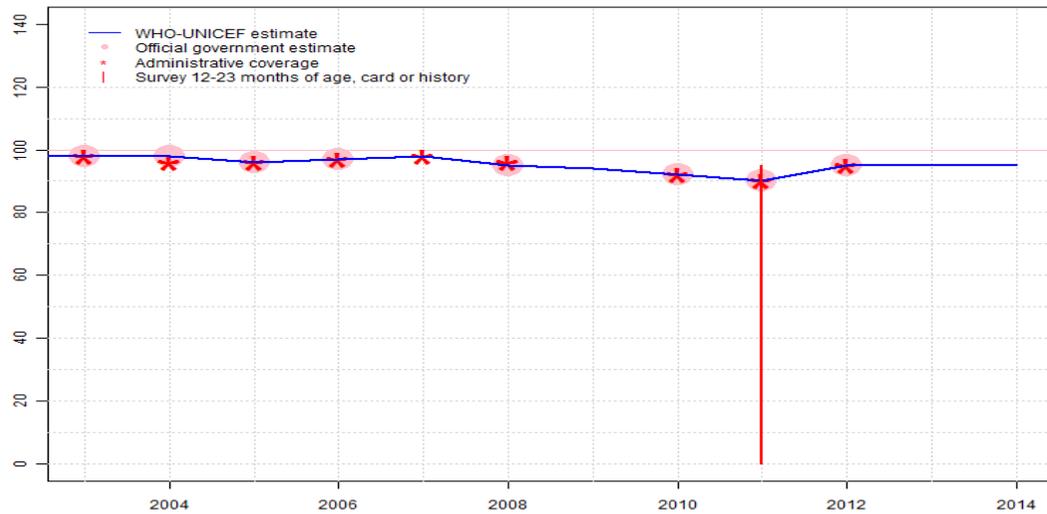


Ukraine - BCG

UKR - BCG



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	98	98	96	97	98	95	94	92	90	95	95	95
Estimate GoC	●●	●●	●●	●●	●●	●●	●	●	●	●	●	●
Official	98	98	96	97	NA	95	NA	92	90	95	NA	NA
Administrative	98	96	96	97	98	96	NA	92	90	95	NA	NA
Survey	NA	95	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.

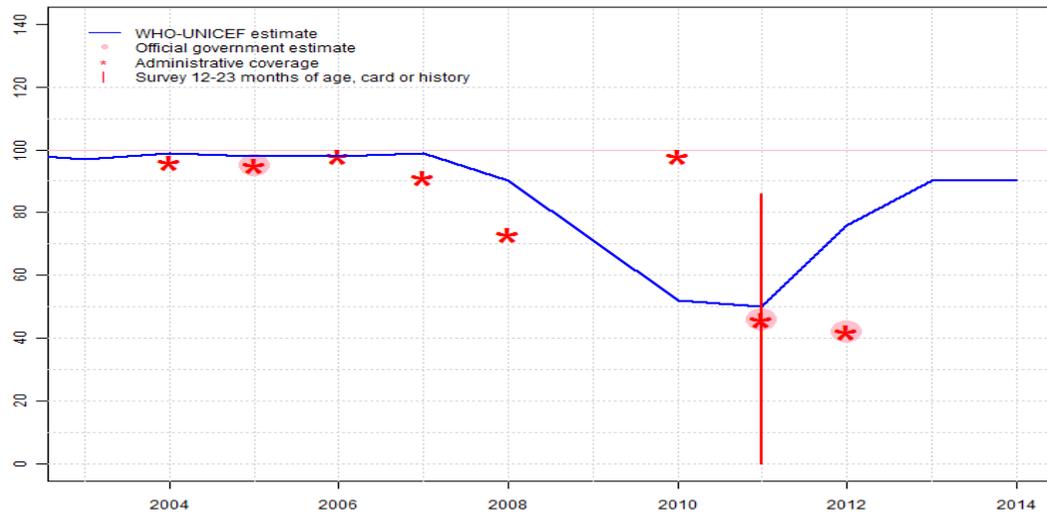
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on coverage reported by national government. GoC=R+ D+
- 2004: Estimate based on coverage reported by national government. GoC=R+ 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 reported administrative data. GoC=R+ D+
- 2008: Estimate based on coverage reported by national government. A 2011 external review of Ukraine's National Immunization Programme reports that programme performance in Ukraine begin to decline in previous years due to vaccine stock-outs, excessive medicalization of vaccine delivery, and the loss in public confidence in immunization. GoC=R+ D+
- 2009: Estimate based on interpolation between data reported by national government. Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government. Ukraine Multiple Indicator Cluster Survey 2012 results ignored by working group. Survey results for children aged 18-29 months reflect late vaccination. Survey coverage by 12 months support reported coverage levels. Estimate challenged by: S-
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2013: Estimate based on extrapolation from data reported by national government. Estimate challenged by: S-
- 2014: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data

Ukraine - DTP1

UKR - DTP1



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	97	99	98	98	99	90	71	52	50	76	90	90
Estimate GoC	•	•	•	••	•	•	•	•	•	•	•	•
Official	NA	NA	95	NA	NA	NA	NA	NA	46	42	NA	NA
Administrative	NA	96	95	98	91	73	NA	98	46	42	NA	NA
Survey	NA	86	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: DTP1 coverage estimated based on DTP3 coverage of 99. Estimate challenged by: R-
- 2005: DTP1 coverage estimated based on DTP3 coverage of 96. Estimate challenged by: R-
- 2006: Estimate based on reported administrative data. GoC=R+ D+
- 2007: DTP1 coverage estimated based on DTP3 coverage of 98. Estimate challenged by: D-R-
- 2008: Reported DTP1 coverage levels less than reported DTP3. The historical performance of the system suggests minimal dropout not only for completion of multi-dose vaccines but for all vaccines. In the absence of better data DTP1 coverage is assumed to be the same as DTP3 coverage. A 2011 external review of Ukraine's National Immunization Programme reports that programme performance in Ukraine begin to decline in previous years due to vaccine stock-outs, excessive medicalization of vaccine delivery, and the loss in public confidence in immunization. Estimate challenged by: D-R-
- 2009: Reported DTP1 coverage levels less than reported DTP3. The historical performance of the system suggests minimal dropout not only for completion of multi-dose vaccines but for all vaccines. In the absence of better data DTP1 coverage is assumed to be the same as DTP3 coverage. Estimate challenged by: S-
- 2010: Reported DTP1 coverage levels less than reported DTP3. The historical performance of the system suggests minimal dropout not only for completion of multi-dose vaccines but for all vaccines. In the absence of better data DTP1 coverage is assumed to be the same as DTP3 coverage. Estimate challenged by: D-R-S-
- 2011: Reported DTP1 coverage levels less than reported DTP3. The historical performance of the system suggests minimal dropout not only for completion of multi-dose vaccines but for all vaccines. In the absence of better data DTP1 coverage is assumed to be the same as DTP3 coverage. Ukraine Multiple Indicator Cluster Survey 2012 results ignored by working group. Survey results for children aged 18-29 months reflect late vaccination. Survey coverage by 12 months support reported coverage levels. Estimate challenged by: R-S-
- 2012: Reported DTP1 coverage levels less than reported DTP3. The historical performance of the system suggests minimal dropout not only for completion of multi-dose vaccines but for all vaccines. In the absence of better data DTP1 coverage is assumed to be the same as DTP3 coverage. Estimate challenged by: D-R-S-

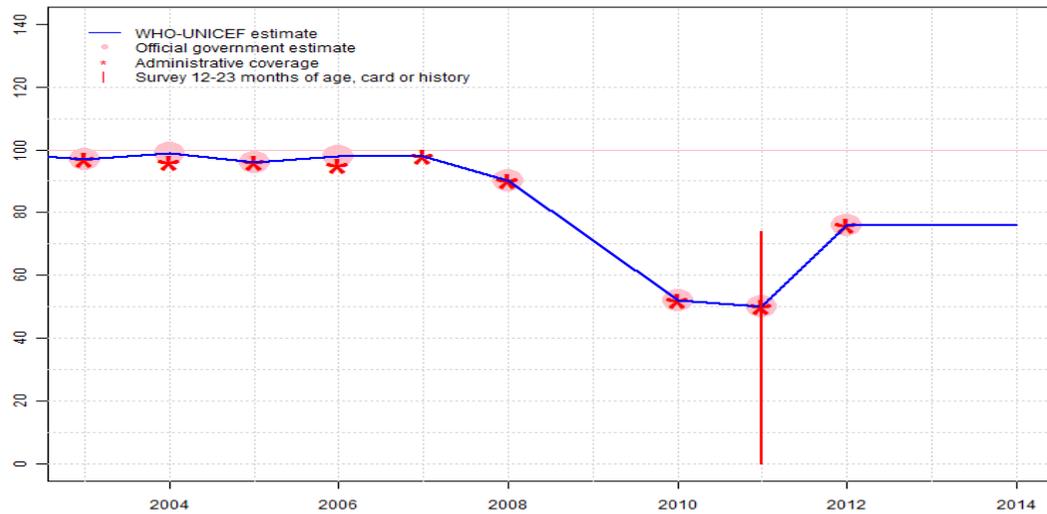
Ukraine - DTP1

2013: DTP1 coverage estimated based on DTP3 coverage of 76. Estimate challenged by: S-

2014: DTP1 coverage estimated based on DTP3 coverage of 76. GoC=No accepted empirical data

Ukraine - DTP3

UKR - DTP3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	97	99	96	98	98	90	71	52	50	76	76	76
Estimate GoC	●●	●●	●●	●●	●●	●●	●	●	●	●	●	●
Official	97	99	96	98	NA	90	NA	52	50	76	NA	NA
Administrative	97	96	96	95	98	90	NA	52	50	76	NA	NA
Survey	NA	74	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.

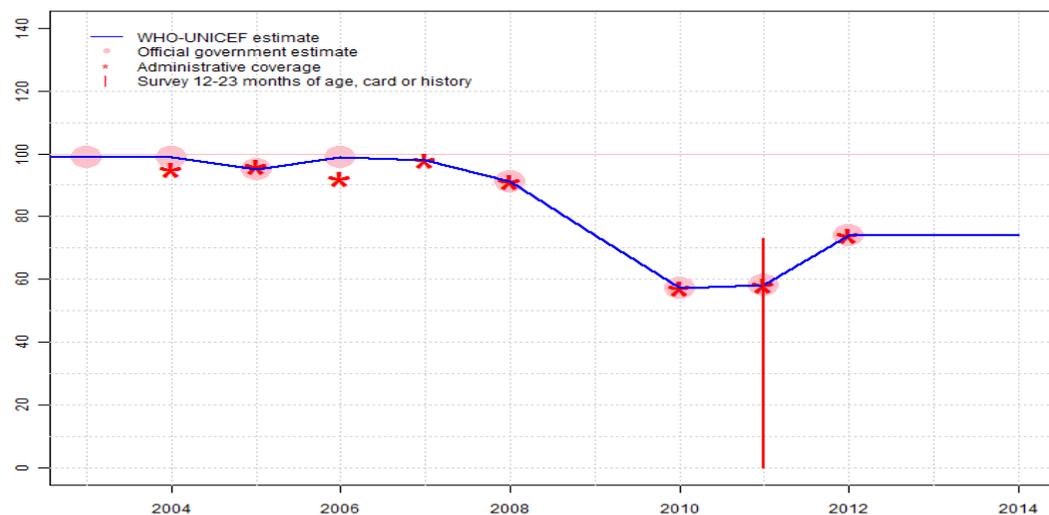
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on coverage reported by national government. GoC=R+ D+
- 2004: Estimate based on coverage reported by national government. GoC=R+ 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 reported administrative data. GoC=R+ D+
- 2008: Estimate based on coverage reported by national government. A 2011 external review of Ukraine's National Immunization Programme reports that programme performance in Ukraine begin to decline in previous years due to vaccine stock-outs, excessive medicalization of vaccine delivery, and the loss in public confidence in immunization. GoC=R+ D+
- 2009: Estimate based on interpolation between data reported by national government. Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government. Ukraine Multiple Indicator Cluster Survey 2012 results ignored by working group. Survey results for children aged 18-29 months reflect late vaccination. Survey coverage by 12 months support reported coverage levels. Ukraine Multiple Indicator Cluster Survey 2012 card or history results of 74 percent modified for recall bias to 76 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 82 percent and 3d dose card only coverage of 72 percent. Estimate challenged by: D-S-
- 2012: Estimate based on coverage reported by national government. Increase in coverage likely represents restoration of public confidence in the national immunization system and improved vaccine supply. Estimate challenged by: S-
- 2013: Estimate based on extrapolation from data reported by national government. Estimate challenged by: S-
- 2014: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data

Ukraine - Pol3

UKR - Pol3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	99	99	95	99	NA	91	74	57	58	74	74	74
Estimate GoC	●●	●●	●●	●●	●●	●●	●	●	●	●	●	●
Official	99	99	95	99	NA	91	NA	57	58	74	NA	NA
Administrative	NA	95	96	92	98	91	NA	57	58	74	NA	NA
Survey	NA	73	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.

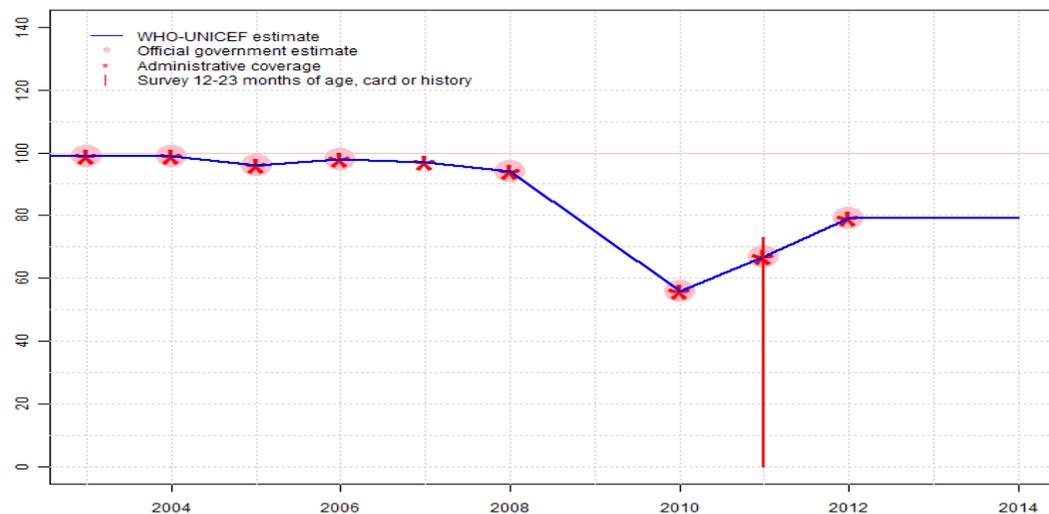
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on coverage reported by national government. GoC=R+
 2004: Estimate based on coverage reported by national government. GoC=R+ 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 reported administrative data. GoC=R+ D+
 2008: Estimate based on coverage reported by national government. A 2011 external review of Ukraine's National Immunization Programme reports that programme performance in Ukraine begin to decline in previous years due to vaccine stock-outs, excessive medicalization of vaccine delivery, and the loss in public confidence in immunization. GoC=R+ D+
 2009: Estimate based on interpolation between data reported by national government. Estimate challenged by: S-
 2010: Estimate based on coverage reported by national government. Estimate challenged by: S-
 2011: Estimate based on coverage reported by national government. Ukraine Multiple Indicator Cluster Survey 2012 results ignored by working group. Survey results for children aged 18-29 months reflect late vaccination. Survey coverage by 12 months support reported coverage levels. Ukraine Multiple Indicator Cluster Survey 2012 card or history results of 73 percent modified for recall bias to 75 percent based on 1st dose card or history coverage of 85 percent, 1st dose card only coverage of 81 percent and 3d dose card only coverage of 71 percent. Estimate challenged by: D-S-
 2012: Estimate based on coverage reported by national government. Increase in coverage likely represents restoration of public confidence in the national immunization system and improved vaccine supply. Estimate challenged by: S-
 2013: Estimate based on extrapolation from data reported by national government. Estimate challenged by: S-
 2014: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data

Ukraine - MCV1

UKR - MCV1



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	99	99	96	98	97	94	75	56	67	79	79	79
Estimate GoC	●●	●●	●●	●●	●●	●●	●	●	●	●	●	●
Official	99	99	96	98	NA	94	NA	56	67	79	NA	NA
Administrative	99	99	96	98	97	94	NA	56	67	79	NA	NA
Survey	NA	73	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.

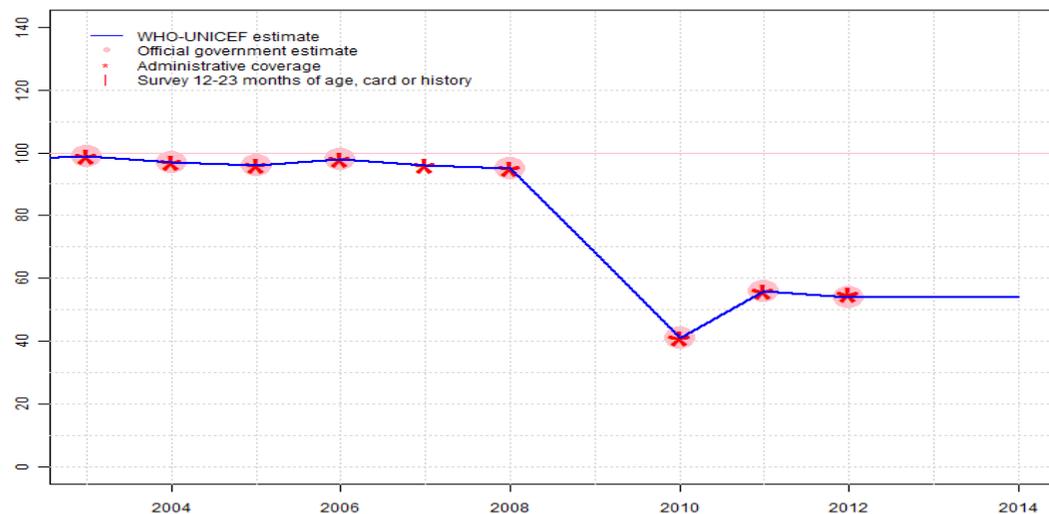
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on coverage reported by national government. GoC=R+ D+
- 2004: Estimate based on coverage reported by national government. GoC=R+ 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 reported administrative data. GoC=R+ D+
- 2008: Estimate based on coverage reported by national government. A 2011 external review of Ukraine's National Immunization Programme reports that programme performance in Ukraine begin to decline in previous years due to vaccine stock-outs, excessive medicalization of vaccine delivery, and the loss in public confidence in immunization. GoC=R+ D+
- 2009: Estimate based on interpolation between data reported by national government. Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government. Ukraine Multiple Indicator Cluster Survey 2012 results ignored by working group. Survey results for children aged 18-29 months reflect late vaccination. Survey coverage by 12 months support reported coverage levels. Estimate challenged by: S-
- 2012: Estimate based on coverage reported by national government. Increase in coverage likely represents restoration of public confidence in the national immunization system and improved vaccine supply. Estimate challenged by: S-
- 2013: Estimate based on extrapolation from data reported by national government. Estimate challenged by: S-
- 2014: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data

Ukraine - MCV2

UKR - MCV2



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	99	97	96	98	96	95	68	41	56	54	54	54
Estimate GoC	•	••	••	•	•	•	•	•	•	•	•	•
Official	99	97	96	98	NA	95	NA	41	56	54	NA	NA
Administrative	99	97	96	98	96	95	NA	41	56	55	NA	NA
Survey	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.

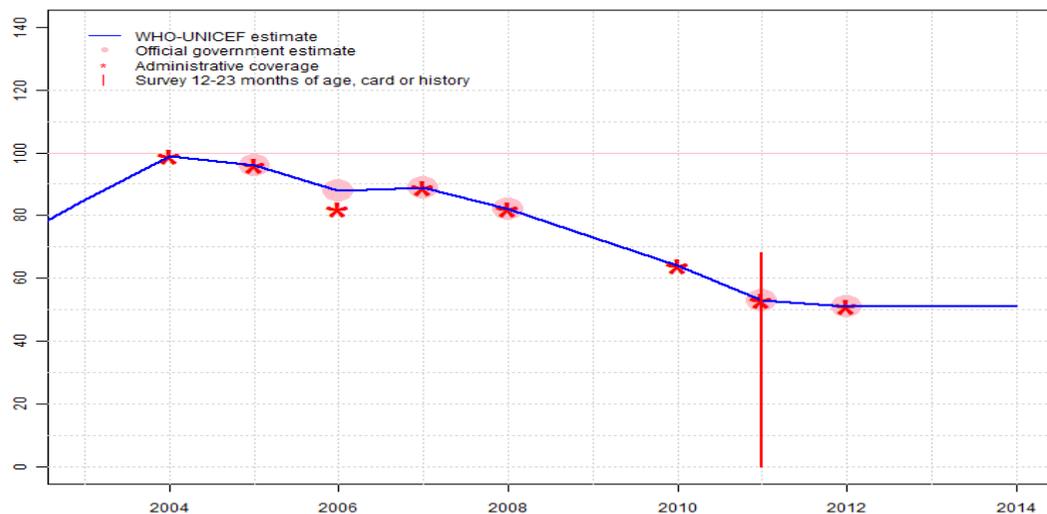
Description:

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

- 2003: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2004: Estimate based on coverage reported by national government. GoC=R+ D+
- 2005: Estimate based on coverage reported by national government. GoC=R+ D+
- 2006: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2007: Estimate based on reported administrative estimate. Estimate challenged by: D-
- 2008: Estimate based on coverage reported by national government. A 2011 external review of Ukraine's National Immunization Programme reports that programme performance in Ukraine begin to decline in previous years due to vaccine stock-outs, excessive medicalization of vaccine delivery, and the loss in public confidence in immunization. Estimate challenged by: D-
- 2009: Estimate based on interpolation between reported values. Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-S-
- 2013: Estimate based on extrapolation from data reported by national government. Estimate challenged by: S-
- 2014: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data

Ukraine - HepBB

UKR - HepBB



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	85	99	96	88	89	82	73	64	53	51	51	51
Estimate GoC	●	●●	●●	●●	●●	●●	●	●	●	●	●	●
Official	NA	NA	96	88	89	82	NA	NA	53	51	NA	NA
Administrative	NA	99	96	82	89	82	NA	64	53	51	NA	NA
Survey	NA	68	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.

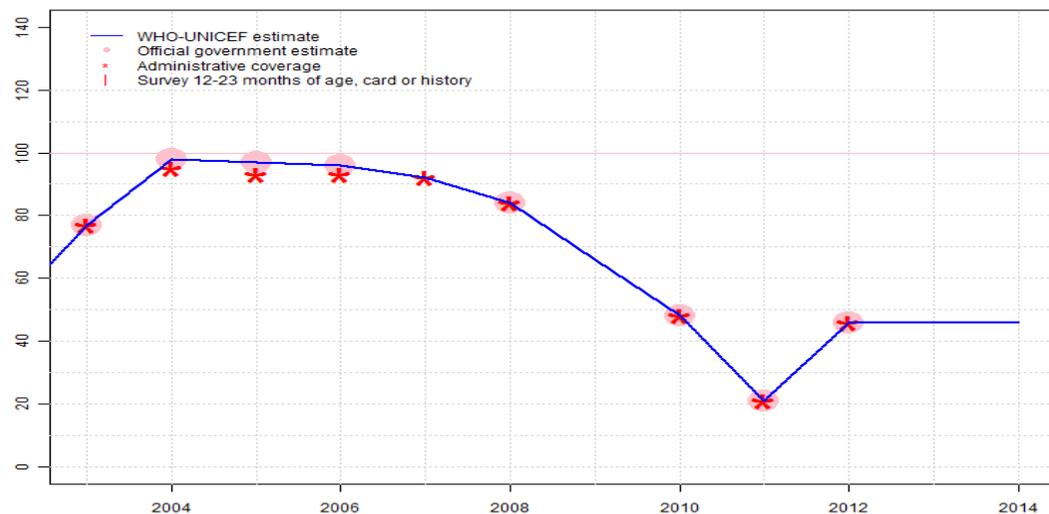
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on interpolation between reported values. GoC=No accepted empirical data
- 2004: Estimate based on reported administrative estimate. GoC=R+ 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. A 2011 external review of Ukraine's National Immunization Programme reports that programme performance in Ukraine begin to decline in previous years due to vaccine stock-outs, excessive medicalization of vaccine delivery, and the loss in public confidence in immunization. GoC=R+ D+
- 2009: Estimate based on interpolation between reported values. Estimate challenged by: S-
- 2010: Estimate based on reported administrative estimate. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government. Ukraine Multiple Indicator Cluster Survey 2012 results ignored by working group. Survey results for children aged 18-29 months reflect late vaccination. Survey coverage by 12 months support reported coverage levels. Estimate challenged by: S-
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2013: Estimate based on extrapolation from data reported by national government. Estimate challenged by: S-
- 2014: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data

Ukraine - HepB3

UKR - HepB3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	77	98	97	96	92	84	66	48	21	46	46	46
Estimate GoC	●●	●●	●●	●●	●●	●●	●	●	●	●	●	●
Official	77	98	97	96	NA	84	NA	48	21	46	NA	NA
Administrative	77	95	93	93	92	84	NA	48	21	46	NA	NA
Survey	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.

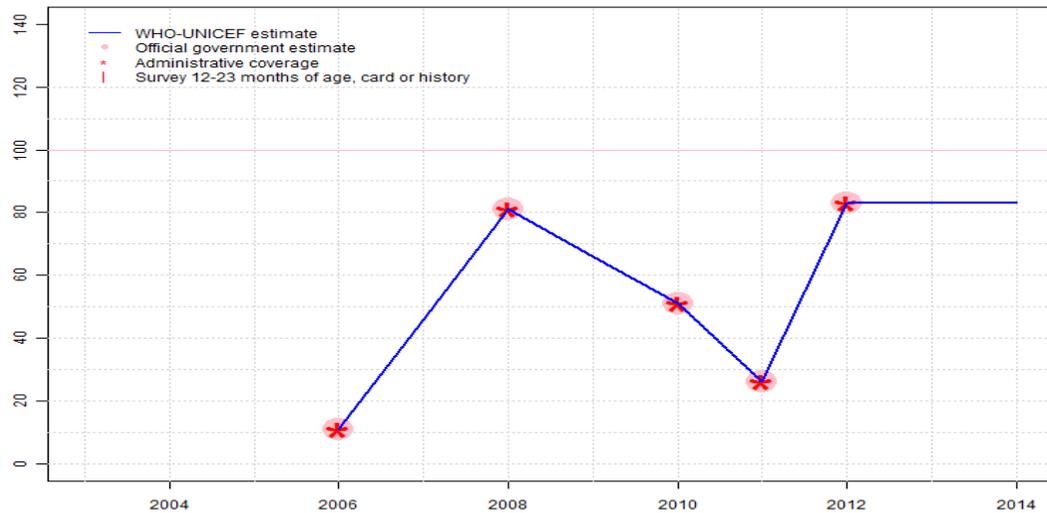
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2003: Estimate based on coverage reported by national government. GoC=R+ D+
- 2004: Estimate based on coverage reported by national government. GoC=R+ 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 reported administrative estimate. GoC=R+ D+
- 2008: Estimate based on coverage reported by national government. A 2011 external review of Ukraine's National Immunization Programme reports that programme performance in Ukraine begin to decline in previous years due to vaccine stock-outs, excessive medicalization of vaccine delivery, and the loss in public confidence in immunization. GoC=R+ D+
- 2009: Estimate based on interpolation between reported values. Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government. Increase in coverage likely represents restoration of public confidence in the national immunization system and improved vaccine supply. Estimate challenged by: D-S-
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2013: Estimate based on extrapolation from data reported by national government. Estimate challenged by: S-
- 2014: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data

Ukraine - Hib3

UKR - Hib3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	NA	NA	NA	11	46	81	66	51	26	83	83	83
Estimate GoC	NA	NA	NA	••	•	••	•	•	•	•	•	•
Official	NA	NA	NA	11	NA	81	NA	51	26	83	NA	NA
Administrative	NA	NA	NA	11	NA	81	NA	51	26	83	NA	NA
Survey	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.

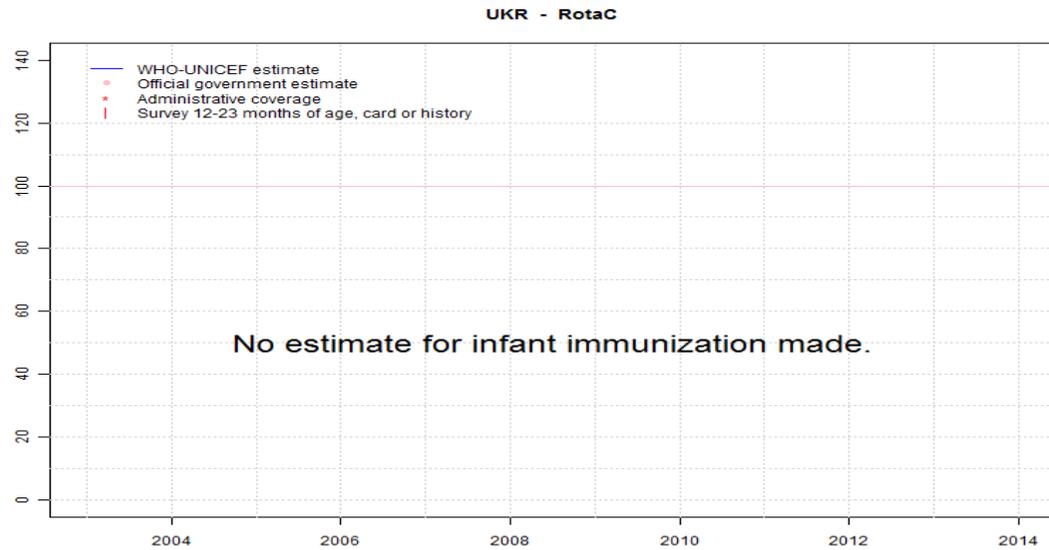
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk 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:

- 2006: Estimate based on coverage reported by national government. Hib vaccine introduced in 2006 GoC=R+ D+
- 2007: Estimate based on interpolation between reported values. GoC=No accepted empirical data
- 2008: Estimate based on coverage reported by national government. A 2011 external review of Ukraine's National Immunization Programme reports that programme performance in Ukraine begin to decline in previous years due to vaccine stock-outs, excessive medicalization of vaccine delivery, and the loss in public confidence in immunization. GoC=R+ D+
- 2009: Estimate based on interpolation between reported values. Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government. Increase in coverage likely represents restoration of public confidence in the national immunization system and improved vaccine supply. Estimate challenged by: S-
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2013: Estimate based on extrapolation from data reported by national government. Estimate challenged by: S-
- 2014: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data

Ukraine - RotaC



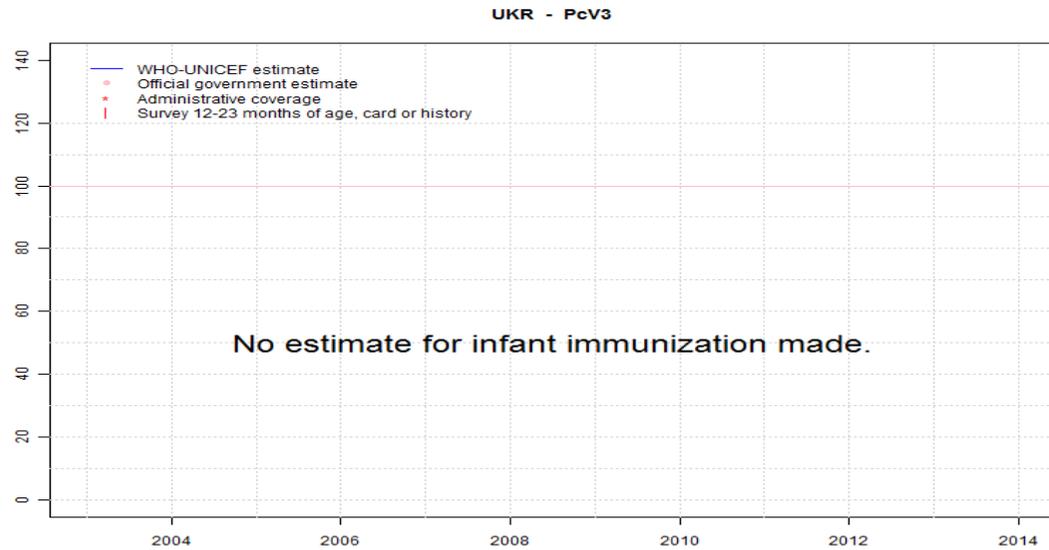
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	NA											

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.

Ukraine - PcV3



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	NA											
Estimate GoC	NA											
Official	NA											
Administrative	NA											
Survey	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.

Ukraine - survey details

2011 Ukraine Multiple Indicator Cluster Survey 2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94	18-29 m	829	92
BCG	Card	90	18-29 m	-	92
BCG	Card or History	95	18-29 m	829	92
BCG	History	6	18-29 m	-	92
DTP1	C or H <12 months	79	18-29 m	829	92
DTP1	Card	82	18-29 m	-	92
DTP1	Card or History	86	18-29 m	829	92
DTP1	History	4	18-29 m	-	92
DTP3	C or H <12 months	42	18-29 m	829	92
DTP3	Card	72	18-29 m	-	92
DTP3	Card or History	74	18-29 m	829	92
DTP3	History	3	18-29 m	-	92
HepB1	C or H <12 months	54	18-29 m	829	92
HepB1	Card	59	18-29 m	-	92
HepB1	Card or History	69	18-29 m	829	92
HepB1	History	10	18-29 m	-	92
HepBB	C or H <12 months	65	18-29 m	829	92

HepBB	Card	65	18-29 m	-	92
HepBB	Card or History	68	18-29 m	829	92
HepBB	History	4	18-29 m	-	92
Hib1	C or H <12 months	75	18-29 m	829	92
Hib1	Card	76	18-29 m	-	92
Hib1	Card or History	80	18-29 m	829	92
Hib1	History	4	18-29 m	-	92
MCV1	C or H <18 months	63	18-29 m	829	92
MCV1	Card	66	18-29 m	-	92
MCV1	Card or History	73	18-29 m	829	92
MCV1	History	7	18-29 m	-	92
Pol1	C or H <12 months	79	18-29 m	829	92
Pol1	Card	81	18-29 m	-	92
Pol1	Card or History	85	18-29 m	829	92
Pol1	History	4	18-29 m	-	92
Pol3	C or H <12 months	48	18-29 m	829	92
Pol3	Card	71	18-29 m	-	92
Pol3	Card or History	73	18-29 m	829	92
Pol3	History	2	18-29 m	-	92

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