Egypt: 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.

Egypt - BCG

EGY - BCG

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	98	98	98	99	98	98	98	98	98	95	98	96
Estimate GoC	•••	•••	•••	•••	•	•	•	•	•	•	•	•
Official	98	98	98	99	98	98	98	98	98	95	98	96
Administrative	98	98	98	99	99	98	98	98	98	95	98	96
Survey	NA	98	NA	NA	99	NA	NA	NA	NA	NA	99	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 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-];
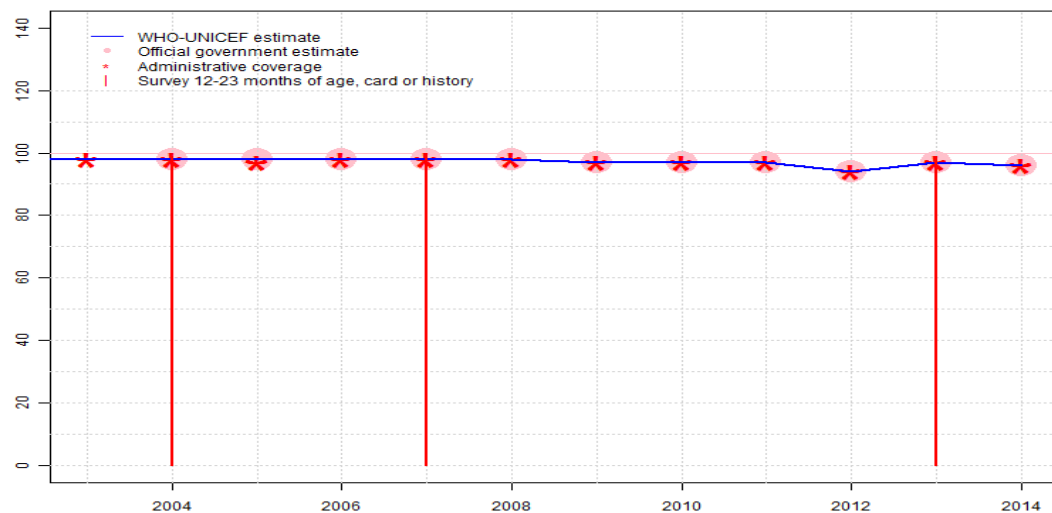   challenge the estimate.

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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 coverage reported by national government. GoC=R+ S+ D+

2004: Estimate based on coverage reported by national government supported by survey. Survey evidence of 98 percent based on 1 survey(s). GoC=R+ S+ D+

2005: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2006: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2007: Estimate based on coverage reported by national government supported by survey. Survey evidence of 99 percent based on 1 survey(s). Estimate challenged by: D-

2008: Estimate based on coverage reported by national government. Estimate challenged by: D-

2009: Estimate based on coverage reported by national government. Estimate challenged by: D-

2010: Estimate based on coverage reported by national government. Estimate challenged by: D-

2011: Estimate based on coverage reported by national government. Estimate challenged by: D-

2012: Estimate based on coverage reported by national government. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government supported by survey. Survey evidence of 99 percent based on 1 survey(s). Estimate challenged by: D-

2014: Estimate based on coverage reported by national government. Estimate challenged by: D-

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	98	98	98	98	98	98	97	97	97	94	97	96
Estimate GoC	•••	•••	•••	•••	•	•	•	•	•	•	•	•
Official	NA	98	98	98	98	98	97	97	97	94	97	96
Administrative	98	98	97	98	98	98	97	97	97	94	97	96
Survey	NA	99	NA	NA	100	NA	NA	NA	NA	NA	99	NA

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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.

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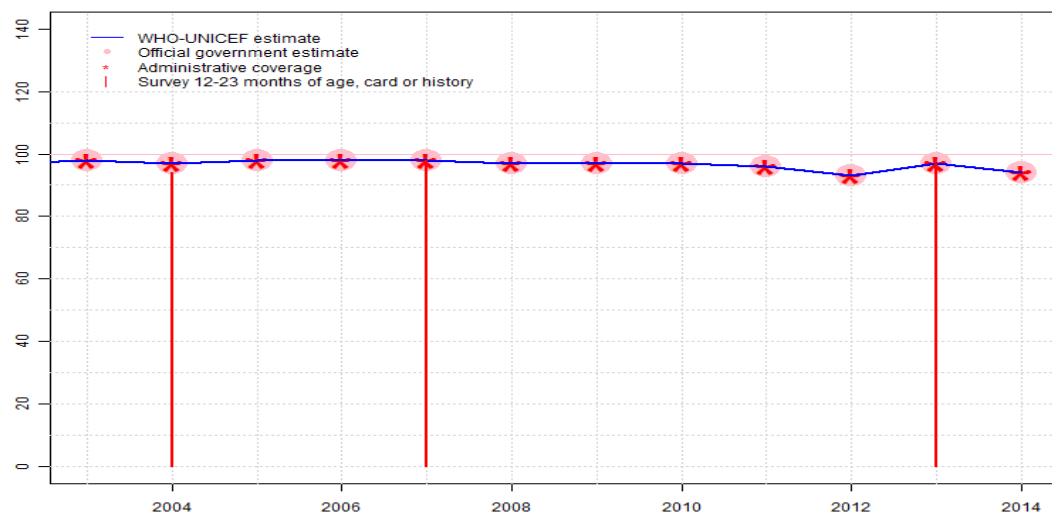challenge the estimate.

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 reported administrative data. GoC=R+ S+ D+

2004: Estimate based on coverage reported by national government supported by
survey. Survey evidence of 99 percent based on 1 survey(s). GoC=R+ S+
D+

2005: Estimate based on coverage reported by national government. GoC=R+ S+
D+

2006: Estimate based on coverage reported by national government. GoC=R+ S+
D+

2007: Estimate based on coverage reported by national government supported by
survey. Survey evidence of 100 percent based on 1 survey(s). Estimate
challenged by: D-

2008: Estimate based on coverage reported by national government. Estimate
challenged by: D-

2009: Estimate based on coverage reported by national government. Estimate
challenged by: D-

2010: Estimate based on coverage reported by national government. Estimate
challenged by: D-

2011: Estimate based on coverage reported by national government. Estimate
challenged by: D-

2012: Estimate based on coverage reported by national government. Estimate
challenged by: D-

2013: Estimate based on coverage reported by national government supported by
survey. Survey evidence of 99 percent based on 1 survey(s). Estimate
challenged by: D-

2014: Estimate based on coverage reported by national government. Estimate
challenged by: D-

Egypt - DTP3

EGY - 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	98	97	98	98	98	97	97	97	96	93	97	94
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●	●	●	●	●	●	●
Official	98	97	98	98	98	97	97	97	96	93	97	94
Administrative	98	97	98	98	98	97	97	97	96	93	97	94
Survey	NA	94	NA	NA	98	NA	NA	NA	NA	NA	97	NA

The WHO and UNICEF estimates of national immunization coverage (wuenic) are based on data and information
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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
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.

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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-];
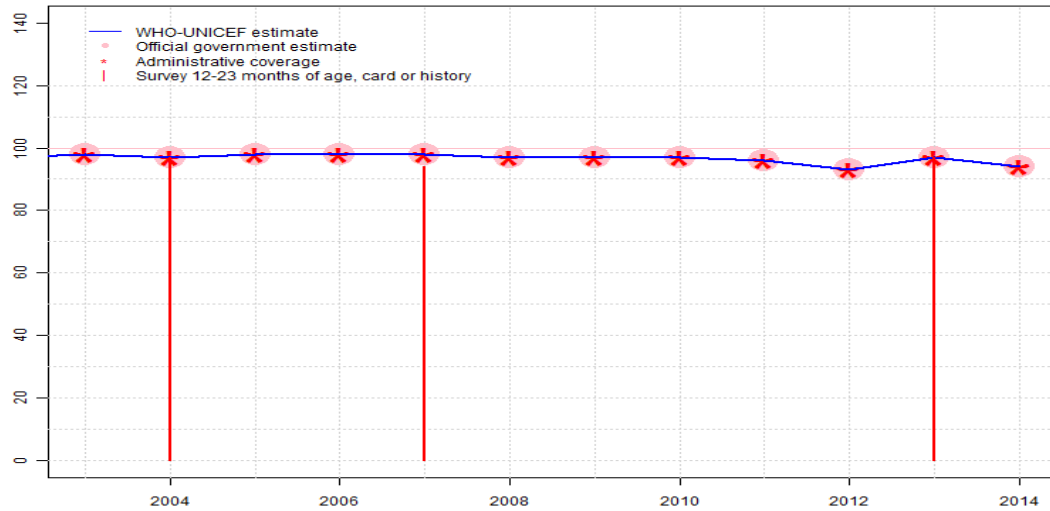challenge the estimate.

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

Description:

2003: Estimate based on coverage reported by national government. GoC=R+ S+
D+

2004: Estimate based on coverage reported by national government supported by
survey. Survey evidence of 95 percent based on 1 survey(s). Egypt De-
mographic and Health Survey 2005 card or history results of 94 percent
modifed for recall bias to 95 percent based on 1st dose card or history
coverage of 99 percent, 1st dose card only coverage of 73 percent and 3d
dose card only coverage of 70 percent. GoC=R+ S+ D+

2005: Estimate based on coverage reported by national government. GoC=R+ S+
D+

2006: Estimate based on coverage reported by national government. GoC=R+ S+
D+

2007: Estimate based on coverage reported by national government supported by
survey. Survey evidence of 99 percent based on 1 survey(s). Egypt De-
mographic and Health Survey 2008 card or history results of 98 percent
modifed for recall bias to 99 percent based on 1st dose card or history
coverage of 100 percent, 1st dose card only coverage of 68 percent and 3d
dose card only coverage of 68 percent. GoC=R+ S+ D+

2008: Estimate based on coverage reported by national government. Estimate
challenged by: D-

2009: Estimate based on coverage reported by national government. Estimate
challenged by: D-

2010: Estimate based on coverage reported by national government. Estimate
challenged by: D-

2011: Estimate based on coverage reported by national government. Estimate
challenged by: D-

2012: Estimate based on coverage reported by national government. Estimate
challenged by: D-

2013: Estimate based on coverage reported by national government supported by
survey. Survey evidence of 99 percent based on 1 survey(s). Egypt De-
mographic and Health Survey, 2014 card or history results of 97 percent
modifed for recall bias to 99 percent based on 1st dose card or history
coverage of 99 percent, 1st dose card only coverage of 58 percent and 3d
dose card only coverage of 58 percent. Estimate challenged by: D-

2014: Estimate based on coverage reported by national government. Estimate
challenged by: D-

Egypt - Pol3

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	98	97	98	98	98	97	97	97	96	93	97	94
Estimate GoC	•••	•••	•••	•••	•••	•	•	•	•	•	•	•
Official	98	97	98	98	98	97	97	97	96	93	97	94
Administrative	98	97	98	98	98	97	97	97	96	93	97	94
Survey	NA	97	NA	NA	94	NA	NA	NA	NA	NA	97	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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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
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[R-], [D-], or [S-], challenges the estimate.

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In all cases these estimates should be used with caution and should be assessed in light
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Description:

2003: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2004: Estimate based on coverage reported by national government supported by survey. Survey evidence of 97 percent based on 1 survey(s). GoC=R+ S+ D+

2005: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2006: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2006: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2007: Estimate based on coverage reported by national government supported by survey. Survey evidence of 99 percent based on 1 survey(s). Egypt Demographic and Health Survey 2008 card or history results of 94 percent modifed for recall bias to 99 percent based on 1st dose card or history coverage of 100 percent, 1st dose card only coverage of 68 percent and 3d dose card only coverage of 68 percent. GoC=R+ S+ D+

2008: Estimate based on coverage reported by national government. Estimate challenged by: D-

2009: Estimate based on coverage reported by national government. Estimate challenged by: D-

2010: Estimate based on coverage reported by national government. Estimate challenged by: D-

2011: Estimate based on coverage reported by national government. Estimate challenged by: D-

2012: Estimate based on coverage reported by national government. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government supported by survey. Survey evidence of 96 percent based on 1 survey(s). Egypt Demographic and Health Survey, 2014 card or history results of 97 percent modifed for recall bias to 96 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 59 percent and 3d dose card only coverage of 58 percent. Estimate challenged by: D-

2014: Estimate based on coverage reported by national government. Estimate challenged by: D-

Egypt - MCV1

EGY - MCV1
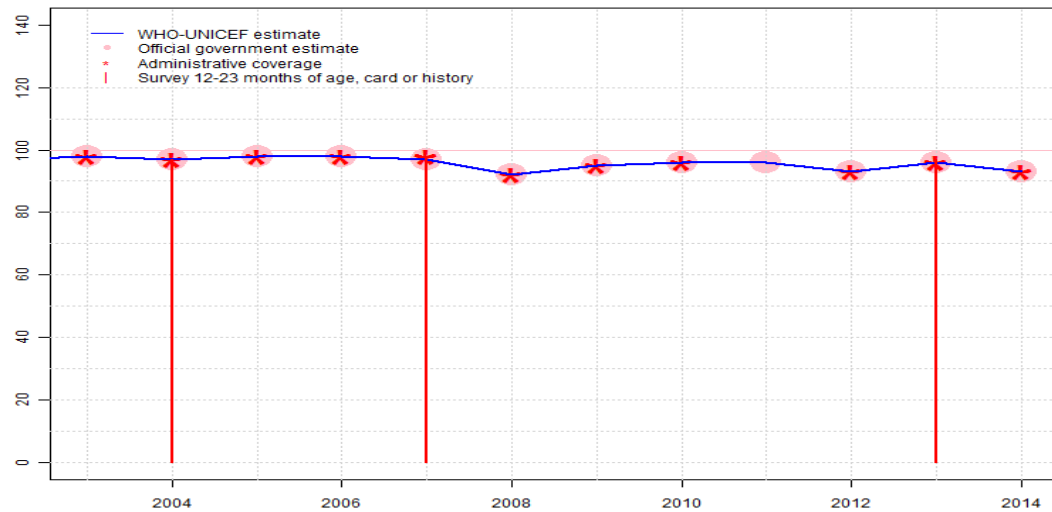
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	98	97	98	98	97	92	95	96	96	93	96	93
Estimate GoC	●●●	●●●	●●●	●●●	●●●	●	●	●	●●	●	●	●
Official	98	97	98	98	97	92	95	96	96	93	96	93
Administrative	98	97	98	98	98	92	95	96	NA	93	96	93
Survey	NA	97	NA	NA	98	NA	NA	NA	NA	NA	97	NA

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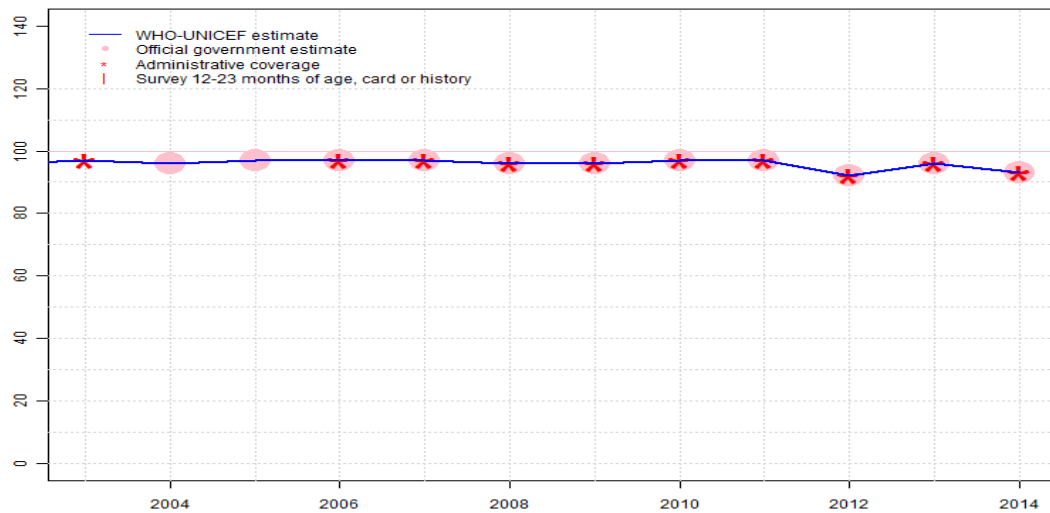 challenge the estimate.

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In all cases these estimates should be used with caution and should be assessed in light
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```

Description:

2003: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2004: Estimate based on coverage reported by national government supported by survey. Survey evidence of 97 percent based on 1 survey(s). GoC=R+ S+ D+

2005: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2006: Estimate based on coverage reported by national government. GoC=R+ S+ D+

2007: Estimate based on coverage reported by national government supported by survey. Survey evidence of 98 percent based on 1 survey(s). GoC=R+ S+ D+

2008: Estimate based on coverage reported by national government. Estimate challenged by: D-

2009: Estimate based on coverage reported by national government. Estimate challenged by: D-

2010: Estimate based on coverage reported by national government. Estimate challenged by: D-

2011: Estimate based on coverage reported by national government. GoC=R+ S+

2012: Estimate based on coverage reported by national government. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government supported by survey. Survey evidence of 97 percent based on 1 survey(s). Estimate challenged by: D-

2014: Estimate based on coverage reported by national government. Estimate challenged by: D-

Egypt - MCV2

EGY - MCV2

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	97	96	97	97	97	96	96	97	97	92	96	93
Estimate GoC	••	••	••	••	••	••	•	••	••	•	•	•
Official	NA	96	97	97	97	96	96	97	97	92	96	93
Administrative	97	NA	NA	97	97	96	96	97	97	92	96	93
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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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
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.

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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-];
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of the objective for which they are being used.

Description:

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

2003: Estimate based on reported administrative estimate. GoC=R+ D+
2004: Estimate based on coverage reported by national government. GoC=R+
2005: Estimate based on coverage reported by national government. GoC=R+
2006: Estimate based on coverage reported by national government. GoC=R+
D+
2007: Estimate based on coverage reported by national government. GoC=R+
D+
2008: Estimate based on coverage reported by national government. GoC=R+
D+
2009: Estimate based on coverage reported by national government. Estimate
challenged by: 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. Estimate
challenged by: D-
2013: Estimate based on coverage reported by national government. Estimate
challenged by: D-
2014: Estimate based on coverage reported by national government. Estimate
challenged by: D-

Egypt - HepBB

EGY - HepBB

— 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

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    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-];
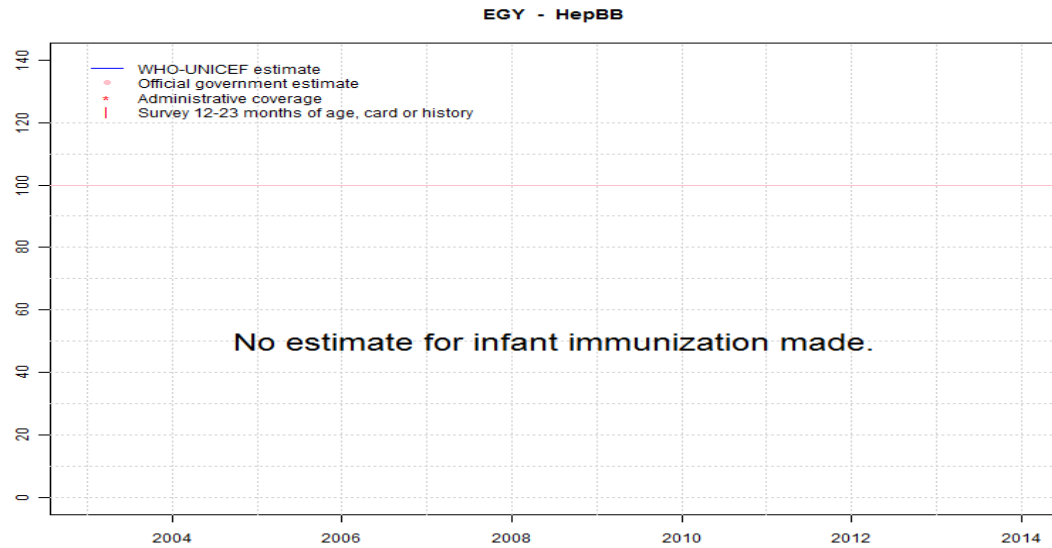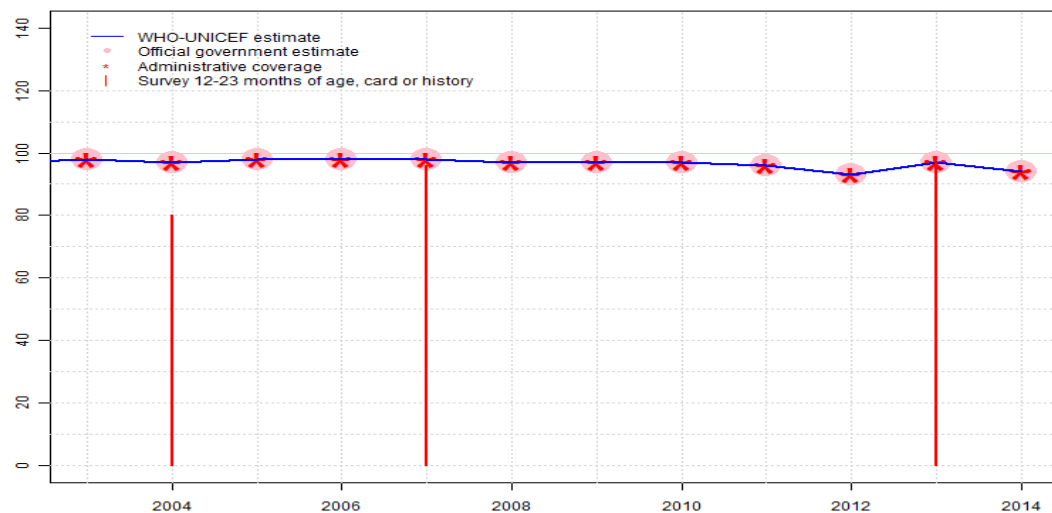   challenge the estimate.

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.

EGY - 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	98	97	98	98	98	97	97	97	96	93	97	94
Estimate GoC	●	●	●	●	●●●	●	●	●	●	●	●	●
Official	98	97	98	98	98	97	97	97	96	93	97	94
Administrative	98	97	98	98	98	97	97	97	96	93	97	94
Survey	NA	80	NA	NA	96	NA	NA	NA	NA	NA	97	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 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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● There are no directly supporting data; or data from at least one source; [R-], [D-], [S-]; challenge the estimate.
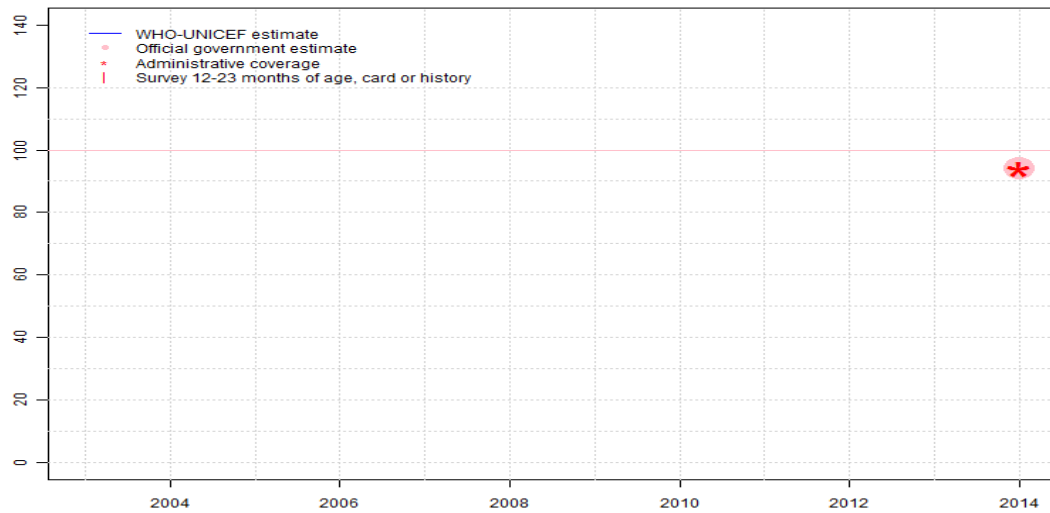
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In all cases these estimates should be used with caution and should be assessed in light
of the objective for which they are being used.
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Description:

2003: Estimate based on coverage reported by national government. Estimate challenged by: S-

2004: Estimate based on coverage reported by national government. Egypt Demographic and Health Survey 2005 results ignored by working group. Survey results inconsistent with other data.Egypt Demographic and Health Survey 2005 card or history results of 80 percent modifed for recall bias to 81 percent based on 1st dose card or history coverage of 91 percent, 1st dose card only coverage of 67 percent and 3d dose card only coverage of 60 percent. Estimate challenged by: S-

2005: Estimate based on coverage reported by national government. Estimate challenged by: S-

2006: Estimate based on coverage reported by national government. Estimate challenged by: S-

2007: Estimate based on coverage reported by national government supported by survey. Survey evidence of 98 percent based on 1 survey(s). Egypt Demographic and Health Survey 2008 card or history results of 96 percent modifed for recall bias to 98 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 68 percent and 3d dose card only coverage of 67 percent. GoC=R+ S+ D+

2008: Estimate based on coverage reported by national government. Estimate challenged by: D-

2009: Estimate based on coverage reported by national government. Estimate challenged by: D-

2010: Estimate based on coverage reported by national government. Estimate challenged by: D-

2011: Estimate based on coverage reported by national government. Estimate challenged by: D-

2012: Estimate based on coverage reported by national government. Estimate challenged by: D-

2013: Estimate based on coverage reported by national government supported by survey. Survey evidence of 99 percent based on 1 survey(s). Egypt Demographic and Health Survey, 2014 card or history results of 97 percent modifed for recall bias to 99 percent based on 1st dose card or history coverage of 99 percent, 1st dose card only coverage of 58 percent and 3d dose card only coverage of 58 percent. Estimate challenged by: D-

2014: Estimate based on coverage reported by national government. Estimate challenged by: D-

Egypt - Hib3

EGY - Hib3

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

Description:

2014: Estimate based on coverage reported by national government. Hib vaccine introduced during early 2014, yet reported data reflect the same number of doses delivered for Hib as for DTP containing vaccine. Estimate challenged by: D-
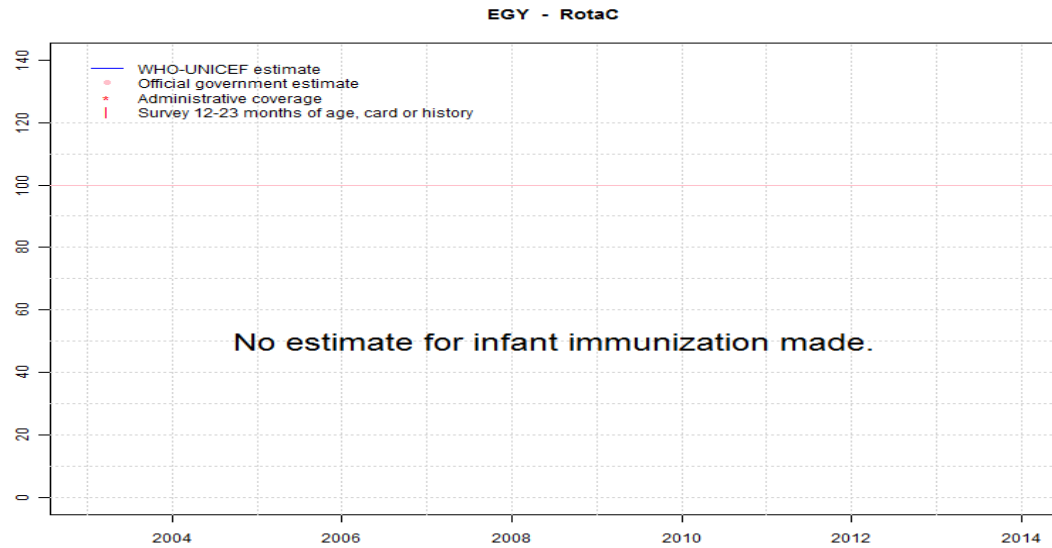
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	94
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	●
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	94
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	94
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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.

EGY - RotaC

No estimate for infant immunization made.

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	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
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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
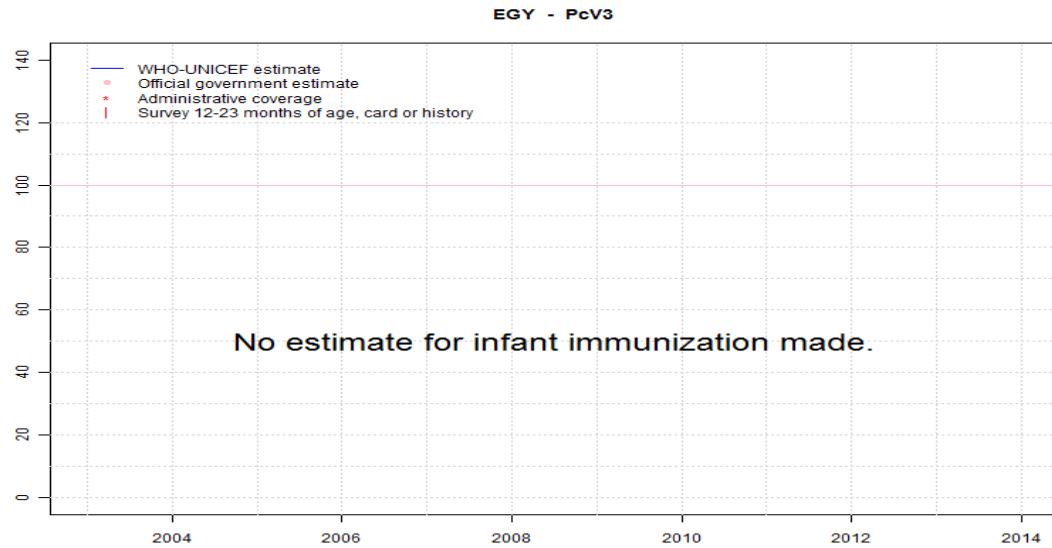of the objective for which they are being used.

Egypt - PcV3

EGY - PcV3

- 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
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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
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.

2013 Egypt Demographic and Health Survey, 2014

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <18 months	99	18-29 m	3121	59
BCG	Card	58	18-29 m	1829	59
BCG	Card or History	99	18-29 m	3121	59
BCG	History	41	18-29 m	1292	59
DTP1	C or H <18 months	99	18-29 m	3121	59
DTP1	Card	58	18-29 m	1829	59
DTP1	Card or History	99	18-29 m	3121	59
DTP1	History	41	18-29 m	1292	59
DTP3	C or H <18 months	96	18-29 m	3121	59
DTP3	Card	58	18-29 m	1829	59
DTP3	Card or History	97	18-29 m	3121	59
DTP3	History	40	18-29 m	1292	59
HepB1	C or H <18 months	99	18-29 m	3121	59
HepB1	Card	58	18-29 m	1829	59
HepB1	Card or History	99	18-29 m	3121	59
HepB1	History	41	18-29 m	1292	59
HepB3	C or H <18 months	96	18-29 m	3121	59
HepB3	Card	58	18-29 m	1829	59
HepB3	Card or History	97	18-29 m	3121	59
HepB3	History	40	18-29 m	1292	59
MCV1	C or H <18 months	82	18-29 m	3121	59
MCV1	Card	58	18-29 m	1829	59
MCV1	Card or History	97	18-29 m	3121	59
MCV1	History	40	18-29 m	1292	59
Pol1	Card	59	18-29 m	1829	59
Pol1	Card or History	98	18-29 m	3121	59
Pol1	History	39	18-29 m	1292	59
Pol3	Card	58	18-29 m	1829	59
Pol3	Card or History	97	18-29 m	3121	59
Pol3	History	38	18-29 m	1292	59

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	68	12-23 m	2160	68
BCG	Card or History	99	12-23 m	2160	68
BCG	History	31	12-23 m	2160	68
DTP1	C or H <12 months	100	12-23 m	2160	68
DTP1	Card	68	12-23 m	2160	68
DTP1	Card or History	100	12-23 m	2160	68
DTP1	History	31	12-23 m	2160	68
DTP3	C or H <12 months	97	12-23 m	2160	68
DTP3	Card	68	12-23 m	2160	68
DTP3	Card or History	98	12-23 m	2160	68
DTP3	History	30	12-23 m	2160	68
HepB1	C or H <12 months	99	12-23 m	2160	68
HepB1	Card	68	12-23 m	2160	68
HepB1	Card or History	99	12-23 m	2160	68
HepB1	History	31	12-23 m	2160	68
HepB3	C or H <12 months	96	12-23 m	2160	68
HepB3	Card	67	12-23 m	2160	68
HepB3	Card or History	96	12-23 m	2160	68
HepB3	History	29	12-23 m	2160	68
MCV1	C or H <12 months	97	12-23 m	2160	68
MCV1	Card	67	12-23 m	2160	68
MCV1	Card or History	98	12-23 m	2160	68
MCV1	History	31	12-23 m	2160	68
Pol1	C or H <12 months	100	12-23 m	2160	68
Pol1	Card	68	12-23 m	2160	68
Pol1	Card or History	100	12-23 m	2160	68
Pol1	History	31	12-23 m	2160	68
Pol3	C or H <12 months	94	12-23 m	2160	68
Pol3	Card	68	12-23 m	2160	68
Pol3	Card or History	94	12-23 m	2160	68
Pol3	History	26	12-23 m	2160	68

2007 Egypt Demographic and Health Survey 2008

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	99	12-23 m	2160	68

2004 Egypt Demographic and Health Survey 2005

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	98	12-23 m	2680	73
BCG	Card	72	12-23 m	2680	73
BCG	Card or History	98	12-23 m	2680	73
BCG	History	26	12-23 m	2680	73

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
DTP1	C or H <12 months	99	12-23 m	2680	73
DTP1	Card	73	12-23 m	2680	73
DTP1	Card or History	99	12-23 m	2680	73
DTP1	History	26	12-23 m	2680	73
DTP3	C or H <12 months	93	12-23 m	2680	73
DTP3	Card	70	12-23 m	2680	73
DTP3	Card or History	94	12-23 m	2680	73
DTP3	History	23	12-23 m	2680	73
HepB1	C or H <12 months	91	12-23 m	2680	73
HepB1	Card	67	12-23 m	2680	73
HepB1	Card or History	91	12-23 m	2680	73
HepB1	History	24	12-23 m	2680	73
HepB3	C or H <12 months	80	12-23 m	2680	73
HepB3	Card	60	12-23 m	2680	73
HepB3	Card or History	80	12-23 m	2680	73
HepB3	History	20	12-23 m	2680	73
MCV1	C or H <12 months	94	12-23 m	2680	73
MCV1	Card	70	12-23 m	2680	73
MCV1	Card or History	97	12-23 m	2680	73
MCV1	History	26	12-23 m	2680	73
Pol1	C or H <12 months	100	12-23 m	2680	73
Pol1	Card	73	12-23 m	2680	73
Pol1	Card or History	100	12-23 m	2680	73
Pol1	History	26	12-23 m	2680	73
Pol3	C or H <12 months	97	12-23 m	2680	73
Pol3	Card	71	12-23 m	2680	73
Pol3	Card or History	97	12-23 m	2680	73
Pol3	History	26	12-23 m	2680	73

2002 Egypt Interim Demographic and Health Survey 2003

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	99	12-23 m	1192	74
DTP1	Card or History	100	12-23 m	1192	74
DTP3	Card or History	93	12-23 m	1192	74
HepB3	Card or History	79	12-23 m	1192	74
MCV1	Card or History	96	12-23 m	1192	74
Pol1	Card or History	100	12-23 m	1192	74
Pol3	Card or History	93	12-23 m	1192	74

1999 Egypt Demographic and Health Survey 2000, 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card	72	12-23 m	2170	72
BCG	Card or History	99	12-23 m	2170	72
BCG	History	27	12-23 m	2170	72
DTP1	Card	72	12-23 m	2170	72
DTP1	Card or History	99	12-23 m	2170	72
DTP1	History	27	12-23 m	2170	72
DTP3	Card	70	12-23 m	2170	72
DTP3	Card or History	94	12-23 m	2170	72
DTP3	History	24	12-23 m	2170	72
HepB3	Card	70	12-23 m	2170	72
HepB3	Card or History	93	12-23 m	2170	72
HepB3	History	23	12-23 m	2170	72
MCV1	Card	70	12-23 m	2170	72
MCV1	Card or History	97	12-23 m	2170	72
MCV1	History	26	12-23 m	2170	72
Pol1	Card	72	12-23 m	2170	72
Pol1	Card or History	100	12-23 m	2170	72
Pol1	History	27	12-23 m	2170	72
Pol3	Card	70	12-23 m	2170	72
Pol3	Card or History	95	12-23 m	2170	72
Pol3	History	24	12-23 m	2170	72

1998 Egypt Demographic and Health Survey 2000, 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	98	24-35 m	2209	72
DTP1	C or H <12 months	99	24-35 m	2209	72
DTP3	C or H <12 months	93	24-35 m	2209	72
HepB3	C or H <12 months	92	24-35 m	2209	72
MCV1	C or H <12 months	89	24-35 m	2209	72
Pol1	C or H <12 months	99	24-35 m	2209	72
Pol3	C or H <12 months	93	24-35 m	2209	72

Egypt - survey details

1997 Egypt Demographic and Health Survey 1998

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	98	12-23 m	837	65
DTP1	Card or History	98	12-23 m	837	65
DTP3	Card or History	88	12-23 m	837	65
HepB1	Card or History	94	12-23 m	837	65
HepB3	Card or History	81	12-23 m	837	65
MCV1	Card or History	93	12-23 m	837	65
Pol1	Card or History	100	12-23 m	837	65
Pol3	Card or History	90	12-23 m	837	65

1997 Egypt Demographic and Health Survey 2000, 2001

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	98	36-47 m	2126	72
DTP1	C or H <12 months	98	36-47 m	2126	72
DTP3	C or H <12 months	90	36-47 m	2126	72
HepB3	C or H <12 months	89	36-47 m	2126	72
MCV1	C or H <12 months	84	36-47 m	2126	72
Pol1	C or H <12 months	98	36-47 m	2126	72
Pol3	C or H <12 months	91	36-47 m	2126	72

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

Egypt
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	85
2005	85
2006	86
2007	85
2008	85
2009	85
2010	86
2011	86
2012	86
2013	86
2014	86

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[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.