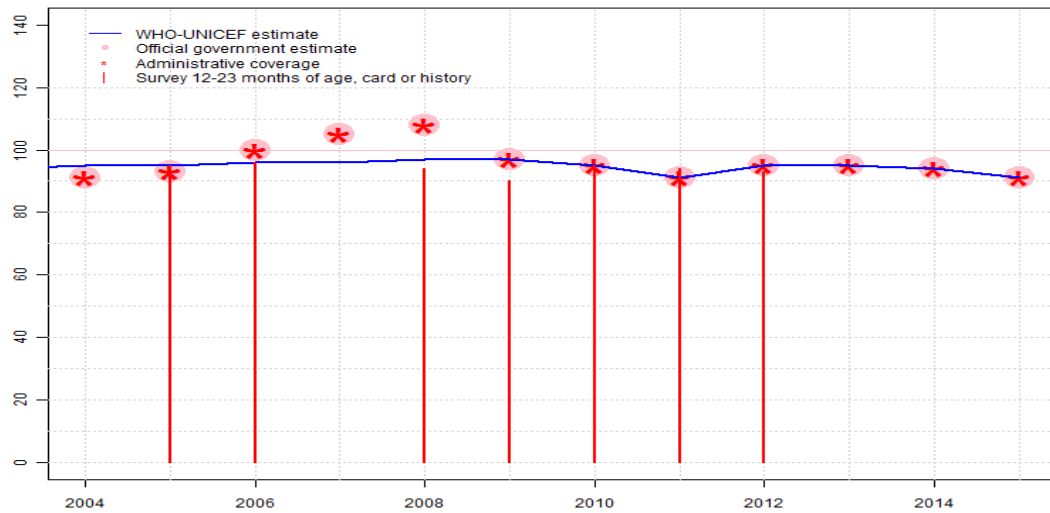


PER - BCG



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	95	95	96	96	97	97	95	91	95	95	94	91
Estimate GoC	••	••	•	•	•	•	•	•••	•••	•••	•••	••
Official	91	93	100	105	108	97	95	91	95	95	94	91
Administrative	91	93	100	105	108	97	95	91	95	95	94	91
Survey	NA	95	96	NA	94	90	95	94	93	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 coverage reported by national government. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. GoC=S+ D+
- 2005: Estimate based on interpolation between data reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. GoC=S+ D+
- 2006: Estimate based on interpolation between data reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: S-
- 2007: Estimate based on interpolation between coverage reported by national government. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Reported data excluded. 105 percent greater than 100 percent. Estimate challenged by: S-
- 2008: Estimate based on interpolation between coverage reported by national government. Peru Continuous Demographic and Health Survey 2009 results ignored by working group. Survey results ignored. Adjustment factor for recall bias inconsistent with other surveys of similar quality and methodology. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Reported data excluded. 108 percent greater than 100 percent. Estimate challenged by: S-
- 2009: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. The 2014 ENDESA survey reporting coverage for children aged less than 12 months

Peru - BCG

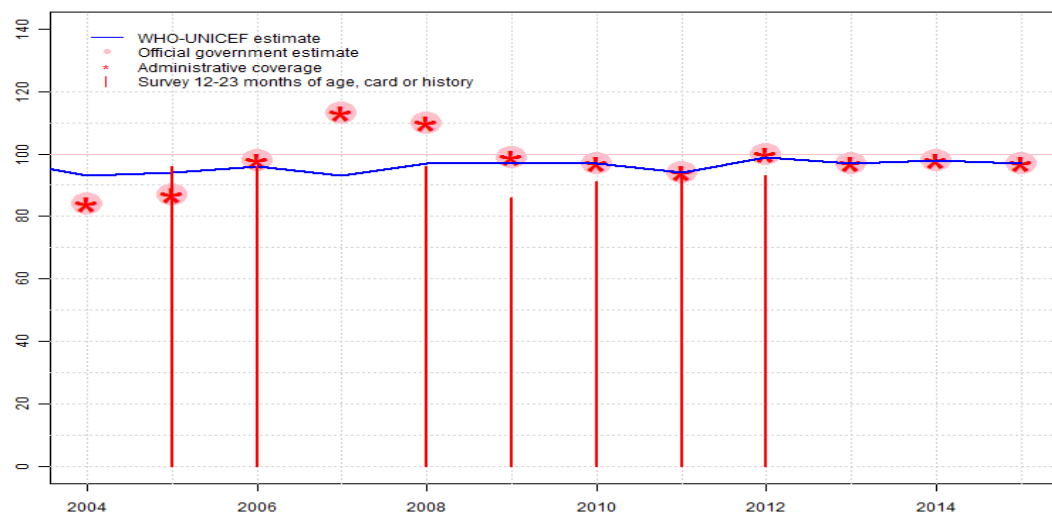
(87 percent of whom had documented evidence of vaccination history),
born during 2013, suggests coverage (card+recall) of 91 percent for BCG.
GoC=R+ S+ D+

2014: Estimate based on coverage reported by national government. GoC=R+ S+
D+

2015: Estimate based on coverage reported by national government. GoC=R+
D+

Peru - DTP1

PER - DTP1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	93	94	96	93	97	97	97	94	99	97	98	97
Estimate GoC	•	••	•	•	•	•	•	•••	•••	•••	•••	••
Official	84	87	98	113	110	99	97	94	100	97	98	97
Administrative	84	87	98	113	110	99	97	94	100	97	98	97
Survey	NA	96	96	NA	96	86	91	93	93	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 coverage reported by national government. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: D-
- 2005: Estimate based on interpolation between data reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. GoC=S+ D+
- 2006: Estimate based on interpolation between data reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: S-
- 2007: Reported data calibrated to 2006 and 2009 levels. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Reported data excluded. 113 percent greater than 100 percent. Estimate challenged by: S-
- 2008: DTP1 coverage estimated based on DTP3 coverage of 93. Peru Continuous Demographic and Health Survey 2009 results ignored by working group. Survey results ignored. Adjustment factor for recall bias inconsistent with other surveys of similar quality and methodology. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Reported data excluded. 110 percent greater than 100 percent. Estimate challenged by: R-S-
- 2009: DTP1 coverage estimated based on DTP3 coverage of 93. Estimate challenged by: R-S-
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 91 percent based on 1 survey(s). Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 93 percent based on 1 survey(s). GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. The 2014 EN-DESA survey reporting coverage for children aged less than 12 months (87 percent of whom had documented evidence of vaccination history), born

Peru - DTP1

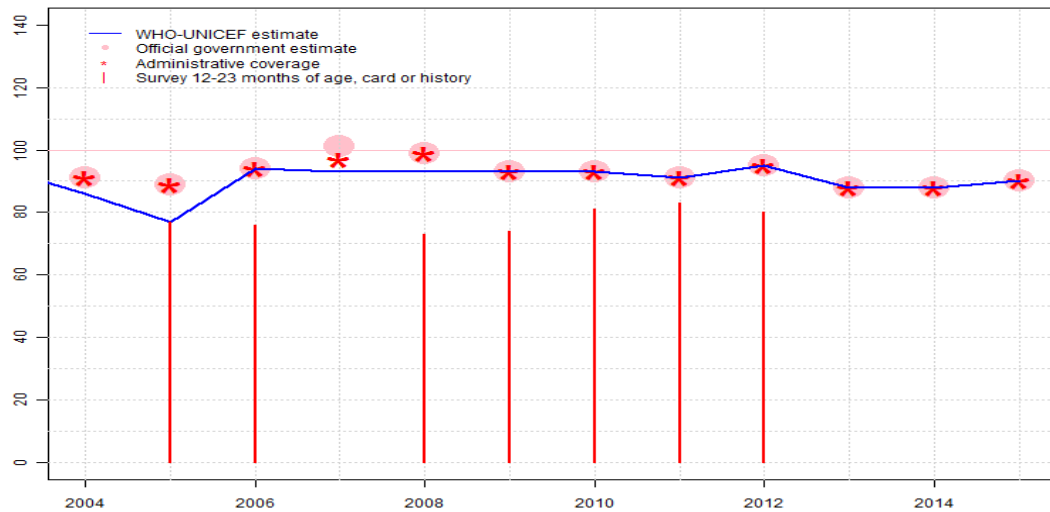
during 2013, suggests coverage (card+recall) of 89 percent for first dose of DTP-HepB-Hib. GoC=R+ S+ D+

2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2015: Estimate based on coverage reported by national government. GoC=R+ D+

Peru - DTP3

PER - DTP3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	86	77	94	93	93	93	93	91	95	88	88	90
Estimate GoC	••	•	•	•	•	•	•	•••	•••	•••	•••	••
Official	91	89	94	101	99	93	93	91	95	88	88	90
Administrative	91	89	94	97	99	93	93	91	95	88	88	90
Survey	NA	77	76	NA	73	74	81	83	80	NA	NA	NA

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

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

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

Description:

- 2004: Reported data calibrated to 2003 and 2005 levels. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. GoC=S+
- 2005: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 77 percent based on 1 survey(s). Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: D-R-
- 2006: Estimate based on interpolation between data reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2007-2008 card or history results of 76 percent modified for recall bias to 90 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 62 percent and 3d dose card only coverage of 58 percent. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: S-
- 2007: Estimate based on interpolation between coverage reported by national government. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Reported data excluded. 101 percent greater than 100 percent. Estimate challenged by: D-S-
- 2008: Estimate based on interpolation between coverage reported by national government. Peru Continuous Demographic and Health Survey 2009 results ignored by working group. Survey results ignored. Adjustment factor for recall bias inconsistent with other surveys of similar quality and methodology. Peru Continuous Demographic and Health Survey 2009 card or history results of 73 percent modified for recall bias to 89 percent based on 1st dose card or history coverage of 96 percent, 1st dose card only coverage of 65 percent and 3d dose card only coverage of 60 percent. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: D-S-
- 2009: Estimate based on reported data. Peru Continuous Demographic and Family Health Survey 2010 card or history results of 74 percent modified for recall bias to 79 percent based on 1st dose card or history coverage of 86 percent, 1st dose card only coverage of 75 percent and 3d dose card only coverage of 69 percent. Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 86 percent based on 1 survey(s). Peru Contin-

uous Demographic and Family Health Survey 2011 card or history results of 81 percent modified for recall bias to 86 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 79 percent and 3d dose card only coverage of 75 percent. Estimate challenged by: S-

2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 88 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2012 card or history results of 83 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 80 percent and 3d dose card only coverage of 76 percent. GoC=R+ S+ D+

2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 88 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2013 card or history results of 80 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 78 percent and 3d dose card only coverage of 74 percent. GoC=R+ S+ D+

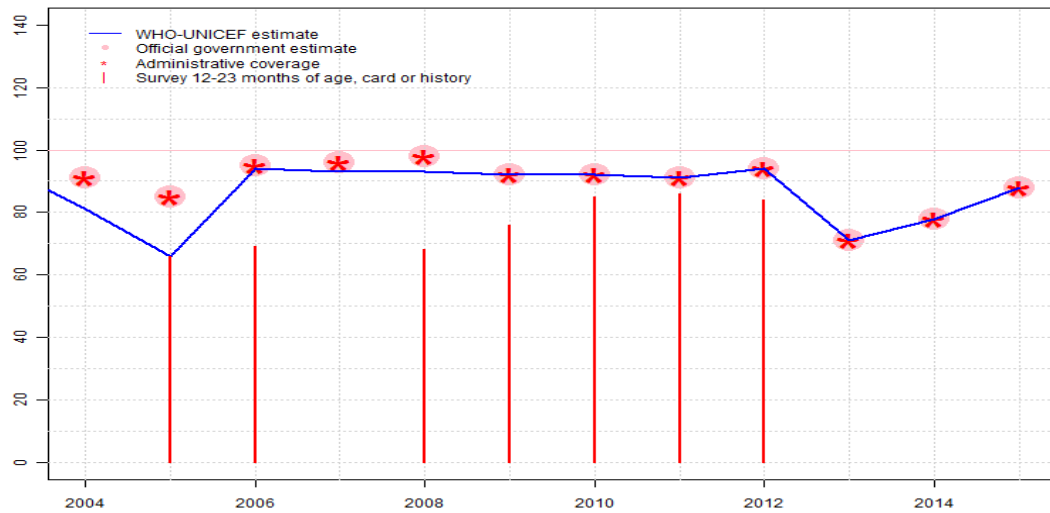
2013: Estimate based on coverage reported by national government. The 2014 ENDESA survey reporting coverage for children aged less than 12 months (87 percent of whom had documented evidence of vaccination history), born during 2013, suggests coverage (card+recall) of 70 percent modified for recall bias to 72 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 82 percent and 3d dose card only coverage of 66 percent. GoC=R+ S+ D+

2014: Estimate based on coverage reported by national government. Increase in dropout due to multiple factors per EPI review 2014. GoC=R+ S+ D+

2015: Estimate based on coverage reported by national government. GoC=R+ D+

Peru - Pol3

PER - Pol3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	81	66	94	93	93	92	92	91	94	71	78	88
Estimate GoC	•	•	•	•	•	•	•	•••	•••	••	•	••
Official	91	85	95	96	98	92	92	91	94	71	78	88
Administrative	91	85	95	96	98	92	92	91	94	71	78	88
Survey	NA	66	69	NA	68	76	85	86	84	NA	NA	NA

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

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

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

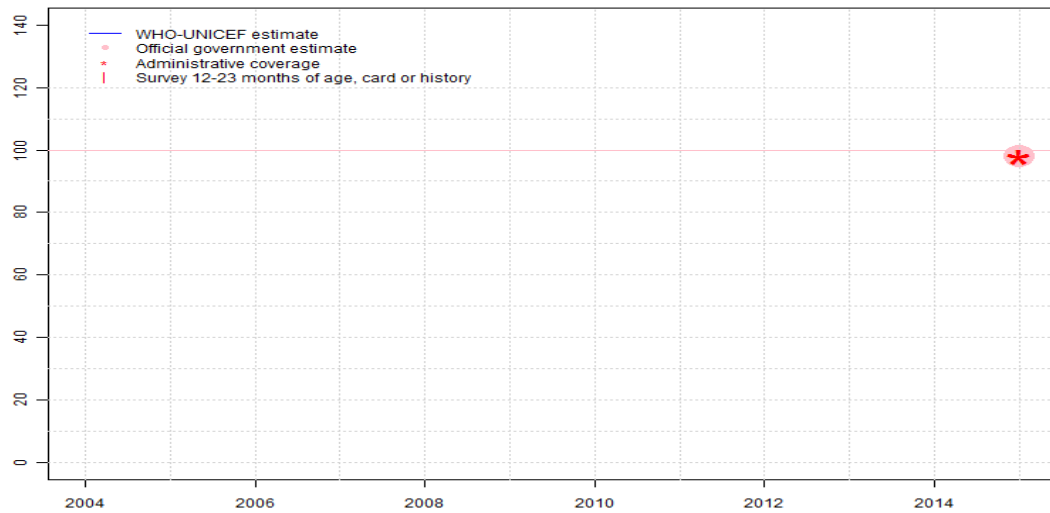
Description:

- 2004: Reported data calibrated to 2003 and 2005 levels. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: D-
- 2005: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 66 percent based on 1 survey(s). Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: D-R-
- 2006: Estimate based on interpolation between data reported by national government supported by survey. Survey evidence of 86 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2007-2008 card or history results of 69 percent modified for recall bias to 86 percent based on 1st dose card or history coverage of 94 percent, 1st dose card only coverage of 62 percent and 3d dose card only coverage of 57 percent. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: S-
- 2007: Estimate based on interpolation between coverage reported by national government. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: D-S-
- 2008: Estimate based on interpolation between coverage reported by national government. Peru Continuous Demographic and Health Survey 2009 results ignored by working group. Survey results ignored. Adjustment factor for recall bias inconsistent with other surveys of similar quality and methodology. Peru Continuous Demographic and Health Survey 2009 card or history results of 68 percent modified for recall bias to 85 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 63 percent and 3d dose card only coverage of 58 percent. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: D-S-
- 2009: Estimate based on coverage reported by national government supported by survey. Survey evidence of 84 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2010 card or history results of 76 percent modified for recall bias to 84 percent based on 1st dose card or history coverage of 92 percent, 1st dose card only coverage of 73 percent and 3d dose card only coverage of 67 percent. Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 92 percent based on 1 survey(s). Peru Contin-

- uous Demographic and Family Health Survey 2011 card or history results of 85 percent modified for recall bias to 92 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 75 percent. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2012 card or history results of 86 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 80 percent and 3d dose card only coverage of 77 percent. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 92 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2013 card or history results of 84 percent modified for recall bias to 92 percent based on 1st dose card or history coverage of 97 percent, 1st dose card only coverage of 78 percent and 3d dose card only coverage of 74 percent. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. The 2014 ENDESA survey reporting coverage for children aged less than 12 months (87 percent of whom had documented evidence of vaccination history), born during 2013, suggests coverage (card+recall) of 51 percent modified for recall bias to 55 percent based on 1st dose card or history coverage of 81 percent, 1st dose card only coverage of 72 percent and 3d dose card only coverage of 49 percent. In 2013, Peru introduced a sequential schedule with IPV1, IPV2, OPV3, OPV4 and a fifth dose of OPV at 4 years. Decline in reported coverage may also be partly explained by a stock-out of polio vaccine. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. Estimate of 78 percent changed from previous revision value of 79 percent. Estimate challenged by: D-
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

Peru - IPV1

PER - IPV1



Description:

2015: Estimate based on coverage reported by national government. IPV vaccine was introduced in 2014. Sequential schedule is used with IPV recommended at 2 and 4 month. GoC=R+ D+

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

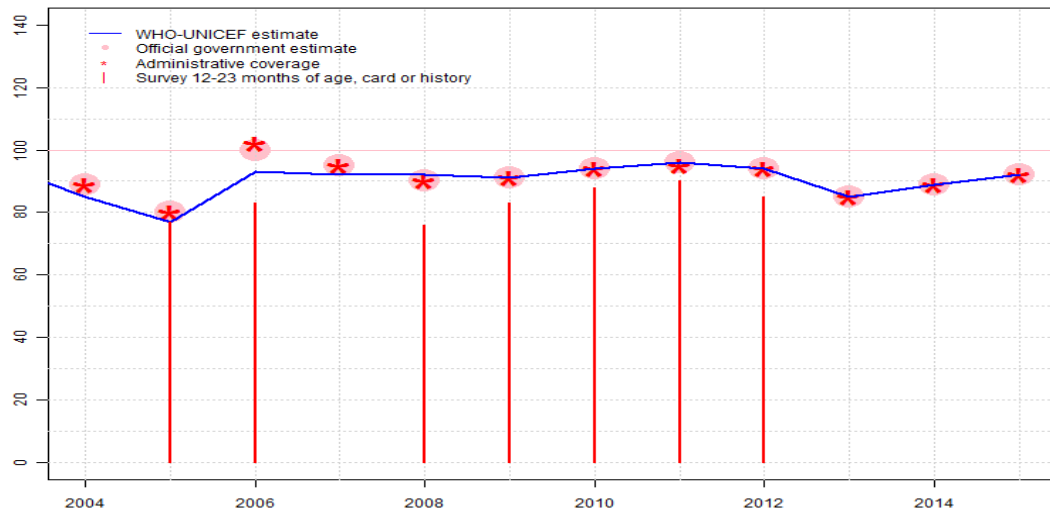
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

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

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

Peru - MCV1

PER - MCV1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	85	77	93	92	92	91	94	96	94	85	89	92
Estimate GoC	••	•	•	•	•	•	•	•••	•••	•••	•••	••
Official	89	80	100	95	90	91	94	96	94	85	89	92
Administrative	89	80	102	95	90	91	94	95	94	85	89	92
Survey	NA	77	83	NA	76	83	88	90	85	NA	NA	NA

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

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

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

Description:

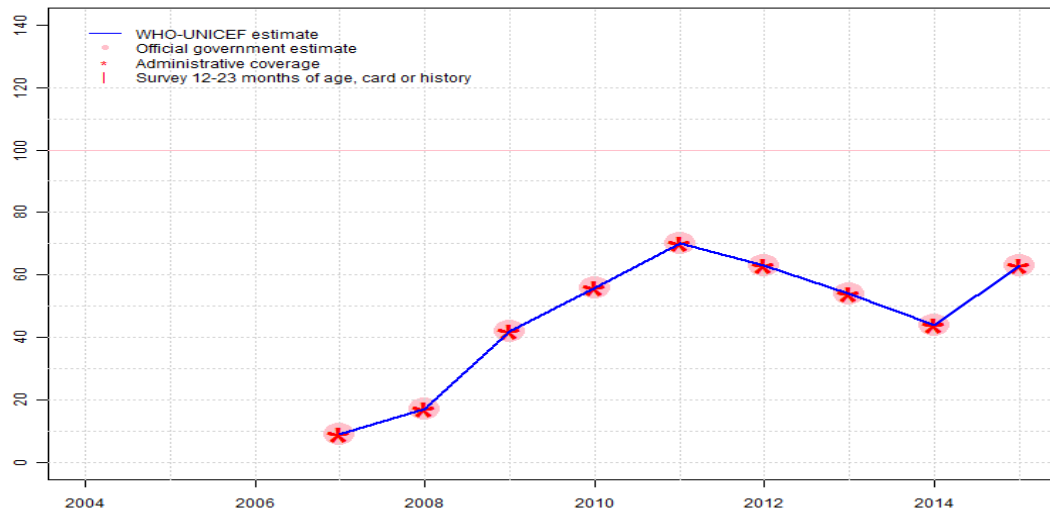
- 2004: Reported data calibrated to 2003 and 2005 levels. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. GoC=S+ D+
- 2005: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 77 percent based on 1 survey(s). Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: D-R-
- 2006: Estimate based on interpolation between data reported by national government supported by survey. Survey evidence of 83 percent based on 1 survey(s). Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: S-
- 2007: Estimate based on interpolation between coverage reported by national government. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: S-
- 2008: Estimate based on interpolation between coverage reported by national government. Peru Continuous Demographic and Health Survey 2009 results ignored by working group. Survey results ignored. Adjustment factor for recall bias inconsistent with other surveys of similar quality and methodology. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: D-S-
- 2009: Estimate based on coverage reported by national government supported by survey. Survey evidence of 83 percent based on 1 survey(s). Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government supported by survey. Survey evidence of 88 percent based on 1 survey(s). Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 85 percent based on 1 survey(s). GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ S+ D+

Peru - MCV1

2015: Estimate based on coverage reported by national government. GoC=R+
D+

Peru - MCV2

PER - MCV2



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	9	17	42	56	70	63	54	44	63
Estimate GoC	NA	NA	NA	•	•	•	•	•	••	••	••	••
Official	NA	NA	NA	9	17	42	56	70	63	54	44	63
Administrative	NA	NA	NA	9	17	42	56	70	63	54	44	63
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

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

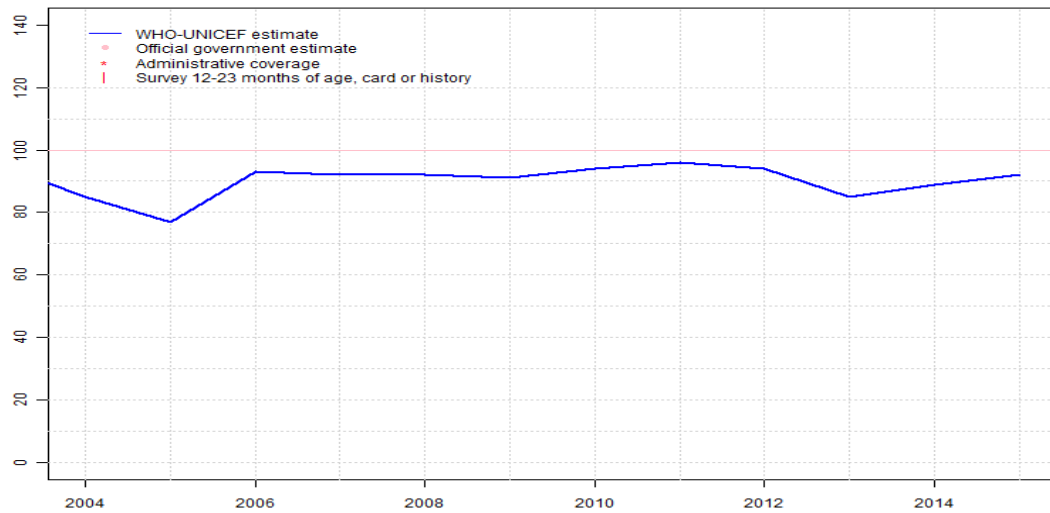
Description:

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

- 2007: Estimate based on coverage reported by national government. Measles 2nd dose was introduced in 2007 and recommended at 4 years of age. Estimate challenged by: S-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government. Estimate challenged by: D-
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. Second dose of measles containing vaccine (MCV2) recommended at age 18 months from 2014. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. Increase from previous year can be attributed to full year with the new schedule. GoC=R+ D+

Peru - RCV1

PER - RCV1



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	85	77	93	92	92	91	94	96	94	85	89	92
Estimate GoC	••	•	•	•	•	•	•	•••	•••	•••	•••	••
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

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

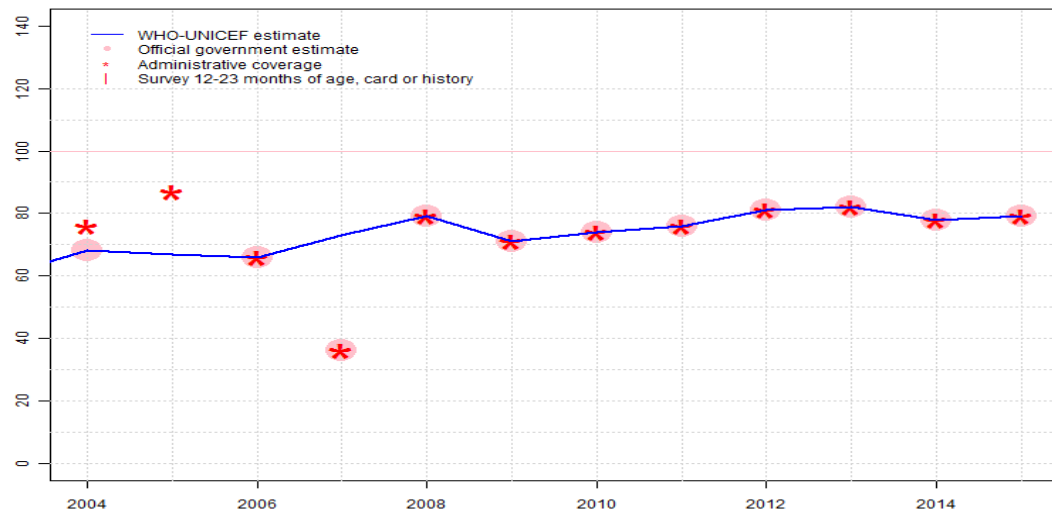
Description:

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

- 2004: Estimate based on estimated MCV1. GoC=S+ D+
- 2005: Estimate based on estimated MCV1. Estimate challenged by: D-R-
- 2006: Estimate based on estimated MCV1. Estimate challenged by: S-
- 2007: Estimate based on estimated MCV1. Estimate challenged by: S-
- 2008: Estimate based on estimated MCV1. Estimate challenged by: D-S-
- 2009: Estimate based on estimated MCV1. Estimate challenged by: S-
- 2010: Estimate based on estimated MCV1. Estimate challenged by: S-
- 2011: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2012: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2013: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2014: Estimate based on estimated MCV1. GoC=R+ S+ D+
- 2015: Estimate based on estimated MCV1. GoC=R+ D+

Peru - HepBB

PER - HepBB



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	68	67	66	73	79	71	74	76	81	82	78	79
Estimate GoC	●●	●	●	●	●	●	●	●●	●●	●●	●●	●●
Official	68	NA	66	36	79	71	74	76	81	82	78	79
Administrative	76	87	66	36	79	71	74	76	81	82	78	79
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

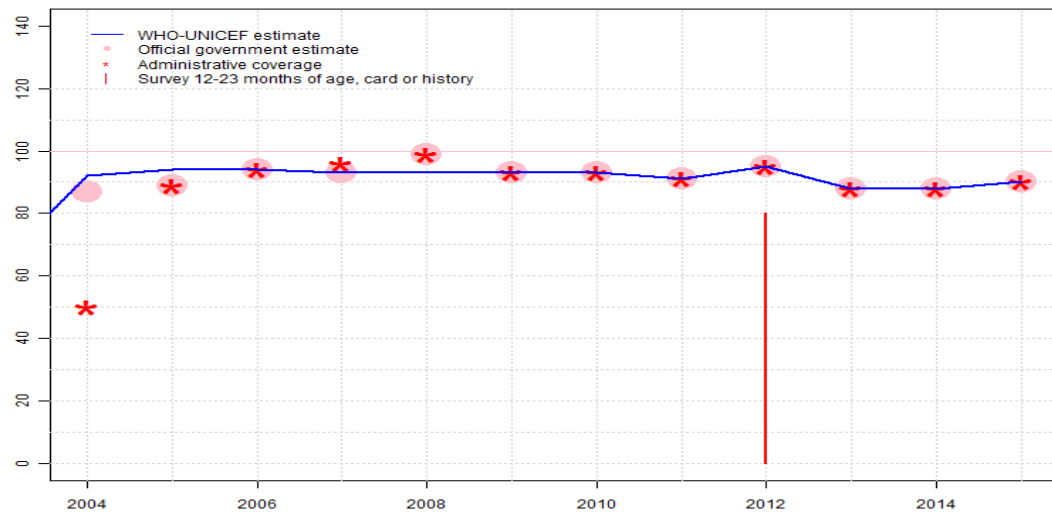
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Estimate based on coverage reported by national government. GoC=R+ D+
- 2005: Estimate based on interpolation between reported values. Reported data excluded. Unexplained increase from 68 percent to 87 percent with decrease 66 percent. Estimate challenged by: D-
- 2006: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2007: Estimate based on interpolation between reported values. Reported data excluded. Decline in reported coverage from 66 percent to 36 percent with increase to 79 percent. Estimate challenged by: D-S-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-S-
- 2009: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

Peru - HepB3

PER - HepB3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	92	94	94	93	93	93	93	91	95	88	88	90
Estimate GoC	•	•	•	•	•	•	•	•••	•••	•••	•••	••
Official	87	89	94	93	99	93	93	91	95	88	88	90
Administrative	50	89	94	96	99	93	93	91	95	88	88	90
Survey	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA

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

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

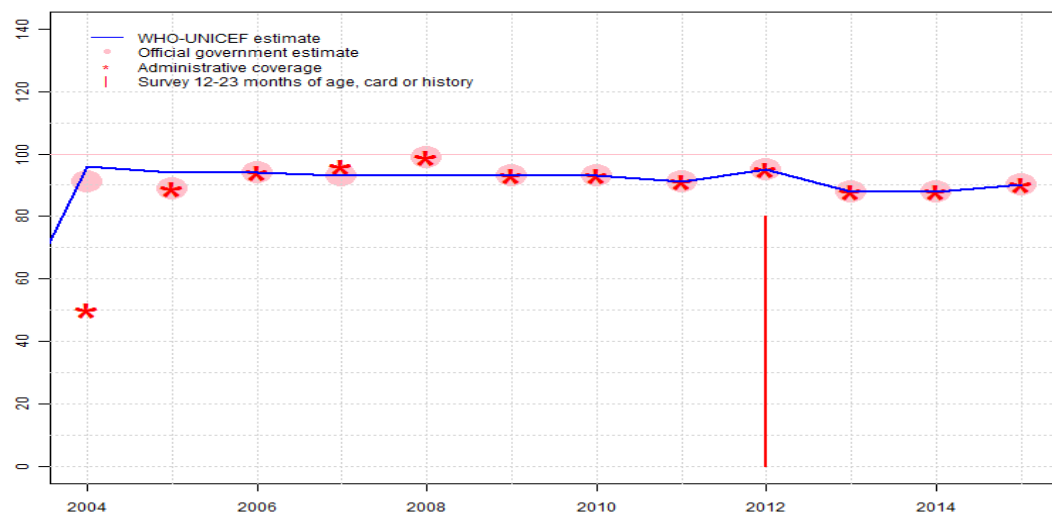
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

Description:

- 2004: Reported data calibrated to 2005 levels. Estimate challenged by: D-
- 2005: Estimate is based on DTP3 coverage levels. Estimate challenged by: D-R-
- 2006: Estimate is based on DTP3 coverage levels. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: R-S-
- 2007: Estimate is based on DTP3 coverage levels. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: D-R-S-
- 2008: Estimate is based on DTP3 coverage levels. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: D-R-S-
- 2009: Estimate is based on coverage reported by national government. Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 88 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2013 card or history results of 80 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 78 percent and 3d dose card only coverage of 74 percent. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. The 2014 ENDESA survey reporting coverage for children aged less than 12 months (87 percent of whom had documented evidence of vaccination history), born during 2013, suggests coverage (card+recall) of 70 percent modified for recall bias to 72 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 82 percent and 3d dose card only coverage of 66 percent. GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government. Increase in dropout due to multiple factors per EPI review 2014. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

Peru - Hib3

PER - Hib3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	96	94	94	93	93	93	93	91	95	88	88	90
Estimate GoC	•	•	•	•	•	•	•	•••	•••	•••	•••	••
Official	91	89	94	93	99	93	93	91	95	88	88	90
Administrative	50	89	94	96	99	93	93	91	95	88	88	90
Survey	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA

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

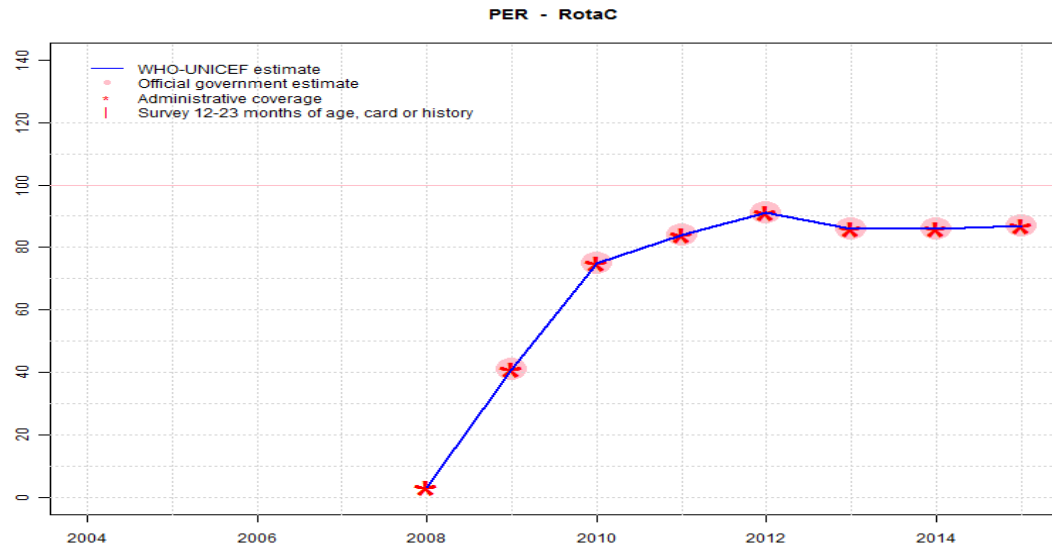
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

Description:

- 2004: Reported data calibrated to 2005 levels. Estimate challenged by: D-
- 2005: Estimate is based on DTP3 coverage levels. Estimate challenged by: D-R-
- 2006: Estimate is based on DTP3 coverage levels. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: R-S-
- 2007: Estimate is based on DTP3 coverage levels. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: D-R-S-
- 2008: Estimate is based on DTP3 coverage levels. Reported data excluded. National reported data in 2006-2008 exceed 100 percent for some antigens and are not consistent with coverage recalculated using UNPD denominators. Estimate challenged by: D-R-S-
- 2009: Estimate is based on coverage reported by national government. Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government. GoC=R+ S+ D+
- 2012: Estimate based on coverage reported by national government supported by survey. Survey evidence of 88 percent based on 1 survey(s). Peru Continuous Demographic and Family Health Survey 2013 card or history results of 80 percent modified for recall bias to 88 percent based on 1st dose card or history coverage of 93 percent, 1st dose card only coverage of 78 percent and 3d dose card only coverage of 74 percent. GoC=R+ S+ D+
- 2013: Estimate based on coverage reported by national government. The 2014 ENDESA survey reporting coverage for children aged less than 12 months (87 percent of whom had documented evidence of vaccination history), born during 2013, suggests coverage (card+recall) of 70 percent modified for recall bias to 72 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 82 percent and 3d dose card only coverage of 66 percent. GoC=R+ S+ D+
- 2014: Estimate based on coverage reported by national government. Increase in dropout due to multiple factors per EPI review 2014. GoC=R+ S+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

Peru - RotaC



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	3	41	75	84	91	86	86	87
Estimate GoC	NA	NA	NA	NA	•	•	•	••	••	••	••	••
Official	NA	NA	NA	NA	NA	41	75	84	91	86	86	87
Administrative	NA	NA	NA	NA	3	41	75	84	91	86	86	87
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

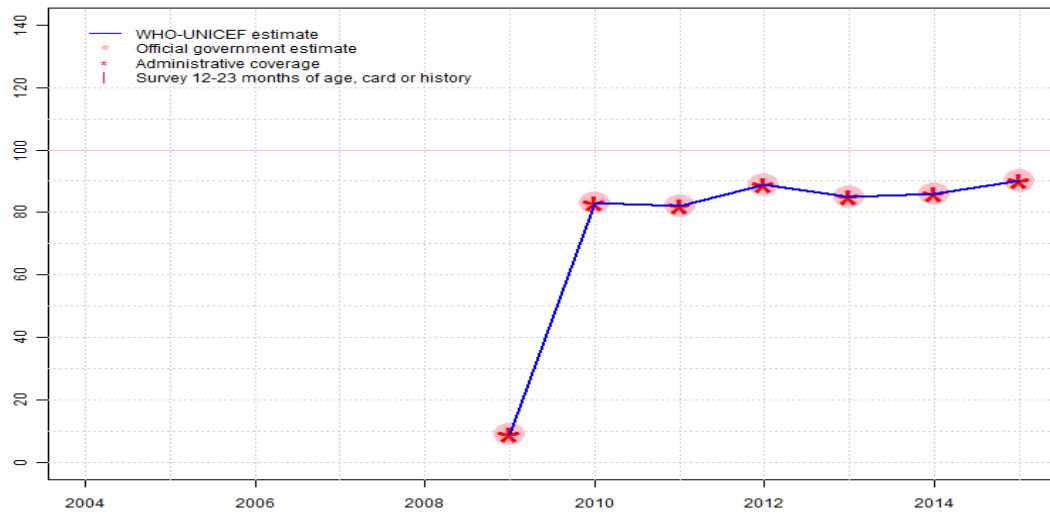
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2015 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

Description:

- 2008: Estimate based on reported administrative estimate. Rotavirus vaccine partially introduced in 2007, nationally in 2009, reporting started in 2008. Estimate challenged by: S-
- 2009: Estimate based on coverage reported by national government. . Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

PER - PcV3



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	NA	NA	NA	NA	NA	9	83	82	89	85	86	90
Estimate GoC	NA	NA	NA	NA	NA	●●	●●	●●	●●	●●	●●	●●
Official	NA	NA	NA	NA	NA	9	83	82	89	85	86	90
Administrative	NA	NA	NA	NA	NA	9	83	82	89	85	86	90
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Description:

- 2009: Estimate based on coverage reported by national government. Pneumococcal conjugate vaccine partially introduced in 2007 nationally in 2009 reporting started in 2009. GoC=R+ D+
- 2010: Estimate based on coverage reported by national government. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

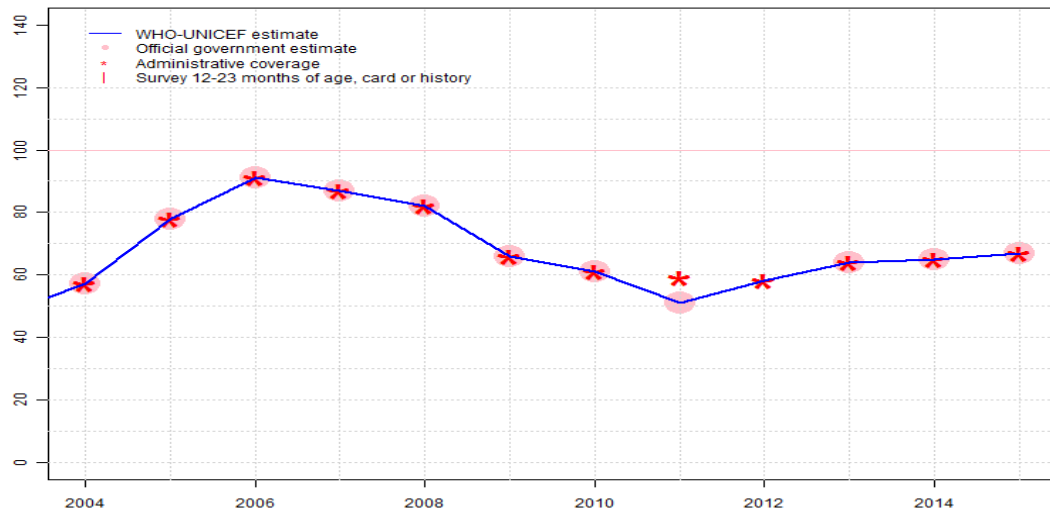
The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information that are of varying, and, in some instances, unknown quality. Beginning with the 2011 revision we describe the grade of confidence (GoC) we have in these estimates. As there is no underlying probability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

Peru - YFV

PER - YFV



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Estimate	57	78	91	87	82	66	61	51	58	64	65	67
Estimate GoC	••	••	•	•	•	•	•	••	••	••	••	••
Official	57	78	91	87	82	66	61	51	NA	64	65	67
Administrative	57	78	91	87	82	66	61	59	58	64	65	67
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

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

Description:

- 2004: Estimate based on coverage reported by national government. GoC=R+ D+
- 2005: Estimate based on coverage reported by national government. GoC=R+ D+
- 2006: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2007: Estimate based on coverage reported by national government. Estimate challenged by: D-S-
- 2008: Estimate based on coverage reported by national government. Estimate challenged by: D-S-
- 2009: Estimate based on coverage reported by national government. Due to vaccine shortages YFV administered in districts at risk only. Estimate challenged by: S-
- 2010: Estimate based on coverage reported by national government. Estimate challenged by: S-
- 2011: Estimate based on coverage reported by national government. GoC=R+ D+
- 2012: Estimate based on reported administrative estimate. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. GoC=R+ D+
- 2014: Estimate based on coverage reported by national government. GoC=R+ D+
- 2015: Estimate based on coverage reported by national government. GoC=R+ D+

Peru - survey details

2013 Peru Encuesta Demográfica y de Salud Familiar-ENDES,
2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	91	0-12 m	1681	87
BCG	Card < 12 months	80	0-12 m	1681	87
BCG	History	11	0-12 m	1681	87
DTP1	C or H <12 months	89	0-12 m	1681	87
DTP1	Card < 12 months	82	0-12 m	1681	87
DTP1	History	8	0-12 m	1681	87
DTP3	C or H <12 months	70	0-12 m	1681	87
DTP3	Card < 12 months	66	0-12 m	1681	87
DTP3	History	4	0-12 m	1681	87
HepB1	C or H <12 months	89	0-12 m	1681	87
HepB1	Card < 12 months	82	0-12 m	1681	87
HepB1	History	8	0-12 m	1681	87
HepB3	C or H <12 months	70	0-12 m	1681	87
HepB3	Card < 12 months	66	0-12 m	1681	87
HepB3	History	4	0-12 m	1681	87
Hib1	C or H <12 months	89	0-12 m	1681	87
Hib1	Card < 12 months	82	0-12 m	1681	87
Hib1	History	8	0-12 m	1681	87
Hib3	C or H <12 months	70	0-12 m	1681	87
Hib3	Card < 12 months	66	0-12 m	1681	87
Hib3	History	4	0-12 m	1681	87
Pol1	C or H <12 months	81	0-12 m	1681	87
Pol1	Card < 12 months	72	0-12 m	1681	87
Pol1	History	9	0-12 m	1681	87
Pol3	C or H <12 months	51	0-12 m	1681	87
Pol3	Card < 12 months	49	0-12 m	1681	87
Pol3	History	2	0-12 m	1681	87

2012 Perú: Encuesta Demográfica y de Salud Familiar - ENDES
2013

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <18 months	93	18-29 m	1586	79
BCG	Card	74	18-29 m	1254	79

BCG	Card or History	93	18-29 m	1586	79
BCG	History	19	18-29 m	332	79
DTP1	C or H <18 months	93	18-29 m	1586	79
DTP1	Card	78	18-29 m	1254	79
DTP1	Card or History	93	18-29 m	1586	79
DTP1	History	15	18-29 m	332	79
DTP3	C or H <18 months	79	18-29 m	1586	79
DTP3	Card	74	18-29 m	1254	79
DTP3	Card or History	80	18-29 m	1586	79
DTP3	History	6	18-29 m	332	79
HepB1	C or H <18 months	93	18-29 m	1586	79
HepB1	Card	78	18-29 m	1254	79
HepB1	Card or History	93	18-29 m	1586	79
HepB1	History	15	18-29 m	332	79
HepB3	C or H <18 months	79	18-29 m	1586	79
HepB3	Card	74	18-29 m	1254	79
HepB3	Card or History	80	18-29 m	1586	79
HepB3	History	6	18-29 m	332	79
Hib1	C or H <18 months	93	18-29 m	1586	79
Hib1	Card	78	18-29 m	1254	79
Hib1	Card or History	93	18-29 m	1586	79
Hib1	History	15	18-29 m	332	79
Hib3	C or H <18 months	79	18-29 m	1586	79
Hib3	Card	74	18-29 m	1254	79
Hib3	Card or History	80	18-29 m	1586	79
Hib3	History	6	18-29 m	332	79
MCV1	C or H <18 months	78	18-29 m	1586	79
MCV1	Card	71	18-29 m	1254	79
MCV1	Card or History	85	18-29 m	1586	79
MCV1	History	14	18-29 m	332	79
Pol1	C or H <18 months	97	18-29 m	1586	79
Pol1	Card	78	18-29 m	1254	79
Pol1	Card or History	97	18-29 m	1586	79
Pol1	History	19	18-29 m	332	79
Pol3	C or H <18 months	83	18-29 m	1586	79
Pol3	Card	74	18-29 m	1254	79
Pol3	Card or History	84	18-29 m	1586	79
Pol3	History	10	18-29 m	332	79

Peru - survey details

2011 Peru Encuesta Demográfica y de Salud Familiar-ENDES, 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	92	0-36 m	5213	87
DTP1	Card or History	92	0-36 m	5213	87
DTP3	Card or History	78	0-36 m	5213	87
HepB1	Card or History	92	0-36 m	5213	87
HepB3	Card or History	78	0-36 m	5213	87
Hib1	Card or History	92	0-36 m	5213	87
Hib3	Card or History	78	0-36 m	5213	87
MCV1	Card or History	79	0-36 m	5213	87
Pol1	Card or History	92	0-36 m	5213	87
Pol3	Card or History	74	0-36 m	5213	87

2011 Perú: Encuesta Demográfica y de Salud Familiar - ENDES 2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <18 months	94	18-29 m	1732	81
BCG	Card	76	18-29 m	1396	81
BCG	Card or History	94	18-29 m	1732	81
BCG	History	18	18-29 m	336	81
DTP1	C or H <18 months	92	18-29 m	1732	81
DTP1	Card	80	18-29 m	1396	81
DTP1	Card or History	93	18-29 m	1732	81
DTP1	History	13	18-29 m	336	81
DTP3	C or H <18 months	82	18-29 m	1732	81
DTP3	Card	76	18-29 m	1396	81
DTP3	Card or History	83	18-29 m	1732	81
DTP3	History	7	18-29 m	336	81
MCV1	C or H <18 months	84	18-29 m	1732	81
MCV1	Card	74	18-29 m	1396	81
MCV1	Card or History	90	18-29 m	1732	81
MCV1	History	15	18-29 m	336	81
Pol1	C or H <18 months	97	18-29 m	1732	81
Pol1	Card	80	18-29 m	1396	81
Pol1	Card or History	98	18-29 m	1732	81

Pol1	History	18	18-29 m	336	81
Pol3	C or H <18 months	85	18-29 m	1732	81
Pol3	Card	77	18-29 m	1396	81
Pol3	Card or History	86	18-29 m	1732	81
Pol3	History	9	18-29 m	336	81

2010 Perú: Encuesta Demográfica y de Salud Familiar - ENDES 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <18 months	95	18-29 m	1715	81
BCG	Card	76	18-29 m	1715	81
BCG	Card or History	95	18-29 m	1715	81
BCG	History	18	18-29 m	1715	81
DTP1	C or H <18 months	90	18-29 m	1715	81
DTP1	Card	79	18-29 m	1715	81
DTP1	Card or History	91	18-29 m	1715	81
DTP1	History	11	18-29 m	1715	81
DTP3	C or H <18 months	80	18-29 m	1715	81
DTP3	Card	75	18-29 m	1715	81
DTP3	Card or History	81	18-29 m	1715	81
DTP3	History	6	18-29 m	1715	81
MCV1	C or H <18 months	80	18-29 m	1715	81
MCV1	Card	73	18-29 m	1715	81
MCV1	Card or History	88	18-29 m	1715	81
MCV1	History	15	18-29 m	1715	81
Pol1	C or H <18 months	96	18-29 m	1715	81
Pol1	Card	79	18-29 m	1715	81
Pol1	Card or History	97	18-29 m	1715	81
Pol1	History	18	18-29 m	1715	81
Pol3	C or H <18 months	84	18-29 m	1715	81
Pol3	Card	75	18-29 m	1715	81
Pol3	Card or History	85	18-29 m	1715	81
Pol3	History	10	18-29 m	1715	81

2009 Perú: Encuesta Demográfica y de Salud Familiar - ENDES Continua, 2010

Peru - survey details

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <18 months	90	18-29 m	1747	76
BCG	Card	68	18-29 m	1747	76
BCG	Card or History	90	18-29 m	1747	76
BCG	History	22	18-29 m	1747	76
DTP1	C or H <18 months	85	18-29 m	1747	76
DTP1	Card	75	18-29 m	1747	76
DTP1	Card or History	86	18-29 m	1747	76
DTP1	History	11	18-29 m	1747	76
DTP3	C or H <18 months	72	18-29 m	1747	76
DTP3	Card	69	18-29 m	1747	76
DTP3	Card or History	74	18-29 m	1747	76
DTP3	History	5	18-29 m	1747	76
MCV1	C or H <18 months	77	18-29 m	1747	76
MCV1	Card	66	18-29 m	1747	76
MCV1	Card or History	83	18-29 m	1747	76
MCV1	History	18	18-29 m	1747	76
Pol1	C or H <18 months	92	18-29 m	1747	76
Pol1	Card	73	18-29 m	1747	76
Pol1	Card or History	92	18-29 m	1747	76
Pol1	History	19	18-29 m	1747	76
Pol3	C or H <18 months	75	18-29 m	1747	76
Pol3	Card	67	18-29 m	1747	76
Pol3	Card or History	76	18-29 m	1747	76
Pol3	History	9	18-29 m	1747	76

2008 Perú: Encuesta Demográfica y de Salud Familiar - ENDES Continua 2009

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	94	18-29 m	1639	66
BCG	Card	61	18-29 m	1639	66
BCG	Card or History	94	18-29 m	1639	66
BCG	History	32	18-29 m	1639	66
DTP1	C or H <12 months	95	18-29 m	1639	66
DTP1	Card	65	18-29 m	1639	66
DTP1	Card or History	96	18-29 m	1639	66
DTP1	History	31	18-29 m	1639	66

DTP3	C or H <12 months	71	18-29 m	1639	66
DTP3	Card	60	18-29 m	1639	66
DTP3	Card or History	73	18-29 m	1639	66
DTP3	History	13	18-29 m	1639	66
MCV1	C or H <12 months	70	18-29 m	1639	66
MCV1	Card	53	18-29 m	1639	66
MCV1	Card or History	76	18-29 m	1639	66
MCV1	History	23	18-29 m	1639	66
Pol1	C or H <12 months	92	18-29 m	1639	66
Pol1	Card	63	18-29 m	1639	66
Pol1	Card or History	92	18-29 m	1639	66
Pol1	History	29	18-29 m	1639	66
Pol3	C or H <12 months	67	18-29 m	1639	66
Pol3	Card	58	18-29 m	1639	66
Pol3	Card or History	68	18-29 m	1639	66
Pol3	History	10	18-29 m	1639	66

2006 Perú: Encuesta Demográfica y de Salud Familiar - ENDES 2007-2008

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <18 months	96	18-29 m	1671	63
BCG	Card	61	18-29 m	1050	63
BCG	Card or History	96	18-29 m	1671	63
BCG	History	35	18-29 m	620	63
DTP1	C or H <18 months	96	18-29 m	1671	63
DTP1	Card	62	18-29 m	1050	63
DTP1	Card or History	96	18-29 m	1671	63
DTP1	History	34	18-29 m	620	63
DTP3	C or H <18 months	76	18-29 m	1671	63
DTP3	Card	58	18-29 m	1050	63
DTP3	Card or History	76	18-29 m	1671	63
DTP3	History	18	18-29 m	620	63
MCV1	C or H <18 months	78	18-29 m	1671	63
MCV1	Card	54	18-29 m	1050	63
MCV1	Card or History	83	18-29 m	1671	63
MCV1	History	29	18-29 m	620	63
Pol1	C or H <18 months	93	18-29 m	1671	63
Pol1	Card	62	18-29 m	1050	63

Peru - survey details

Pol1	Card or History	94	18-29 m	1671	63
Pol1	History	32	18-29 m	620	63
Pol3	C or H <18 months	69	18-29 m	1671	63
Pol3	Card	57	18-29 m	1050	63
Pol3	Card or History	69	18-29 m	1671	63
Pol3	History	12	18-29 m	620	63

2005 Perú: Encuesta Demográfica y de Salud Familiar - ENDES 2007-2008

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	95	24-35 m	1653	63
DTP1	Card or History	96	24-35 m	1653	63
DTP3	Card or History	77	24-35 m	1653	63
MCV1	Card or History	77	24-35 m	1653	63
Pol1	Card or History	93	24-35 m	1653	63
Pol3	Card or History	66	24-35 m	1653	63

2003 Peru Encuesta Demográfica y de Salud Familiar ENDES Continua 2004-2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	95	18-29 m	859	68
BCG	Card	65	18-29 m	859	68
BCG	Card or History	95	18-29 m	859	68
BCG	History	30	18-29 m	859	68
DTP1	C or H <12 months	97	18-29 m	859	68
DTP1	Card	68	18-29 m	859	68
DTP1	Card or History	98	18-29 m	859	68
DTP1	History	30	18-29 m	859	68
DTP3	C or H <12 months	82	18-29 m	859	68
DTP3	Card	66	18-29 m	859	68
DTP3	Card or History	85	18-29 m	859	68
DTP3	History	20	18-29 m	859	68
MCV1	C or H <12 months	83	18-29 m	859	68
MCV1	Card	60	18-29 m	859	68
MCV1	Card or History	87	18-29 m	859	68

MCV1	History	27	18-29 m	859	68
Pol1	C or H <12 months	96	18-29 m	859	68
Pol1	Card	68	18-29 m	859	68
Pol1	Card or History	97	18-29 m	859	68
Pol1	History	29	18-29 m	859	68
Pol3	C or H <12 months	76	18-29 m	859	68
Pol3	Card	66	18-29 m	859	68
Pol3	Card or History	79	18-29 m	859	68
Pol3	History	14	18-29 m	859	68

2003 Perú Encuesta Demográfica y de Salud Familiar, ENDES Continua 2004

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <18 months	94	18-29 m	455	67
BCG	Card	62	18-29 m	455	67
BCG	Card or history	94	18-29 m	455	67
BCG	History	32	18-29 m	455	67
DTP1	C or H <18 months	96	18-29 m	455	67
DTP1	Card	66	18-29 m	455	67
DTP1	Card or history	97	18-29 m	455	67
DTP1	History	32	18-29 m	455	67
DTP3	C or H <18 months	83	18-29 m	455	67
DTP3	Card	64	18-29 m	455	67
DTP3	Card or history	87	18-29 m	455	67
DTP3	History	23	18-29 m	455	67
MCV1	C or H <18 months	85	18-29 m	455	67
MCV1	Card	60	18-29 m	455	67
MCV1	Card or history	90	18-29 m	455	67
MCV1	History	30	18-29 m	455	67
Pol1	C or H <18 months	96	18-29 m	455	67
Pol1	Card	66	18-29 m	455	67
Pol1	Card or history	97	18-29 m	455	67
Pol1	History	31	18-29 m	455	67
Pol3	C or H <18 months	78	18-29 m	455	67
Pol3	Card	65	18-29 m	455	67
Pol3	Card or history	81	18-29 m	455	67
Pol3	History	16	18-29 m	455	67

Peru - survey details

1999 Peru, Encuesta Demográfica y de Salud Familiar 2000, 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	57	18-29 m	2353	58
BCG	Card or History	96	12-23 m	2353	58
BCG	History	40	18-29 m	2353	58
DTP1	Card	58	18-29 m	2353	58
DTP1	Card or History	96	12-23 m	2353	58
DTP1	History	39	18-29 m	2353	58
DTP3	Card	56	18-29 m	2353	58
DTP3	Card or History	85	12-23 m	2353	58

DTP3	History	29	18-29 m	2353	58
MCV1	Card	51	18-29 m	2353	58
MCV1	Card or History	84	12-23 m	2353	58
MCV1	History	34	18-29 m	2353	58
Pol1	Card	58	18-29 m	2353	58
Pol1	Card or History	96	12-23 m	2353	58
Pol1	History	38	18-29 m	2353	58
Pol3	Card	54	18-29 m	2353	58
Pol3	Card or History	76	12-23 m	2353	58
Pol3	History	22	18-29 m	2353	58

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

Peru

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	65
2005	65
2006	66
2007	67
2008	67
2009	67
2010	85
2011	85
2012	85
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.