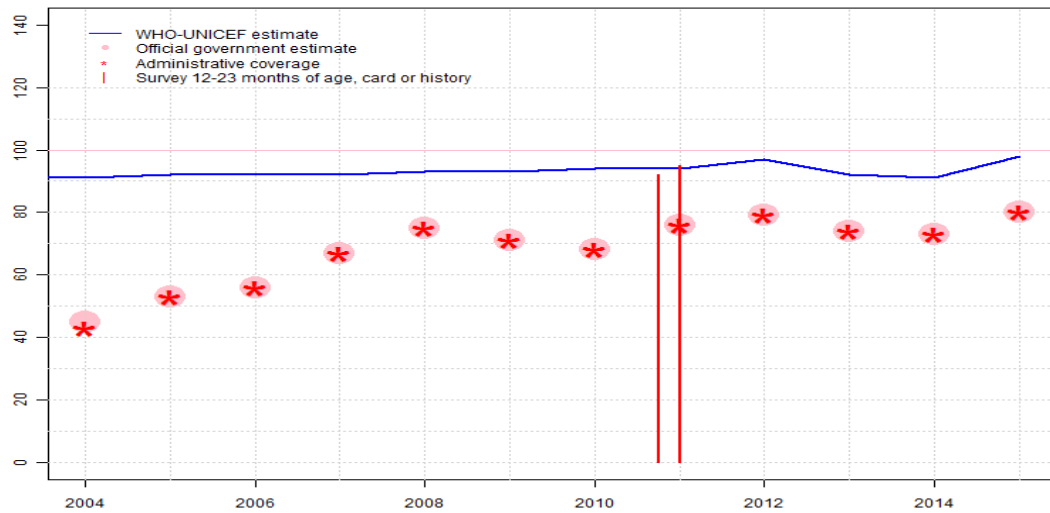


Gabon - BCG

GAB - BCG



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 91 | 92 | 92 | 92 | 93 | 93 | 94 | 94 | 97 | 92 | 91 | 98 |
| Estimate GoC | • | • | • | • | • | • | • | • | • | • | • | • |
| Official | 45 | 53 | 56 | 67 | 75 | 71 | 68 | 76 | 79 | 74 | 73 | 80 |
| Administrative | 43 | 53 | 56 | 67 | 75 | 71 | 68 | 76 | 79 | 74 | 73 | 80 |
| Survey | 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.

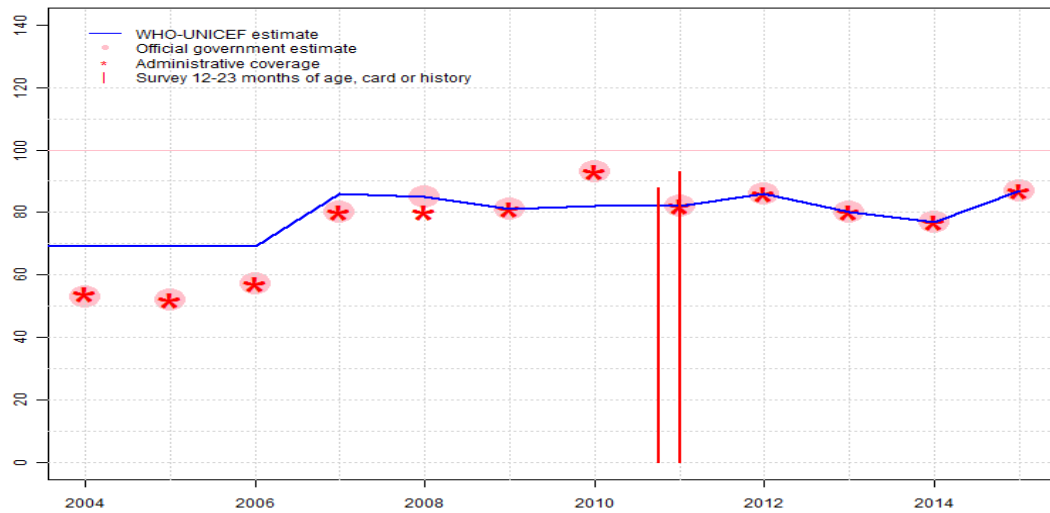
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Estimate based on interpolation between 1999 and 2011 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: D-R-
- 2005: Estimate based on interpolation between 1999 and 2011 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: D-R-
- 2006: Estimate based on interpolation between 1999 and 2011 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: D-R-
- 2007: Estimate based on interpolation between 1999 and 2011 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: R-
- 2008: Estimate based on interpolation between 1999 and 2011 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: R-
- 2009: Estimate based on interpolation between 1999 and 2011 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: R-
- 2010: Estimate based on interpolation between 1999 and 2011 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: R-
- 2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 94 percent based on 2 survey(s). High proportion of births assisted by skilled attendant. Estimate challenged by: R-
- 2012: Reported data calibrated to 2011 levels. Estimate challenged by: D-
- 2013: Reported data calibrated to 2011 levels. Estimate challenged by: D-
- 2014: Reported data calibrated to 2011 levels. Estimate challenged by: D-
- 2015: Reported data calibrated to 2011 levels. Increase in coverage observed in 2015 from 2014 levels due in part to use of projections from 2013 census (previously used projections from 2003 census). GoC=Assigned by working group. Consistency with other vaccines.

Gabon - DTP1

GAB - DTP1



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 69 | 69 | 69 | 86 | 85 | 81 | 82 | 82 | 86 | 80 | 77 | 87 |
| Estimate GoC | • | • | • | • | • | • | • | • | • | • | • | • |
| Official | 53 | 52 | 57 | 80 | 85 | 81 | 93 | 82 | 86 | 80 | 77 | 87 |
| Administrative | 54 | 52 | 57 | 80 | 80 | 81 | 93 | 82 | 86 | 80 | 77 | 87 |
| Survey | 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.

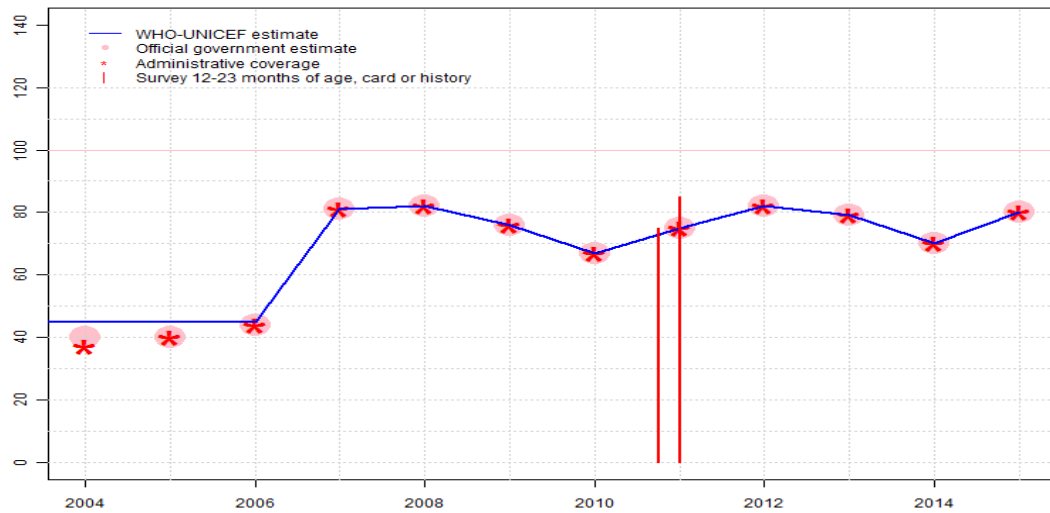
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Estimate based on interpolation between 1999 and 2006 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: R-
- 2005: Estimate based on interpolation between 1999 and 2006 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: R-
- 2006: Estimate based on survey result. Estimate challenged by: R-
- 2007: Reported data calibrated to 2006 and 2008 levels. Estimate challenged by: D-
- 2008: Estimate based on reported data. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on interpolation between coverage reported by national government. Reported data excluded. Unexplained increase from 81 percent to 93 percent with decrease 82 percent. Estimate challenged by: D-
- 2011: Survey support reported data for other antigens. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2014: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. Increase in coverage observed in 2015 from 2014 levels due in part to use of projections from 2013 census (previously used projections from 2003 census). Estimate challenged by: D-

Gabon - DTP3

GAB - DTP3



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 45 | 45 | 45 | 81 | 82 | 76 | 67 | 75 | 82 | 79 | 70 | 80 |
| Estimate GoC | • | • | • | • | • | • | • | • | • | • | • | • |
| Official | 40 | 40 | 44 | 81 | 82 | 76 | 67 | 75 | 82 | 79 | 70 | 80 |
| Administrative | 37 | 40 | 44 | 81 | 82 | 76 | 67 | 75 | 82 | 79 | 70 | 80 |
| Survey | 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.

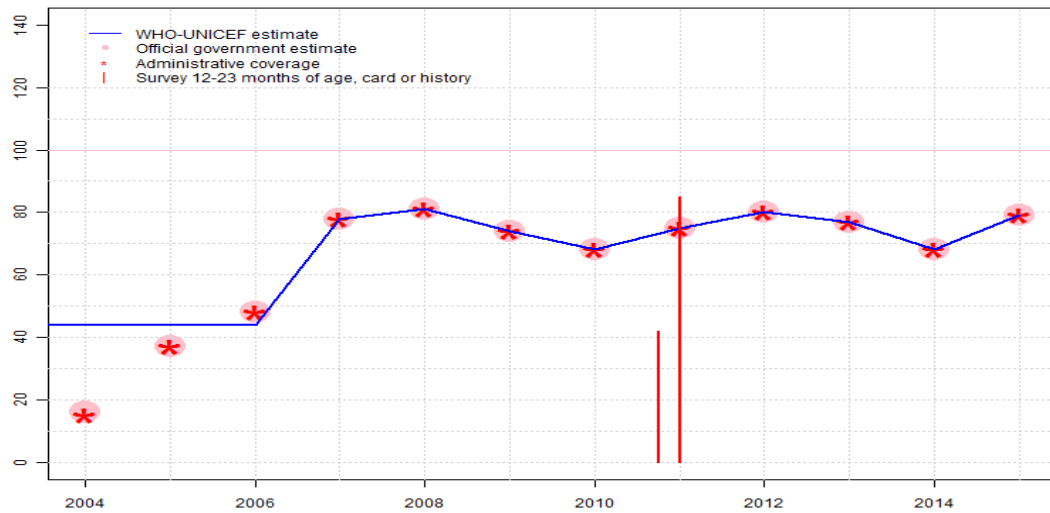
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Estimate based on interpolation between 1999 and 2006 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: R-
- 2005: Estimate based on interpolation between 1999 and 2006 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: D-R-
- 2006: Estimate based on survey result. Estimate challenged by: D-R-
- 2007: Based on reported data. Estimate challenged by: D-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 81 percent based on 2 survey(s). Gabon Demographic and Health Survey 2012 card or history results of 75 percent modified for recall bias to 76 percent based on 1st dose card or history coverage of 88 percent, 1st dose card only coverage of 72 percent and 3d dose card only coverage of 62 percent. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2014: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. Increase in coverage observed in 2015 from 2014 levels due in part to use of projections from 2013 census (previously used projections from 2003 census). Estimate challenged by: D-

Gabon - Pol3

GAB - Pol3



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 44 | 44 | 44 | 78 | 81 | 74 | 68 | 75 | 80 | 77 | 68 | 79 |
| Estimate GoC | • | • | • | • | • | • | • | • | • | • | • | • |
| Official | 16 | 37 | 48 | 78 | 81 | 74 | 68 | 75 | 80 | 77 | 68 | 79 |
| Administrative | 15 | 37 | 48 | 78 | 81 | 74 | 68 | 75 | 80 | 77 | 68 | 79 |
| Survey | 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.

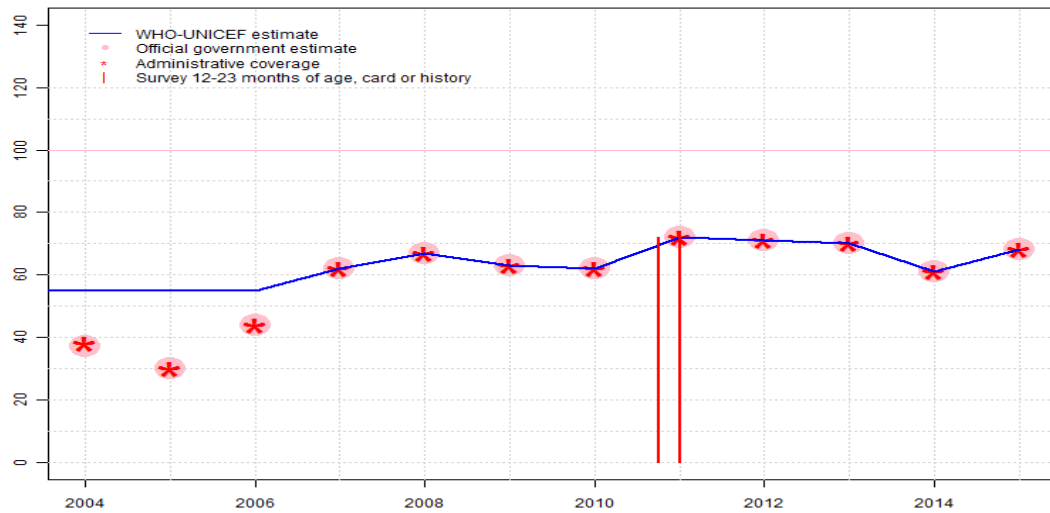
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Estimate based on interpolation between 1999 and 2006 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Reported data excluded. Decline in reported coverage from 40 percent to 16 percent with increase to 37 percent. Estimate challenged by: D-R-
- 2005: Estimate based on interpolation between 1999 and 2006 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: R-
- 2006: Estimate based on Survey data. Estimate challenged by: D-R-
- 2007: Based on reported data. Estimate challenged by: D-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-S-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-S-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 85 percent based on 1 survey(s). Gabon Demographic and Health Survey 2012 results ignored by working group. Survey results are inconsistent with results from other antigens. Gabon Demographic and Health Survey 2012 card or history results of 42 percent modified for recall bias to 45 percent based on 1st dose card or history coverage of 70 percent, 1st dose card only coverage of 53 percent and 3d dose card only coverage of 34 percent. Estimate challenged by: D-S-
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-S-
- 2013: Estimate based on coverage reported by national government. Estimate challenged by: D-S-
- 2014: Estimate based on coverage reported by national government. Programme reports a one month stock-out of polio vaccine at national level. Estimate challenged by: D-S-
- 2015: Estimate based on coverage reported by national government. Increase in coverage observed in 2015 from 2014 levels due in part to use of projections from 2013 census (previously used projections from 2003 census). Recovery from prior year stock-out of polio vaccine. Estimate challenged by: D-S-

Gabon - MCV1

GAB - MCV1



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 55 | 55 | 55 | 62 | 67 | 63 | 62 | 72 | 71 | 70 | 61 | 68 |
| Estimate GoC | • | • | • | • | • | • | • | • | • | • | • | • |
| Official | 37 | 30 | 44 | 62 | 67 | 63 | 62 | 72 | 71 | 70 | 61 | 68 |
| Administrative | 38 | 30 | 44 | 62 | 67 | 63 | 62 | 72 | 71 | 70 | 61 | 68 |
| Survey | 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.

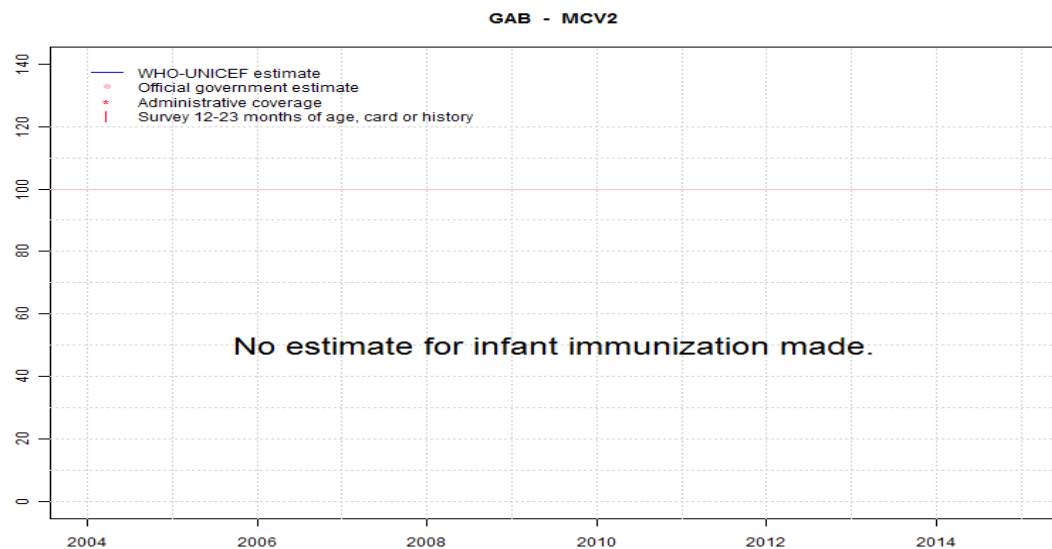
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk 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 interpolation between 1999 and 2006 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: R-
- 2005: Estimate based on interpolation between 1999 and 2006 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: D-R-
- 2006: Estimate based on survey result. Estimate challenged by: R-
- 2007: Based on reported data. Estimate challenged by: D-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 73 percent based on 2 survey(s). Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2014: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. Increase in coverage observed in 2015 from 2014 levels due in part to use of projections from 2013 census (previously used projections from 2003 census). Estimate challenged by: D-

Gabon - MCV2



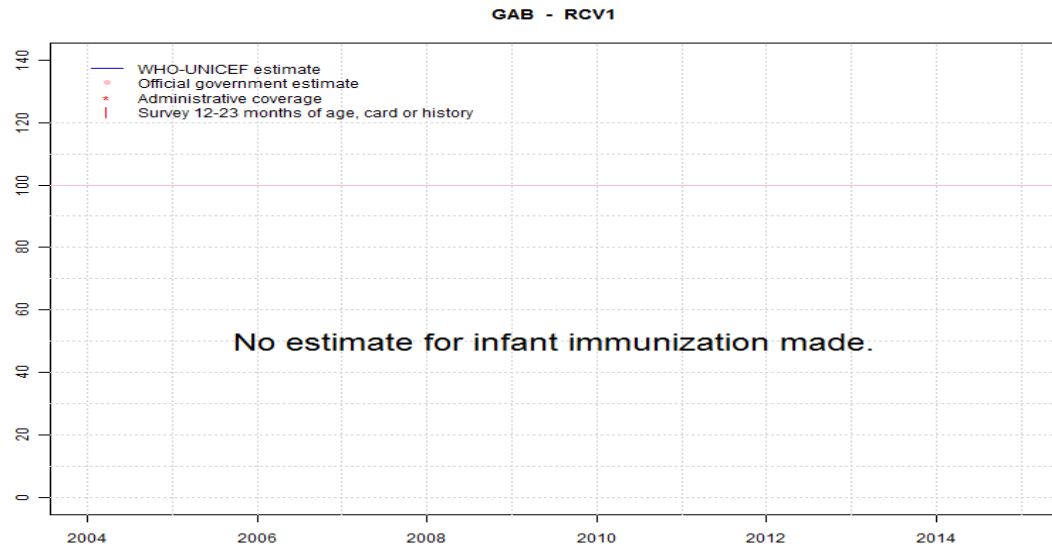
| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA |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

Gabon - RCV1



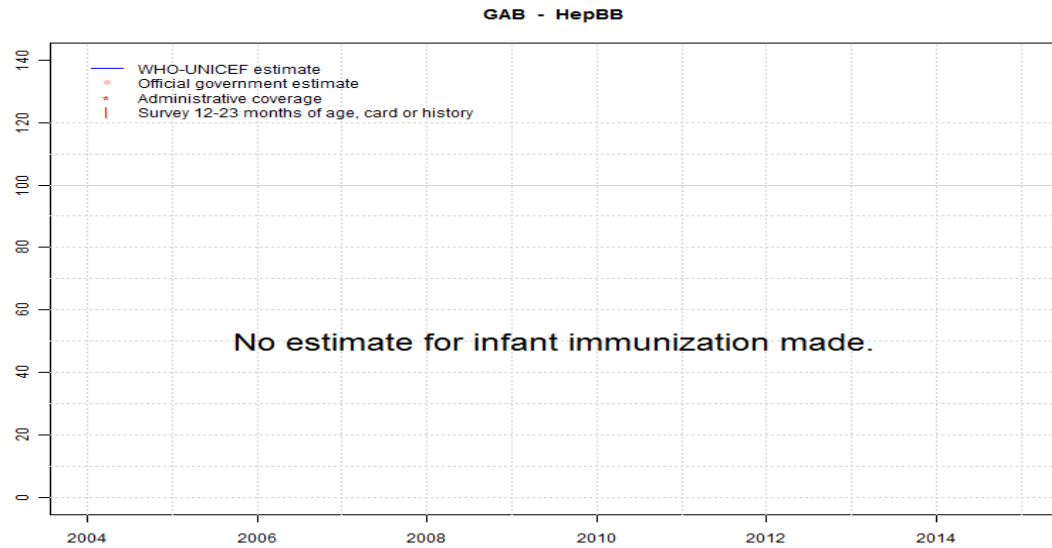
| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA |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

Gabon - HepBB



| | 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 |

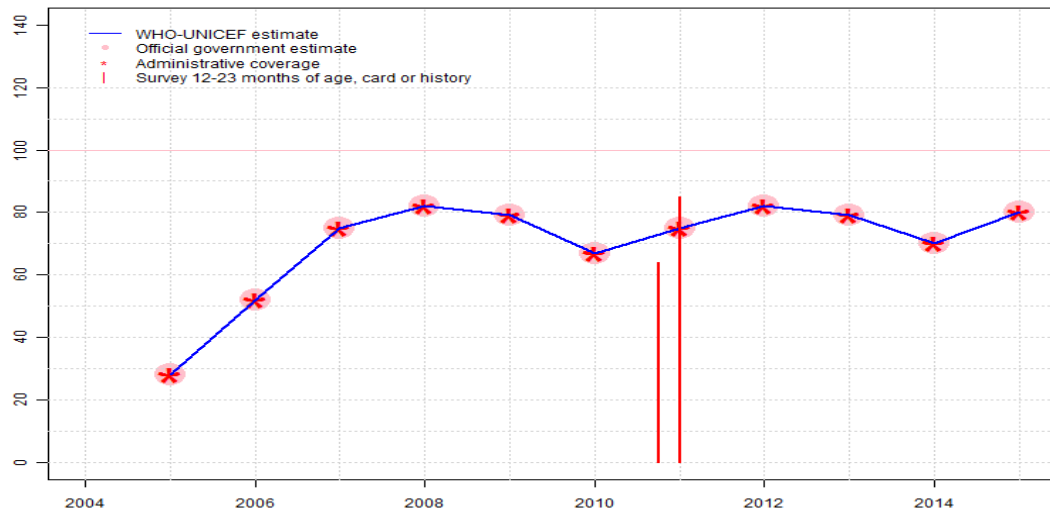
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Gabon - HepB3

GAB - HepB3



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | 28 | 52 | 75 | 82 | 79 | 67 | 75 | 82 | 79 | 70 | 80 |
| Estimate GoC | NA | • | • | • | • | • | • | • | • | • | • | • |
| Official | NA | 28 | 52 | 75 | 82 | 79 | 67 | 75 | 82 | 79 | 70 | 80 |
| Administrative | NA | 28 | 52 | 75 | 82 | 79 | 67 | 75 | 82 | 79 | 70 | 80 |
| Survey | 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.

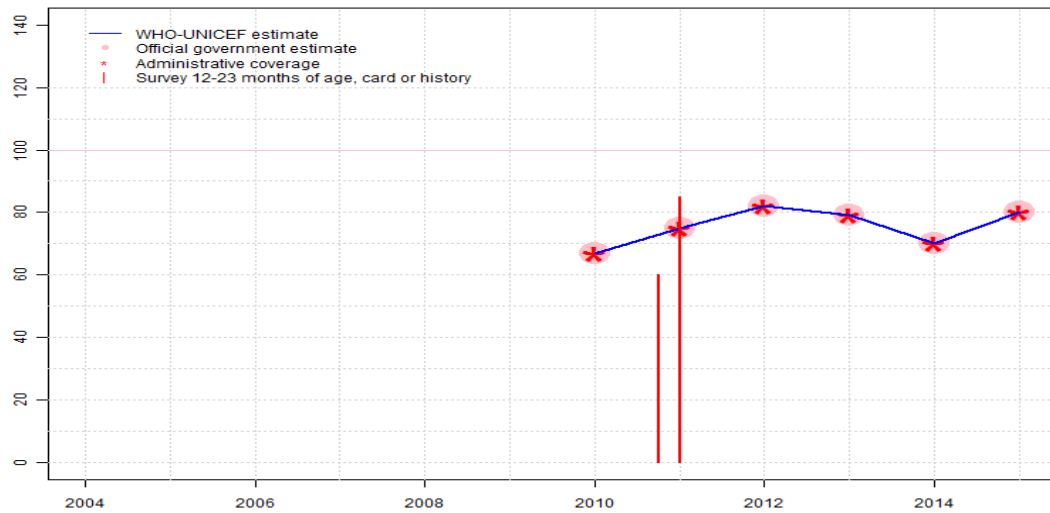
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2005: Estimate based on reported data. HepB vaccine introduced in 2004. Reporting started in 2005. Estimate challenged by: D-
- 2006: Estimate based on reported data. Estimate challenged by: D-
- 2007: Estimate based on reported data. Estimate challenged by: D-
- 2008: Estimate based on reported data. Estimate challenged by: D-
- 2009: Estimate based on reported data. Estimate challenged by: D-
- 2010: Estimate based on reported data. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 77 percent based on 2 survey(s). Gabon Demographic and Health Survey 2012 card or history results of 64 percent modified for recall bias to 68 percent based on 1st dose card or history coverage of 81 percent, 1st dose card only coverage of 66 percent and 3d dose card only coverage of 55 percent. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2014: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. Increase in coverage observed in 2015 from 2014 levels due in part to use of projections from 2013 census (previously used projections from 2003 census). Estimate challenged by: D-

Gabon - Hib3

GAB - Hib3



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | 67 | 75 | 82 | 79 | 70 | 80 |
| Estimate GoC | NA | NA | NA | NA | NA | NA | ● | ● | ● | ● | ● | ● |
| Official | NA | NA | NA | NA | NA | NA | 67 | 75 | 82 | 79 | 70 | 80 |
| Administrative | NA | NA | NA | NA | NA | NA | 67 | 75 | 82 | 79 | 70 | 80 |
| Survey | 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.

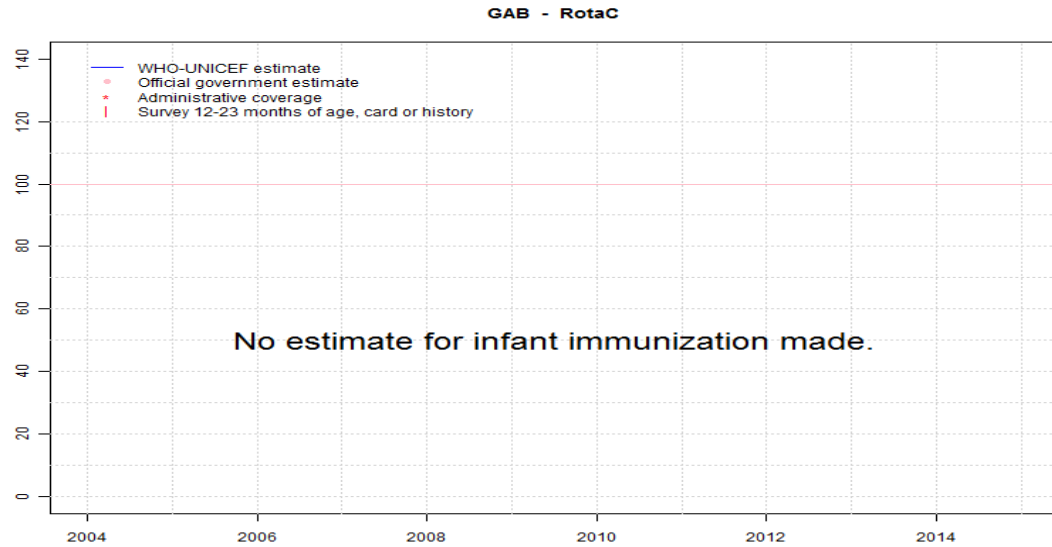
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

- 2010: Estimate based on reported data. DTP-HepB-Hib combination vaccine introduced in 2010. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 74 percent based on 2 survey(s). Gabon Demographic and Health Survey 2012 card or history results of 60 percent modified for recall bias to 63 percent based on 1st dose card or history coverage of 75 percent, 1st dose card only coverage of 63 percent and 3d dose card only coverage of 53 percent. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2014: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. Increase in coverage observed in 2015 from 2014 levels due in part to use of projections from 2013 census (previously used projections from 2003 census). Estimate challenged by: D-

Gabon - RotaC



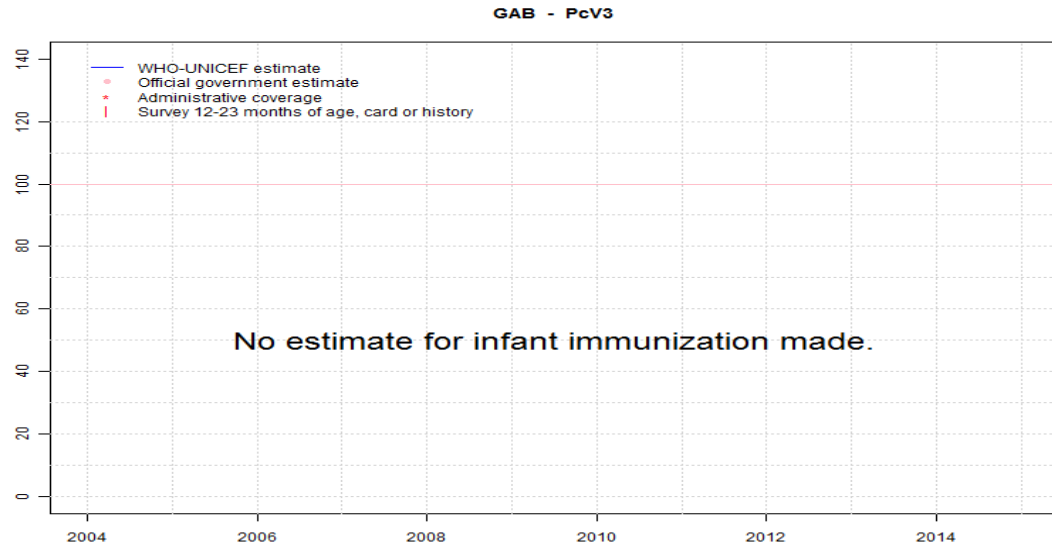
| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Estimate GoC | NA | NA | NA | NA |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

Gabon - PcV3



| | 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 |

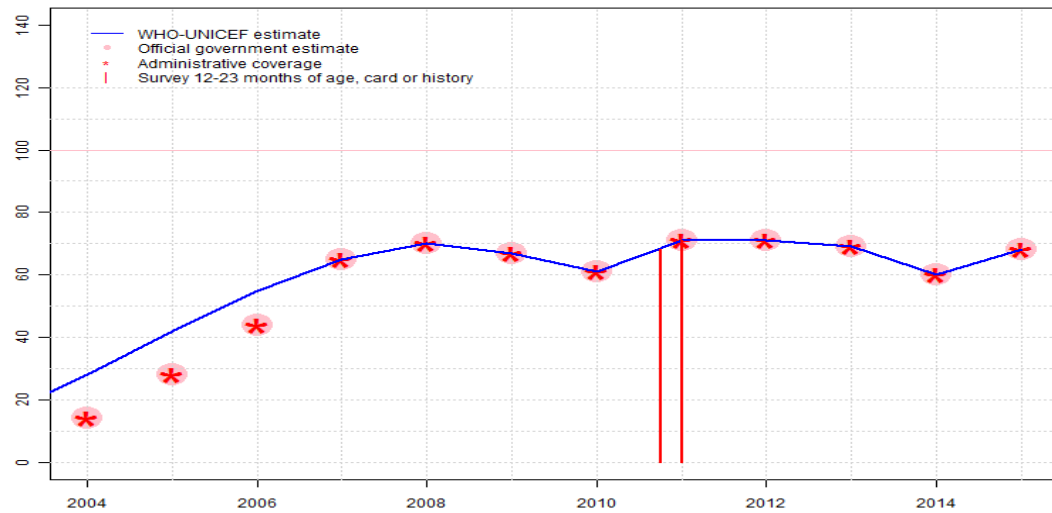
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Gabon - YFV

GAB - YFV



| | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 28 | 42 | 55 | 65 | 70 | 67 | 61 | 71 | 71 | 69 | 60 | 68 |
| Estimate GoC | • | • | • | • | • | • | • | • | • | • | • | • |
| Official | 14 | 28 | 44 | 65 | 70 | 67 | 61 | 71 | 71 | 69 | 60 | 68 |
| Administrative | 14 | 28 | 44 | 65 | 70 | 67 | 61 | 71 | 71 | 69 | 60 | 68 |
| Survey | 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 interpolation between 2003 and 2006 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: R-
- 2005: Estimate based on interpolation between 2003 and 2006 levels. Fluctuating and inconsistent data across antigens suggest poor reporting. Estimate challenged by: R-
- 2006: Nationally reported data matched and exceeded reported MCV coverage levels. Estimate set to MCV coverage levels. Estimate challenged by: R-
- 2007: Based on reported data. Estimate challenged by: D-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 70 percent based on 2 survey(s). Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2013: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2014: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. Increase in coverage observed in 2015 from 2014 levels due in part to use of projections from 2013 census (previously used projections from 2003 census). Estimate challenged by: D-

Gabon - survey details

2011 Enquête Démographique et de Santé Gabon, 2012

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | C or H <12 months | 90 | 12-23 m | 935 | 75 |
| BCG | Card | 72 | 12-23 m | 702 | 75 |
| BCG | Card or History | 92 | 12-23 m | 935 | 75 |
| BCG | History | 19 | 12-23 m | 233 | 75 |
| DTP1 | C or H <12 months | 87 | 12-23 m | 935 | 75 |
| DTP1 | Card | 72 | 12-23 m | 702 | 75 |
| DTP1 | Card or History | 88 | 12-23 m | 935 | 75 |
| DTP1 | History | 17 | 12-23 m | 233 | 75 |
| DTP3 | C or H <12 months | 73 | 12-23 m | 935 | 75 |
| DTP3 | Card | 62 | 12-23 m | 702 | 75 |
| DTP3 | Card or History | 75 | 12-23 m | 935 | 75 |
| DTP3 | History | 13 | 12-23 m | 233 | 75 |
| HepB1 | C or H <12 months | 80 | 12-23 m | 935 | 75 |
| HepB1 | Card | 66 | 12-23 m | 702 | 75 |
| HepB1 | Card or History | 81 | 12-23 m | 935 | 75 |
| HepB1 | History | 15 | 12-23 m | 233 | 75 |
| HepB3 | C or H <12 months | 62 | 12-23 m | 935 | 75 |
| HepB3 | Card | 55 | 12-23 m | 702 | 75 |
| HepB3 | Card or History | 64 | 12-23 m | 935 | 75 |
| HepB3 | History | 9 | 12-23 m | 233 | 75 |
| Hib1 | C or H <12 months | 74 | 12-23 m | 935 | 75 |
| Hib1 | Card | 63 | 12-23 m | 702 | 75 |
| Hib1 | Card or History | 75 | 12-23 m | 935 | 75 |
| Hib1 | History | 12 | 12-23 m | 233 | 75 |
| Hib3 | C or H <12 months | 58 | 12-23 m | 935 | 75 |
| Hib3 | Card | 53 | 12-23 m | 702 | 75 |
| Hib3 | Card or History | 60 | 12-23 m | 935 | 75 |
| Hib3 | History | 7 | 12-23 m | 233 | 75 |
| MCV1 | C or H <12 months | 68 | 12-23 m | 935 | 75 |
| MCV1 | Card | 58 | 12-23 m | 702 | 75 |
| MCV1 | Card or History | 74 | 12-23 m | 935 | 75 |
| MCV1 | History | 16 | 12-23 m | 233 | 75 |
| Pol1 | C or H <12 months | 67 | 12-23 m | 935 | 75 |
| Pol1 | Card | 53 | 12-23 m | 702 | 75 |
| Pol1 | Card or History | 70 | 12-23 m | 935 | 75 |
| Pol1 | History | 17 | 12-23 m | 233 | 75 |
| Pol3 | C or H <12 months | 41 | 12-23 m | 935 | 75 |

| | | | | | |
|------|-------------------|----|---------|-----|----|
| Pol3 | Card | 34 | 12-23 m | 702 | 75 |
| Pol3 | Card or History | 42 | 12-23 m | 935 | 75 |
| Pol3 | History | 8 | 12-23 m | 233 | 75 |
| YFV | C or H <12 months | 26 | 12-23 m | 935 | 75 |
| YFV | Card | 54 | 12-23 m | 702 | 75 |
| YFV | Card or History | 68 | 12-23 m | 935 | 75 |
| YFV | History | 14 | 12-23 m | 233 | 75 |

2011 Revue Externe du PEV Gabon, 2012

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | Card | 82 | 12-23 m | - | 83 |
| BCG | Card or History | 95 | 12-23 m | 3097 | 83 |
| BCG | Scar | 25 | 12-23 m | - | 83 |
| DTP1 | Card or History | 93 | 12-23 m | 3097 | 83 |
| DTP3 | Card | 73 | 12-23 m | - | 83 |
| DTP3 | Card or History | 85 | 12-23 m | 3097 | 83 |
| HepB1 | Card or History | 93 | 12-23 m | 3097 | 83 |
| HepB3 | Card | 73 | 12-23 m | - | 83 |
| HepB3 | Card or History | 85 | 12-23 m | 3097 | 83 |
| Hib1 | Card or History | 93 | 12-23 m | 3097 | 83 |
| Hib3 | Card | 73 | 12-23 m | - | 83 |
| Hib3 | Card or History | 85 | 12-23 m | 3097 | 83 |
| MCV1 | Card | 61 | 12-23 m | - | 83 |
| MCV1 | Card or History | 72 | 12-23 m | 3097 | 83 |
| Pol3 | Card | 72 | 12-23 m | - | 83 |
| Pol3 | Card or History | 85 | 12-23 m | 3097 | 83 |
| YFV | Card | 71 | 12-23 m | - | 83 |
| YFV | Card or History | 71 | 12-23 m | 3097 | 83 |

1999 Enquête Démographique et de Santé, Gabon 2000

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | C or H <12 months | 88 | 12-23 m | 803 | 63 |
| BCG | Card | 61 | 12-23 m | 803 | 63 |
| BCG | Card or History | 89 | 12-23 m | 803 | 63 |
| BCG | History | 28 | 12-23 m | 803 | 63 |
| DTP1 | C or H <12 months | 67 | 12-23 m | 803 | 63 |

Gabon - survey details

| | | | | | | | | | | | |
|------|-------------------|----|---------|-----|----|------|-------------------|----|---------|-----|----|
| DTP1 | Card | 48 | 12-23 m | 803 | 63 | Pol1 | Card | 52 | 12-23 m | 803 | 63 |
| DTP1 | Card or History | 69 | 12-23 m | 803 | 63 | Pol1 | Card or History | 84 | 12-23 m | 803 | 63 |
| DTP1 | History | 22 | 12-23 m | 803 | 63 | Pol1 | History | 32 | 12-23 m | 803 | 63 |
| DTP3 | C or H <12 months | 36 | 12-23 m | 803 | 63 | Pol3 | C or H <12 months | 26 | 12-23 m | 803 | 63 |
| DTP3 | Card | 31 | 12-23 m | 803 | 63 | Pol3 | Card | 27 | 12-23 m | 803 | 63 |
| DTP3 | Card or History | 38 | 12-23 m | 803 | 63 | Pol3 | Card or History | 28 | 12-23 m | 803 | 63 |
| DTP3 | History | 6 | 12-23 m | 803 | 63 | Pol3 | History | 1 | 12-23 m | 803 | 63 |
| MCV1 | C or H <12 months | 44 | 12-23 m | 803 | 63 | YFV | C or H <12 months | 2 | 12-23 m | 803 | 63 |
| MCV1 | Card | 39 | 12-23 m | 803 | 63 | YFV | Card | 11 | 12-23 m | 803 | 63 |
| MCV1 | Card or History | 55 | 12-23 m | 803 | 63 | YFV | Card or History | 24 | 12-23 m | 803 | 63 |
| MCV1 | History | 16 | 12-23 m | 803 | 63 | YFV | History | 13 | 12-23 m | 803 | 63 |
| Pol1 | C or H <12 months | 82 | 12-23 m | 803 | 63 | | | | | | |

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

Gabon

WHO/UNICEF Estimates of Protection at Birth (PAB) against tetanus

In countries where tetanus is recommended for girls and women coverage is usually reported as "TT2+", i.e. the proportion of (pregnant) women who have received their second or superior TT dose in a given year. TT2 + coverage, however, can under-represent the actual proportion of births that are protected against tetanus as it does not include women who have previously received protective doses, women who received one dose without documentation of previous doses, and women who received doses in TT (or Td) supplemental immunization activities (SIA). In addition, girls who have received DTP in their childhood and are entering childbearing age, may be protected with TT booster doses.

WHO and UNICEF have developed a model that takes into account the above scenarios, and calculates the proportion of births in a given year that can be considered as having been protected against tetanus - "Protection at Birth".

In this model, annual cohorts of women are followed from infancy through their life. A proportion receives DTP in infancy (estimated based on the WHO-UNICEF estimates of DTP3 coverage). In addition some of these women also receive TT through routine services when they are pregnant and may also receive TT during SIAs. The model also adjusts reported data, taking into account coverage patterns in other years, and/or results available through surveys. The duration of protection is then calculated, based on WHO estimates of the duration of protection by doses ever received. The proportion of births that are protected against tetanus as a result of maternal immunization reflects the tetanus immunization received by the mother throughout her life rather than simply the TT immunizations received during the current pregnancy.

The model was used in the mid to late 2000. Currently, the coverage series developed by the model is used as the baseline, and efforts are made to obtain data from all sources that include the JRF and reported trend over the years, routine PAB reporting and its trend over the years, data from surveys (DHS, MICS, EPI), whether countries have been validated for the attainment of maternal and neonatal tetanus elimination and what the TT coverage figures are from the survey etc and all the information is used to arrive at an estimate of the protection-at-birth from TT vaccination.

| Year | PAB coverage estimate (%) |
|------|---------------------------|
| 2004 | 58 |
| 2005 | 58 |
| 2006 | 63 |
| 2007 | 67 |
| 2008 | 73 |
| 2009 | 75 |
| 2010 | 75 |
| 2011 | 75 |
| 2012 | 75 |
| 2013 | 85 |
| 2014 | 85 |
| 2015 | 85 |

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.