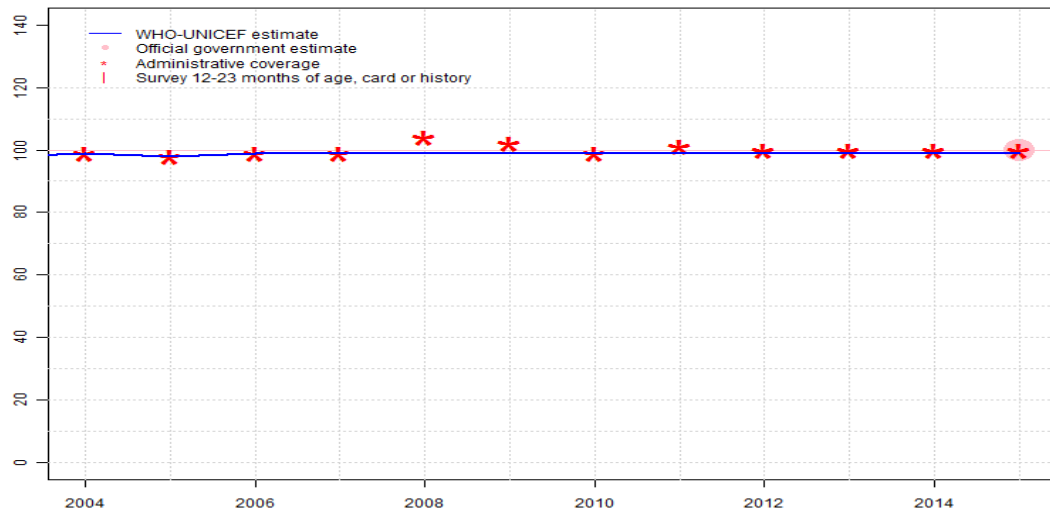


Oman - BCG

OMN - BCG



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	99	98	99	99	99	99	99	99	99	99	99	99
Estimate GoC	••	••	••	••	••	••	••	••	••	••	••	••
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100
Administrative	99	98	99	99	104	102	99	101	100	100	100	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: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

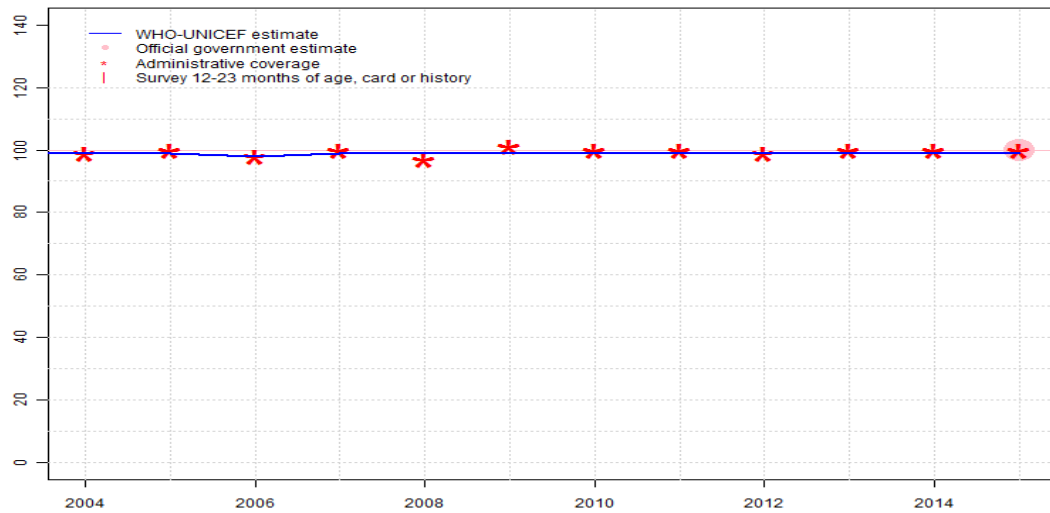
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Estimate based on reported administrative data. GoC=R+ D+
- 2005: Estimate based on reported administrative data. GoC=R+ D+
- 2006: Estimate based on reported administrative data. GoC=R+ D+
- 2007: Estimate based on reported administrative data. GoC=R+ D+
- 2008: Estimate based on interpolation between data reported by national government. Reported data excluded. 104 percent greater than 100 percent. GoC=D+
- 2009: Estimate based on interpolation between data reported by national government. Reported data excluded. 102 percent greater than 100 percent. GoC=D+
- 2010: Estimate based on reported administrative data. GoC=R+ D+
- 2011: Estimate based on interpolation between data reported by national government. Reported data excluded. 101 percent greater than 100 percent. GoC=D+
- 2012: Estimate based on reported administrative data. GoC=R+ D+
- 2013: Estimate based on reported administrative data. GoC=R+ D+
- 2014: Estimate based on reported administrative data. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+

Oman - DTP1

OMN - DTP1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	99	99	98	99	99	99	99	99	99	99	99	99
Estimate GoC	••	••	••	••	•	••	••	••	••	••	••	••
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100
Administrative	99	100	98	100	97	101	100	100	99	100	100	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: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

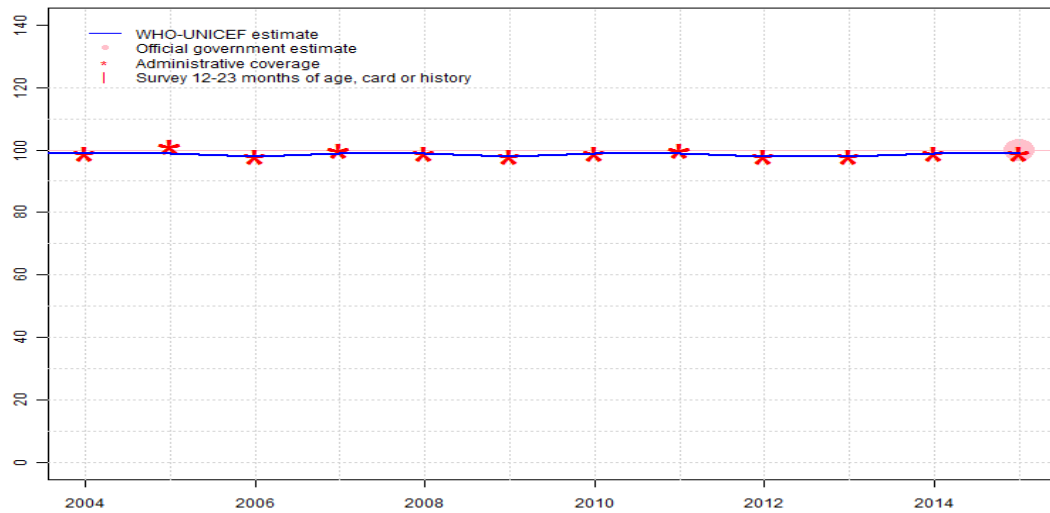
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Estimate based on reported administrative data. GoC=R+ D+
- 2005: Estimate based on reported administrative data. GoC=R+ D+
- 2006: Estimate based on reported administrative data. GoC=R+ D+
- 2007: Estimate based on reported administrative data. GoC=R+ D+
- 2008: DTP1 coverage estimated based on DTP3 coverage of 99. Estimate challenged by: R-
- 2009: Estimate based on interpolation between data reported by national government. Reported data excluded. 101 percent greater than 100 percent. GoC=D+
- 2010: Estimate based on reported administrative data. GoC=R+ D+
- 2011: Estimate based on reported administrative data. GoC=R+ D+
- 2012: Estimate based on reported administrative data. GoC=R+ D+
- 2013: Estimate based on reported administrative data. GoC=R+ D+
- 2014: Estimate based on reported administrative data. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+

Oman - DTP3

OMN - DTP3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	99	99	98	99	99	98	99	99	98	98	99	99
Estimate GoC	••	••	••	••	•	••	••	••	••	••	••	••
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100
Administrative	99	101	98	100	99	98	99	100	98	98	99	99
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.

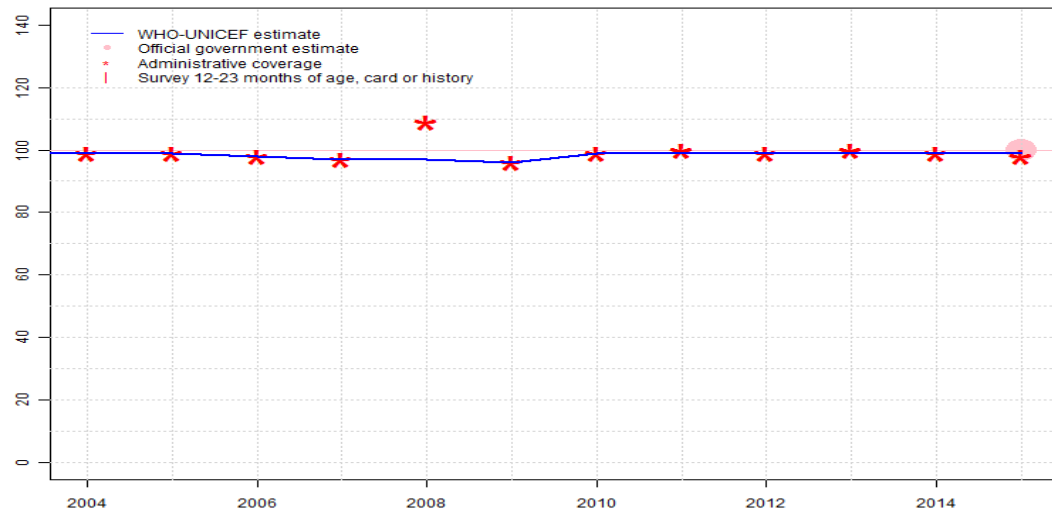
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2004: Estimate based on reported administrative data. GoC=R+ D+
- 2005: Estimate based on interpolation between data reported by national government. Reported data excluded. 101 percent greater than 100 percent. GoC=D+
- 2006: Estimate based on reported administrative data. GoC=R+ D+
- 2007: Estimate based on reported administrative data. GoC=R+ D+
- 2008: Estimate based on reported administrative data. Estimate challenged by: D-
- 2009: Estimate based on reported administrative data. GoC=R+ D+
- 2010: Estimate based on reported administrative data. GoC=R+ D+
- 2011: Estimate based on reported administrative data. GoC=R+ D+
- 2012: Estimate based on reported administrative data. GoC=R+ D+
- 2013: Estimate based on reported administrative data. GoC=R+ D+
- 2014: Estimate based on reported administrative data. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+

OMN - Pol3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	99	99	98	97	97	96	99	99	99	99	99	99
Estimate GoC	••	••	••	••	••	••	••	••	••	••	••	••
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100
Administrative	99	99	98	97	109	96	99	100	99	100	99	98
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.

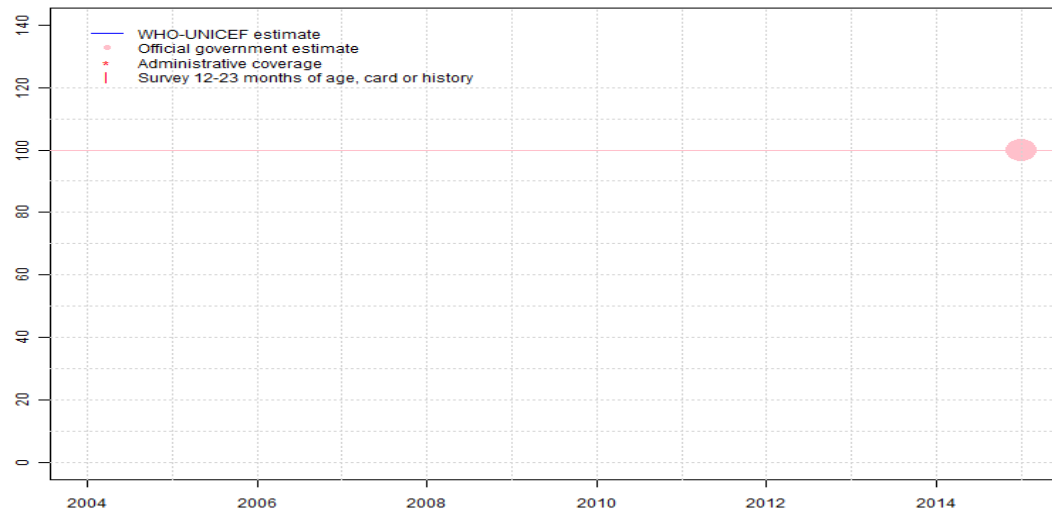
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Estimate based on reported administrative data. GoC=R+ D+
- 2005: Estimate based on reported administrative data. GoC=R+ D+
- 2006: Estimate based on reported administrative data. GoC=R+ D+
- 2007: Estimate based on reported administrative data. GoC=R+ D+
- 2008: Estimate based on interpolation between data reported by national government. Reported data excluded. 109 percent greater than 100 percent. Reported data excluded. Unexplained increase from 97 percent to 109 percent with decrease 96 percent. Increase in reported coverage is due to a change in recommended ages for polio vaccination. GoC=D+
- 2009: Estimate based on reported administrative data. GoC=R+ D+
- 2010: Estimate based on reported administrative data. GoC=R+ D+
- 2011: Estimate based on reported administrative data. GoC=R+ D+
- 2012: Estimate based on reported administrative data. GoC=R+ D+
- 2013: Estimate based on reported administrative data. GoC=R+ D+
- 2014: Estimate based on reported administrative data. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+

Oman - IPV1

OMN - IPV1



Description:

2015: Estimate based on coverage reported by national government. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. IPV introduced in 2010. GoC=R+

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99
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	100
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

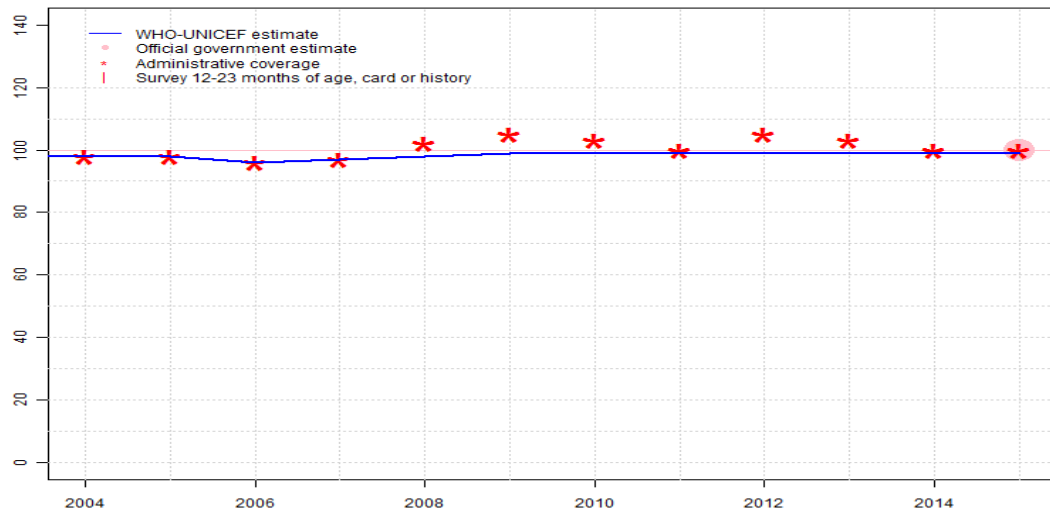
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Oman - MCV1

OMN - MCV1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	98	98	96	97	98	99	99	99	99	99	99	99
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100
Administrative	98	98	96	97	102	105	103	100	105	103	100	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: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

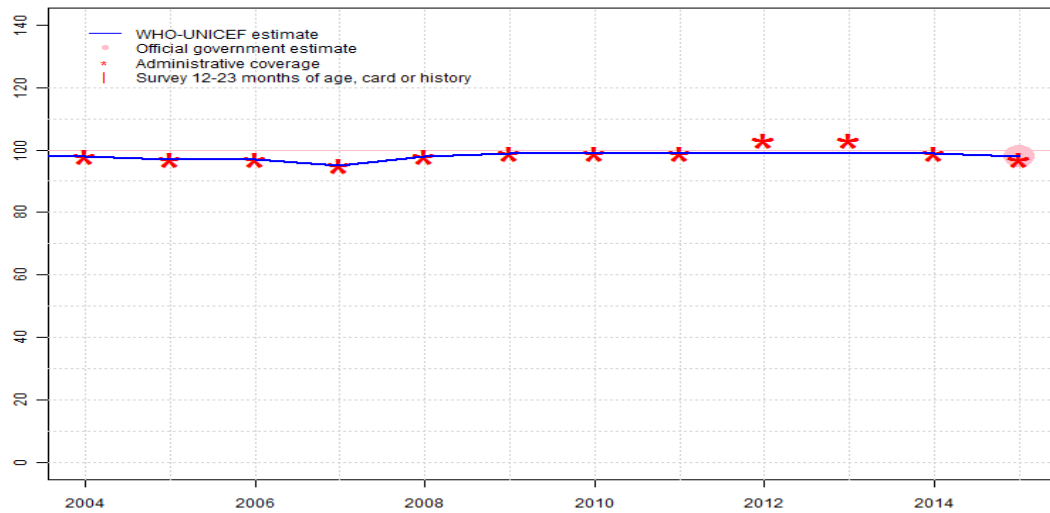
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Estimate based on reported administrative data. GoC=R+ D+
- 2005: Estimate based on reported administrative data. GoC=R+ D+
- 2006: Estimate based on reported administrative data. GoC=R+ D+
- 2007: Estimate based on reported administrative data. GoC=R+ D+
- 2008: Estimate based on interpolation between data reported by national government. Reported data excluded. 102 percent greater than 100 percent. GoC=D+
- 2009: Estimate based on interpolation between data reported by national government. Reported data excluded. 105 percent greater than 100 percent. GoC=D+
- 2010: Estimate based on interpolation between data reported by national government. Reported data excluded. 103 percent greater than 100 percent. GoC=D+
- 2011: Estimate based on reported administrative data. GoC=R+ D+
- 2012: Estimate based on interpolation between data reported by national government. Reported data excluded. 105 percent greater than 100 percent. GoC=D+
- 2013: Estimate based on interpolation between data reported by national government. Reported data excluded. 103 percent greater than 100 percent. GoC=D+
- 2014: Estimate based on reported administrative data. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+

Oman - MCV2

OMN - MCV2



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	98	97	97	95	98	99	99	99	99	99	99	98
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	98
Administrative	98	97	97	95	98	99	99	99	103	103	99	97
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.

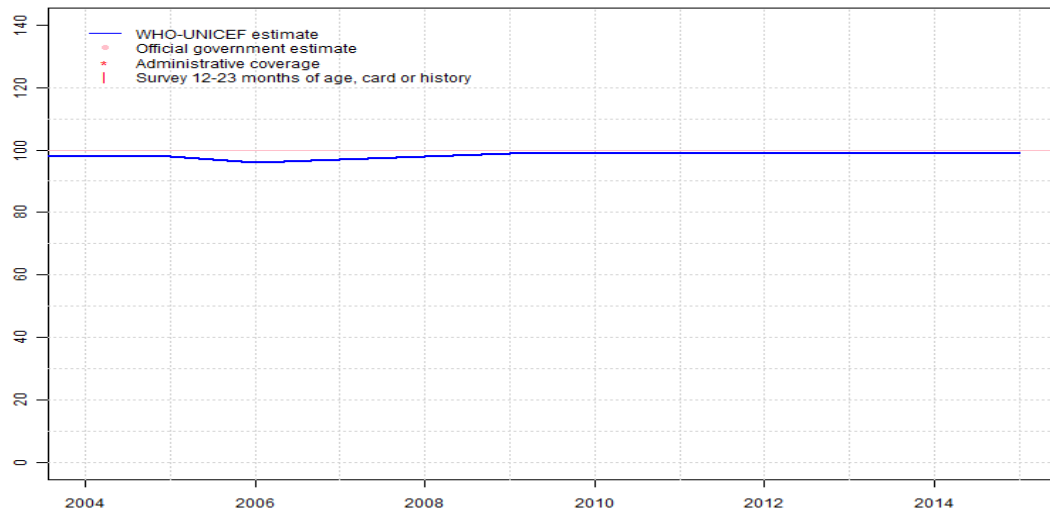
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

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

- 2004: Estimate based on reported administrative estimate. GoC=R+ D+
- 2005: Estimate based on reported administrative estimate. GoC=R+ D+
- 2006: Estimate based on reported administrative estimate. GoC=R+ D+
- 2007: Estimate based on reported administrative estimate. GoC=R+ D+
- 2008: Estimate based on reported administrative estimate. GoC=R+ D+
- 2009: Estimate based on reported administrative estimate. GoC=R+ D+
- 2010: Estimate based on reported administrative estimate. GoC=R+ D+
- 2011: Estimate based on reported administrative estimate. GoC=R+ D+
- 2012: Estimate based on interpolation between reported values. Reported data excluded. 103 percent greater than 100 percent. GoC=D+
- 2013: Estimate based on interpolation between reported values. Reported data excluded. 103 percent greater than 100 percent. GoC=D+
- 2014: Estimate based on reported administrative estimate. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+

OMN - RCV1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	98	98	96	97	98	99	99	99	99	99	99	99
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
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.

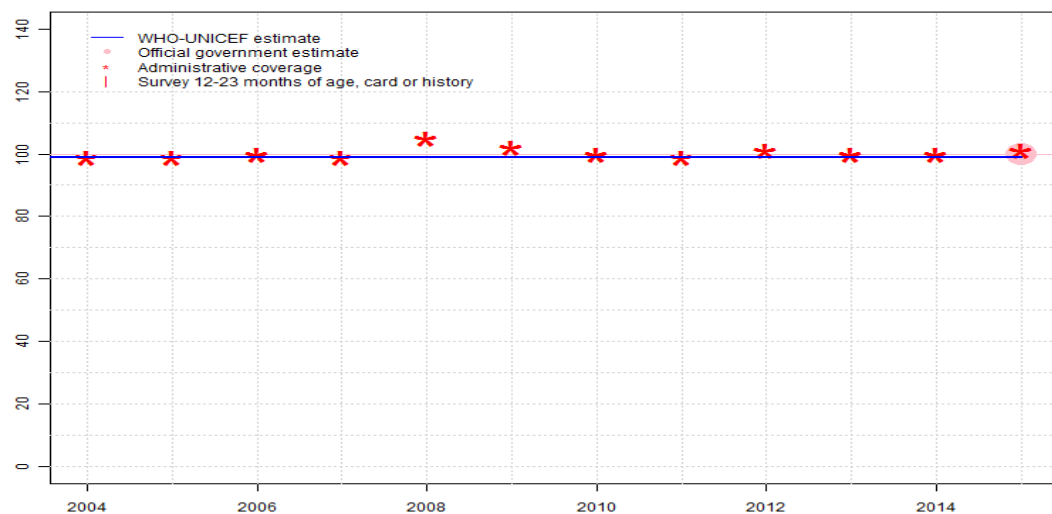
Description:

For this revision, coverage estimates for the first dose of rubella containing vaccine are based on WHO and UNICEF estimates of coverage of measles containing vaccine. Nationally reported coverage of rubella containing vaccine is not taken into consideration nor are they represented in the accompanying graph and data table.

- 2004: Estimate based on estimated MCV1. GoC=R+ D+
- 2005: Estimate based on estimated MCV1. GoC=R+ D+
- 2006: Estimate based on estimated MCV1. GoC=R+ D+
- 2007: Estimate based on estimated MCV1. GoC=R+ D+
- 2008: Estimate based on estimated MCV1. GoC=D+
- 2009: Estimate based on estimated MCV1. GoC=D+
- 2010: Estimate based on estimated MCV1. GoC=D+
- 2011: Estimate based on estimated MCV1. GoC=R+ D+
- 2012: Estimate based on estimated MCV1. GoC=D+
- 2013: Estimate based on estimated MCV1. GoC=D+
- 2014: Estimate based on estimated MCV1. GoC=R+ D+
- 2015: Estimate based on estimated MCV1. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+

Oman - HepBB

OMN - HepBB



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	99	99	99	99	99	99	99	99	99	99	99	99
Estimate GoC	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100
Administrative	99	99	100	99	105	102	100	99	101	100	100	101
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.

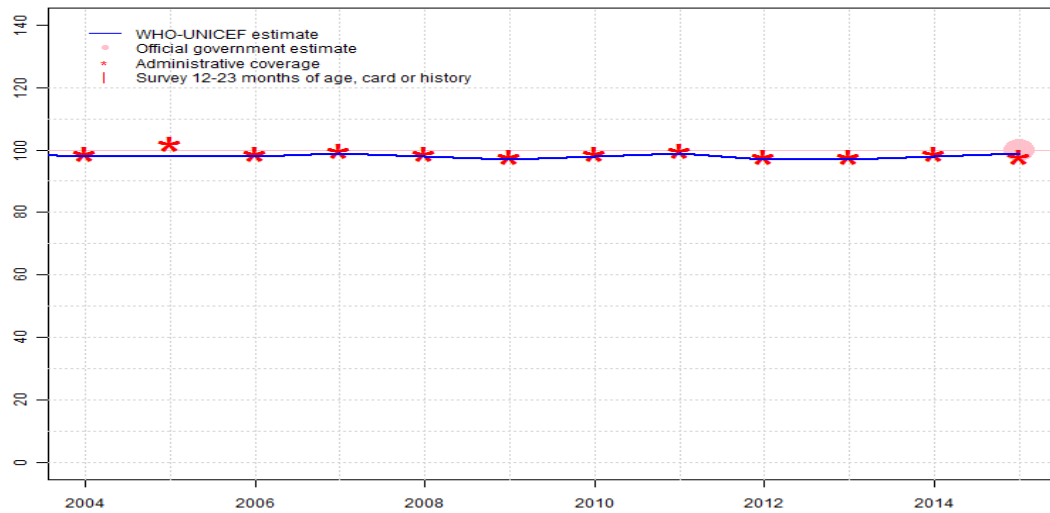
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Estimate based on reported administrative estimate. GoC=R+ D+
- 2005: Estimate based on reported administrative estimate. GoC=R+ D+
- 2006: Estimate based on reported administrative estimate. GoC=R+ D+
- 2007: Estimate based on reported administrative estimate. GoC=R+ D+
- 2008: Estimate based on interpolation between reported values. Reported data excluded. 105 percent greater than 100 percent. GoC=D+
- 2009: Estimate based on interpolation between reported values. Reported data excluded. 102 percent greater than 100 percent. GoC=D+
- 2010: Estimate based on reported administrative estimate. GoC=R+ D+
- 2011: Estimate based on reported administrative estimate. GoC=R+ D+
- 2012: Estimate based on interpolation between reported values. Reported data excluded. 101 percent greater than 100 percent. GoC=D+
- 2013: Estimate based on reported administrative estimate. GoC=R+ D+
- 2014: Estimate based on reported administrative estimate. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+

Oman - HepB3

OMN - HepB3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	98	98	98	99	98	97	98	99	97	97	98	99
Estimate GoC	●●	●●	●●	●●	●	●●	●●	●●	●●	●●	●●	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100
Administrative	99	102	99	100	99	98	99	100	98	98	99	98
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.

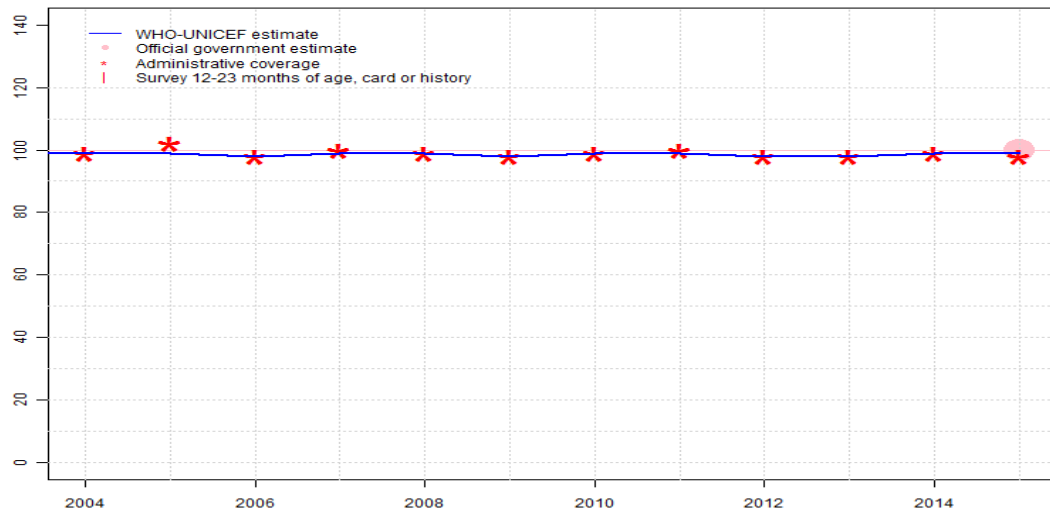
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2004: Reported data calibrated to 1997 levels. GoC=D+
- 2005: Reported data calibrated to 1997 levels. Reported data excluded. 102 percent greater than 100 percent. GoC=D+
- 2006: Reported data calibrated to 1997 levels. GoC=D+
- 2007: Reported data calibrated to 1997 levels. GoC=D+
- 2008: Reported data calibrated to 1997 levels. Estimate challenged by: D-
- 2009: Reported data calibrated to 1997 levels. GoC=D+
- 2010: Reported data calibrated to 1997 levels. GoC=D+
- 2011: Reported data calibrated to 1997 levels. GoC=D+
- 2012: Reported data calibrated to 1997 levels. GoC=D+
- 2013: Reported data calibrated to 1997 levels. GoC=D+
- 2014: Reported data calibrated to 1997 levels. GoC=D+
- 2015: Reported data calibrated to 1997 levels. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=D+

OMN - Hib3



Description:

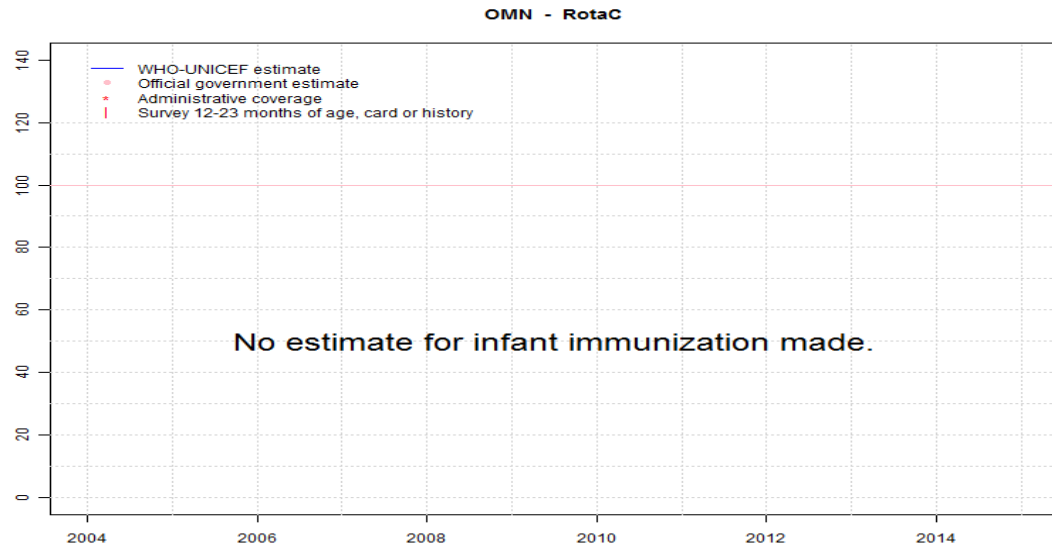
- 2004: Estimate based on reported administrative estimate. GoC=R+ D+
- 2005: Estimate based on interpolation between reported values. Reported data excluded. 102 percent greater than 100 percent. GoC=D+
- 2006: Estimate based on reported administrative estimate. GoC=R+ D+
- 2007: Estimate based on reported administrative estimate. GoC=R+ D+
- 2008: Estimate based on reported administrative estimate. Estimate challenged by: D-
- 2009: Estimate based on reported administrative estimate. GoC=R+ D+
- 2010: Estimate based on reported administrative estimate. GoC=R+ D+
- 2011: Estimate based on reported administrative estimate. GoC=R+ D+
- 2012: Estimate based on reported administrative estimate. GoC=R+ D+
- 2013: Estimate based on reported administrative estimate. GoC=R+ D+
- 2014: Estimate based on reported administrative estimate. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	99	99	98	99	99	98	99	99	98	98	99	99
Estimate GoC	●●	●●	●●	●●	●	●●	●●	●●	●●	●●	●●	●●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100
Administrative	99	102	98	100	99	98	99	100	98	98	99	98
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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



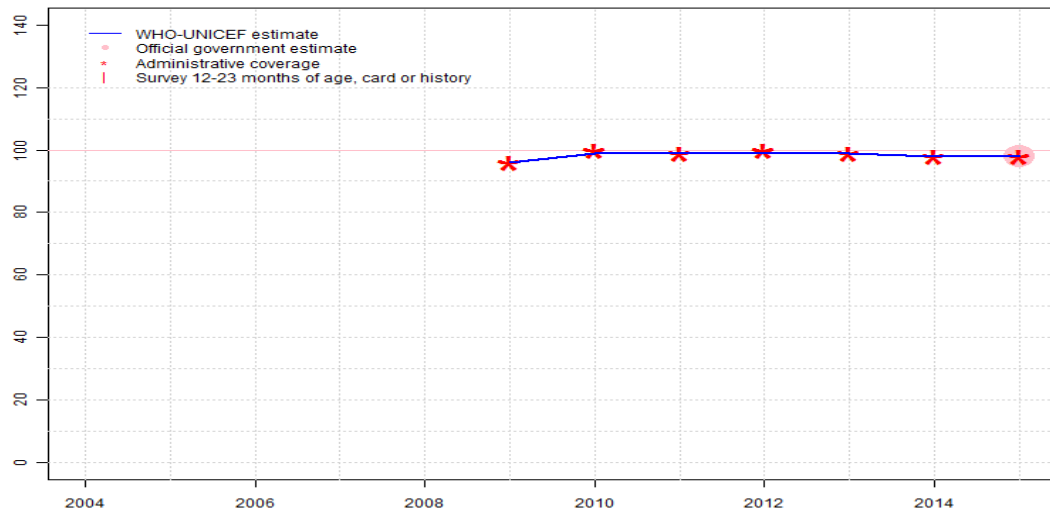
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.
- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
- There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.

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

OMN - PcV3



Description:

- 2009: Estimate based on reported administrative estimate. Pneumococcal conjugate vaccine introduced in 2008, reporting started in 2009. GoC=R+ D+
- 2010: Estimate based on reported administrative estimate. GoC=R+ D+
- 2011: Estimate based on reported administrative estimate. GoC=R+
- 2012: Estimate based on reported administrative estimate. GoC=R+ D+
- 2013: Estimate based on reported administrative estimate. GoC=R+ D+
- 2014: Estimate based on reported administrative estimate. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. No nationally representative household survey within the last 5 years. WHO and UNICEF recommend a high-quality survey to confirm reported levels of coverage. GoC=R+ D+

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	96	99	99	99	99	98	98
Estimate GoC	NA	NA	NA	NA	NA	••	••	••	••	••	••	••
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	98
Administrative	NA	NA	NA	NA	NA	96	100	99	100	99	98	98
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.

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

Oman

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	94
2005	94
2006	94
2007	95
2008	91
2009	91
2010	91
2011	91
2012	91
2013	91
2014	98
2015	98

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.