

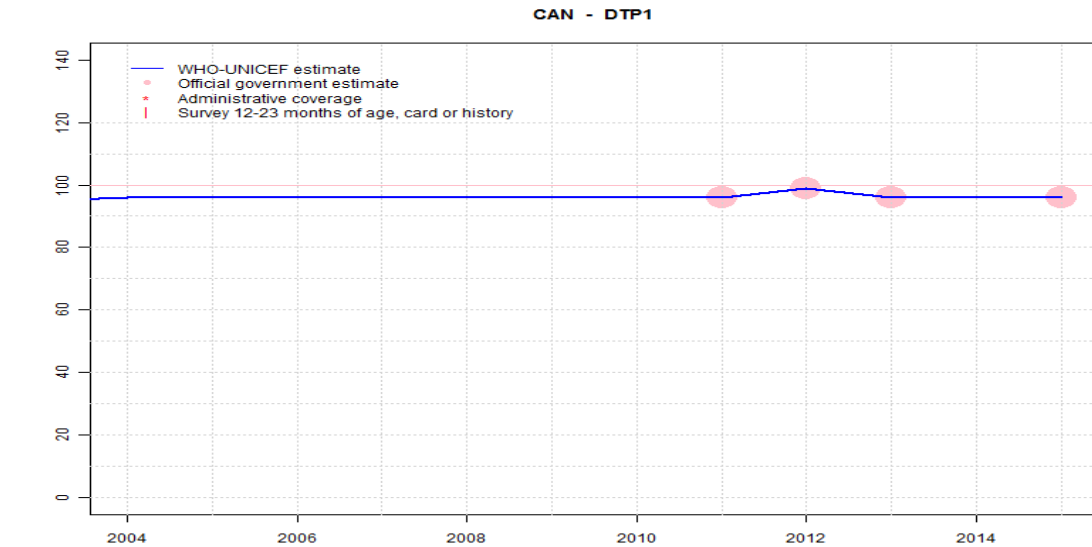
| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA | 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.

Canada - DTP1



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

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- Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.
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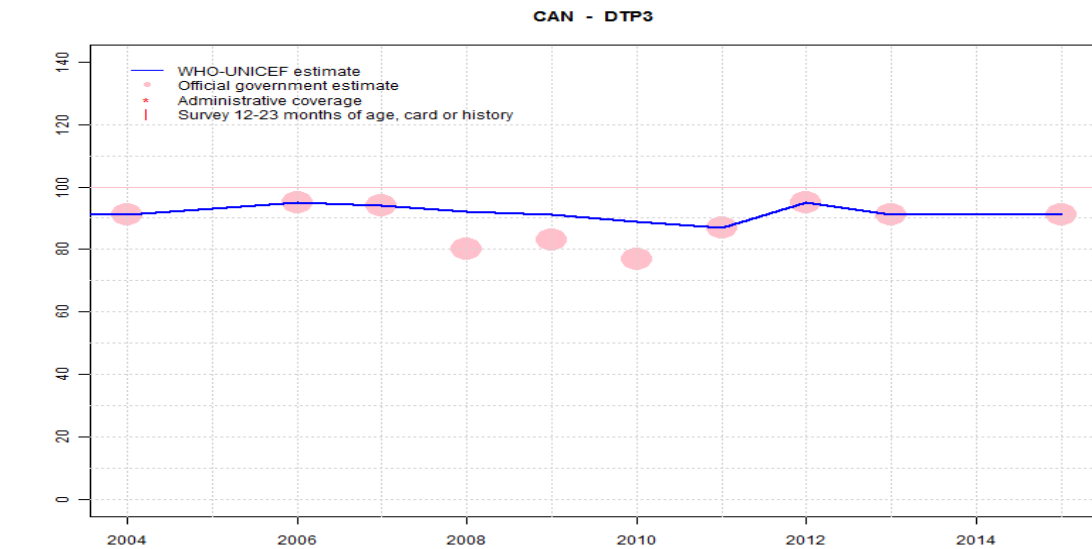
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Reported data calibrated to 1997 and 2011 levels. The first dose of DTP containing vaccine was not monitored. Estimate of 96 percent changed from previous revision value of 95 percent. GoC=No accepted empirical data
- 2005: Reported data calibrated to 1997 and 2011 levels. The first dose of DTP containing vaccine was not monitored. Estimate of 96 percent changed from previous revision value of 95 percent. GoC=No accepted empirical data
- 2006: Reported data calibrated to 1997 and 2011 levels. The first dose of DTP containing vaccine was not monitored. Estimate of 96 percent changed from previous revision value of 95 percent. GoC=No accepted empirical data
- 2007: Reported data calibrated to 1997 and 2011 levels. The first dose of DTP containing vaccine was not monitored. Estimate of 96 percent changed from previous revision value of 95 percent. GoC=No accepted empirical data
- 2008: Reported data calibrated to 1997 and 2011 levels. Nationally reported data for 2008 are based on the results of the 2006 Childhood National Immunization Coverage Survey. The first dose of DTP containing vaccine was not monitored. Estimate of 96 percent changed from previous revision value of 95 percent. GoC=No accepted empirical data
- 2009: Reported data calibrated to 1997 and 2011 levels. The first dose of DTP containing vaccine was not monitored. Estimate of 96 percent changed from previous revision value of 95 percent. GoC=No accepted empirical data
- 2010: Reported data calibrated to 1997 and 2011 levels. The first dose of DTP containing vaccine was not monitored. Estimate of 96 percent changed from previous revision value of 98 percent. GoC=No accepted empirical data
- 2011: Reported DTP1 data started in 2011. Estimate is based on reported data. Estimate of 96 percent changed from previous revision value of 98 percent. GoC=R+
- 2012: Estimate based on coverage reported by national government. Estimate of 99 percent changed from previous revision value of 95 percent. GoC=R+
- 2013: Estimate based on coverage reported by national government. Reported coverage are obtained from the validation component of the 2011 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. Estimate of 96 percent changed from previous revision value of 98 percent. GoC=R+

- 2014: Estimate based on interpolation between data reported by national government. See note for 2013 on source of reported coverage. Estimate of 96 percent changed from previous revision value of 98 percent. GoC=No accepted empirical data
- 2015: Estimate based on coverage reported by national government. Reported coverage are obtained from the validation component of the 2013 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. GoC=R+

Canada - DTP3



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 91 | 93 | 95 | 94 | 92 | 91 | 89 | 87 | 95 | 91 | 91 | 91 |
| Estimate GoC | •• | • | •• | •• | • | • | • | •• | •• | •• | • | •• |
| Official | 91 | NA | 95 | 94 | 80 | 83 | 77 | 87 | 95 | 91 | NA | 91 |
| 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.

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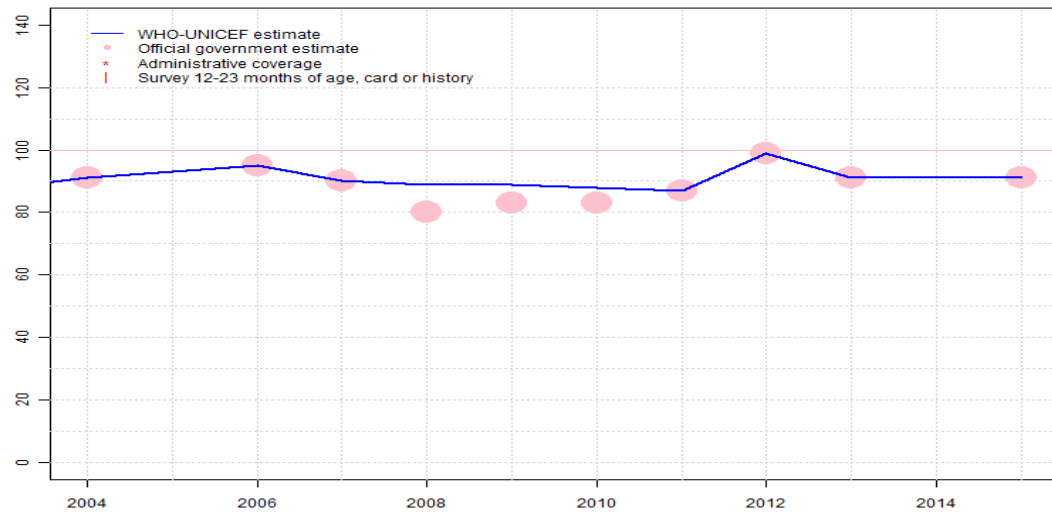
Description:

- 2004: Estimate based on coverage reported by national government. GoC=R+
- 2005: Estimate based on interpolation between data reported by national government. GoC=No accepted empirical data
- 2006: Estimate based on coverage reported by national government. GoC=R+
- 2007: Estimate based on coverage reported by national government. GoC=R+
- 2008: Estimate based on interpolation between data reported by national government. Reported data excluded. Decline in coverage unexplained. Nationally reported data for 2008 are based on the results of the 2006 Childhood National Immunization Coverage Survey. Estimate of 92 percent changed from previous revision value of 95 percent. GoC=No accepted empirical data
- 2009: Estimate based on interpolation between data reported by national government. Reported data excluded. Decline in coverage unexplained. The Government of Canada conducts periodic nationally representative national immunization coverage surveys. In the 2011 Childhood National Immunization Coverage Survey (cNICS) questions were asked of the parents of 395 children who turned 2 years of age within 12 months prior to the survey. Estimate of 91 percent changed from previous revision value of 95 percent. GoC=No accepted empirical data
- 2010: Estimate based on interpolation between data reported by national government. Reported data excluded. Decline in coverage unexplained. Estimate of 89 percent changed from previous revision value of 96 percent. GoC=No accepted empirical data
- 2011: Estimate based on coverage reported by national government. Estimate is based on reported data. Estimate of 87 percent changed from previous revision value of 96 percent. GoC=R+
- 2012: Estimate based on coverage reported by national government. GoC=R+
- 2013: Estimate based on coverage reported by national government. Reported coverage are obtained from the validation component of the 2011 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. Estimate of 91 percent changed from previous revision value of 96 percent. GoC=R+
- 2014: Estimate based on interpolation between data reported by national government. See note for 2013 on source of reported coverage. Reported coverage is based on that for the third dose of polio vaccine administered in combination with DTP. The programme monitors the fourth dose of DTP containing vaccine at 2 years of age. Estimate of 91 percent changed from previous revision value of 96 percent. GoC=No accepted empirical data

Canada - DTP3

2015: Estimate based on coverage reported by national government. Reported coverage are obtained from the validation component of the 2013 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. GoC=R+

CAN - Pol3



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 91 | 93 | 95 | 90 | 89 | 89 | 88 | 87 | 99 | 91 | 91 | 91 |
| Estimate GoC | •• | • | •• | •• | • | • | • | •• | •• | •• | • | •• |
| Official | 91 | NA | 95 | 90 | 80 | 83 | 83 | 87 | 99 | 91 | NA | 91 |
| 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.

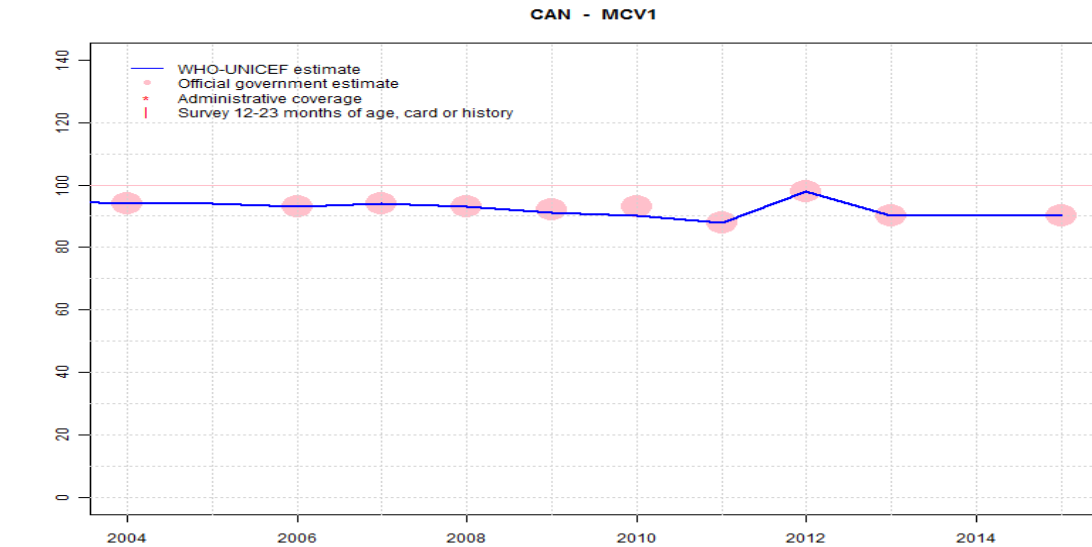
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

Description:

- 2004: Estimate based on coverage reported by national government. Estimate of 91 percent changed from previous revision value of 89 percent. GoC=R+
- 2005: Estimate based on interpolation between data reported by national government. Estimate of 93 percent changed from previous revision value of 92 percent. GoC=No accepted empirical data
- 2006: Estimate based on coverage reported by national government. GoC=R+
- 2007: Estimate based on coverage reported by national government. GoC=R+
- 2008: Estimate based on interpolation between data reported by national government. Reported data excluded. Decline in coverage unexplained. Nationally reported data for 2008 are based on the results of the 2006 Childhood National Immunization Coverage Survey. Estimate of 89 percent changed from previous revision value of 92 percent. GoC=No accepted empirical data
- 2009: Estimate based on interpolation between data reported by national government. Reported data excluded. Decline in coverage unexplained. The Government of Canada conducts periodic nationally representative national immunization coverage surveys. In the 2011 Childhood National Immunization Coverage Survey (cNICS) questions were asked of the parents of 395 children who turned 2 years of age within 12 months prior to the survey. Results suggests coverage of 96 percent for four doses of IPV vaccine by the 2nd birthday. Estimate of 89 percent changed from previous revision value of 93 percent. GoC=No accepted empirical data
- 2010: Estimate based on interpolation between data reported by national government. Reported data excluded. Decline in coverage unexplained. Estimate of 88 percent changed from previous revision value of 95 percent. GoC=No accepted empirical data
- 2011: Estimate based on coverage reported by national government. Estimate is based on reported data. Estimate of 87 percent changed from previous revision value of 96 percent. GoC=R+
- 2012: Estimate based on coverage reported by national government. GoC=R+
- 2013: Estimate based on coverage reported by national government. Reported coverage are obtained from the validation component of the 2011 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. Estimate of 91 percent changed from previous revision value of 96 percent. GoC=R+
- 2014: Estimate based on interpolation between data reported by national government. See note for 2013 on source of reported coverage. Estimate of 91 percent changed from previous revision value of 96 percent. GoC=No accepted empirical data

2015: Estimate based on coverage reported by national government. Reported coverage are obtained from the validation component of the 2013 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. GoC=R+



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 94 | 94 | 93 | 94 | 93 | 91 | 90 | 88 | 98 | 90 | 90 | 90 |
| Estimate GoC | •• | • | •• | •• | •• | • | • | •• | •• | •• | • | •• |
| Official | 94 | NA | 93 | 94 | 93 | 92 | 93 | 88 | 98 | 90 | NA | 90 |
| 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 |

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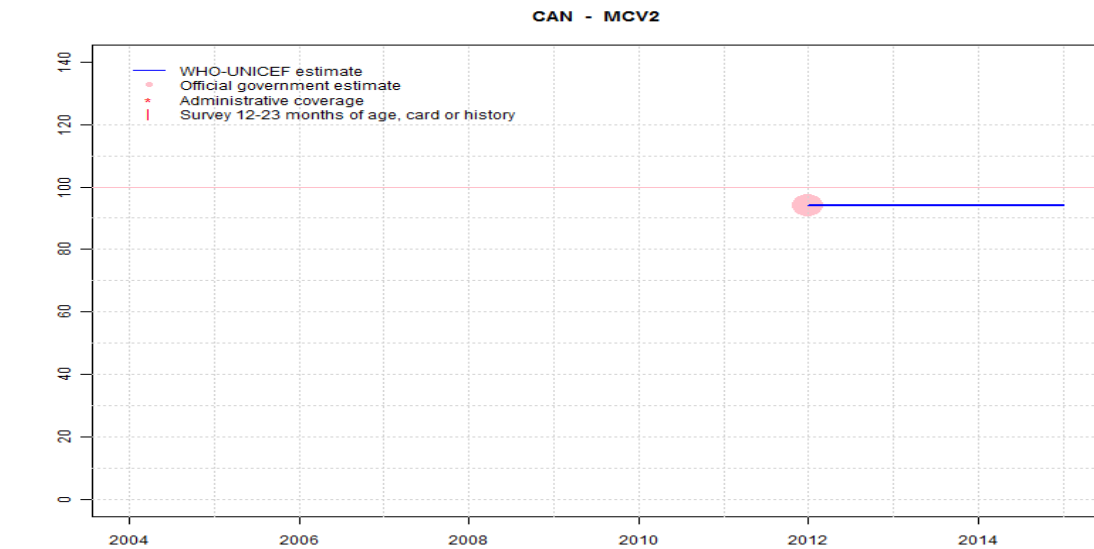
Description:

- 2004: Estimate based on coverage reported by national government. GoC=R+
- 2005: Estimate based on interpolation between data reported by national government. GoC=No accepted empirical data
- 2006: Estimate based on coverage reported by national government. GoC=R+
- 2007: Estimate based on coverage reported by national government. GoC=R+
- 2008: Estimate based on interpolation between data reported by national government. Reported data excluded. Decline in coverage unexplained. Nationally reported data for 2008 are based on the results of the 2006 Childhood National Immunization Coverage Survey. Estimate of 93 percent changed from previous revision value of 94 percent. GoC=R+
- 2009: Estimate based on interpolation between data reported by national government. Reported data excluded. Decline in coverage unexplained. The Government of Canada conducts periodic nationally representative national immunization coverage surveys. In the 2011 Childhood National Immunization Coverage Survey (cNICS) questions were asked of the parents of 395 children who turned 2 years of age within 12 months prior to the survey. Results suggests coverage of 95 percent for MMR vaccine by the 2nd birthday. Estimate of 91 percent changed from previous revision value of 95 percent. GoC=No accepted empirical data
- 2010: Estimate based on interpolation between data reported by national government. Reported data excluded. Decline in coverage unexplained. Estimate of 90 percent changed from previous revision value of 95 percent. GoC=No accepted empirical data
- 2011: Estimate based on coverage reported by national government. Estimate is based on reported data. Estimate of 88 percent changed from previous revision value of 95 percent. GoC=R+
- 2012: Estimate based on coverage reported by national government. GoC=R+
- 2013: Estimate based on coverage reported by national government. Reported coverage are obtained from the validation component of the 2011 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. Estimate of 90 percent changed from previous revision value of 95 percent. GoC=R+
- 2014: Estimate based on interpolation between data reported by national government. See note for 2013 on source of reported coverage. Estimate of 90 percent changed from previous revision value of 95 percent. GoC=No accepted empirical data
- 2015: Estimate based on coverage reported by national government. Reported coverage are obtained from the validation component of the 2013 Childhood National Immunization Coverage Survey for children 24 months or less.

Canada - MCV1

Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. GoC=R+

Canada - MCV2



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | 94 | 94 | 94 | 94 |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | •• | • | • | • |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | 94 | 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 |

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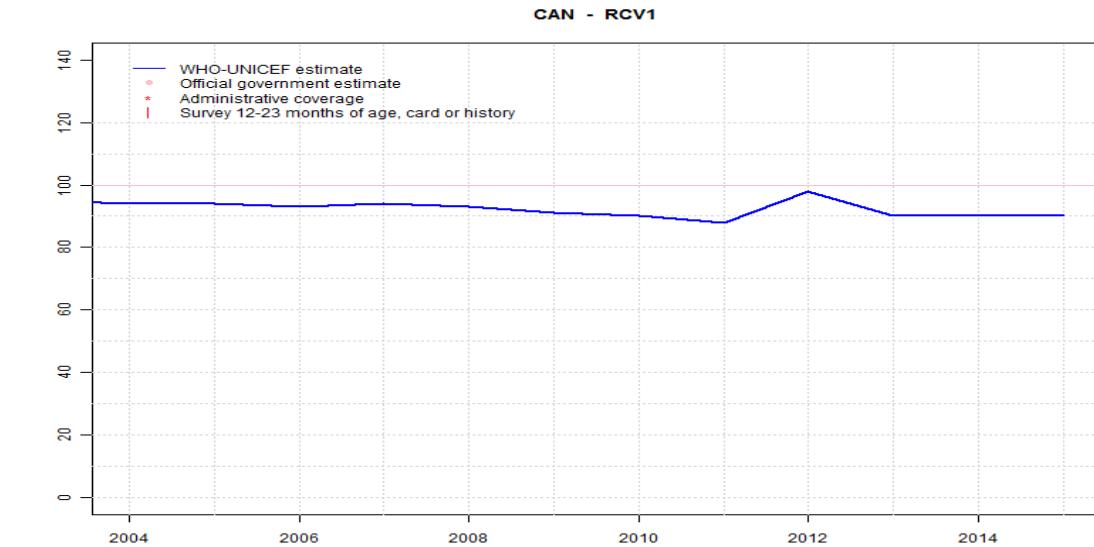
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Description:

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

- 2012: Estimate based on coverage reported by national government. MCV second dose introduced in 1997. Reporting started in 2012. GoC=R+
- 2013: Estimate based on extrapolation from data reported by national government. Reported coverage are obtained from the validation component of the 2011 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. GoC=No accepted empirical data
- 2014: Estimate based on extrapolation from data reported by national government. See note for 2013 on source of reported coverage. GoC=No accepted empirical data
- 2015: Estimate based on extrapolation from data reported by national government. Reported coverage are obtained from the validation component of the 2013 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. GoC=No accepted empirical data

Canada - RCV1



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 94 | 94 | 93 | 94 | 93 | 91 | 90 | 88 | 98 | 90 | 90 | 90 |
| 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 |

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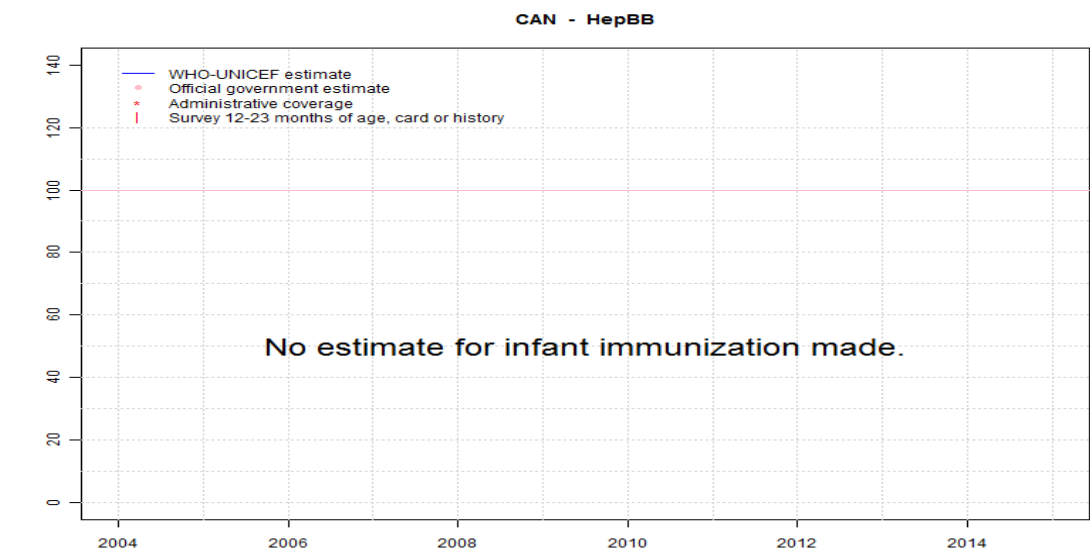
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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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+
- 2005: Estimate based on estimated MCV1. GoC=No accepted empirical data
- 2006: Estimate based on estimated MCV1. GoC=R+
- 2007: Estimate based on estimated MCV1. GoC=R+
- 2008: Estimate based on estimated MCV1. Nationally reported data for 2008 are based on the results of the 2006 Childhood National Immunization Coverage Survey. GoC=R+
- 2009: Estimate based on estimated MCV1. GoC=No accepted empirical data
- 2010: Estimate based on estimated MCV1. GoC=No accepted empirical data
- 2011: Estimate based on estimated MCV1. Estimate is based on reported data. GoC=R+
- 2012: Estimate based on estimated MCV1. GoC=R+
- 2013: Estimate based on estimated MCV1. Reported coverage are obtained from the validation component of the 2011 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. GoC=R+
- 2014: Estimate based on estimated MCV1. See note for 2013 on source of reported coverage. GoC=No accepted empirical data
- 2015: Estimate based on estimated MCV1. Reported coverage are obtained from the validation component of the 2013 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. GoC=R+



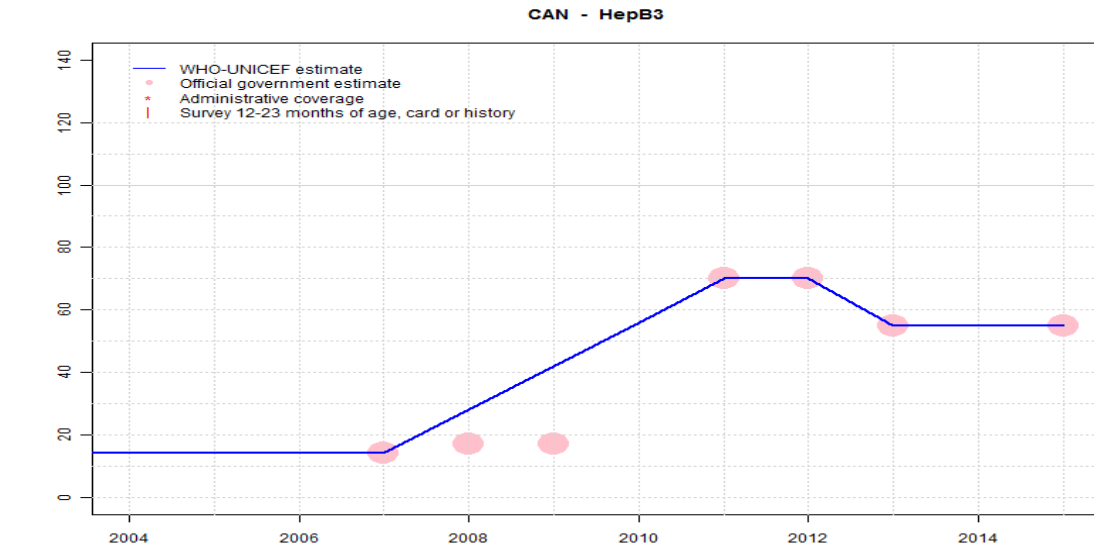
| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA | 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 |

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

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Canada - HepB3



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 14 | 14 | 14 | 14 | 28 | 42 | 56 | 70 | 70 | 55 | 55 | 55 |
| Estimate GoC | • | • | • | •• | • | • | • | •• | •• | •• | • | •• |
| Official | NA | NA | NA | 14 | 17 | 17 | NA | 70 | 70 | 55 | NA | 55 |
| 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.

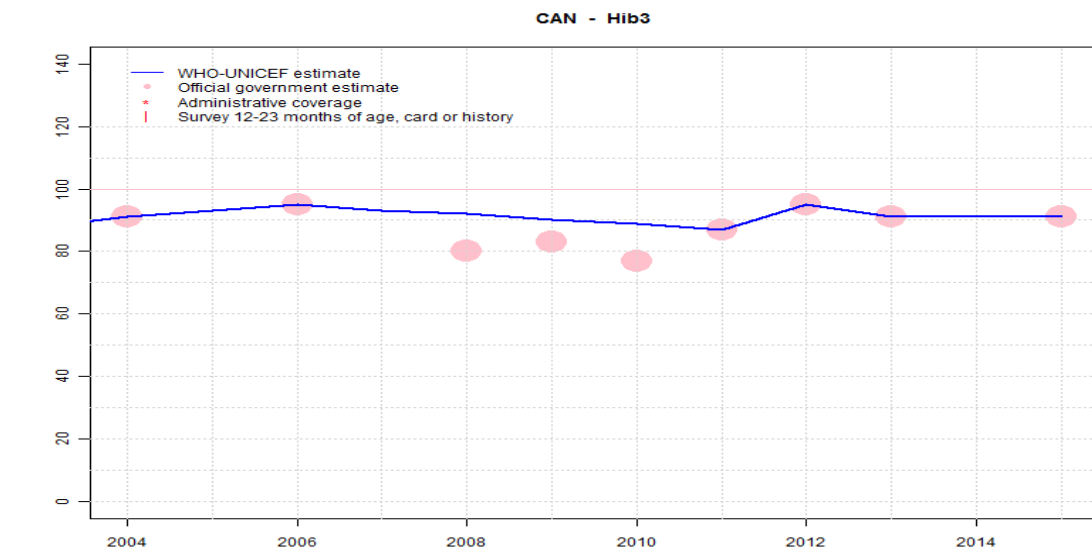
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2004: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data
- 2005: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data
- 2006: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data
- 2007: Estimate based on coverage reported by national government. GoC=R+
- 2008: Estimate based on interpolation between reported values. Reported data excluded. Decline in coverage unexplained. Nationally reported data for 2008 are based on the results of the 2006 Childhood National Immunization Coverage Survey. GoC=No accepted empirical data
- 2009: Estimate based on interpolation between reported values. Reported data excluded. Decline in coverage unexplained. GoC=No accepted empirical data
- 2010: Estimate based on interpolation between reported values. GoC=No accepted empirical data
- 2011: Estimate based on coverage reported by national government. Not all provinces immunized infants for Hep B in 2011. Estimate is based on reported data. GoC=R+
- 2012: Estimate based on coverage reported by national government. GoC=R+
- 2013: Estimate based on coverage reported by national government. Reported coverage are obtained from the validation component of the 2011 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. Estimate of 55 percent changed from previous revision value of 75 percent. GoC=R+
- 2014: Estimate based on interpolation between reported values. See note for 2013 on source of reported coverage. Estimate of 55 percent changed from previous revision value of 75 percent. GoC=No accepted empirical data
- 2015: Estimate based on coverage reported by national government. Reported coverage are obtained from the validation component of the 2013 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. Data reflect coverage for the six jurisdictions that recommend HepB vaccine among infants. GoC=R+

Canada - Hib3



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 91 | 93 | 95 | 93 | 92 | 90 | 89 | 87 | 95 | 91 | 91 | 91 |
| Estimate GoC | •• | • | •• | • | • | • | • | •• | •• | •• | • | •• |
| Official | 91 | NA | 95 | NA | 80 | 83 | 77 | 87 | 95 | 91 | NA | 91 |
| 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.

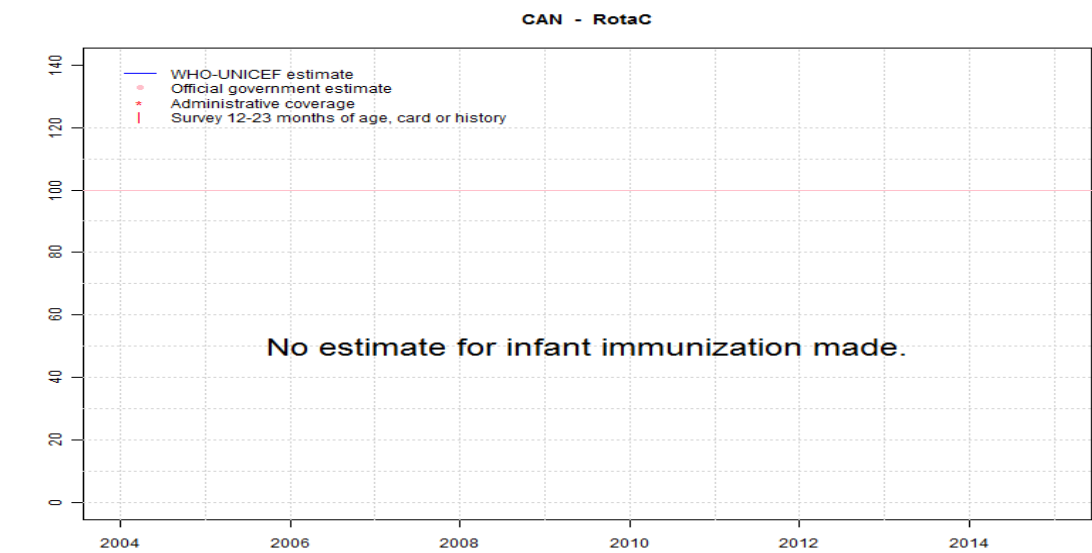
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Estimate based on coverage reported by national government. Estimate of 91 percent changed from previous revision value of 90 percent. GoC=R+
- 2005: Estimate based on interpolation between data reported by national government. GoC=No accepted empirical data
- 2006: Estimate based on coverage reported by national government. GoC=R+
- 2007: Estimate based on interpolation between data reported by national government. Estimate of 93 percent changed from previous revision value of 95 percent. GoC=No accepted empirical data
- 2008: Estimate based on interpolation between data reported by national government. Reported data excluded. Decline in coverage unexplained. Nationally reported data for 2008 are based on the results of the 2006 Childhood National Immunization Coverage Survey. Estimate of 92 percent changed from previous revision value of 95 percent. GoC=No accepted empirical data
- 2009: Estimate based on interpolation between data reported by national government. Reported data excluded. Decline in coverage unexplained. The Government of Canada conducts periodic nationally representative national immunization coverage surveys. In the 2011 Childhood National Immunization Coverage Survey (cNICS) questions were asked of the parents of 395 children who turned 2 years of age within 12 months prior to the survey. Results suggests coverage of 88 percent for four doses of Hib vaccine by the 2nd birthday. Estimate of 90 percent changed from previous revision value of 96 percent. GoC=No accepted empirical data
- 2010: Estimate based on interpolation between data reported by national government. Reported data excluded. Decline in coverage unexplained. Estimate of 89 percent changed from previous revision value of 96 percent. GoC=No accepted empirical data
- 2011: Estimate based on coverage reported by national government. Estimate is based on reported data. Estimate of 87 percent changed from previous revision value of 96 percent. GoC=R+
- 2012: Estimate based on coverage reported by national government. GoC=R+
- 2013: Estimate based on coverage reported by national government. Reported coverage are obtained from the validation component of the 2011 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. Estimate of 91 percent changed from previous revision value of 96 percent. GoC=R+
- 2014: Estimate based on interpolation between data reported by national government. See note for 2013 on source of reported coverage. Reported coverage is based on that for the third dose of polio vaccine administered in combina-

tion with Hib. The programme monitors the fourth dose of Hib containing vaccine at 2 years of age. Estimate of 91 percent changed from previous revision value of 96 percent. GoC=No accepted empirical data

2015: Estimate based on coverage reported by national government. Reported coverage are obtained from the validation component of the 2013 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. GoC=R+



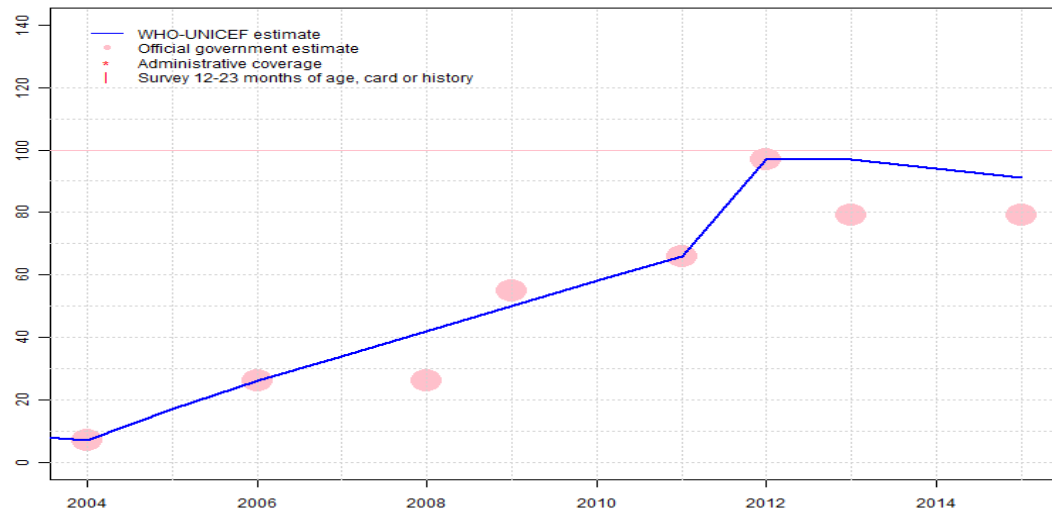
| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA | 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.

CAN - PcV3



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 7 | 17 | 26 | 34 | 42 | 50 | 58 | 66 | 97 | 97 | 94 | 91 |
| Estimate GoC | •• | • | •• | • | • | • | • | •• | •• | • | • | • |
| Official | 7 | NA | 26 | NA | 26 | 55 | NA | 66 | 97 | 79 | NA | 79 |
| 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:

- 2004: Estimate based on reported data. GoC=R+
- 2005: Estimate based on interpolation between data reported by national government. GoC=No accepted empirical data
- 2006: Estimate based on reported data. GoC=R+
- 2007: Estimate based on interpolation between data reported by national government. Estimate of 34 percent changed from previous revision value of 36 percent. GoC=No accepted empirical data
- 2008: Estimate based on interpolation between data reported by national government. Reported data excluded. Decline in coverage unexplained. Nationally reported data for 2008 are based on the results of the 2006 Childhood National Immunization Coverage Survey. Estimate of 42 percent changed from previous revision value of 46 percent. GoC=No accepted empirical data
- 2009: Estimate based on interpolation between data reported by national government. Reported data excluded. Decline in coverage unexplained. Reported coverage reflects that for the third dose or fourth dose depending on jurisdiction. Estimate of 50 percent changed from previous revision value of 57 percent. GoC=No accepted empirical data
- 2010: Estimate based on interpolation between data reported by national government. Reported coverage reflects that for the third dose or fourth dose depending on jurisdiction. Estimate of 58 percent changed from previous revision value of 67 percent. GoC=No accepted empirical data
- 2011: Estimate based on reported data. Reported coverage reflects that for the third dose or fourth dose depending on jurisdiction. Estimate is based on reported data. Estimate of 66 percent changed from previous revision value of 77 percent. GoC=R+
- 2012: Estimate is based on official government data for the PcV dose recommended at 4 months of age. For the PcV dose recommended at 4 months of age reported coverage is ninety-seven percent. Reported official data is for a PcV dose given at 6 months to high risk groups. . GoC=R+
- 2013: Estimate is based on official government data for the PcV dose recommended at 4 months of age. Reported data excluded. For the PcV dose recommended at 12-15 months reported coverage is ninety-one percent. Reported official data is for a PcV dose given at 6 months to high risk groups. Reported coverage are obtained from the validation component of the 2011 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. For the PcV dose recommended at 4 months of age reported coverage is ninety-seven percent. Reported official data is for a PcV dose given at 6 months to high

risk groups. GoC=No accepted empirical data

2014: Reported data calibrated to 2013 and 2015 levels. See note for 2013 on source of reported coverage. Estimate of 94 percent changed from previous revision value of 97 percent. GoC=No accepted empirical data

2015: Estimate is based on official government data for the PcV dose recommended at 12-15 months of age. Reported data excluded. For the PcV dose recommended at 12-15 months reported coverage is ninety-one percent. Reported official data is for a PcV dose given at 6 months to high risk groups. Reported coverage are obtained from the validation component of the 2013 Childhood National Immunization Coverage Survey for children 24 months or less. Immunization coverage estimates obtained from the national survey may yield lower than actual immunization coverage due to provincial variations in vaccine delivery programmes. Estimate challenged by: R-

Canada - survey details

2003 National Immunization Coverage Survey 2004

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| HepB3 | Card | 14 | 20-40 m | - | - |
| MCV1 | Card | 94 | 20-40 m | - | - |
| Pol3 | Card | 89 | 20-40 m | - | - |

2000 Canada, National Immunization Coverage Survey, 2002

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| DTP3 | History | 91 | 24-35 m | 629 | 85 |
| MCV1 | History | 94 | 24-35 m | 629 | 85 |
| Pol3 | History | 88 | 24-35 m | 629 | 85 |

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