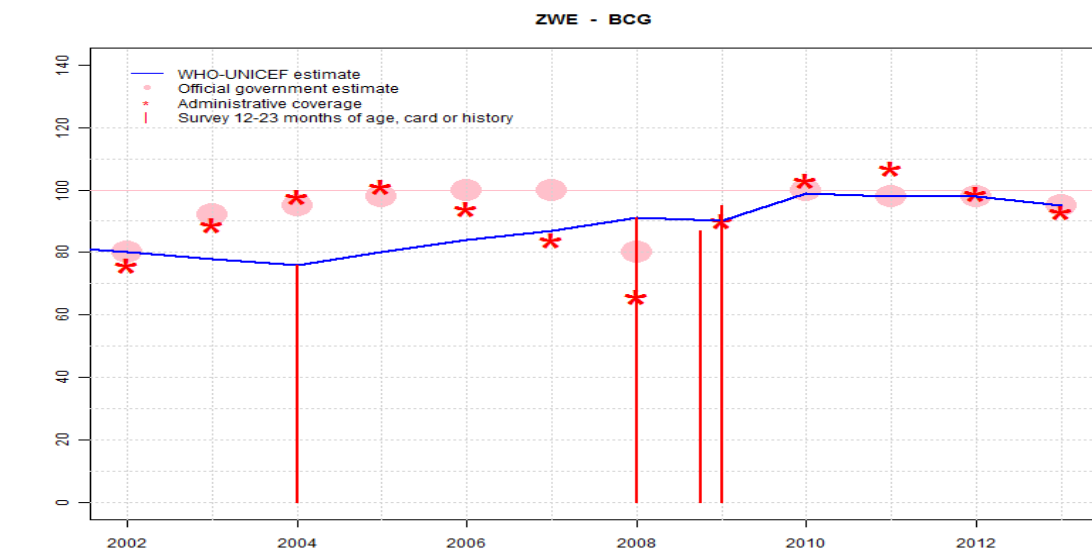


Zimbabwe - BCG



| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 80 | 78 | 76 | 80 | 84 | 87 | 91 | 90 | 99 | 98 | 98 | 95 |
| Estimate GoC | • | • | • | • | • | • | • | • | ••• | ••• | •• | •• |
| Official | 80 | 92 | 95 | 98 | 100 | 100 | 80 | NA | 100 | 98 | 98 | 95 |
| Administrative | 76 | 89 | 98 | 101 | 94 | 84 | 66 | 90 | 103 | 107 | 99 | 93 |
| Survey | NA | NA | 76 | NA | NA | NA | 91 | * | NA | NA | NA | NA |

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

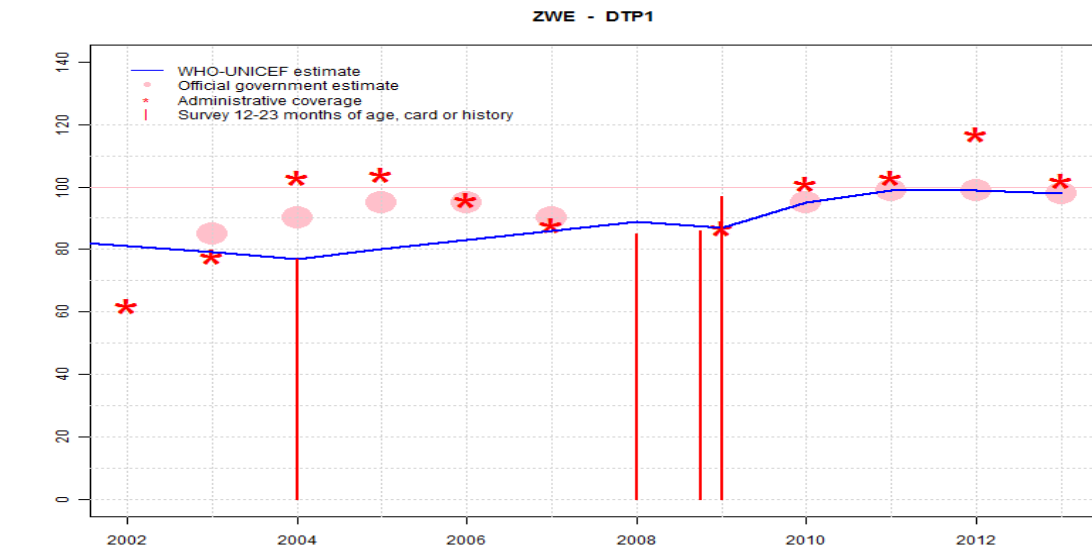
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

Description:

- 2002: Estimate based on interpolation between 1998 and 2004 levels. Unexplained temporal change in numerator and denominator levels. Estimate challenged by: R-
- 2003: Estimate based on interpolation between 1998 and 2004 levels. Unexplained temporal change in numerator and denominator levels. Estimate challenged by: R-
- 2004: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 76 percent based on 1 survey(s). Estimate challenged by: D-R-
- 2005: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: D-R-
- 2006: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: R-
- 2007: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: D-R-
- 2008: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 91 percent based on 1 survey(s). Estimate challenged by: D-R-
- 2009: Estimate is based on reported data supported by surveys. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government. Denominator series revised in 2011. WHO and UNICEF recommend reviewing and revising denominators from 1998 through 2010. Estimate of 98 percent changed from previous revision value of 99 percent. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. Estimate of 98 percent changed from previous revision value of 99 percent. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+

Zimbabwe - DTP1



| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 81 | 79 | 77 | 80 | 83 | 86 | 89 | 87 | 95 | 99 | 99 | 98 |
| Estimate GoC | • | • | • | • | • | • | •• | ••• | ••• | ••• | • | •• |
| Official | NA | 85 | 90 | 95 | 95 | 90 | NA | NA | 95 | 99 | 99 | 98 |
| Administrative | 62 | 78 | 103 | 104 | 96 | 88 | NA | 87 | 101 | 103 | 117 | 102 |
| Survey | NA | NA | 77 | NA | NA | NA | 85 | * | NA | NA | NA | NA |

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

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

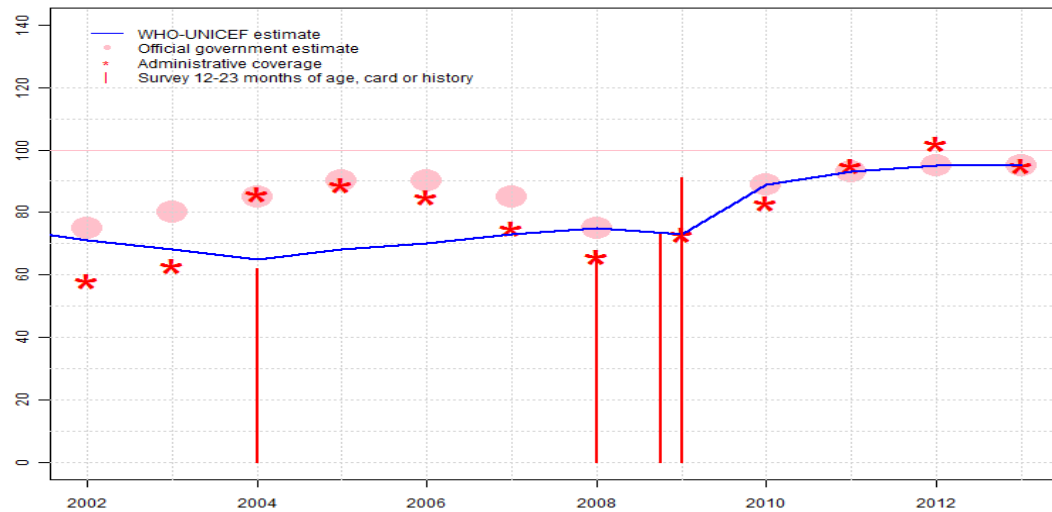
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2002: Estimate based on interpolation between 1998 and 2004 levels. Unexplained temporal change in numerator and denominator levels. Estimate challenged by: R-
- 2003: Estimate based on interpolation between 1998 and 2004 levels. Unexplained temporal change in numerator and denominator levels. Estimate challenged by: R-
- 2004: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 77 percent based on 1 survey(s). Estimate challenged by: D-R-
- 2005: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: D-R-
- 2006: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: R-
- 2007: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: R-
- 2008: Estimate based on interpolation between data reported by national government supported by survey. Survey evidence of 85 percent based on 1 survey(s). GoC=S+
- 2009: Estimate is based on reported data supported by surveys. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2011: Estimate based on coverage reported by national government. Denominator series revised in 2011. WHO and UNICEF recommend reviewing and revising denominators from 1998 through 2010. Estimate of 99 percent changed from previous revision value of 95 percent. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. Estimate of 99 percent changed from previous revision value of 95 percent. Estimate challenged by: D-
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+

Zimbabwe - DTP3

ZWE - DTP3



| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 71 | 68 | 65 | 68 | 70 | 73 | 75 | 73 | 89 | 93 | 95 | 95 |
| Estimate GoC | • | • | • | • | • | • | • | ••• | • | ••• | •• | •• |
| Official | 75 | 80 | 85 | 90 | 90 | 85 | 75 | NA | 89 | 93 | 95 | 95 |
| Administrative | 58 | 63 | 86 | 89 | 85 | 75 | 66 | 73 | 83 | 95 | 102 | 95 |
| Survey | NA | NA | 62 | NA | NA | NA | 67 | * | NA | NA | NA | NA |

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

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

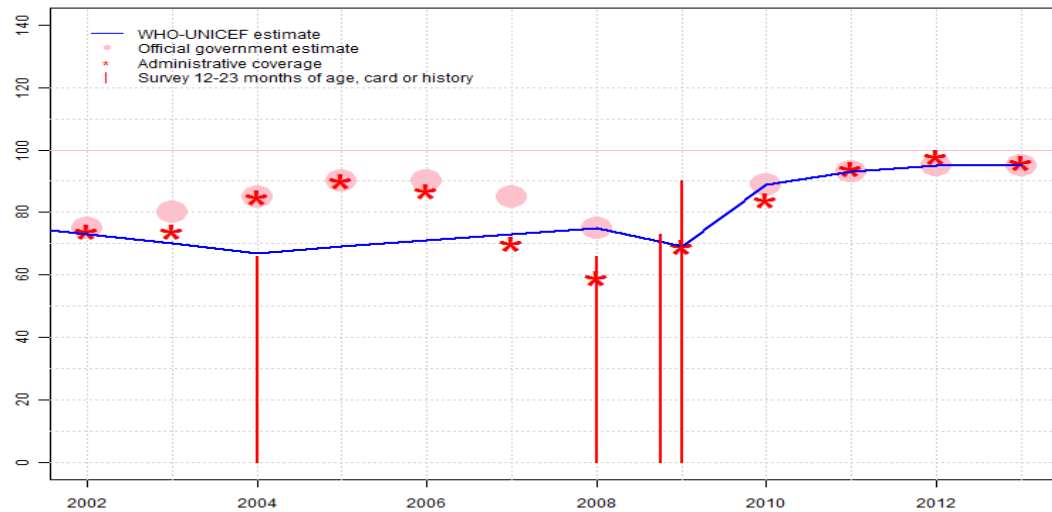
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2002: Estimate based on interpolation between 1998 and 2004 levels. Unexplained temporal change in numerator and denominator levels. Estimate challenged by: R-
- 2003: Estimate based on interpolation between 1998 and 2004 levels. Unexplained temporal change in numerator and denominator levels. Estimate challenged by: R-
- 2004: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 65 percent based on 1 survey(s). Zimbabwe Demographic and Health 2005-2006 card or history results of 62 percent modified for recall bias to 65 percent based on 1st dose card or history coverage of 77 percent, 1st dose card only coverage of 70 percent and 3d dose card only coverage of 59 percent. Estimate challenged by: D-R-
- 2005: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: D-R-
- 2006: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: R-
- 2007: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: R-
- 2008: Estimate based on coverage reported by national government supported by survey. Survey evidence of 67 percent based on 1 survey(s). Estimate challenged by: D-
- 2009: Estimate is based on reported data supported by surveys. Zimbabwe Demographic and Health Survey 2010-11 card or history results of 73 percent modified for recall bias to 78 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 67 percent and 3d dose card only coverage of 61 percent. Report on Zimbabwe 2010 Routine Immunization Coverage Survey card or history results of 91 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 79 percent and 3d dose card only coverage of 73 percent. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government. Denominator series revised in 2011. WHO and UNICEF recommend reviewing and revising denominators from 1998 through 2010. Estimate of 93 percent changed from previous revision value of 89 percent. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. Estimate of 95 percent changed from previous revision value of 89 percent. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+

Zimbabwe - Pol3

ZWE - Pol3



| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 73 | 70 | 67 | 69 | 71 | 73 | 75 | 69 | 89 | 93 | 95 | 95 |
| Estimate GoC | • | • | • | • | • | • | • | ••• | • | •• | •• | •• |
| Official | 75 | 80 | 85 | 90 | 90 | 85 | 75 | NA | 89 | 93 | 95 | 95 |
| Administrative | 74 | 74 | 85 | 90 | 87 | 70 | 59 | 69 | 84 | 94 | 98 | 96 |
| Survey | NA | NA | 66 | NA | NA | NA | 66 | * | NA | NA | NA | NA |

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

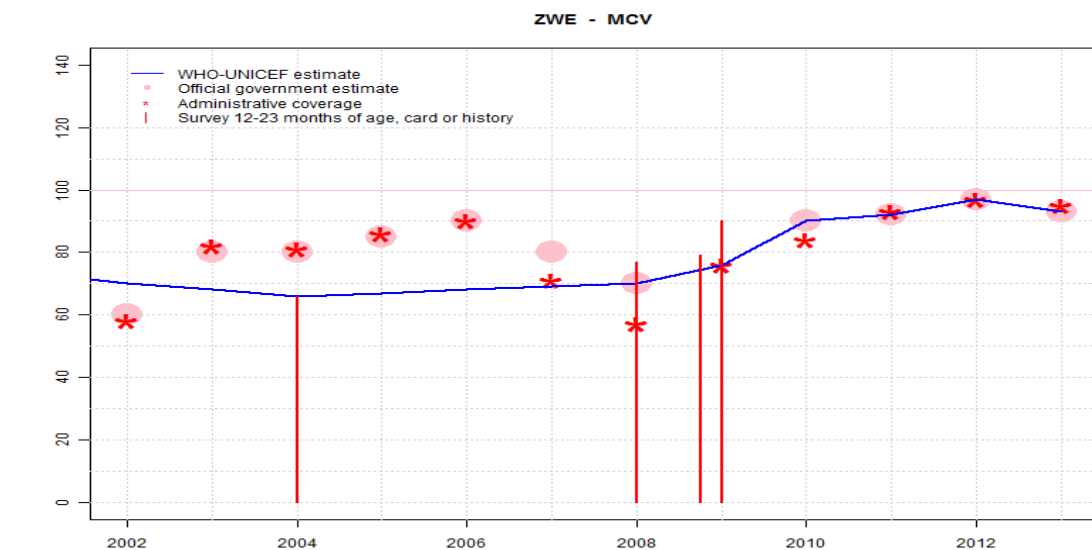
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

Description:

- 2002: Estimate based on interpolation between 1998 and 2004 levels. Unexplained temporal change in numerator and denominator levels. Estimate challenged by: R-
- 2003: Estimate based on interpolation between 1998 and 2004 levels. Unexplained temporal change in numerator and denominator levels. Estimate challenged by: R-
- 2004: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 67 percent based on 1 survey(s). Zimbabwe Demographic and Health 2005-2006 card or history results of 66 percent modified for recall bias to 67 percent based on 1st dose card or history coverage of 77 percent, 1st dose card only coverage of 71 percent and 3d dose card only coverage of 62 percent. Estimate challenged by: D-R-
- 2005: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: D-R-
- 2006: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: R-
- 2007: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: R-
- 2008: Estimate based on coverage reported by national government supported by survey. Survey evidence of 66 percent based on 1 survey(s). Estimate challenged by: D-
- 2009: Estimate is based on reported data supported by surveys. Zimbabwe Demographic and Health Survey 2010-11 card or history results of 73 percent modified for recall bias to 77 percent based on 1st dose card or history coverage of 87 percent, 1st dose card only coverage of 67 percent and 3d dose card only coverage of 59 percent. Report on Zimbabwe 2010 Routine Immunization Coverage Survey card or history results of 90 percent modified for recall bias to 87 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 78 percent and 3d dose card only coverage of 71 percent. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government. Denominator series revised in 2011. WHO and UNICEF recommend reviewing and revising denominators from 1998 through 2010. Estimate of 93 percent changed from previous revision value of 89 percent. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. Estimate of 95 percent changed from previous revision value of 89 percent. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+

Zimbabwe - MCV



| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 70 | 68 | 66 | 67 | 68 | 69 | 70 | 76 | 90 | 92 | 97 | 93 |
| Estimate GoC | • | • | • | • | • | • | • | ••• | • | ••• | •• | •• |
| Official | 60 | 80 | 80 | 85 | 90 | 80 | 70 | NA | 90 | 92 | 97 | 93 |
| Administrative | 58 | 82 | 81 | 86 | 90 | 71 | 57 | 76 | 84 | 93 | 97 | 95 |
| Survey | NA | NA | 66 | NA | NA | NA | 77 | * | NA | NA | NA | NA |

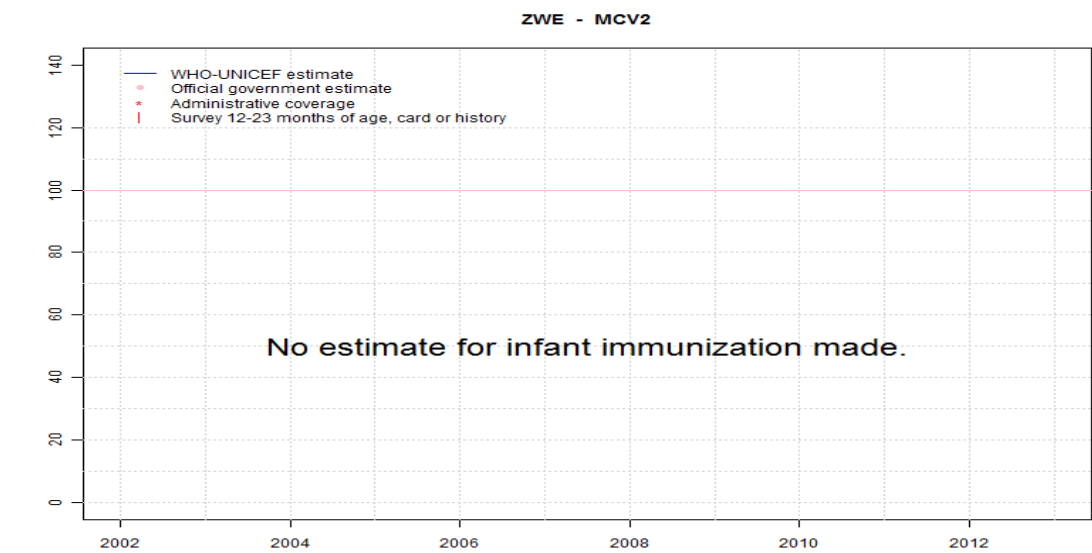
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

Description:

- 2002: Estimate based on interpolation between 1998 and 2004 levels. Unexplained temporal change in numerator and denominator levels. Estimate challenged by: R-
- 2003: Estimate based on interpolation between 1998 and 2004 levels. Unexplained temporal change in numerator and denominator levels. Estimate challenged by: D-R-
- 2004: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 66 percent based on 1 survey(s). Estimate challenged by: D-R-
- 2005: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: D-R-
- 2006: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: D-R-
- 2007: Estimate based on interpolation between 2004 and 2008 levels. Inconsistency between reported and survey trends. Estimate challenged by: R-
- 2008: Estimate based on coverage reported by national government supported by survey. Survey evidence of 77 percent based on 1 survey(s). Estimate challenged by: D-
- 2009: Estimate is based on reported data supported by surveys. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government. Denominator series revised in 2011. WHO and UNICEF recommend reviewing and revising denominators from 1998 through 2010. Estimate of 92 percent changed from previous revision value of 90 percent. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government. Estimate of 97 percent changed from previous revision value of 90 percent. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+



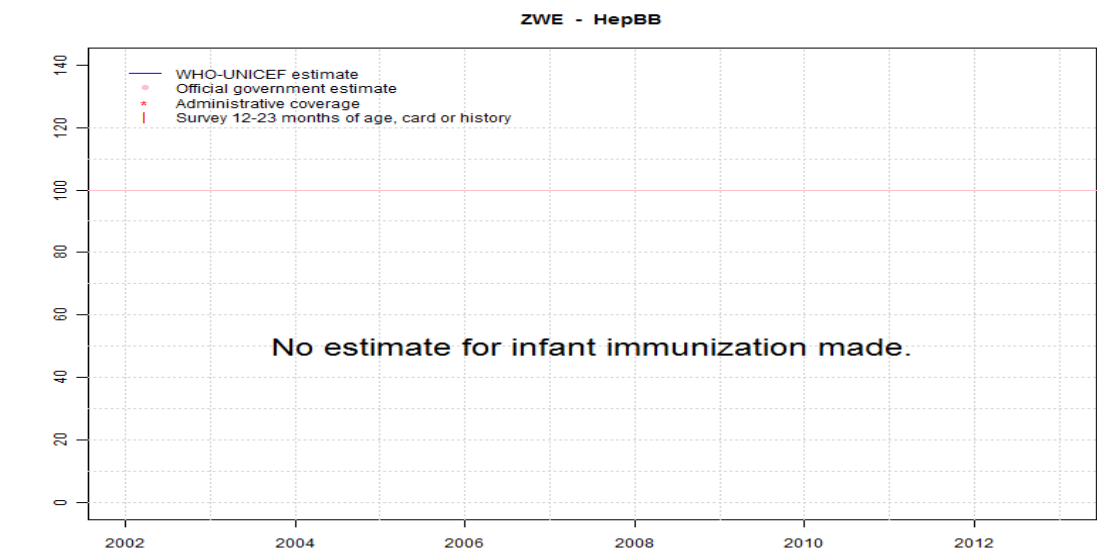
| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Survey | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN 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.

Zimbabwe - HepBB



| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Survey | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

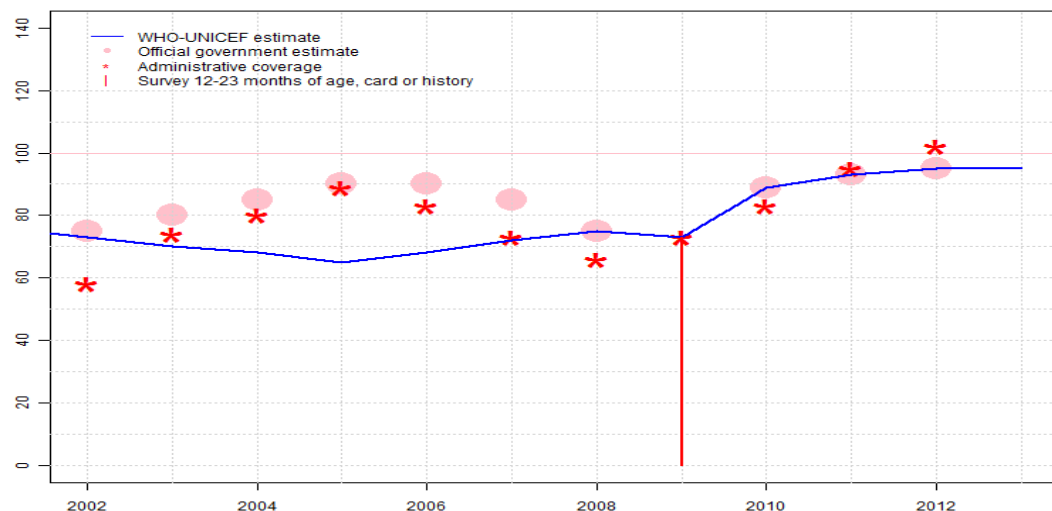
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN 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.

Zimbabwe - HepB3

ZWE - HepB3



| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 73 | 70 | 68 | 65 | 68 | 72 | 75 | 73 | 89 | 93 | 95 | 95 |
| Estimate GoC | • | • | • | • | • | • | • | ••• | • | •• | •• | • |
| Official | 75 | 80 | 85 | 90 | 90 | 85 | 75 | NA | 89 | 93 | 95 | NA |
| Administrative | 58 | 74 | 80 | 89 | 83 | 73 | 66 | 73 | 83 | 95 | 102 | NA |
| Survey | NA | NA | NA | NA | NA | NA | NA | 73 | NA | NA | NA | NA |

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

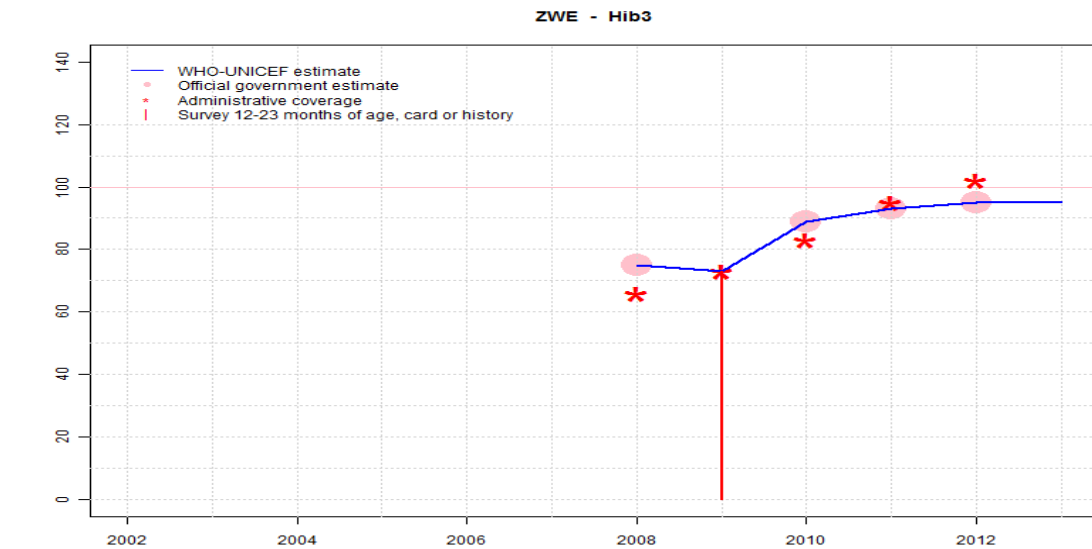
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

Description:

- 2002: Estimate based on DTP3 coverage estimates. Estimate challenged by: R-
- 2003: Estimate based on DTP3 coverage estimates. Estimate challenged by: R-
- 2004: Estimate based on DTP3 coverage estimates. Estimate challenged by: R-
- 2005: Estimate based on DTP3 coverage estimates. Estimate challenged by: D-R-
- 2006: Estimate based on DTP3 coverage estimates. Estimate challenged by: R-
- 2007: Estimate based on DTP3 coverage estimates. Estimate challenged by: R-
- 2008: Estimate based on reported data. Estimate challenged by: D-
- 2009: Estimate is based on reported data supported by surveys. Zimbabwe Demographic and Health Survey 2010-11 card or history results of 73 percent modified for recall bias to 78 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 67 percent and 3d dose card only coverage of 61 percent. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government. Denominator series revised in 2011. WHO and UNICEF recommend reviewing and revising denominators from 1998 through 2010. Estimate of 93 percent changed from previous revision value of 89 percent. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. Estimate of 95 percent changed from previous revision value of 89 percent. GoC=R+ D+
- 2013: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data

Zimbabwe - Hib3



| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | 75 | 73 | 89 | 93 | 95 | 95 |
| Estimate GoC | NA | NA | NA | NA | NA | NA | • | ••• | • | •• | •• | • |
| Official | NA | NA | NA | NA | NA | NA | 75 | NA | 89 | 93 | 95 | NA |
| Administrative | NA | NA | NA | NA | NA | NA | 66 | 73 | 83 | 95 | 102 | NA |
| Survey | NA | NA | NA | NA | NA | NA | NA | 73 | NA | NA | NA | NA |

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

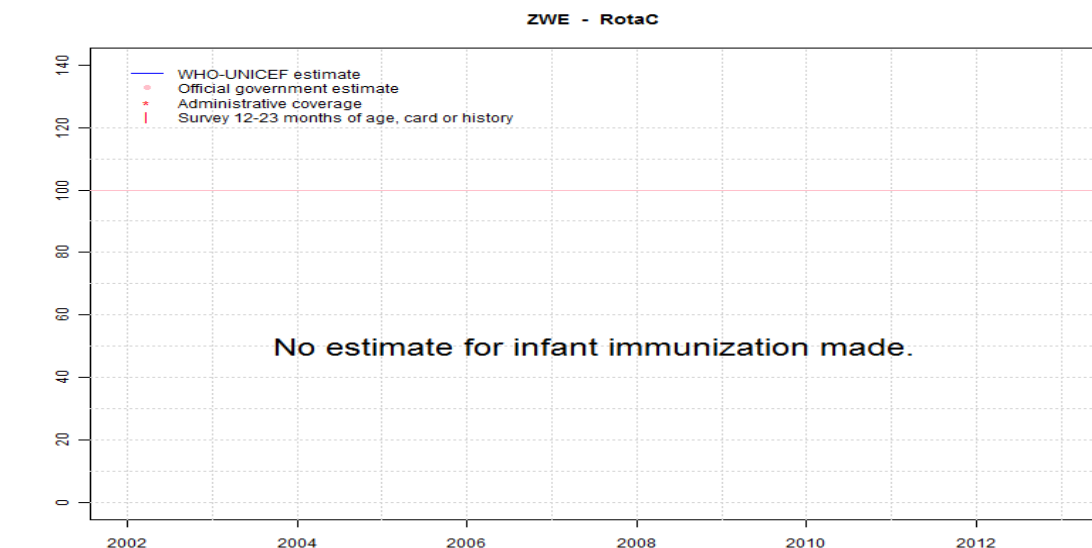
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

Description:

- 2008: Estimate based on reported data. Hib vaccine introduced in 2008 Vaccine presentation is DTP-HepB-Hib. Estimate challenged by: D-
- 2009: Estimate is based on reported data supported by surveys. Zimbabwe Demographic and Health Survey 2010-11 card or history results of 73 percent modified for recall bias to 78 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 67 percent and 3d dose card only coverage of 61 percent. GoC=R+ S+ D+
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government. Denominator series revised in 2011. WHO and UNICEF recommend reviewing and revising denominators from 1998 through 2010. Estimate of 93 percent changed from previous revision value of 89 percent. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. Estimate of 95 percent changed from previous revision value of 89 percent. GoC=R+ D+
- 2013: Estimate based on extrapolation from data reported by national government. GoC=No accepted empirical data

Zimbabwe - RotaC



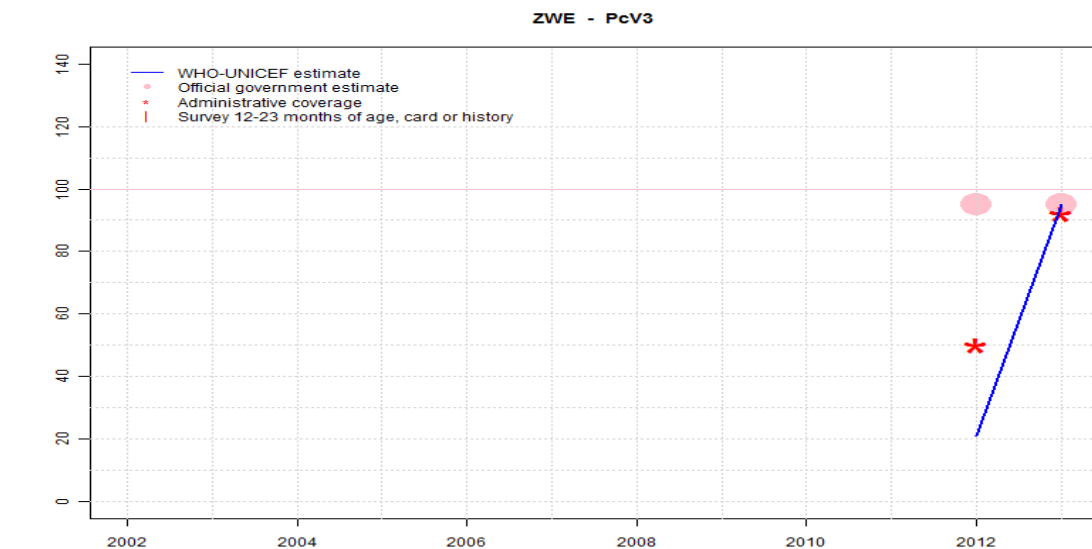
| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Survey | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

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

- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN 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.

Zimbabwe - PcV3



| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 21 | 95 |
| Estimate GoC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | ● | ●● |
| Official | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 95 | 95 |
| Administrative | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 50 | 92 |
| Survey | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

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

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

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

Description:

2012: Fifty percent coverage attained in 42 percent of the target population. Estimate challenged by: R-

2013: Estimate based on coverage reported by national government. GoC=R+D+

Zimbabwe - survey details

2009 Report on Zimbabwe 2010 Routine Immunization Coverage Survey

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | Card | 79 | 12-23 m | 600 | 84 |
| BCG | Card or History | 95 | 12-23 m | 600 | 84 |
| DTP1 | Card | 79 | 12-23 m | 600 | 84 |
| DTP1 | Card or History | 97 | 12-23 m | 600 | 84 |
| DTP3 | Card | 73 | 12-23 m | 600 | 84 |
| DTP3 | Card or History | 91 | 12-23 m | 600 | 84 |
| MCV | Card | 73 | 12-23 m | 600 | 84 |
| MCV | Card or History | 90 | 12-23 m | 600 | 84 |
| Pol1 | Card | 78 | 12-23 m | 600 | 84 |
| Pol1 | Card or History | 96 | 12-23 m | 600 | 84 |
| Pol3 | Card | 71 | 12-23 m | 600 | 84 |
| Pol3 | Card or History | 90 | 12-23 m | 600 | 84 |

2009 Zimbabwe Demographic and Health Survey 2010-11

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | C or H <12 months | 87 | 12-23 m | 1034 | 68 |
| BCG | Card | 67 | 12-23 m | 1034 | 68 |
| BCG | Card or History | 87 | 12-23 m | 1034 | 68 |
| BCG | History | 20 | 12-23 m | 1034 | 68 |
| DTP1 | C or H <12 months | 85 | 12-23 m | 1034 | 68 |
| DTP1 | Card | 67 | 12-23 m | 1034 | 68 |
| DTP1 | Card or History | 86 | 12-23 m | 1034 | 68 |
| DTP1 | History | 19 | 12-23 m | 1034 | 68 |
| DTP3 | C or H <12 months | 70 | 12-23 m | 1034 | 68 |
| DTP3 | Card | 61 | 12-23 m | 1034 | 68 |
| DTP3 | Card or History | 73 | 12-23 m | 1034 | 68 |
| DTP3 | History | 12 | 12-23 m | 1034 | 68 |
| HepB1 | C or H <12 months | 85 | 12-23 m | 1034 | 68 |
| HepB1 | Card | 67 | 12-23 m | 1034 | 68 |
| HepB1 | Card or History | 86 | 12-23 m | 1034 | 68 |
| HepB1 | History | 19 | 12-23 m | 1034 | 68 |
| HepB3 | C or H <12 months | 70 | 12-23 m | 1034 | 68 |
| HepB3 | Card | 61 | 12-23 m | 1034 | 68 |

| | | | | | |
|-------|-------------------|----|---------|------|----|
| HepB3 | Card or History | 73 | 12-23 m | 1034 | 68 |
| HepB3 | History | 12 | 12-23 m | 1034 | 68 |
| Hib1 | C or H <12 months | 85 | 12-23 m | 1034 | 68 |
| Hib1 | Card | 67 | 12-23 m | 1034 | 68 |
| Hib1 | Card or History | 86 | 12-23 m | 1034 | 68 |
| Hib1 | History | 19 | 12-23 m | 1034 | 68 |
| Hib3 | C or H <12 months | 70 | 12-23 m | 1034 | 68 |
| Hib3 | Card | 61 | 12-23 m | 1034 | 68 |
| Hib3 | Card or History | 73 | 12-23 m | 1034 | 68 |
| Hib3 | History | 12 | 12-23 m | 1034 | 68 |
| MCV | C or H <12 months | 69 | 12-23 m | 1034 | 68 |
| MCV | Card | 61 | 12-23 m | 1034 | 68 |
| MCV | Card or History | 79 | 12-23 m | 1034 | 68 |
| MCV | History | 18 | 12-23 m | 1034 | 68 |
| Pol1 | C or H <12 months | 87 | 12-23 m | 1034 | 68 |
| Pol1 | Card | 67 | 12-23 m | 1034 | 68 |
| Pol1 | Card or History | 87 | 12-23 m | 1034 | 68 |
| Pol1 | History | 20 | 12-23 m | 1034 | 68 |
| Pol3 | C or H <12 months | 69 | 12-23 m | 1034 | 68 |
| Pol3 | Card | 59 | 12-23 m | 1034 | 68 |
| Pol3 | Card or History | 73 | 12-23 m | 1034 | 68 |
| Pol3 | History | 14 | 12-23 m | 1034 | 68 |

2008 Zimbabwe Multiple Indicator Monitoring Survey (MIMS) 2009

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | Card or History | 91 | 12-23 m | 1444 | 74 |
| DTP1 | Card or History | 85 | 12-23 m | 1444 | 74 |
| DTP3 | Card or History | 67 | 12-23 m | 1444 | 74 |
| MCV | Card or History | 77 | 12-23 m | 1444 | 74 |
| Pol1 | Card or History | 89 | 12-23 m | 1444 | 74 |
| Pol3 | Card or History | 66 | 12-23 m | 1444 | 74 |

2004 Zimbabwe Demographic and Health 2005-2006

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | C or H <12 months | 75 | 12-23 m | 1019 | 72 |

Zimbabwe - survey details

| | | | | | |
|------|-------------------|----|---------|------|----|
| BCG | Card | 70 | 12-23 m | 1019 | 72 |
| BCG | Card or History | 76 | 12-23 m | 1019 | 72 |
| BCG | History | 6 | 12-23 m | 1019 | 72 |
| DTP1 | C or H <12 months | 75 | 12-23 m | 1019 | 72 |
| DTP1 | Card | 70 | 12-23 m | 1019 | 72 |
| DTP1 | Card or History | 77 | 12-23 m | 1019 | 72 |
| DTP1 | History | 6 | 12-23 m | 1019 | 72 |
| DTP3 | C or H <12 months | 55 | 12-23 m | 1019 | 72 |
| DTP3 | Card | 59 | 12-23 m | 1019 | 72 |
| DTP3 | Card or History | 62 | 12-23 m | 1019 | 72 |
| DTP3 | History | 3 | 12-23 m | 1019 | 72 |
| MCV | C or H <12 months | 56 | 12-23 m | 1019 | 72 |
| MCV | Card | 61 | 12-23 m | 1019 | 72 |
| MCV | Card or History | 66 | 12-23 m | 1019 | 72 |
| MCV | History | 5 | 12-23 m | 1019 | 72 |
| Pol1 | C or H <12 months | 76 | 12-23 m | 1019 | 72 |
| Pol1 | Card | 71 | 12-23 m | 1019 | 72 |
| Pol1 | Card or History | 77 | 12-23 m | 1019 | 72 |
| Pol1 | History | 6 | 12-23 m | 1019 | 72 |
| Pol3 | C or H <12 months | 59 | 12-23 m | 1019 | 72 |
| Pol3 | Card | 62 | 12-23 m | 1019 | 72 |
| Pol3 | Card or History | 66 | 12-23 m | 1019 | 72 |
| Pol3 | History | 4 | 12-23 m | 1019 | 72 |

1998 Zimbabwe Demographic and Health Survey 1999, 2000

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | C or H <12 months | 87 | 12-23 m | 699 | 69 |
| BCG | Card | 68 | 12-23 m | 699 | 69 |
| BCG | Card or History | 88 | 12-23 m | 699 | 69 |
| BCG | History | 20 | 12-23 m | 699 | 69 |

| | | | | | |
|------|-------------------|----|---------|-----|----|
| DTP1 | C or H <12 months | 88 | 12-23 m | 699 | 69 |
| DTP1 | Card | 68 | 12-23 m | 699 | 69 |
| DTP1 | Card or History | 88 | 12-23 m | 699 | 69 |
| DTP1 | History | 20 | 12-23 m | 699 | 69 |
| DTP3 | C or H <12 months | 78 | 12-23 m | 699 | 69 |
| DTP3 | Card | 65 | 12-23 m | 699 | 69 |
| DTP3 | Card or History | 81 | 12-23 m | 699 | 69 |
| DTP3 | History | 16 | 12-23 m | 699 | 69 |
| MCV | C or H <12 months | 71 | 12-23 m | 699 | 69 |
| MCV | Card | 62 | 12-23 m | 699 | 69 |
| MCV | Card or History | 79 | 12-23 m | 699 | 69 |
| MCV | History | 17 | 12-23 m | 699 | 69 |
| Pol1 | C or H <12 months | 88 | 12-23 m | 699 | 69 |
| Pol1 | Card | 68 | 12-23 m | 699 | 69 |
| Pol1 | Card or History | 88 | 12-23 m | 699 | 69 |
| Pol1 | History | 20 | 12-23 m | 699 | 69 |
| Pol3 | C or H <12 months | 78 | 12-23 m | 699 | 69 |
| Pol3 | Card | 65 | 12-23 m | 699 | 69 |
| Pol3 | Card or History | 81 | 12-23 m | 699 | 69 |
| Pol3 | History | 16 | 12-23 m | 699 | 69 |

1997 Zimbabwe Demographic and Health Survey 1999, 2000

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | C or H <12 months | 89 | 24-35 m | 669 | 69 |
| DTP1 | C or H <12 months | 88 | 24-35 m | 669 | 69 |
| DTP3 | C or H <12 months | 76 | 24-35 m | 669 | 69 |
| MCV | C or H <12 months | 74 | 24-35 m | 669 | 69 |
| Pol1 | C or H <12 months | 89 | 24-35 m | 669 | 69 |
| Pol3 | C or H <12 months | 77 | 24-35 m | 669 | 69 |

Further information and estimates prior to 2002 are available at:

<http://www.data.unicef.org/child-health/immunization>

http://www.who.int/immunization/monitoring_surveillance/routine/coverage/en/index4.html

Zimbabwe

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 receive 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.

| Year | PAB coverage estimate (%) |
|------|---------------------------|
| 2002 | 78 |
| 2003 | 78 |
| 2004 | 79 |
| 2005 | 77 |
| 2006 | 78 |
| 2007 | 78 |
| 2008 | 76 |
| 2009 | 76 |
| 2010 | 76 |
| 2011 | 66 |
| 2012 | 66 |
| 2013 | 66 |

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.