Cuba: WHO and UNICEF estimates of immunization coverage: 2014 revision

BCG

DTP1

DTP3

Pol3

MCV1

HepB3

Hib3

RotaC

No estimate for infant immunization made.

PcV3

No estimate for infant immunization made.
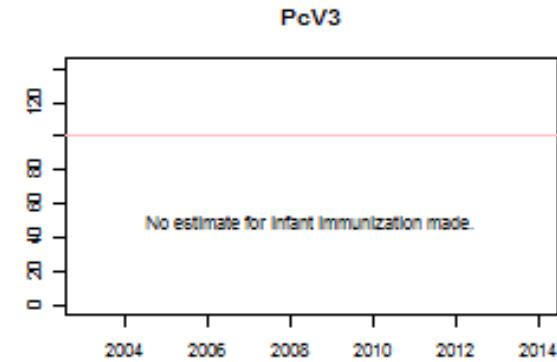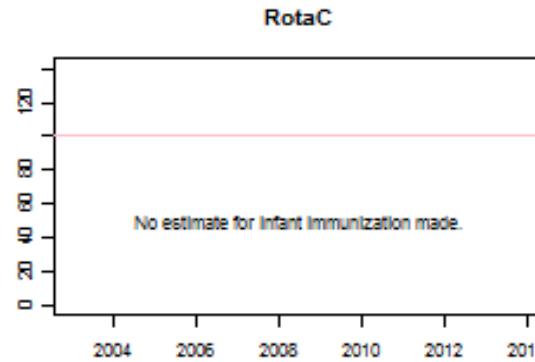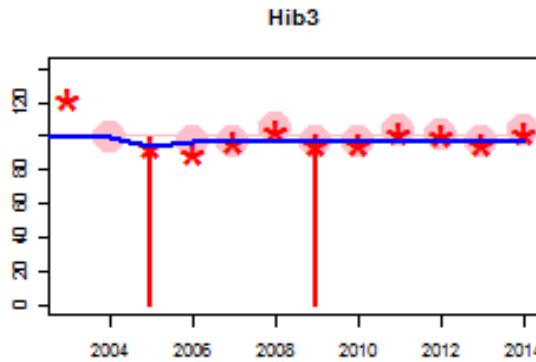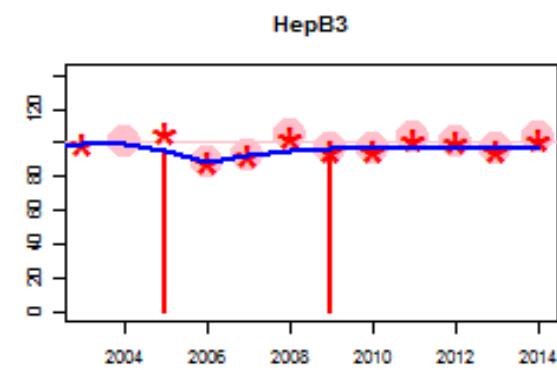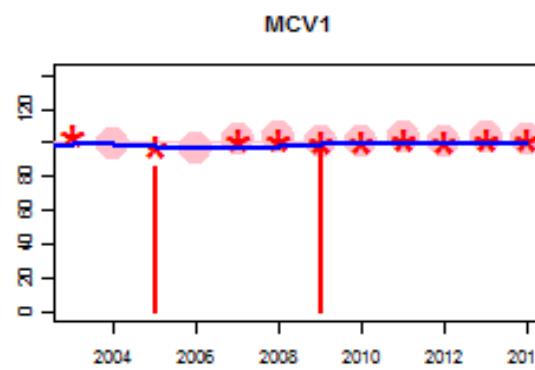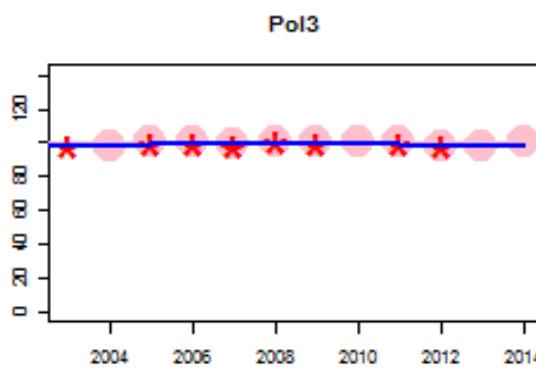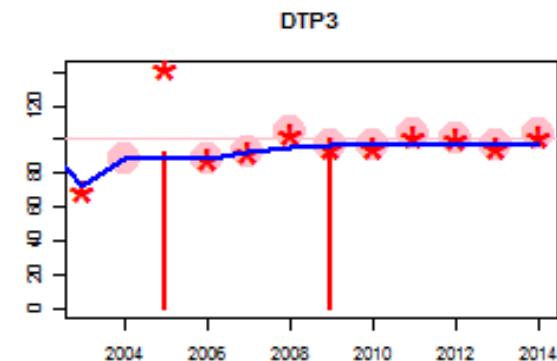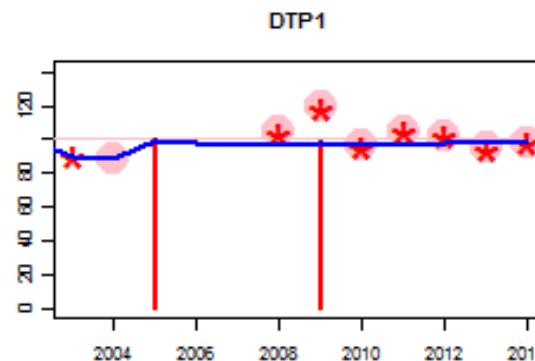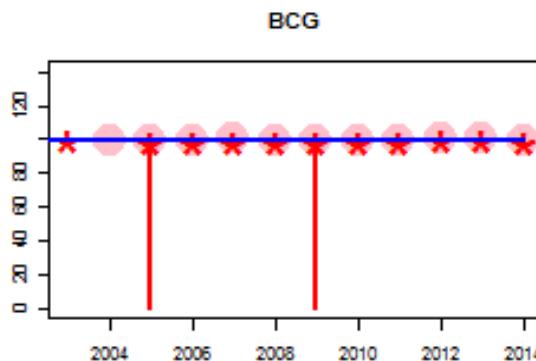
Cuba - BCG
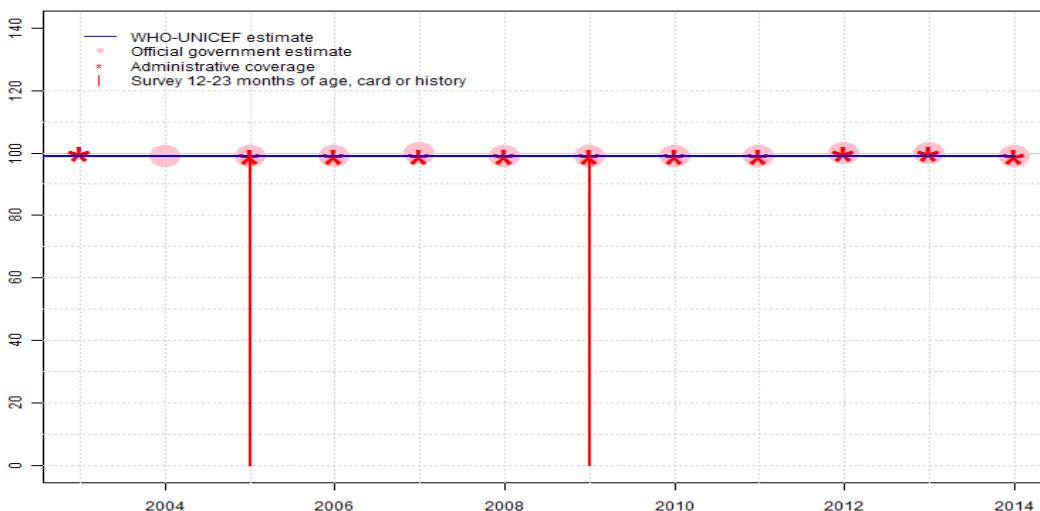
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	99	99	99	99	99	99	99	99	99	99	99	99
Estimate GoC	●●●	●●●	●●●	●	●●●	●●●	●	●	●	●	●	●
Official	NA	99	99	99	100	99	99	99	99	100	100	99
Administrative	100	NA	99	99	99	99	99	99	99	100	100	99
Survey	NA	NA	100	NA	NA	NA	100	NA	NA	NA	NA	NA

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The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information
that are of varying, and, in some instances, unknown quality.  Beginning with the 2011 revision we describe
the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon
which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence
intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around
the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is
not a judgment of the quality of data reported by national authorities.
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●●● Estimate is supported by reported data [R+], coverage recalculated with an independent
denominator from the World Population Prospects: 2012 revision from the UN Popula-
tion 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.

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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.
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Description:

2003: Estimate based on reported administrative data. GoC=R+ S+ D+

2004: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2005: Estimate based on coverage reported by national government supported by survey. Survey evidence of 100 percent based on 1 survey(s). GoC=R+ S+ D+

2006: Estimate based on coverage reported by national government. Estimate challenged by: 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 supported by survey. Survey evidence of 100 percent based on 1 survey(s). Estimate challenged by: D-

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

2011: Estimate based on coverage reported by national government. Estimate challenged by: D-

2012: Estimate based on coverage reported by national government. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government. Preliminary results from a 2014 Multiple Cluster Indicator Survey for the 2013 birth cohort suggest coverage of 100 percent. Estimate challenged by: D-

2014: Estimate based on coverage reported by national government. Estimate challenged by: D-

Cuba - DTP1

CUB - DTP1

Legend:
- WHO-UNICEF estimate
- Official government estimate
- Administrative coverage
- Survey 12-23 months of age, card or history
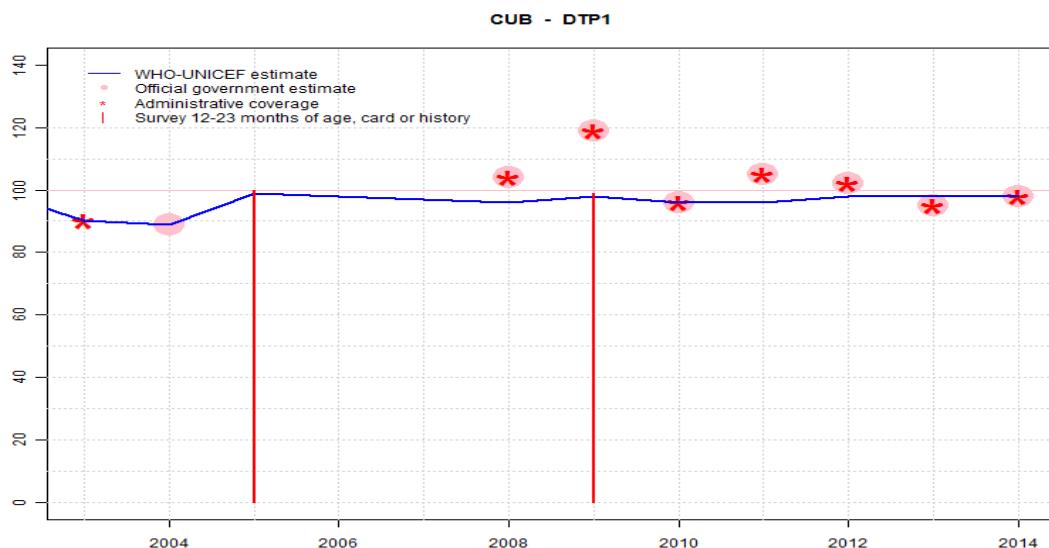
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	90	89	99	98	97	96	98	96	96	98	98	98
Estimate GoC	●●●	●●	●	●●	●	●	●	●	●	●	●	●
Official	NA	89	NA	NA	NA	104	119	96	105	102	95	98
Administrative	90	NA	NA	NA	NA	104	119	96	105	102	95	98
Survey	NA	NA	100	NA	NA	NA	99	NA	NA	NA	NA	NA

```
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information
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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 Popula-
tion Division (D+), and at least one supporting survey within 2 years [S+]. While well
supported, the estimate still carries a risk of being wrong.

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[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:

2003: Estimate based on reported administrative data. GoC=R+ S+ D+

2004: Estimate is based on reported data. GoC=R+ D+

2005: Estimate is based on survey results. Estimate challenged by: D-

2006: Reported data calibrated to 2005 and 2009 levels. GoC=S+ D+

2007: Reported data calibrated to 2005 and 2009 levels. Estimate challenged by: D-

2008: Reported data calibrated to 2005 and 2009 levels. Reported data excluded. 104 percent greater than 100 percent. Estimate challenged by: D-

2009: DTP1 coverage estimated based on DTP3 coverage of 96. Reported data excluded. 119 percent greater than 100 percent. Reported data excluded. Unexplained increase from 104 percent to 119 percent with decrease 96 percent. Estimate challenged by: D-R-

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

2011: Estimate based on interpolation between data reported by national government. Reported data excluded. 105 percent greater than 100 percent. Estimate challenged by: D-

2012: DTP1 coverage estimated based on DTP3 coverage of 96. Reported data excluded. 102 percent greater than 100 percent. Estimate challenged by: D-R-

2013: DTP1 coverage estimated based on DTP3 coverage of 96. Preliminary results from a 2014 Multiple Cluster Indicator Survey for the 2013 birth cohort suggest coverage of 99 percent. Estimate challenged by: D-R-

2014: Estimate based on coverage reported by national government. Estimate challenged by: D-

Cuba - DTP3

CUB - DTP3

Legend:
- WHO-UNICEF estimate
- Official government estimate
- * Administrative coverage
- | Survey 12-23 months of age, card or history
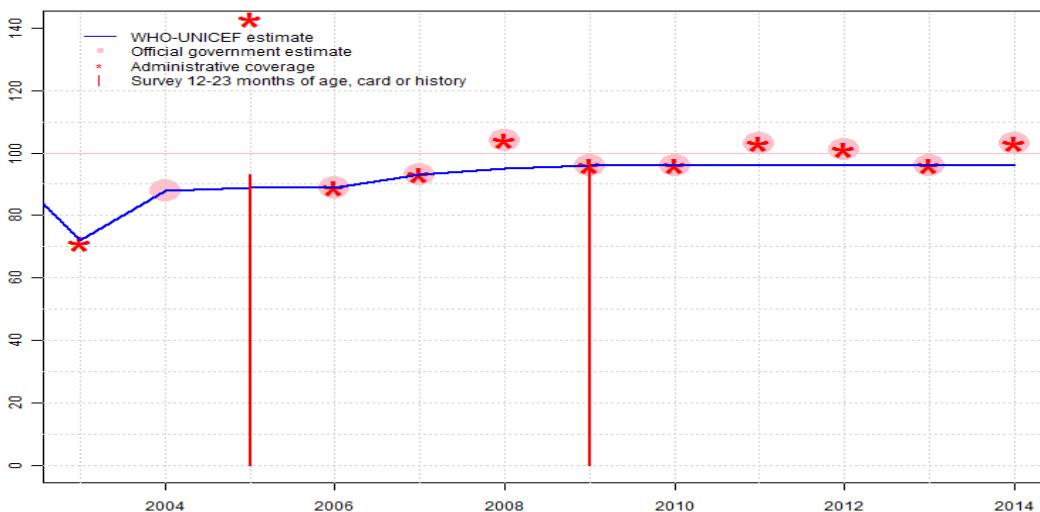
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	72	88	89	89	93	95	96	96	96	96	96	96
Estimate GoC	••	••	•	•••	•••	••	•	•	•	•	•	•
Official	NA	88	NA	89	93	104	96	96	103	101	96	103
Administrative	71	NA	143	89	93	104	96	96	103	101	96	103
Survey	NA	NA	93	NA	NA	NA	97	NA	NA	NA	NA	NA

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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 Popula-
    tion 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:

2003: Reported data calibrated to 1997 and 2005 levels. Decline attributed to interruption of vaccine supply. Catch-up campaigned conducted in 2005. GoC=D+

2004: Reported data calibrated to 1997 and 2005 levels. GoC=S+ D+

2005: Estimate based on interpolation between data reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). Cuba Multiple Indicator Cluster Survey, 2006 card or history results of 93 percent modifed for recall bias to 94 percent based on 1st dose card or history coverage of 100 percent, 1st dose card only coverage of 97 percent and 3d dose card only coverage of 91 percent. Reported data excluded. 143 percent greater than 100 percent. Reported data excluded. Unexplained increase from 88 percent to 143 percent with decrease 89 percent. Estimate challenged by: 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 interpolation between coverage reported by national government. Reported data excluded. 104 percent greater than 100 percent. GoC=S+ D+

2009: Estimate based on coverage reported by national government supported by survey. Survey evidence of 97 percent based on 1 survey(s). Estimate challenged by: D-

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

2011: Estimate based on interpolation between data reported by national government. Reported data excluded. 103 percent greater than 100 percent. Estimate challenged by: D-

2012: Estimate based on interpolation between data reported by national government. Reported data excluded. 101 percent greater than 100 percent. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government. Preliminary results from a 2014 Multiple Cluster Indicator Survey for the 2013 birth cohort support reported coverage. Estimate challenged by: D-

2014: Estimate based on extrapolation from data reported by national government. Reported data excluded. 103 percent greater than 100 percent. Estimate challenged by: D-

Cuba - Pol3

CUB - Pol3

Legend:
- WHO-UNICEF estimate
- Official government estimate
- Administrative coverage
- Survey 12-23 months of age, card or history
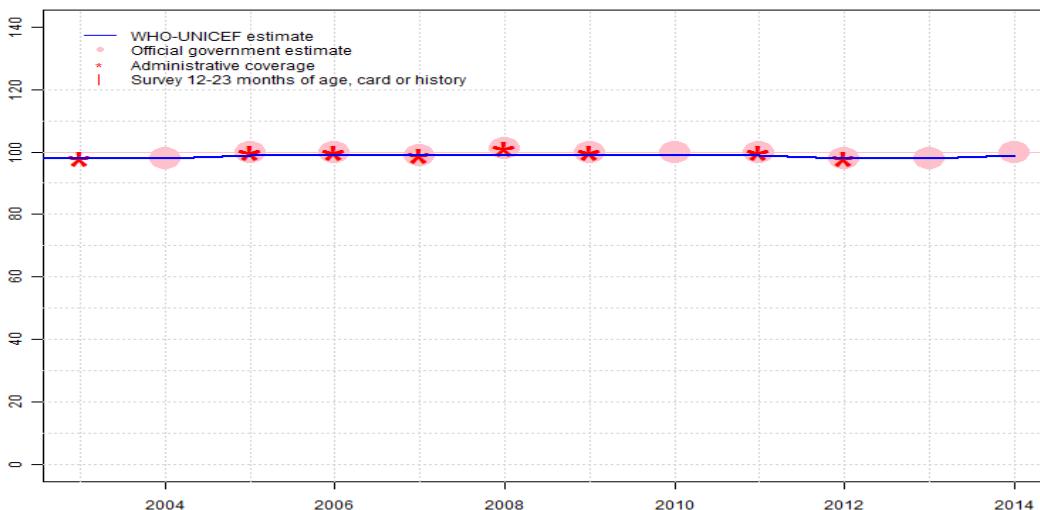
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	98	98	99	99	99	99	99	99	99	98	98	99
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●	●	●●	●●
Official	NA	98	100	100	99	101	100	100	100	98	98	100
Administrative	98	NA	100	100	99	101	100	NA	100	98	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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
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denominator from the World Population Prospects: 2012 revision from the UN Popula-
tion Division (D+), and at least one supporting survey within 2 years [S+]. While well
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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:

2003: Estimate based on reported administrative data. GoC=R+ D+

2004: Estimate based on coverage reported by national government. GoC=R+

2005: Estimate based on coverage reported by national government. GoC=R+
D+

2006: Estimate based on coverage reported by national government. GoC=R+
D+

2007: Estimate based on coverage reported by national government. GoC=R+
D+

2008: Estimate based on interpolation between data reported by national gov-
ernment. Reported data excluded. 101 percent greater than 100 percent.
GoC=D+

2009: Estimate based on coverage reported by national government. GoC=R+
D+

2010: Estimate based on coverage reported by national government. GoC=R+

2011: Estimate based on coverage reported by national government. Estimate
challenged by: D-

2012: Estimate based on coverage reported by national government. Estimate
challenged by: D-

2013: Estimate based on coverage reported by national government. Preliminary
results from a 2014 Multiple Cluster Indicator Survey for the 2013 birth
cohort support reported coverage. GoC=R+

2014: Estimate based on coverage reported by national government. GoC=R+

CUB - MCV1
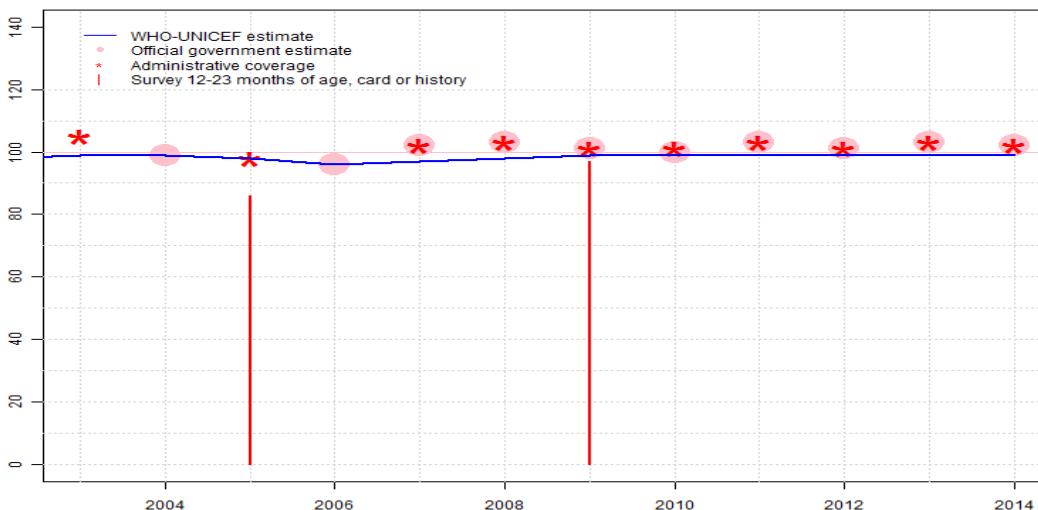
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	99	99	98	96	97	98	99	99	99	99	99	99
Estimate GoC	●	●	●	●	●	●●	●	●	●	●	●	●
Official	NA	99	NA	96	102	103	101	100	103	101	103	102
Administrative	105	NA	98	NA	102	103	101	101	103	101	103	102
Survey	NA	NA	86	NA	NA	NA	97	NA	NA	NA	NA	NA

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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:

2003: Estimate based on interpolation between coverage reported by national government. Reported data excluded. 105 percent greater than 100 percent. Estimate challenged by: S-

2004: Estimate based on coverage reported by national government. Estimate challenged by: S-

2005: Estimate based on reported administrative data. Cuba Multiple Indicator Cluster Survey, 2006 results ignored by working group. Measles vaccination is recommended between 12 and 23 months of age. Survey cohort under-estimates coverage. Estimate challenged by: S-

2006: Estimate based on coverage reported by national government. Estimate challenged by: S-

2007: Estimate based on interpolation between coverage reported by national government. Reported data excluded. 102 percent greater than 100 percent. Estimate challenged by: S-

2008: Estimate based on interpolation between coverage reported by national government. Reported data excluded. 103 percent greater than 100 percent. GoC=S+ D+

2009: Estimate based on interpolation between data reported by national government supported by survey. Survey evidence of 97 percent based on 1 survey(s). Reported data excluded. 101 percent greater than 100 percent. Estimate challenged by: D-

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

2011: Estimate based on extrapolation from data reported by national government. Reported data excluded. 103 percent greater than 100 percent. Estimate challenged by: D-

2012: Estimate based on extrapolation from data reported by national government. Reported data excluded. 101 percent greater than 100 percent. Estimate challenged by: D-

2013: Estimate based on extrapolation from data reported by national government. Reported data excluded. 103 percent greater than 100 percent. Preliminary results from a 2014 Multiple Cluster Indicator Survey for the 2013 birth cohort suggests 87 percent coverage. Estimate challenged by: D-

2014: Estimate based on extrapolation from data reported by national government. Reported data excluded. 102 percent greater than 100 percent. Estimate challenged by: D-

Cuba - MCV2

CUB - MCV2

Legend:
- WHO-UNICEF estimate
- Official government estimate
- * Administrative coverage
- | Survey 12-23 months of age, card or history
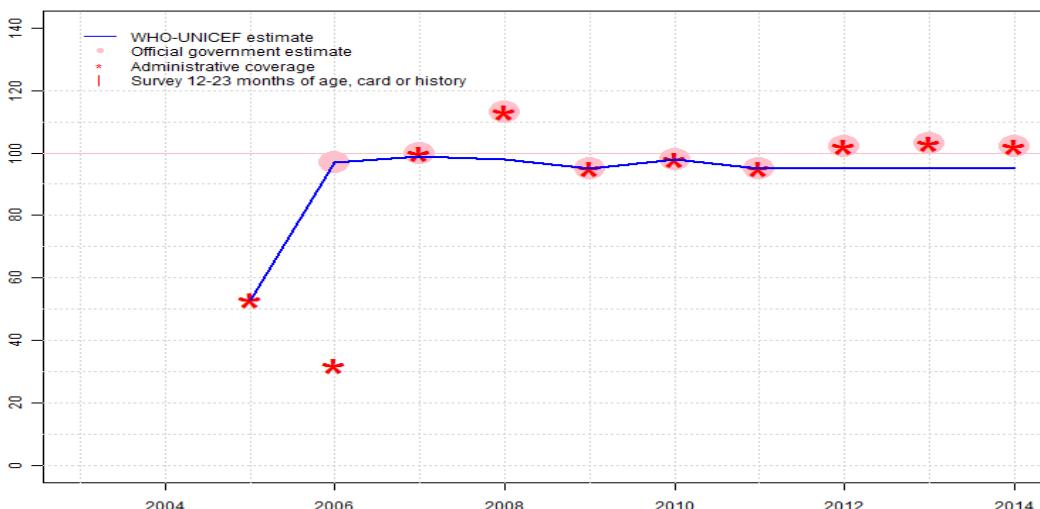
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	NA	NA	53	97	99	98	95	98	95	95	95	95
Estimate GoC	NA	NA	●●	●	●	●	●	●	●	●	●●	●
Official	NA	NA	NA	97	100	113	95	98	95	102	103	102
Administrative	NA	NA	53	32	100	113	95	98	95	102	103	102
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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tion Division (D+), and at least one supporting survey within 2 years [S+]. While well
supported, the estimate still carries a risk of being wrong.

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Description:

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

2005: Estimate based on reported administrative estimate. GoC=R+ D+

2006: Estimate based on coverage reported by national government. Estimate
challenged by: D-

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

2008: Estimate based on interpolation between reported values. Reported data
excluded. 113 percent greater than 100 percent. Reported data excluded.
Unexplained increase from 100 percent to 113 percent with decrease 95
percent. Estimate challenged by: D-

2009: Estimate based on coverage reported by national government. Estimate
challenged by: D-

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

2011: Estimate based on coverage reported by national government. Estimate
challenged by: D-

2012: Estimate based on extrapolation from data reported by national government.
Reported data excluded. 102 percent greater than 100 percent. Estimate
challenged by: D-

2013: Estimate based on extrapolation from data reported by national government.
Reported data excluded. 103 percent greater than 100 percent. GoC=D+

2014: Estimate based on extrapolation from data reported by national government.
Reported data excluded. 102 percent greater than 100 percent. Estimate
challenged by: D-

Cuba - HepBB

CUB - HepBB

Legend:
- WHO-UNICEF estimate
- Official government estimate
- * Administrative coverage
- | Survey 12-23 months of age, card or history
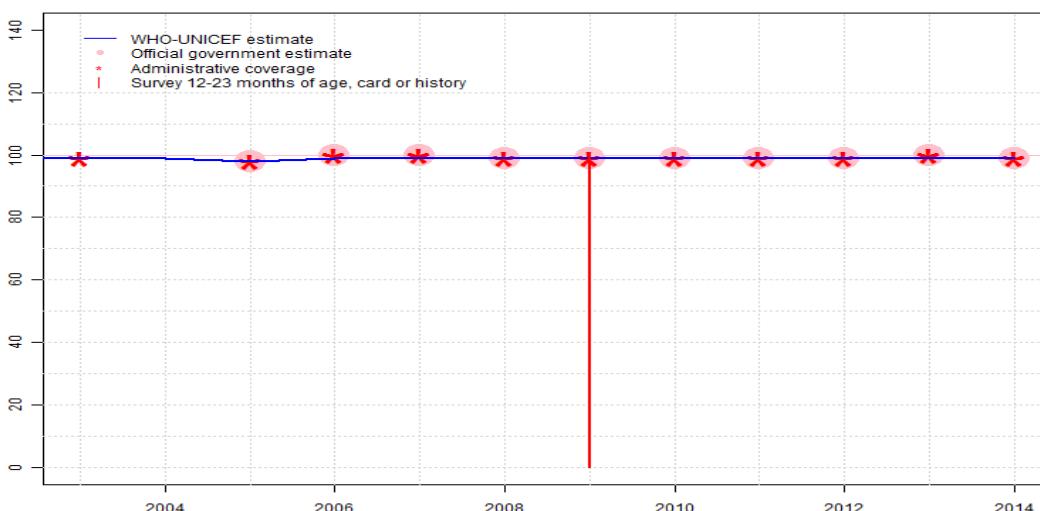
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	99	99	98	99	99	99	99	99	99	99	99	99
Estimate GoC	●●	●	●●	●	●●●	●●●	●	●	●	●	●	●
Official	NA	NA	98	100	100	99	99	99	99	99	100	99
Administrative	99	NA	98	100	100	99	99	99	99	99	100	99
Survey	NA	NA	NA	NA	NA	NA	100	NA	NA	NA	NA	NA

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the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is
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denominator from the World Population Prospects: 2012 revision from the UN Popula-
tion Division (D+), and at least one supporting survey within 2 years [S+]. While well
supported, the estimate still carries a risk of being wrong.

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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:

2003: Estimate based on reported data. GoC=R+
2004: Estimate based on interpolation between data reported by national govern-
ment. GoC=No accepted empirical data
2005: Estimate based on reported data. GoC=R+ D+
2006: Estimate based on reported data. Estimate challenged by: D-
2007: Estimate based on reported data. GoC=R+ S+ D+
2008: Estimate based on reported data. GoC=R+ S+ D+
2009: Estimate based on coverage reported by national government supported by
survey. Survey evidence of 100 percent based on 1 survey(s). Estimate
challenged by: D-
2010: Estimate based on coverage reported by national government. Estimate
challenged by: D-
2011: Estimate based on coverage reported by national government. Estimate
challenged by: 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-
2014: Estimate based on coverage reported by national government. Estimate
challenged by: D-

Cuba - HepB3

CUB - HepB3

Legend:
- WHO-UNICEF estimate
- Official government estimate
- * Administrative coverage
- | Survey 12-23 months of age, card or history
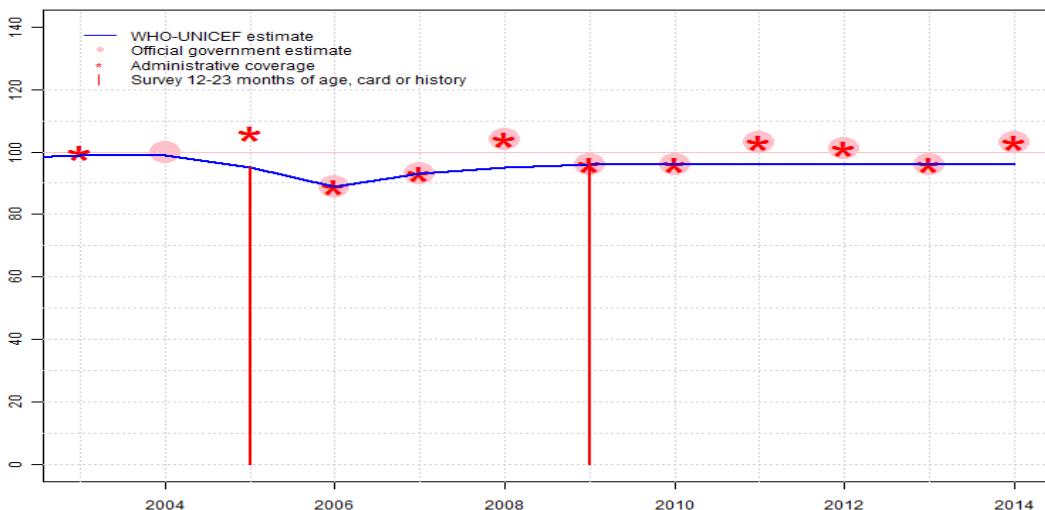
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	99	99	95	89	93	95	96	96	96	96	96	96
Estimate GoC	●●●	●●●	●	●	●●●	●●	●	●	●	●	●	●
Official	NA	100	NA	89	93	104	96	96	103	101	96	103
Administrative	100	NA	106	89	93	104	96	96	103	101	96	103
Survey	NA	NA	95	NA	NA	NA	97	NA	NA	NA	NA	NA

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

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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.
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Description:

2003: Estimate based on reported administrative data. GoC=R+ S+ D+

2004: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2005: Estimate based on interpolation between data reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). Cuba Multiple Indicator Cluster Survey, 2006 card or history results of 95 percent modifed for recall bias to 94 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 97 percent and 3d dose card only coverage of 92 percent. Reported data excluded. 106 percent greater than 100 percent. Estimate challenged by: D-

2006: Estimate based on coverage reported by national government. Estimate challenged by: D-

2007: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2008: Estimate based on interpolation between coverage reported by national government. Reported data excluded. 104 percent greater than 100 percent. GoC=S+ D+

2009: Estimate based on coverage reported by national government supported by survey. Survey evidence of 97 percent based on 1 survey(s). Estimate challenged by: D-

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

2011: Estimate based on interpolation between data reported by national government. Reported data excluded. 103 percent greater than 100 percent. Estimate challenged by: D-

2012: Estimate based on interpolation between data reported by national government. Reported data excluded. 101 percent greater than 100 percent. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government. Preliminary results from a 2014 Multiple Cluster Indicator Survey for the 2013 birth cohort support reported coverage. Estimate challenged by: D-

2014: Estimate based on extrapolation from data reported by national government. Reported data excluded. 103 percent greater than 100 percent. Estimate challenged by: D-

CUB - Hib3

Legend:
- WHO-UNICEF estimate
- Official government estimate
- Administrative coverage
- Survey 12-23 months of age, card or history

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	99	99	94	97	97	97	96	96	96	96	96	96
Estimate GoC	••	•••	•••	•	•••	••	•	•	•	•	•	•
Official	NA	99	NA	97	97	104	96	96	103	101	96	103
Administrative	123	NA	94	90	97	104	96	96	103	101	96	103
Survey	NA	NA	95	NA	NA	NA	97	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:

2003: Estimate based on interpolation between data reported by national government. Reported data excluded. 123 percent greater than 100 percent. Reported data excluded. Unexplained increase from 78 percent to 123 percent with decrease 99 percent. GoC=S+

2004: Estimate based on reported data. GoC=R+ S+ D+

2005: Estimate based on administrative data reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). GoC=R+ S+ D+

2006: Estimate based on coverage reported by national government. Estimate challenged by: D-

2007: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2008: Estimate based on interpolation between coverage reported by national government. Reported data excluded. 104 percent greater than 100 percent. GoC=S+ D+

2009: Estimate based on coverage reported by national government supported by survey. Survey evidence of 97 percent based on 1 survey(s). Estimate challenged by: D-

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

2011: Estimate based on interpolation between data reported by national government. Reported data excluded. 103 percent greater than 100 percent. Estimate challenged by: D-

2012: Estimate based on interpolation between data reported by national government. Reported data excluded. 101 percent greater than 100 percent. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government. Preliminary results from a 2014 Multiple Cluster Indicator Survey for the 2013 birth cohort support reported coverage. Estimate challenged by: D-

2014: Estimate based on extrapolation from data reported by national government. Reported data excluded. 103 percent greater than 100 percent. Estimate challenged by: D-

Cuba - RotaC

CUB - RotaC

WHO-UNICEF estimate
Official government estimate
Administrative coverage
Survey 12-23 months of age, card or history

No estimate for infant immunization made.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
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 Popula-
tion 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.

Cuba - PcV3

CUB - PcV3

Legend:
- WHO-UNICEF estimate
- Official government estimate
- Administrative coverage
- Survey 12-23 months of age, card or history

No estimate for infant immunization made.

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
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 Popula-
tion 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.

2009 Encuesta de Indicadores Múltiples por Conglomerados de
    Cuba 2010/11

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	99	18-29 m	1413	95
BCG	Card	94	18-29 m	1413	95
BCG	Card or History	100	18-29 m	1413	95
BCG	History	5	18-29 m	1413	95
DTP1	C or H <12 months	98	18-29 m	1413	95
DTP1	Card	94	18-29 m	1413	95
DTP1	Card or History	99	18-29 m	1413	95
DTP1	History	5	18-29 m	1413	95
DTP3	C or H <12 months	93	18-29 m	1413	95
DTP3	Card	92	18-29 m	1413	95
DTP3	Card or History	97	18-29 m	1413	95
DTP3	History	5	18-29 m	1413	95
HepB1	C or H <12 months	98	18-29 m	1413	95
HepB1	Card	94	18-29 m	1413	95
HepB1	Card or History	99	18-29 m	1413	95
HepB1	History	5	18-29 m	1413	95
HepB3	C or H <12 months	93	18-29 m	1413	95
HepB3	Card	92	18-29 m	1413	95
HepB3	Card or History	97	18-29 m	1413	95
HepB3	History	5	18-29 m	1413	95
HepBB	C or H <12 months	99	18-29 m	1413	95
HepBB	Card	95	18-29 m	1413	95
HepBB	Card or History	100	18-29 m	1413	95
HepBB	History	5	18-29 m	1413	95
Hib1	C or H <12 months	98	18-29 m	1413	95
Hib1	Card	94	18-29 m	1413	95
Hib1	Card or History	99	18-29 m	1413	95
Hib1	History	5	18-29 m	1413	95
Hib3	C or H <12 months	93	18-29 m	1413	95
Hib3	Card	92	18-29 m	1413	95
Hib3	Card or History	97	18-29 m	1413	95
Hib3	History	5	18-29 m	1413	95
MCV1	C or H <12 months	91	18-29 m	1413	95
MCV1	Card	92	18-29 m	1413	95
MCV1	Card or History	97	18-29 m	1413	95
MCV1	History	5	18-29 m	1413	95

2005 La Encuesta de Indicadores Múltiples por Conglomerados
    2006 de Cuba

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	100	12-23 m	1840	98
BCG	Card	98	12-23 m	1840	98
BCG	Card or History	100	12-23 m	1840	98
BCG	History	2	12-23 m	1840	98
DTP1	C or H <12 months	99	12-23 m	1840	98
DTP1	Card	97	12-23 m	1840	98
DTP1	Card or History	100	12-23 m	1840	98
DTP1	History	2	12-23 m	1840	98
DTP3	C or H <12 months	86	12-23 m	1840	98
DTP3	Card	91	12-23 m	1840	98
DTP3	Card or History	93	12-23 m	1840	98
DTP3	History	2	12-23 m	1840	98
HepB1	C or H <12 months	99	12-23 m	1840	98
HepB1	Card	97	12-23 m	1840	98
HepB1	Card or History	99	12-23 m	1840	98
HepB1	History	2	12-23 m	1840	98
HepB3	C or H <12 months	92	12-23 m	1840	98
HepB3	Card	92	12-23 m	1840	98
HepB3	Card or History	95	12-23 m	1840	98
HepB3	History	2	12-23 m	1840	98
Hib3	C or H <12 months	89	12-23 m	1840	98
Hib3	Card	93	12-23 m	1840	98
Hib3	Card or History	95	12-23 m	1840	98
Hib3	History	2	12-23 m	1840	98
MCV1	C or H <12 months	83	12-23 m	1840	98
MCV1	Card	83	12-23 m	1840	98
MCV1	Card or History	86	12-23 m	1840	98
MCV1	History	3	12-23 m	1840	98
Pol1	C or H <12 months	92	12-23 m	1840	98
Pol1	Card	65	12-23 m	1840	98
Pol1	Card or History	95	12-23 m	1840	98
Pol1	History	30	12-23 m	1840	98

Cuba - survey details

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