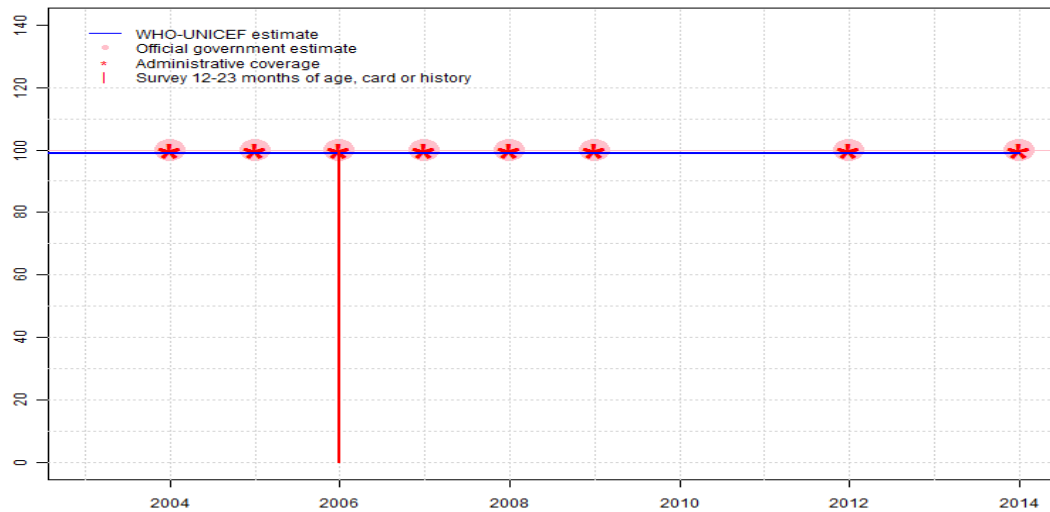


LBY - BCG



	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	100	100	100	100	100	100	NA	NA	100	NA	100
Administrative	NA	100	100	100	100	100	100	NA	NA	100	NA	100
Survey	NA	NA	NA	100	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

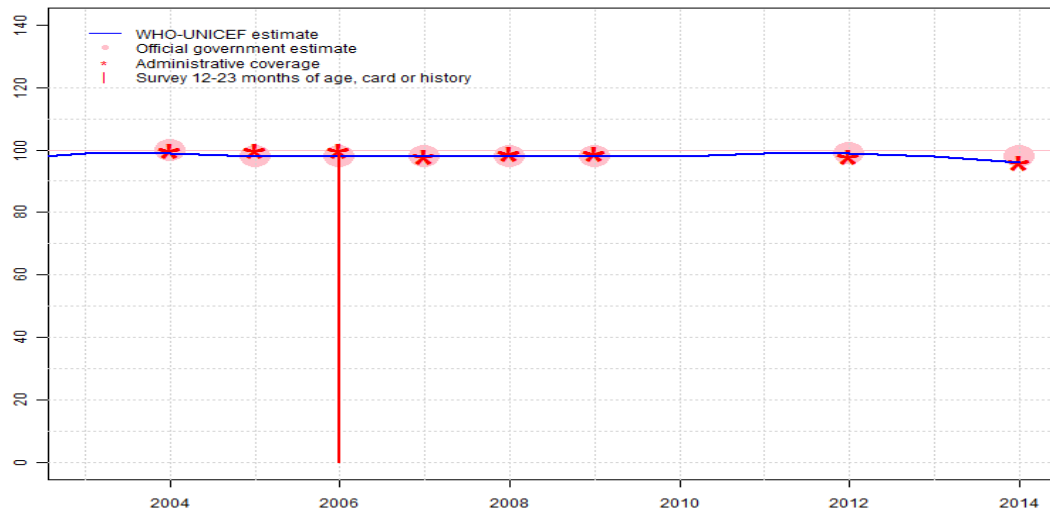
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on interpolation between coverage reported by national government. GoC=No accepted empirical data
- 2004: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2005: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2006: 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-
- 2007: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on interpolation between data reported by national government. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2011: Estimate based on interpolation between data reported by national government. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on interpolation between data reported by national government. GoC=No accepted empirical data
- 2014: Estimate based on reported administrative data. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. Declines in reported coverage are unexplained given increases in the reported number of children vaccinated. Reported coverage levels may carry a risk of overestimation given the use of the number of children vaccinated with BCG as the target population and civil unrest in the country. Programme does not provide an explanation for adjustment of government official coverage from administrative reported data. Estimate challenged by: D-

Libya - DTP1

LBY - DTP1



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	99	99	98	98	98	98	98	98	99	99	98	96
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	NA	100	98	98	98	98	98	NA	NA	99	NA	98
Administrative	NA	100	100	100	98	99	99	NA	NA	98	NA	96
Survey	NA	NA	NA	100	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

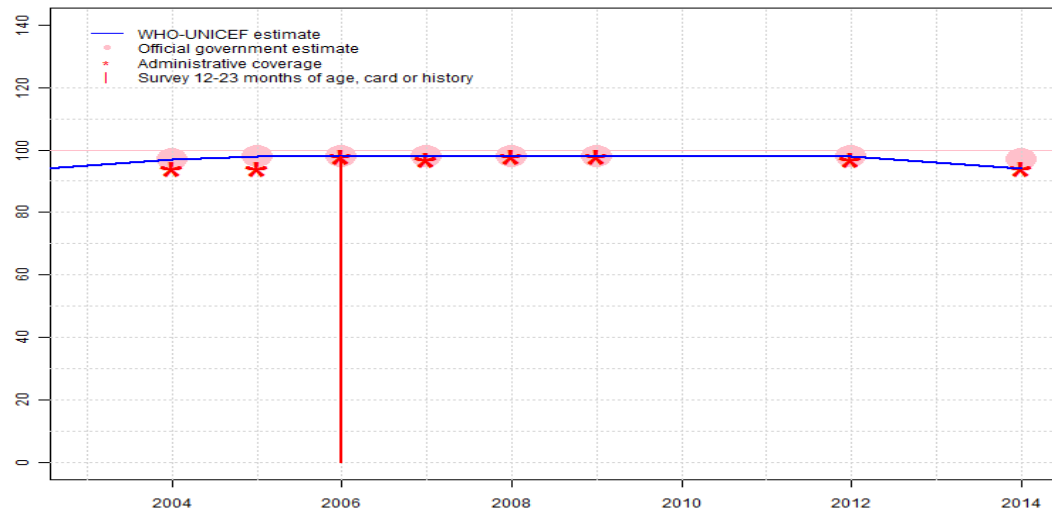
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on interpolation between coverage reported by national government. GoC=No accepted empirical data
- 2004: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2005: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2006: 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-
- 2007: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on interpolation between data reported by national government. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2011: Estimate based on interpolation between data reported by national government. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on interpolation between data reported by national government. Estimate of 98 percent changed from previous revision value of 99 percent. GoC=No accepted empirical data
- 2014: Estimate based on reported administrative data. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. Declines in reported coverage are unexplained given increases in the reported number of children vaccinated. Reported coverage levels may carry a risk of overestimation given the use of the number of children vaccinated with BCG as the target population and civil unrest in the country. Programme does not provide an explanation for adjustment of government official coverage from administrative reported data. Estimate challenged by: D-

Libya - DTP3

LBY - DTP3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	95	97	98	98	98	98	98	98	98	98	96	94
Estimate GoC	•	•••	•	•	•••	•	•	•	•	•	•	•
Official	NA	97	98	98	98	98	98	NA	NA	98	NA	97
Administrative	NA	94	94	98	97	98	98	NA	NA	97	NA	94
Survey	NA	NA	NA	98	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

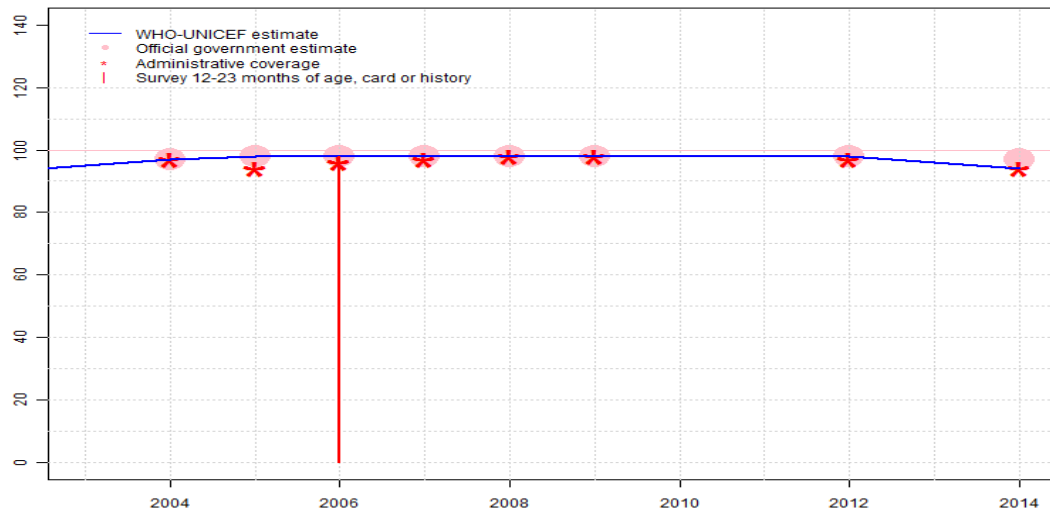
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on interpolation between coverage reported by national government. GoC=No accepted empirical data
- 2004: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2006: Estimate based on coverage reported by national government supported by survey. Survey evidence of 98 percent based on 1 survey(s). 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. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on interpolation between data reported by national government. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2011: Estimate based on interpolation between data reported by national government. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on interpolation between data reported by national government. Estimate of 96 percent changed from previous revision value of 98 percent. GoC=No accepted empirical data
- 2014: Estimate based on reported administrative data. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. Declines in reported coverage are unexplained given increases in the reported number of children vaccinated. Reported coverage levels may carry a risk of overestimation given the use of the number of children vaccinated with BCG as the target population and civil unrest in the country. Programme does not provide an explanation for adjustment of government official coverage from administrative reported data. Estimate challenged by: D-

Libya - Pol3

LBY - Pol3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	95	97	98	98	98	98	98	98	98	98	96	94
Estimate GoC	•	•	•	•	•••	•	•	•	•	•	•	•
Official	NA	97	98	98	98	98	98	NA	NA	98	NA	97
Administrative	NA	97	94	96	97	98	98	NA	NA	97	NA	94
Survey	NA	NA	NA	98	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

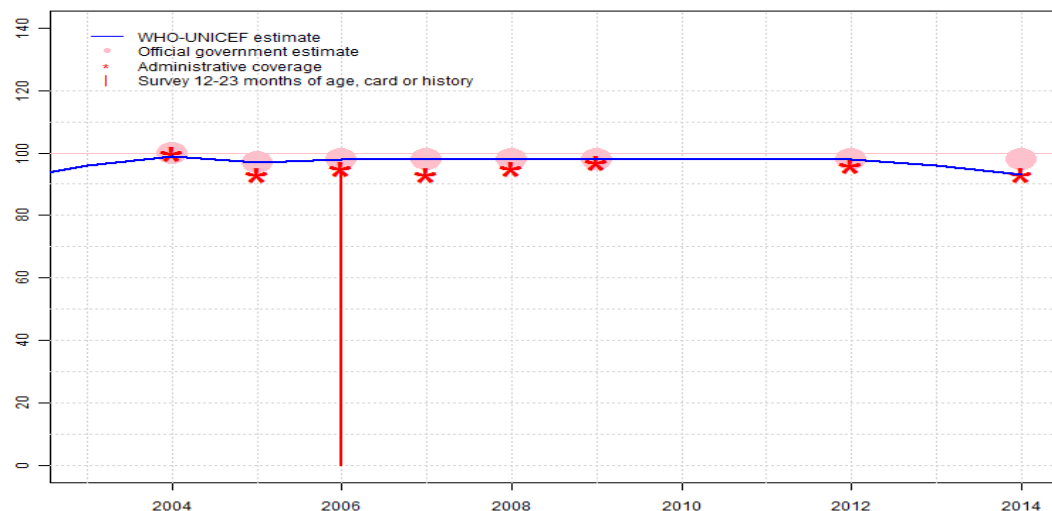
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on interpolation between coverage reported by national government. GoC=No accepted empirical data
- 2004: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2005: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2006: Estimate based on coverage reported by national government supported by survey. Survey evidence of 98 percent based on 1 survey(s). 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. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on interpolation between data reported by national government. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2011: Estimate based on interpolation between data reported by national government. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on interpolation between data reported by national government. Estimate of 96 percent changed from previous revision value of 98 percent. GoC=No accepted empirical data
- 2014: Estimate based on reported administrative data. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. Declines in reported coverage are unexplained given increases in the reported number of children vaccinated. Reported coverage levels may carry a risk of overestimation given the use of the number of children vaccinated with BCG as the target population and civil unrest in the country. Programme does not provide an explanation for adjustment of government official coverage from administrative reported data. Estimate challenged by: D-

Libya - MCV1

LBY - MCV1



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	96	99	97	98	98	98	98	98	98	98	96	93
Estimate GoC	•	•	•	•••	•••	•	•	•	•	•	•	•
Official	NA	100	97	98	98	98	98	NA	NA	98	NA	98
Administrative	NA	100	93	95	93	95	97	NA	NA	96	NA	93
Survey	NA	NA	NA	94	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

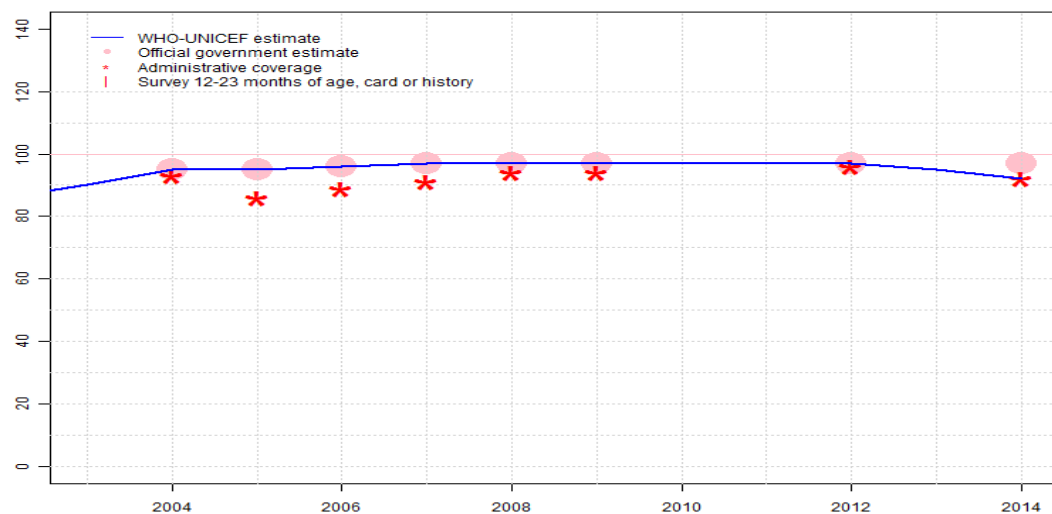
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on interpolation between coverage reported by national government. GoC=No accepted empirical data
- 2004: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2005: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2006: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). GoC=R+ S+ D+
- 2007: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on interpolation between data reported by national government. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2011: Estimate based on interpolation between data reported by national government. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on interpolation between data reported by national government. Estimate of 96 percent changed from previous revision value of 98 percent. GoC=No accepted empirical data
- 2014: Estimate based on reported administrative data. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. Declines in reported coverage are unexplained given increases in the reported number of children vaccinated. Reported coverage levels may carry a risk of overestimation given the use of the number of children vaccinated with BCG as the target population and civil unrest in the country. Programme does not provide an explanation for adjustment of government official coverage from administrative reported data. Estimate challenged by: D-

Libya - MCV2

LBY - MCV2



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	90	95	95	96	97	97	97	97	97	97	95	92
Estimate GoC	•	•	••	••	••	•	•	•	•	•	•	•
Official	NA	95	95	96	97	97	97	NA	NA	97	NA	97
Administrative	NA	93	86	89	91	94	94	NA	NA	96	NA	92
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

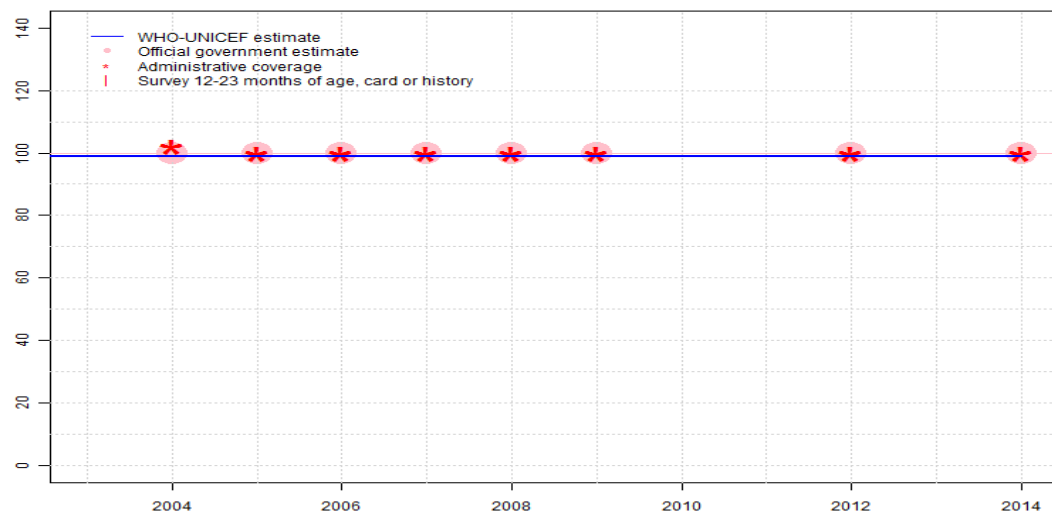
Description:

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

- 2003: Estimate based on interpolation between reported values. GoC=No accepted empirical data
- 2004: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 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 coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on interpolation between reported values. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2011: Estimate based on interpolation between reported values. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on interpolation between reported values. Estimate of 95 percent changed from previous revision value of 97 percent. GoC=No accepted empirical data
- 2014: Estimate based on reported administrative estimate. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. Declines in reported coverage are unexplained given increases in the reported number of children vaccinated. Reported coverage levels may carry a risk of overestimation given the use of the number of children vaccinated with BCG as the target population and civil unrest in the country. Programme does not provide an explanation for adjustment of government official coverage from administrative reported data. Estimate challenged by: D-

Libya - HepBB

LBY - HepBB



	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	100	100	100	100	100	100	NA	NA	100	NA	100
Administrative	NA	102	100	100	100	100	100	NA	NA	100	NA	100
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

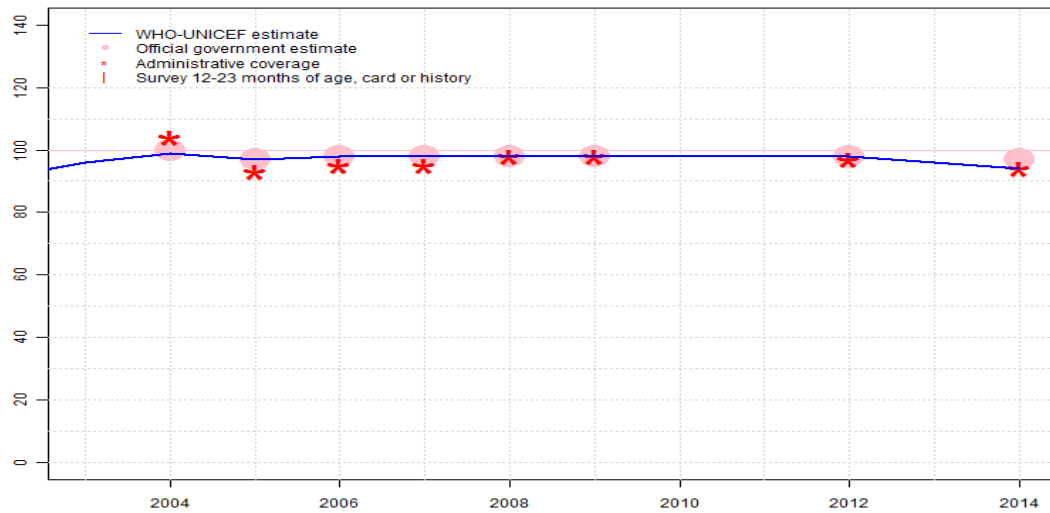
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on interpolation between reported values. GoC=No accepted empirical data
- 2004: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2005: Estimate based on coverage reported by national government. 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. Estimate challenged by: D-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on interpolation between reported values. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2011: Estimate based on interpolation between reported values. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on interpolation between reported values. GoC=No accepted empirical data
- 2014: Estimate based on reported administrative estimate. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. Programme does not provide an explanation for adjustment of government official coverage from administrative reported data. GoC=Assigned by working group. Consistent with other vaccines.

Libya - HepB3

LBY - HepB3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	96	99	97	98	98	98	98	98	98	98	96	94
Estimate GoC	•	•	•	••	•	•	•	•	•	•	•	•
Official	NA	100	97	98	98	98	98	NA	NA	98	NA	97
Administrative	NA	104	93	95	95	98	98	NA	NA	97	NA	94
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

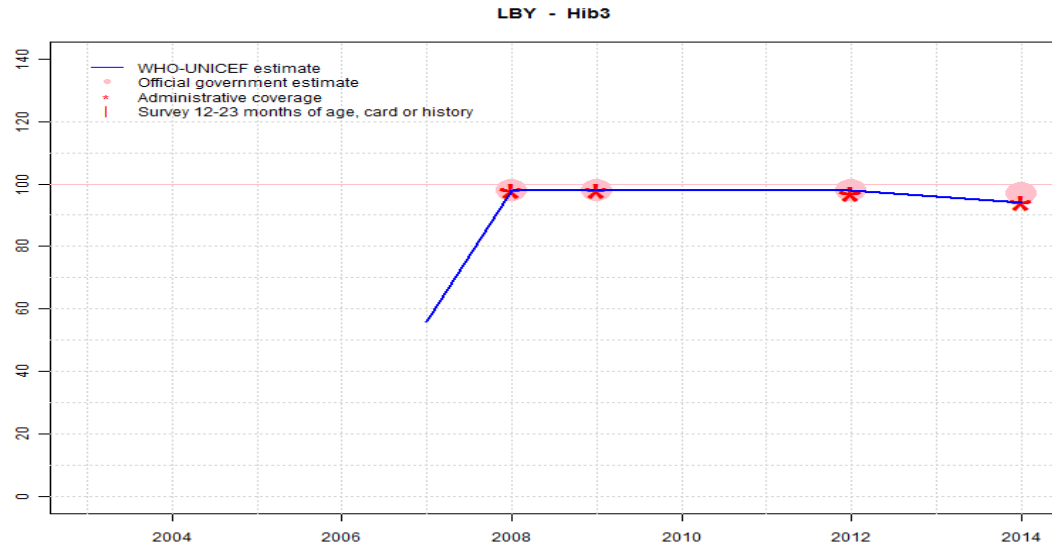
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Description:

- 2003: Estimate based on interpolation between data reported by national government. GoC=No accepted empirical data
- 2004: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2005: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2006: Estimate based on coverage reported by national government. GoC=R+ D+
- 2007: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on interpolation between data reported by national government. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2011: Estimate based on interpolation between data reported by national government. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on interpolation between data reported by national government. Estimate of 96 percent changed from previous revision value of 98 percent. GoC=No accepted empirical data
- 2014: Estimate based on reported administrative data. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. Declines in reported coverage are unexplained given increases in the reported number of children vaccinated. Reported coverage levels may carry a risk of overestimation given the use of the number of children vaccinated with BCG as the target population and civil unrest in the country. Programme does not provide an explanation for adjustment of government official coverage from administrative reported data. Estimate challenged by: D-

Libya - Hib3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	NA	NA	NA	NA	56	98	98	98	98	98	96	94
Estimate GoC	NA	NA	NA	NA	••	•	•	•	•	•	•	•
Official	NA	NA	NA	NA	NA	98	98	NA	NA	98	NA	97
Administrative	NA	NA	NA	NA	NA	98	98	NA	NA	97	NA	94
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

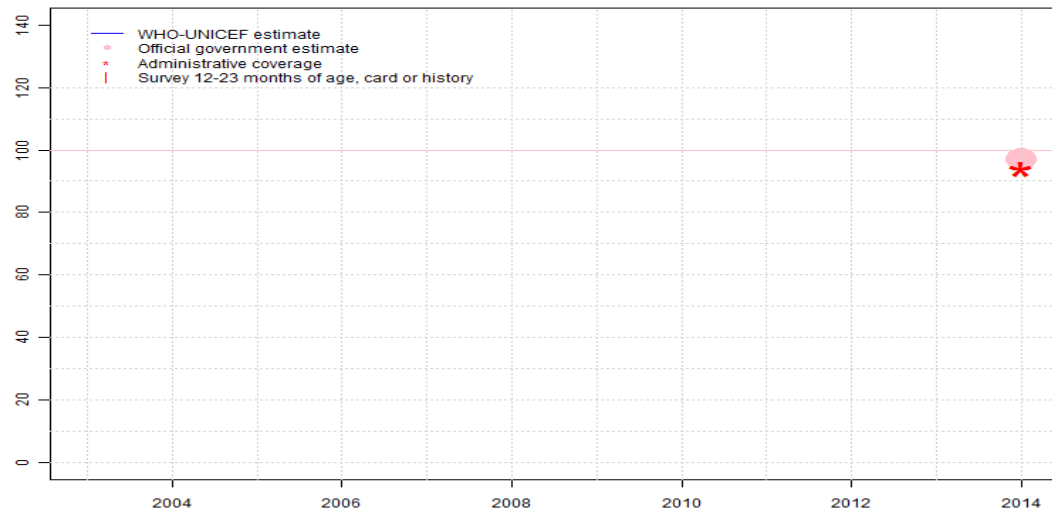
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2007: Hib vaccine introduced in 2007. 94 percent coverage was achieved in 60 percent of the country. Hib vaccine introduced in 2007 Vaccine presentation is DTP-HepB-Hib. GoC=D+
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on interpolation between reported values. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2011: Estimate based on interpolation between reported values. No empirical data available. Estimate is based on interpolation and actual coverage levels were likely lower during the time of civil strife. GoC=No accepted empirical data
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on interpolation between reported values. Estimate of 96 percent changed from previous revision value of 98 percent. GoC=No accepted empirical data
- 2014: Estimate based on reported administrative estimate. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. Declines in reported coverage are unexplained given increases in the reported number of children vaccinated. Reported coverage levels may carry a risk of overestimation given the use of the number of children vaccinated with BCG as the target population and civil unrest in the country. Programme does not provide an explanation for adjustment of government official coverage from administrative reported data. Estimate challenged by: D-

Libya - RotaC

LBY - RotaC



Description:

2014: Rotavirus vaccine introduced during 2013 and reporting started in 2014. Programme reports 97 percent coverage in 92 percent of the target population. Estimate is based on annualized coverage achieved in the national birth cohort. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. Programme does not provide an explanation for adjustment of government official coverage from administrative reported data. Estimate challenged by: D-R-

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	86
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	97
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	94
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

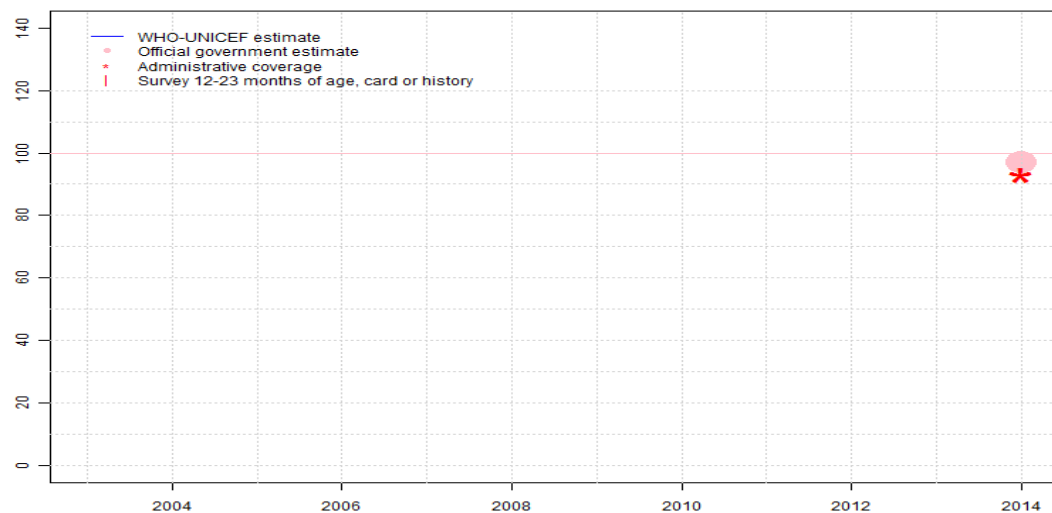
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Libya - PcV3

LBY - PcV3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
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	97
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

Description:

2014: Pneumococcal conjugate vaccine introduced during 2013 and reporting started in 2014. Programme reports 97 percent coverage in 42 percent of the target population. Estimate is based on coverage achieved in the national target population. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. Programme does not provide an explanation for adjustment of government official coverage from administrative reported data. Estimate challenged by: D-R-

Libya - survey details

2006 Libyan Arab Republic 2007 Family Health Survey

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	100	12-23 m	11920	81
DTP1	Card or History	100	12-23 m	11920	81

DTP3	Card or History	98	12-23 m	11920	81
MCV1	Card or History	94	12-23 m	11920	81
Pol1	Card or History	100	12-23 m	11920	81
Pol3	Card or History	98	12-23 m	11920	81

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