Indonesia: WHO and UNICEF estimates of immunization coverage: 2014 revision

BCG

DTP1

DTP3

Pol3

MCV1

HepB3

Hib3

RotaC

No estimate for infant immunization made.

PcV3

No estimate for infant immunization made.

WHO and UNICEF estimates of national immunization coverage - next revision available July 15, 2016

data as of July 7, 2015

Indonesia - BCG

IDN - BCG

- WHO-UNICEF estimate
- Official government estimate
- * Administrative coverage
- | Survey 12-23 months of age, card or history

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	83	85	86	88	83	80	78	88	98	99	98	93
Estimate GoC	●	●	●	●	●	●	●	●●	●●●	●●	●●●	●●
Official	97	78	97	93	92	89	93	97	97	89	92	89
Administrative	98	98	88	95	94	93	95	97	98	100	98	93
Survey	NA	NA	NA	*	NA	NA	78	NA	89	NA	NA	NA

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The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information
that are of varying, and, in some instances, unknown quality.  Beginning with the 2011 revision we describe
the grade of confidence (GoC) we have in these estimates. As there is no underlying probability model upon
which the estimates are based, we are unable to present classical measures of uncertainty, e.g., confidence
intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around
the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is
not a judgment of the quality of data reported by national authorities.
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●●● Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.
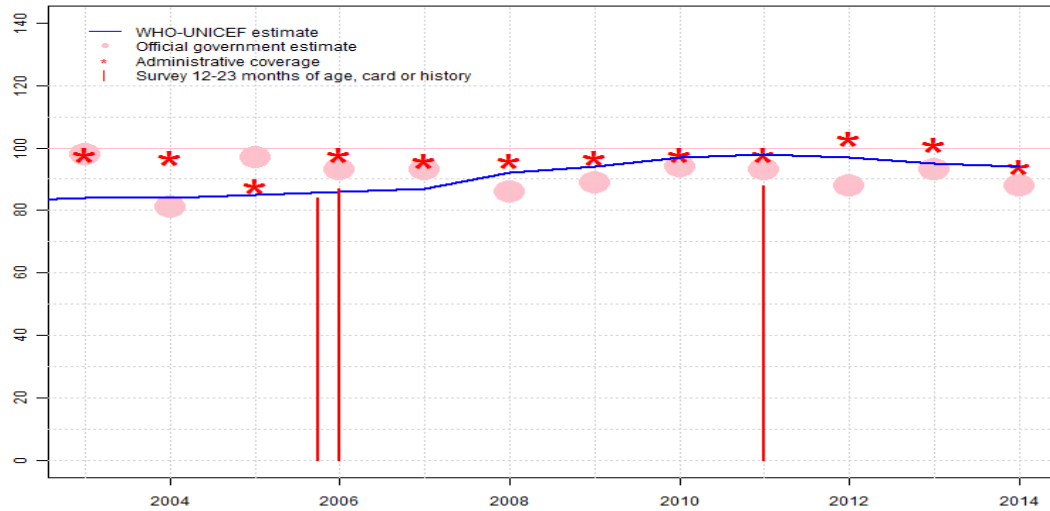
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In all cases these estimates should be used with caution and should be assessed in light
of the objective for which they are being used.
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Description:

2003: Estimate based on interpolation between 2001 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Reported data excluded. Unexplained increase from 77 percent to 97 percent with decrease 78 percent. Estimate challenged by: D-R-

2004: Estimate based on interpolation between 2001 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Reported data excluded. Decline in reported coverage from 97 percent to 78 percent with increase to 97 percent. Estimate challenged by: D-R-

2005: Estimate based on interpolation between 2001 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Estimate challenged by: R-

2006: Estimate is based on the averaged results of 3 surveys conducted in this year. Estimate challenged by: R-

2007: Reported data calibrated to 2006 and 2009 levels. Estimate challenged by: D-

2008: Reported data calibrated to 2006 and 2009 levels. Calibration applied to administrative coverage levels. Estimate challenged by: D-

2009: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 78 percent based on 1 survey(s). Calibration applied to administrative coverage levels. Estimate challenged by: D-R-

2010: Reported data calibrated to 2009 and 2011 levels. Calibration applied to administrative coverage levels. GoC=S+ D+

2011: Estimate based on administrative data reported by national government supported by survey. Survey evidence of 89 percent based on 1 survey(s). Calibration applied to administrative coverage levels. GoC=R+ S+ D+

2012: Estimate based on reported administrative data. Calibration applied to administrative coverage levels. GoC=R+ D+

2013: Estimate based on reported administrative data. Calibration applied to administrative coverage levels. GoC=R+ S+ D+

2014: Estimate based on reported administrative data. Programme reports six month stock-out during first half of year. Calibration applied to administrative coverage levels. GoC=R+ D+

Indonesia - DTP1

IDN - DTP1

Legend:
- WHO-UNICEF estimate
- Official government estimate
- * Administrative coverage
- | Survey 12-23 months of age, card or history

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	84	84	85	86	87	92	94	97	98	97	95	94
Estimate GoC	●	●	●	●	●	●●	●●	●●	●●●	●●	●●	●●
Official	98	81	97	93	93	86	89	94	93	88	93	88
Administrative	98	97	88	98	96	96	97	98	98	103	101	94
Survey	NA	NA	NA	*	NA	NA	NA	NA	88	NA	NA	NA

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intervals. Moreover, we have chosen not to make subjective estimates of plausibility/certainty ranges around
the coverage. The GoC reflects the degree of empirical support upon which the estimates are based. It is
not a judgment of the quality of data reported by national authorities.
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●●● Estimate is supported by reported data [R+], coverage recalculated with an independent
    denominator from the World Population Prospects: 2012 revision from the UN Popula-
    tion Division (D+), and at least one supporting survey within 2 years [S+]. While well
    supported, the estimate still carries a risk of being wrong.

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    [R-], [D-], or [S-], challenges the estimate.

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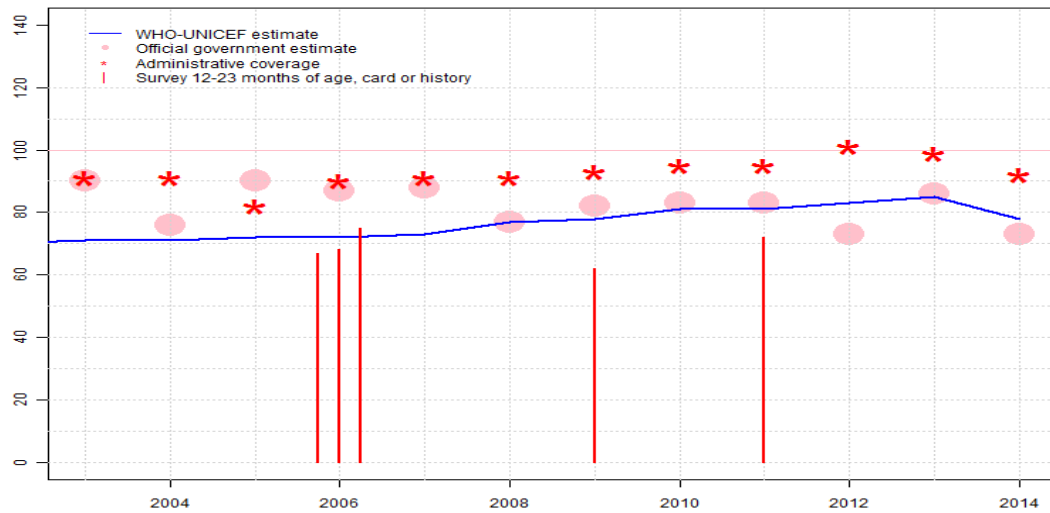   challenge the estimate.

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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.
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Description:

2003: Estimate based on interpolation between 2001 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Reported data excluded. Unexplained increase from 81 percent to 98 percent with decrease 81 percent. Estimate challenged by: D-R-

2004: Estimate based on interpolation between 2001 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Reported data excluded. Decline in reported coverage from 98 percent to 81 percent with increase to 97 percent. Estimate challenged by: D-R-

2005: Estimate based on interpolation between 2001 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Estimate challenged by: R-

2006: Estimate is based on the averaged results of two surveys conducted in this year. Estimate challenged by: D-R-

2007: Reported data calibrated to 2006 and 2011 levels. Estimate challenged by: D-

2008: Reported data calibrated to 2006 and 2011 levels. Calibration applied to administrative coverage levels. GoC=S+ D+

2009: Reported data calibrated to 2006 and 2011 levels. Calibration applied to administrative coverage levels. GoC=S+ D+

2010: Reported data calibrated to 2006 and 2011 levels. Calibration applied to administrative coverage levels. GoC=S+ D+

2011: Estimate based on administrative data reported by national government supported by survey. Survey evidence of 88 percent based on 1 survey(s). Calibration applied to administrative coverage levels. GoC=R+ S+ D+

2012: Estimate based on interpolation between data reported by national government. Reported data excluded. 103 percent greater than 100 percent. Calibration applied to administrative coverage levels. Estimate of 97 percent changed from previous revision value of 98 percent. GoC=S+ D+

2013: Estimate based on interpolation between data reported by national government. Reported data excluded. 101 percent greater than 100 percent. Calibration applied to administrative coverage levels. Estimate of 95 percent changed from previous revision value of 98 percent. GoC=S+ D+

2014: Estimate based on reported administrative data. Programme reports four month stock-out during first half of year. Calibration applied to administrative coverage levels. GoC=R+ D+

Indonesia - DTP3

IDN - DTP3

Legend:
- WHO-UNICEF estimate
- Official government estimate
- * Administrative coverage
- | Survey 12-23 months of age, card or history

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	71	71	72	72	73	77	78	81	81	83	85	78
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	90	76	90	87	88	77	82	83	83	73	86	73
Administrative	91	91	82	90	91	91	93	95	95	101	99	92
Survey	NA	NA	NA	*	NA	NA	62	NA	72	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
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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
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    denominator from the World Population Prospects: 2012 revision from the UN Popula-
    tion Division (D+), and at least one supporting survey within 2 years [S+]. While well
    supported, the estimate still carries a risk of being wrong.

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

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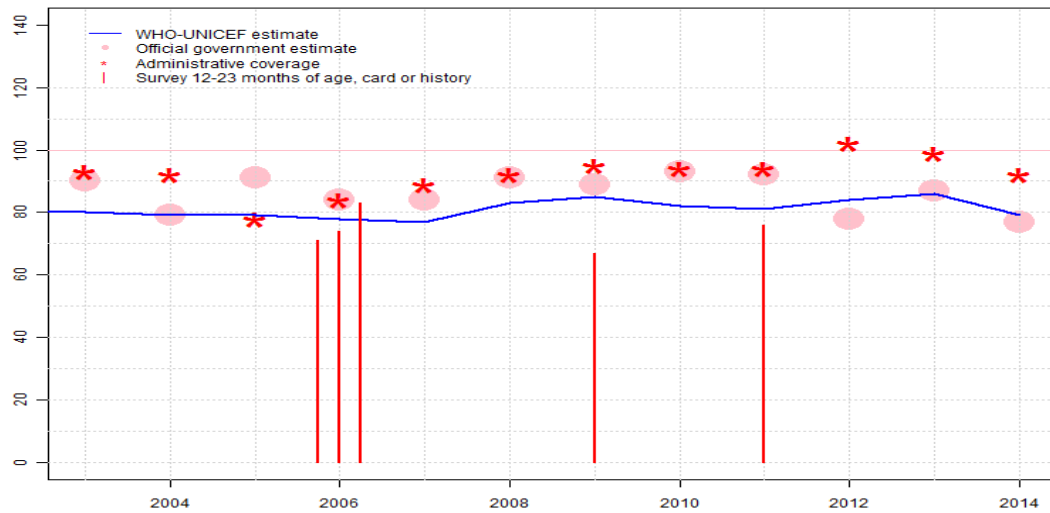of the objective for which they are being used.

Description:

2003: Estimate based on interpolation between 2002 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Reported data excluded. Unexplained increase from 75 percent to 90 percent with decrease 76 percent. Estimate challenged by: D-R-

2004: Estimate based on interpolation between 2002 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Reported data excluded. Decline in reported coverage from 90 percent to 76 percent with increase to 90 percent. Estimate challenged by: D-R-

2005: Estimate based on interpolation between 2002 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Estimate challenged by: D-R-

2006: Estimate is based on the averaged results of 3 surveys conducted in this year. Indonesia Demographic and Health Survey 2007 card or history results of 67 percent modifed for recall bias to 72 percent based on 1st dose card or history coverage of 84 percent, 1st dose card only coverage of 36 percent and 3d dose card only coverage of 31 percent. Estimate challenged by: D-R-

2007: Reported data calibrated to 2006 and 2011 levels. Estimate challenged by: D-S-

2008: Reported data calibrated to 2006 and 2011 levels. Calibration applied to administrative coverage levels. Estimate challenged by: D-S-

2009: Reported data calibrated to 2006 and 2011 levels. Indonesia Basic Health Survey (RISKESDAS) 2010 results ignored by working group. Insufficient evidence to correct for recall bias. Calibration applied to administrative coverage levels. Estimate challenged by: D-S-

2010: Reported data calibrated to 2006 and 2011 levels. Calibration applied to administrative coverage levels. Estimate challenged by: D-S-

2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 81 percent based on 1 survey(s). Indonesia Demographic and Health Survey 2012 card or history results of 72 percent modifed for recall bias to 81 percent based on 1st dose card or history coverage of 88 percent, 1st dose card only coverage of 40 percent and 3d dose card only coverage of 37 percent. Calibration applied to administrative coverage levels. Estimate challenged by: D-R-S-

2012: Reported data calibrated to 2011 levels. Reported data excluded. 101 percent greater than 100 percent. Calibration applied to administrative coverage levels. Estimate challenged by: D-

2013: Reported data calibrated to 2011 levels. Calibration applied to administrative coverage levels. Estimate challenged by: D-

2014: Reported data calibrated to 2011 levels. Programme reports four month stock-out during first half of year. Calibration applied to administrative

coverage levels. Estimate challenged by: D-

Indonesia - Pol3

IDN - Pol3

Legend:
- WHO-UNICEF estimate
- Official government estimate
- * Administrative coverage
- | Survey 12-23 months of age, card or history

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	80	79	79	78	77	83	85	82	81	84	86	79
Estimate GoC	●	●	●	●	●	●	●	●	●	●	●	●
Official	90	79	91	84	84	91	89	93	92	78	87	77
Administrative	93	92	78	84	89	92	95	94	94	102	99	92
Survey	NA	NA	NA	*	NA	NA	67	NA	76	NA	NA	NA

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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
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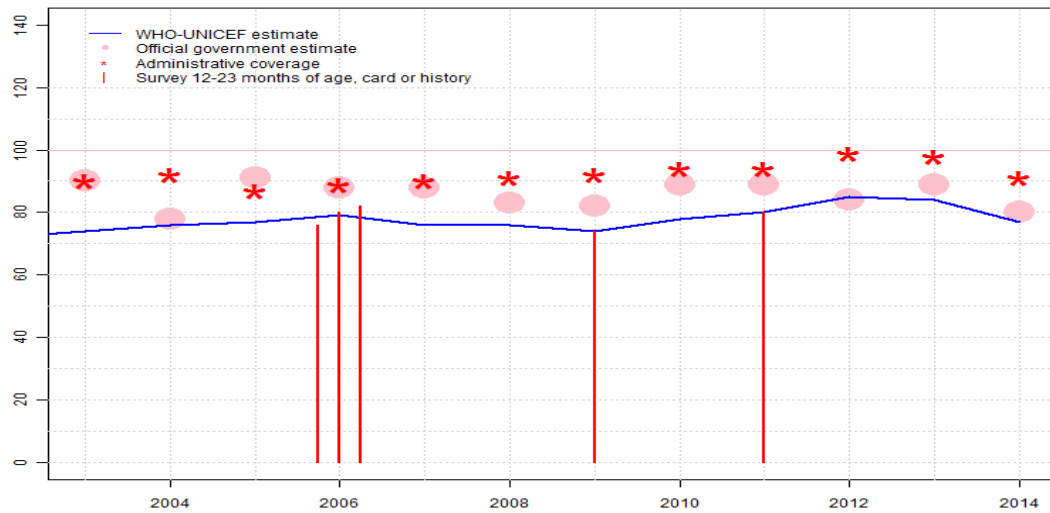   challenge the estimate.

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

2003: Estimate based on interpolation between 2002 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Reported data excluded. Unexplained increase from 74 percent to 90 percent with decrease 79 percent. Estimate challenged by: D-R-

2004: Estimate based on interpolation between 2002 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Reported data excluded. Decline in reported coverage from 90 percent to 79 percent with increase to 91 percent. Estimate challenged by: D-R-

2005: Estimate based on interpolation between 2002 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Estimate challenged by: R-

2006: Estimate is based on the averaged results of 3 surveys conducted in this year. Indonesia Demographic and Health Survey 2007 card or history results of 74 percent modifed for recall bias to 79 percent based on 1st dose card or history coverage of 89 percent, 1st dose card only coverage of 36 percent and 3d dose card only coverage of 32 percent. Estimate challenged by: R-

2007: Reported data calibrated to 2006 and 2011 levels. Estimate challenged by: D-S-

2008: Reported data calibrated to 2006 and 2011 levels. Calibration applied to administrative coverage levels. Estimate challenged by: D-S-

2009: Reported data calibrated to 2006 and 2011 levels. Indonesia Basic Health Survey (RISKESDAS) 2010 results ignored by working group. Insufficient evidence to correct for recall bias. Calibration applied to administrative coverage levels. Estimate challenged by: D-S-

2010: Reported data calibrated to 2006 and 2011 levels. Calibration applied to administrative coverage levels. Estimate challenged by: D-S-

2011: Based on DTP survey results adjusted for recall bias. Indonesia Demographic and Health Survey 2012 results ignored by working group. Survey result likely includes polio doses administered during supplementary immunization activities.Indonesia Demographic and Health Survey 2012 card or history results of 76 percent modifed for recall bias to 84 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 41 percent and 3d dose card only coverage of 38 percent. Calibration applied to administrative coverage levels. Estimate challenged by: D-R-S-

2012: Reported data calibrated to 2011 levels. Reported data excluded. 102 percent greater than 100 percent. Calibration applied to administrative coverage levels. Estimate challenged by: D-S-

2013: Reported data calibrated to 2011 levels. Calibration applied to administrative coverage levels. Estimate challenged by: D-S-

2014: Reported data calibrated to 2011 levels. Programme reports six month stock-out during first half of year. Calibration applied to administrative coverage levels. Estimate challenged by: D-

Indonesia - MCV1

IDN - MCV1

Legend:
- WHO-UNICEF estimate
- Official government estimate
- * Administrative coverage
- | Survey 12-23 months of age, card or history

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	74	76	77	79	76	76	74	78	80	85	84	77
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	90	78	91	88	88	83	82	89	89	84	89	80
Administrative	90	92	87	89	90	91	92	94	94	99	98	91
Survey	NA	NA	NA	*	NA	NA	74	NA	80	NA	NA	NA

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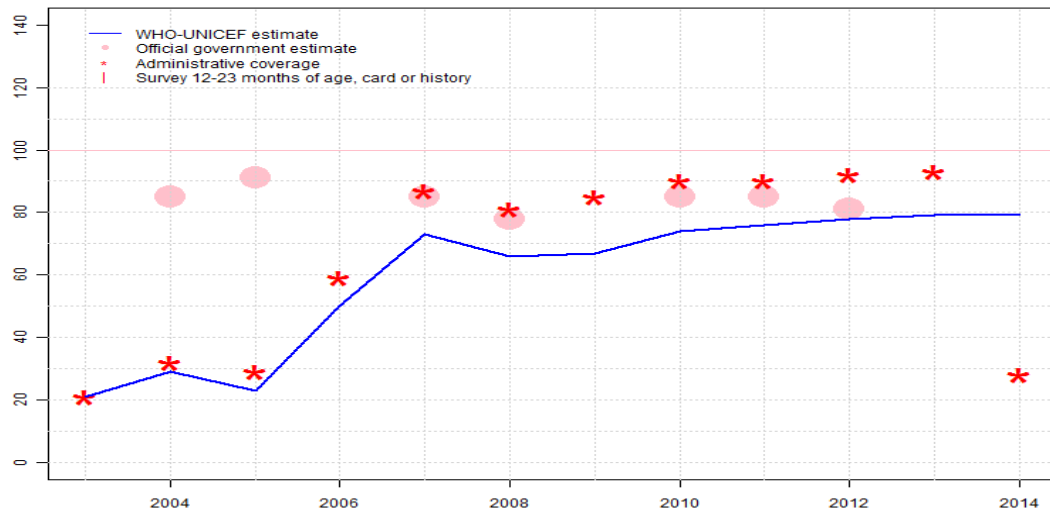challenge the estimate.

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

2003: Estimate based on interpolation between 2002 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Reported data excluded. Unexplained increase from 44 percent to 90 percent with decrease 78 percent. Estimate challenged by: D-R-

2004: Estimate based on interpolation between 2002 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Reported data excluded. Decline in reported coverage from 90 percent to 78 percent with increase to 91 percent. Estimate challenged by: D-R-

2005: Estimate based on interpolation between 2002 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Estimate challenged by: D-R-

2006: Estimate is based on the averaged results of 3 surveys conducted in this year. Estimate challenged by: D-R-

2007: Reported data calibrated to 2006 and 2009 levels. Estimate challenged by: D-

2008: Reported data calibrated to 2006 and 2009 levels. Calibration applied to administrative coverage levels. Estimate challenged by: D-

2009: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 74 percent based on 1 survey(s). Calibration applied to administrative coverage levels. Estimate challenged by: D-R-

2010: Reported data calibrated to 2009 and 2011 levels. Calibration applied to administrative coverage levels. Estimate challenged by: D-

2011: Survey evidence does not support reported data. Estimate based on survey results. Survey evidence of 80 percent based on 1 survey(s). Calibration applied to administrative coverage levels. Estimate challenged by: D-R-

2012: Reported data calibrated to 2011 levels. Calibration applied to administrative coverage levels. Estimate challenged by: D-

2013: Reported data calibrated to 2011 levels. Calibration applied to administrative coverage levels. Estimate challenged by: D-

2014: Reported data calibrated to 2011 levels. Programme reports two month stock-out during first half of year. Calibration applied to administrative coverage levels. Estimate challenged by: D-

Indonesia - MCV2

IDN - MCV2

Legend:
- WHO-UNICEF estimate
- Official government estimate
- * Administrative coverage
- I Survey 12-23 months of age, card or history

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	21	29	23	50	73	66	67	74	76	78	79	79
Estimate GoC	••	••	••	••	•	•	•	•	•	•	•	•
Official	NA	85	91	NA	85	78	NA	85	85	81	NA	NA
Administrative	21	32	29	59	87	81	85	90	90	92	93	28
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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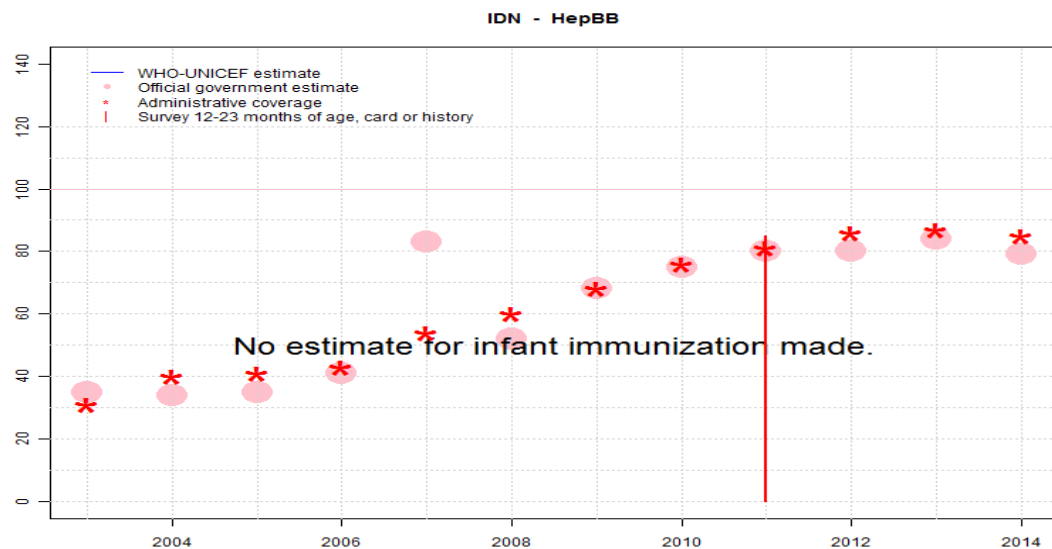
••• Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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Description:

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

2003: Estimate is based on reported administrative data. . GoC=R+ D+

2004: Reported data calibrated to 2003 and 2007 levels. . GoC=D+

2005: Reported data calibrated to 2003 and 2007 levels. . GoC=D+

2006: Reported data calibrated to 2003 and 2007 levels. . GoC=D+

2007: Estimate follows reported data calibrated based on MCV adjustment factor. Estimate challenged by: R-

2008: Estimate follows reported data calibrated based on MCV adjustment factor. Calibration applied to administrative coverage levels. Estimate challenged by: D-R-

2009: Estimate follows reported data calibrated based on MCV adjustment factor. Calibration applied to administrative coverage levels. Estimate challenged by: D-R-

2010: Estimate follows reported data calibrated based on MCV adjustment factor. Calibration applied to administrative coverage levels. Estimate challenged by: D-R-

2011: Estimate follows reported data calibrated based on MCV adjustment factor. Calibration applied to administrative coverage levels. Estimate challenged by: D-R-

2012: Estimate follows reported data calibrated based on MCV adjustment factor. Calibration applied to administrative coverage levels. Estimate challenged by: D-R-

2013: Estimate follows reported data calibrated based on MCV adjustment factor. Calibration applied to administrative coverage levels. Estimate challenged by: D-R-

2014: Reported data calibrated to 2013 levels. Reported data excluded. Decline in administrative coverage reflects change in reporting for children under 3 years. School-based administration to children aged 6-7 years was 92 percent during 2014, similar to levels reported in prior years for this age group.Reported data excluded. Change in reported coverage from 93 level to 28 percent. Calibration applied to administrative coverage levels. Estimate challenged by: D-

Indonesia - HepBB

IDN - HepBB

- — WHO-UNICEF estimate
- ● Official government estimate
- * Administrative coverage
- | Survey 12-23 months of age, card or history

No estimate for infant immunization made.

Although hepatitis birth dose is in the national immunization schedule, estimates for hepatitis birth dose are not provided due to insufficient information on doses administered within 24 hours

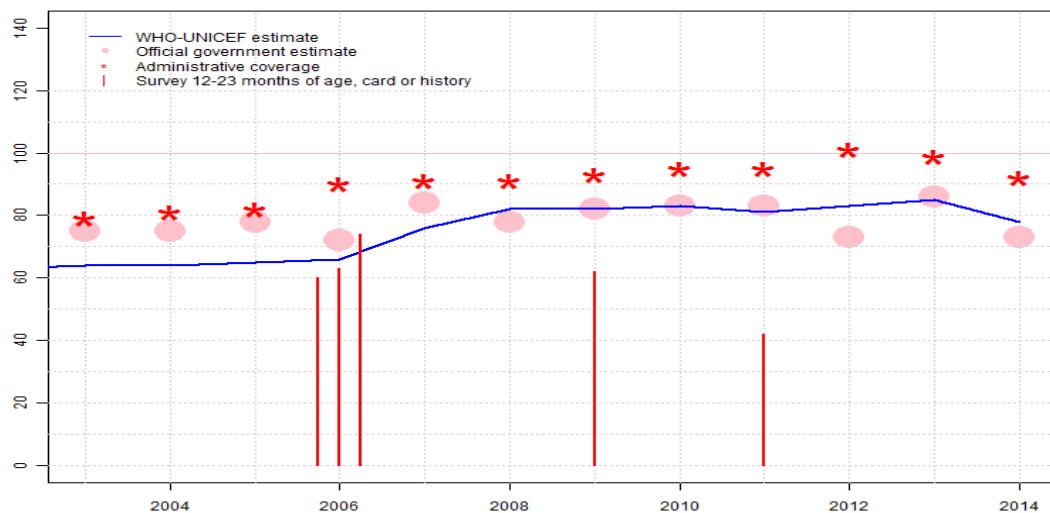|	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	35	34	35	41	83	52	68	75	80	80	84	79
Administrative	31	40	41	43	54	60	68	76	81	86	87	85
Survey	NA	NA	NA	NA	NA	NA	NA	NA	85	NA	NA	NA

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

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.

Indonesia - HepB3

IDN - HepB3

Legend:
- WHO-UNICEF estimate
- Official government estimate
- * Administrative coverage
- | Survey 12-23 months of age, card or history

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	64	64	65	66	76	82	82	83	81	83	85	78
Estimate GoC	•	•	•	•	•	•	•	•	•	•	•	•
Official	75	75	78	72	84	78	82	83	83	73	86	73
Administrative	79	81	82	90	91	91	93	95	95	101	99	92
Survey	NA	NA	NA	*	NA	NA	62	NA	42	NA	NA	NA

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    denominator from the World Population Prospects: 2012 revision from the UN Popula-
    tion Division (D+), and at least one supporting survey within 2 years [S+]. While well
    supported, the estimate still carries a risk of being wrong.

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source,
   [R-], [D-], or [S-], challenges the estimate.

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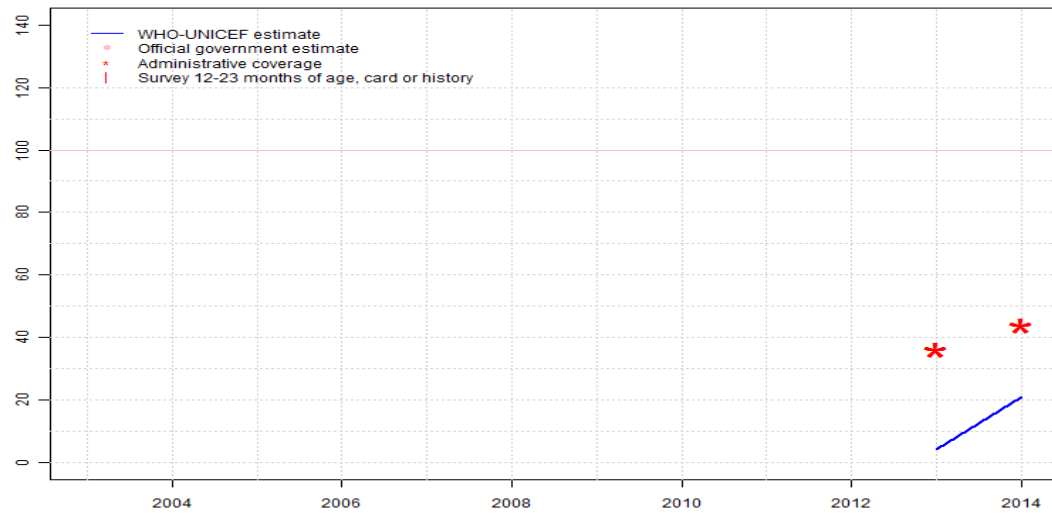 challenge the estimate.

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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.
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Description:

2003: Estimate based on interpolation between 2001 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Estimate challenged by: D-R-

2004: Estimate based on interpolation between 2001 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Estimate challenged by: D-R-

2005: Estimate based on interpolation between 2001 and 2006 levels. Fluctuating and inconsistent data suggest poor reporting. Estimate challenged by: D-R-

2006: Estimate is based on the averaged results of 3 surveys conducted in this year. Estimate challenged by: D-R-

2007: Reported data calibrated to 2006 and 2011 levels. Estimate challenged by: D-S-

2008: Reported data calibrated to 2006 and 2011 levels. Calibration applied to administrative coverage levels. Estimate challenged by: D-S-

2009: Reported data calibrated to 2006 and 2011 levels. Indonesia Basic Health Survey (RISKESDAS) 2010 results ignored by working group. Insufficient evidence to correct for recall bias. Calibration applied to administrative coverage levels. Estimate challenged by: D-S-

2010: Reported data calibrated to 2006 and 2011 levels. Calibration applied to administrative coverage levels. Estimate challenged by: D-S-

2011: Based on DTP survey results adjusted for recall bias. Indonesia Demographic and Health Survey 2012 results ignored by working group. Survey results for HepB3 inconsistent with DTP3 while vaccine presentation is DTP-HepB tetravalent vaccine.Indonesia Demographic and Health Survey 2012 card or history results of 42 percent modifed for recall bias to 58 percent based on 1st dose card or history coverage of 74 percent, 1st dose card only coverage of 37 percent and 3d dose card only coverage of 29 percent. Calibration applied to administrative coverage levels. Estimate challenged by: D-R-S-

2012: Reported data calibrated to 2011 levels. Reported data excluded. 101 percent greater than 100 percent. Calibration applied to administrative coverage levels. Estimate challenged by: D-S-

2013: Reported data calibrated to 2011 levels. Calibration applied to administrative coverage levels. Estimate challenged by: D-S-

2014: Reported data calibrated to 2011 levels. Programme reports four month stock-out during first half of year. Calibration applied to administrative coverage levels. Estimate challenged by: D-

IDN - Hib3

Legend:
- WHO-UNICEF estimate
- Official government estimate
- * Administrative coverage
- | Survey 12-23 months of age, card or history

Description:

2013: DTP-HepB-Hib pentavalent combination vaccine introduced in part of the country in August 2013. Thirty-six percent coverage achieved in 24 percent of national target population. Estimate challenged by: R-

2014: Reported data based on national target population. Estimate is based on calibrated DTP3 level. Estimate challenged by: D-R-

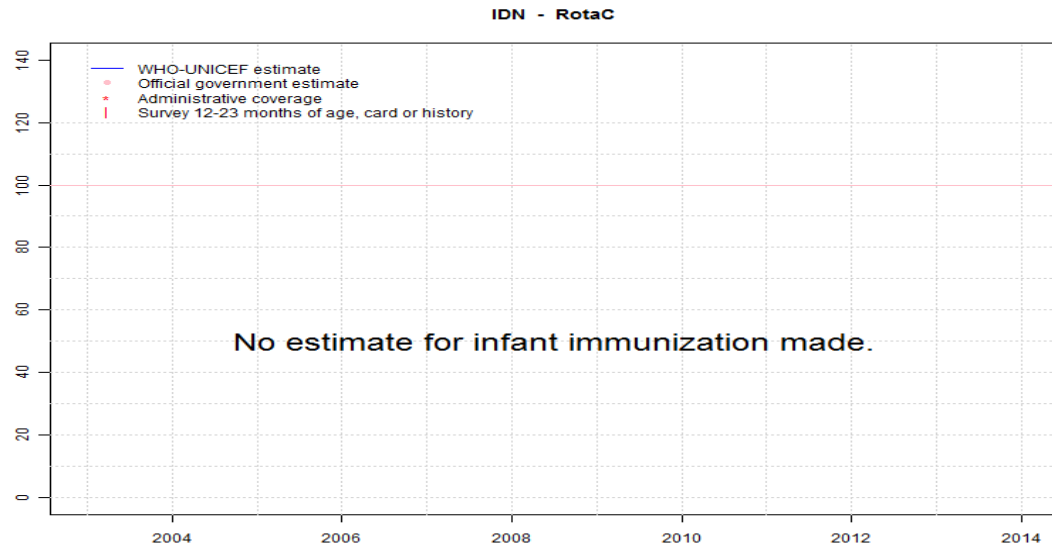|	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4	21
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	●	●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36	44
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

●● Estimate is supported by at least one data source; [R+], [S+], or [D+]; and no data source, [R-], [D-], or [S-], challenges the estimate.

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

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

IDN - RotaC

- —— WHO-UNICEF estimate
- • Official government estimate
- * Administrative coverage
- | Survey 12-23 months of age, card or history

No estimate for infant immunization made.

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

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

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

IDN - PcV3

Legend:
- —— WHO-UNICEF estimate
- • Official government estimate
- * Administrative coverage
- | Survey 12-23 months of age, card or history

No estimate for infant immunization made.

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

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

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

2011 Indonesia Demographic and Health Survey 2012

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	89	12-23 m	3333	41
BCG	Card	40	12-23 m	1370	41
BCG	Card or History	89	12-23 m	3333	41
BCG	History	50	12-23 m	1963	41
DTP1	C or H <12 months	88	12-23 m	3333	41
DTP1	Card	40	12-23 m	1370	41
DTP1	Card or History	88	12-23 m	3333	41
DTP1	History	48	12-23 m	1963	41
DTP3	C or H <12 months	71	12-23 m	3333	41
DTP3	Card	37	12-23 m	1370	41
DTP3	Card or History	72	12-23 m	3333	41
DTP3	History	35	12-23 m	1963	41
HepB1	C or H <12 months	74	12-23 m	3333	41
HepB1	Card	37	12-23 m	1370	41
HepB1	Card or History	74	12-23 m	3333	41
HepB1	History	38	12-23 m	1963	41
HepB3	C or H <12 months	41	12-23 m	3333	41
HepB3	Card	29	12-23 m	1370	41
HepB3	Card or History	42	12-23 m	3333	41
HepB3	History	14	12-23 m	1963	41
HepBB	C or H <12 months	85	12-23 m	3333	41
HepBB	Card	40	12-23 m	1370	41
HepBB	Card or History	85	12-23 m	3333	41
HepBB	History	46	12-23 m	1963	41
MCV1	C or H <12 months	74	12-23 m	3333	41
MCV1	Card	36	12-23 m	1370	41
MCV1	Card or History	80	12-23 m	3333	41
MCV1	History	44	12-23 m	1963	41
Pol1	C or H <12 months	91	12-23 m	3333	41
Pol1	Card	41	12-23 m	1370	41
Pol1	Card or History	91	12-23 m	3333	41
Pol1	History	50	12-23 m	1963	41
Pol3	C or H <12 months	75	12-23 m	3333	41
Pol3	Card	38	12-23 m	1370	41
Pol3	Card or History	76	12-23 m	3333	41
Pol3	History	38	12-23 m	1963	41

2009 Riset Kesehatan Dasar (RISKESDAS) 2010

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	78	12-23 m	4505	-
DTP3	Card or History	62	12-23 m	4505	-
HepB3	Card or History	62	12-23 m	4505	-
MCV1	Card or History	74	12-23 m	4505	-
Pol3	Card or History	67	12-23 m	4505	-

2006 Indonesia Demographic and Health Survey 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	84	12-23 m	3094	37
BCG	Card	35	12-23 m	3094	37
BCG	Card or History	85	12-23 m	3094	37
BCG	History	51	12-23 m	3094	37
DTP1	C or H <12 months	83	12-23 m	3094	37
DTP1	Card	36	12-23 m	3094	37
DTP1	Card or History	84	12-23 m	3094	37
DTP1	History	49	12-23 m	3094	37
DTP3	C or H <12 months	64	12-23 m	3094	37
DTP3	Card	31	12-23 m	3094	37
DTP3	Card or History	67	12-23 m	3094	37
DTP3	History	35	12-23 m	3094	37
HepB1	Card or History	80	12-23 m	3094	37
HepB3	Card or History	60	12-23 m	3094	37
MCV1	C or H <12 months	67	12-23 m	3094	37
MCV1	Card	31	12-23 m	3094	37
MCV1	Card or History	76	12-23 m	3094	37
MCV1	History	46	12-23 m	3094	37
Pol1	C or H <12 months	87	12-23 m	3094	37
Pol1	Card	36	12-23 m	3094	37
Pol1	Card or History	89	12-23 m	3094	37
Pol1	History	53	12-23 m	3094	37
Pol3	C or H <12 months	71	12-23 m	3094	37
Pol3	Card	32	12-23 m	3094	37
Pol3	Card or History	74	12-23 m	3094	37
Pol3	History	41	12-23 m	3094	37

2006 Report of Result of National Basic Health Research (RISKEDAS) 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	87	12-23 m	438	23
DTP3	Card or History	68	12-23 m	438	23
HepB3	Card or History	63	12-23 m	438	23
MCV1	Card or History	82	12-23 m	438	23
Pol3	Card or History	71	12-23 m	438	23

2006 Republic of Indonesia Immunization Coverage Survey 2007

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	91	12-23 m	18204	52
DTP1	Card or History	87	12-23 m	18204	52
DTP3	Card or History	75	12-23 m	18204	52
HepB3	Card or History	74	12-23 m	18204	52
MCV1	Card or History	80	12-23 m	18204	52
Pol3	Card or History	83	12-23 m	18204	52

2001 Indonesia Demographic and Health Survey 2002-2003

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	93	12-23 m	2819	31
BCG	Card or History	82	12-23 m	2819	31
BCG	History	78	12-23 m	2819	31
DTP1	Card	94	12-23 m	2819	31
DTP1	Card or History	81	12-23 m	2819	31
DTP1	History	76	12-23 m	2819	31
DTP3	Card	81	12-23 m	2819	31
DTP3	Card or History	58	12-23 m	2819	31
DTP3	History	48	12-23 m	2819	31
MCV1	Card	71	12-23 m	2819	31
MCV1	Card or History	72	12-23 m	2819	31
MCV1	History	68	12-23 m	2819	31
Pol1	Card	96	12-23 m	2819	31
Pol1	Card or History	87	12-23 m	2819	31
Pol1	History	84	12-23 m	2819	31
Pol3	Card	88	12-23 m	2819	31
Pol3	Card or History	66	12-23 m	2819	31
Pol3	History	56	12-23 m	2819	31

2001 NID + Routine Coverage Survey

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	76	12-35 m	-	66
DTP1	Card or History	77	12-35 m	-	66
DTP3	Card or History	67	12-35 m	-	66
HepB3	Card or History	62	12-35 m	-	66
MCV1	Card or History	70	12-35 m	-	66
Pol3	Card or History	67	12-35 m	-	66

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

Indonesia
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 (%)
2003	82
2004	82
2005	83
2006	83
2007	83
2008	79
2009	85
2010	85
2011	85
2012	85
2013	85
2014	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.