12-23 m	-	75
Pol1	Card or History	83	12-23 m	8787	75
Pol3	Card	55	12-23 m	-	75
Pol3	Card or History	78	12-23 m	8787	75
YFV	Card	49	12-23 m	-	75
YFV	Card or History	69	12-23 m	8787	75

2012 Enquête de Couverture Vaccinale 2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	87	12-23 m	-	88
BCG	Card or History	93	12-23 m	4751	88
DTP1	Card	88	12-23 m	-	88
DTP1	Card or History	93	12-23 m	4751	88
DTP3	Card	78	12-23 m	-	88
DTP3	Card or History	82	12-23 m	4751	88
HepB1	Card	88	12-23 m	-	88
HepB1	Card or History	93	12-23 m	4751	88
HepB3	Card	78	12-23 m	-	88
HepB3	Card or History	82	12-23 m	4751	88
Hib1	Card	88	12-23 m	-	88
Hib1	Card or History	93	12-23 m	4751	88
Hib3	Card	78	12-23 m	-	88
Hib3	Card or History	82	12-23 m	4751	88
MCV1	Card	71	12-23 m	-	88
MCV1	Card or History	74	12-23 m	4751	88
Pol1	Card	88	12-23 m	-	88
Pol1	Card or History	94	12-23 m	4751	88
Pol3	Card	78	12-23 m	-	88
Pol3	Card or History	82	12-23 m	4751	88
YFV	Card	69	12-23 m	-	88
YFV	Card or History	73	12-23 m	4751	88

Côte d'Ivoire - survey details

2011 Enquête Démographique et de Santé et à Indicateurs Multiples EDSCI-III, Côte d'Ivoire, 2011-2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	83	12-23 m	1432	74
BCG	Card	68	12-23 m	1061	74
BCG	Card or History	83	12-23 m	1432	74
BCG	History	15	12-23 m	371	74
DTP1	C or H <12 months	77	12-23 m	1432	74
DTP1	Card	65	12-23 m	1061	74
DTP1	Card or History	78	12-23 m	1432	74
DTP1	History	12	12-23 m	371	74
DTP3	C or H <12 months	60	12-23 m	1432	74
DTP3	Card	56	12-23 m	1061	74
DTP3	Card or History	64	12-23 m	1432	74
DTP3	History	8	12-23 m	371	74
MCV1	C or H <12 months	49	12-23 m	1432	74
MCV1	Card	53	12-23 m	1061	74
MCV1	Card or History	64	12-23 m	1432	74
MCV1	History	12	12-23 m	371	74
Pol1	C or H <12 months	91	12-23 m	1432	74
Pol1	Card	71	12-23 m	1061	74
Pol1	Card or History	91	12-23 m	1432	74
Pol1	History	20	12-23 m	371	74
Pol3	C or H <12 months	65	12-23 m	1432	74
Pol3	Card	60	12-23 m	1061	74
Pol3	Card or History	69	12-23 m	1432	74
Pol3	History	9	12-23 m	371	74
YFV	C or H <12 months	34	12-23 m	1432	74
YFV	Card	48	12-23 m	1061	74
YFV	Card or History	48	12-23 m	1432	74
YFV	History	0	12-23 m	371	74

2010 Enquête Démographique et de Santé et à Indicateurs Multiples EDSCI-III, Côte d'Ivoire, 2011-2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	84	24-35 m	1350	74
DTP1	C or H <12 months	79	24-35 m	1350	74
DTP3	C or H <12 months	62	24-35 m	1350	74
MCV1	C or H <12 months	52	24-35 m	1350	74
Pol1	C or H <12 months	90	24-35 m	1350	74
Pol3	C or H <12 months	64	24-35 m	1350	74

2009 Côte D'Ivoire Revue externe 2010 du Programme Elargi de Vaccination

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	87	12-23 m	-	91
BCG	Card <12 months	78	12-23 m	-	91
BCG	Card or History	91	12-23 m	3455	91
DTP1	Card	78	12-23 m	-	91
DTP1	Card <12 months	72	12-23 m	-	91
DTP1	Card or History	92	12-23 m	3455	91
DTP3	Card	64	12-23 m	-	91
DTP3	Card <12 months	53	12-23 m	-	91
DTP3	Card or History	75	12-23 m	3455	91
HepB1	Card	78	12-23 m	-	91
HepB1	Card <12 months	72	12-23 m	-	91
HepB1	Card or History	92	12-23 m	3455	91
HepB3	Card	64	12-23 m	-	91
HepB3	Card <12 months	53	12-23 m	-	91
HepB3	Card or History	75	12-23 m	3455	91
MCV1	Card	57	12-23 m	-	91
MCV1	Card <12 months	40	12-23 m	-	91
MCV1	Card or History	63	12-23 m	3455	91
Pol1	Card	81	12-23 m	-	91
Pol1	Card <12 months	74	12-23 m	-	91
Pol1	Card or History	92	12-23 m	3455	91
Pol3	Card	66	12-23 m	-	91
Pol3	Card <12 months	55	12-23 m	-	91
Pol3	Card or History	75	12-23 m	3455	91
YFV	Card	36	12-23 m	-	91
YFV	Card <12 months	24	12-23 m	-	91
YFV	Card or History	41	12-23 m	3455	91

Côte d'Ivoire - survey details

2009 Enquête Démographique et de Santé et à Indicateurs Multiples EDSCI-III, Côte d'Ivoire, 2011-2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	79	36-47 m	1289	74
DTP1	C or H <12 months	72	36-47 m	1289	74
DTP3	C or H <12 months	54	36-47 m	1289	74
MCV1	C or H <12 months	48	36-47 m	1289	74
Pol1	C or H <12 months	84	36-47 m	1289	74
Pol3	C or H <12 months	57	36-47 m	1289	74

2008 Enquête Démographique et de Santé et à Indicateurs Multiples EDSCI-III, Côte d'Ivoire, 2011-2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	79	46-59 m	1250	74
DTP1	C or H <12 months	72	46-59 m	1250	74
DTP3	C or H <12 months	54	46-59 m	1250	74
MCV1	C or H <12 months	50	46-59 m	1250	74
Pol1	C or H <12 months	84	46-59 m	1250	74
Pol3	C or H <12 months	55	46-59 m	1250	74

2005 Enquête par grappes à indicateurs multiples, Côte d'Ivoire, 2006

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	85	12-23 m	1751	73
BCG	Card	72	12-23 m	1751	73
BCG	Card or History	85	12-23 m	1751	73
BCG	History	13	12-23 m	1751	73
DTP1	C or H <12 months	81	12-23 m	1751	73
DTP1	Card	72	12-23 m	1751	73
DTP1	Card or History	83	12-23 m	1751	73
DTP1	History	11	12-23 m	1751	73
DTP3	C or H <12 months	74	12-23 m	1751	73
DTP3	Card	66	12-23 m	1751	73
DTP3	Card or History	79	12-23 m	1751	73
DTP3	History	12	12-23 m	1751	73
HepB1	C or H <12 months	81	12-23 m	1751	73
HepB1	Card	72	12-23 m	1751	73
HepB1	Card or History	83	12-23 m	1751	73
HepB1	History	11	12-23 m	1751	73
HepB3	C or H <12 months	74	12-23 m	1751	73
HepB3	Card	66	12-23 m	1751	73
HepB3	Card or History	79	12-23 m	1751	73
HepB3	History	12	12-23 m	1751	73
MCV1	C or H <12 months	72	12-23 m	1751	73
MCV1	Card	68	12-23 m	1751	73
MCV1	Card or History	84	12-23 m	1751	73
MCV1	History	16	12-23 m	1751	73
Pol1	C or H <12 months	91	12-23 m	1751	73
Pol1	Card	71	12-23 m	1751	73
Pol1	Card or History	94	12-23 m	1751	73
Pol1	History	23	12-23 m	1751	73
Pol3	C or H <12 months	76	12-23 m	1751	73
Pol3	Card	66	12-23 m	1751	73
Pol3	Card or History	81	12-23 m	1751	73
Pol3	History	15	12-23 m	1751	73
YFV	C or H <12 months	71	12-23 m	1751	73
YFV	Card	74	12-23 m	1751	73
YFV	Card or History	83	12-23 m	1751	73
YFV	History	9	12-23 m	1751	73

2000 Revue externe du PEV 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	87	12-23 m	-	98
DTP1	Card or History	87	12-23 m	-	98
DTP3	Card or History	70	12-23 m	-	98
MCV1	Card or History	69	12-23 m	-	98
Pol3	Card or History	70	12-23 m	-	98

Côte d'Ivoire - survey details

1999 Côte d'Ivoire, Enquête à Indicateurs Multiples MICS 2000

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	83	12-23 m	1588	77
BCG	Card	71	12-23 m	1588	77
BCG	Card or History	84	12-23 m	1588	77
BCG	History	13	12-23 m	1588	77
DTP1	C or H <12 months	75	12-23 m	1588	77
DTP1	Card	70	12-23 m	1588	77
DTP1	Card or History	79	12-23 m	1588	77
DTP1	History	9	12-23 m	1588	77
DTP3	C or H <12 months	56	12-23 m	1588	77
DTP3	Card	56	12-23 m	1588	77
DTP3	Card or History	62	12-23 m	1588	77
DTP3	History	6	12-23 m	1588	77
MCV1	C or H <12 months	53	12-23 m	1588	77
MCV1	Card	52	12-23 m	1588	77
MCV1	Card or History	62	12-23 m	1588	77
MCV1	History	10	12-23 m	1588	77
Pol1	C or H <12 months	82	12-23 m	1588	77
Pol1	Card	71	12-23 m	1588	77
Pol1	Card or History	86	12-23 m	1588	77
Pol1	History	14	12-23 m	1588	77
Pol3	C or H <12 months	56	12-23 m	1588	77
Pol3	Card	55	12-23 m	1588	77
Pol3	Card or History	62	12-23 m	1588	77
Pol3	History	7	12-23 m	1588	77
YFV	Card	47	12-23 m	1588	77
YFV	Card or History	48	12-23 m	1588	77
YFV	History	1	12-23 m	1588	77

1997 Enquête Démographique et de Santé, Côte d'Ivoire 1998-99, 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	82	12-23 m	439	73
BCG	Card	70	12-23 m	439	73
BCG	Card or History	84	12-23 m	439	73
BCG	History	14	12-23 m	439	73
DTP1	C or H <12 months	80	12-23 m	439	73
DTP1	Card	69	12-23 m	439	73
DTP1	Card or History	83	12-23 m	439	73
DTP1	History	14	12-23 m	439	73
DTP3	C or H <12 months	55	12-23 m	439	73
DTP3	Card	54	12-23 m	439	73
DTP3	Card or History	61	12-23 m	439	73
DTP3	History	7	12-23 m	439	73
MCV1	C or H <12 months	51	12-23 m	439	73
MCV1	Card	57	12-23 m	439	73
MCV1	Card or History	66	12-23 m	439	73
MCV1	History	9	12-23 m	439	73
Pol1	C or H <12 months	82	12-23 m	439	73
Pol1	Card	70	12-23 m	439	73
Pol1	Card or History	86	12-23 m	439	73
Pol1	History	16	12-23 m	439	73
Pol3	C or H <12 months	55	12-23 m	439	73
Pol3	Card	54	12-23 m	439	73
Pol3	Card or History	61	12-23 m	439	73
Pol3	History	7	12-23 m	439	73

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

Côte d'Ivoire

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	76
2005	75
2006	75
2007	74
2008	92
2009	92
2010	82
2011	82
2012	82
2013	82
2014	82
2015	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.