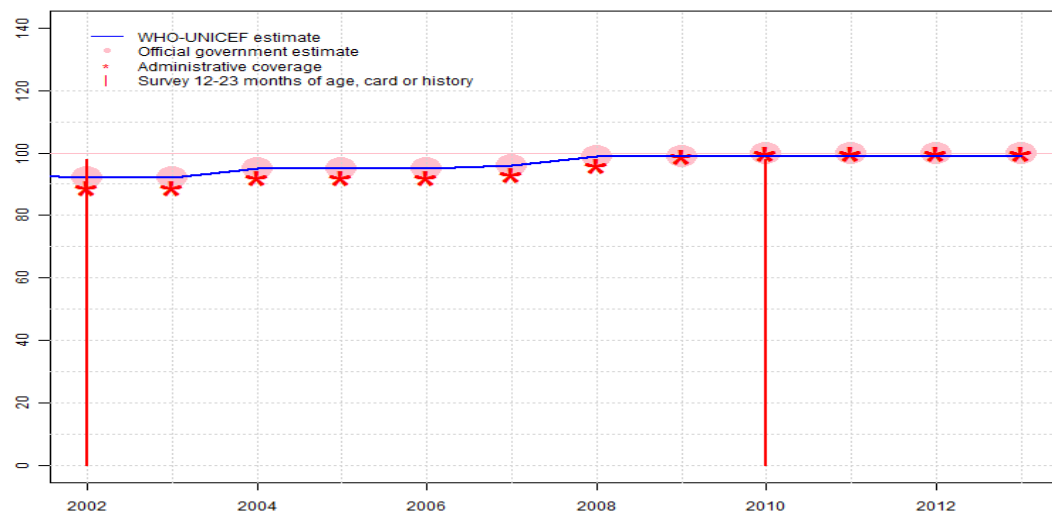


# Morocco - BCG

MAR - BCG



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	92	92	95	95	95	96	99	99	99	99	99	99
Estimate GoC	●●●	●●●	●●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	92	92	95	95	95	96	99	99	100	100	100	100
Administrative	89	89	92	92	92	93	96	99	100	100	100	100
Survey	98	NA	NA	NA	NA	NA	NA	NA	98	NA	NA	NA

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

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

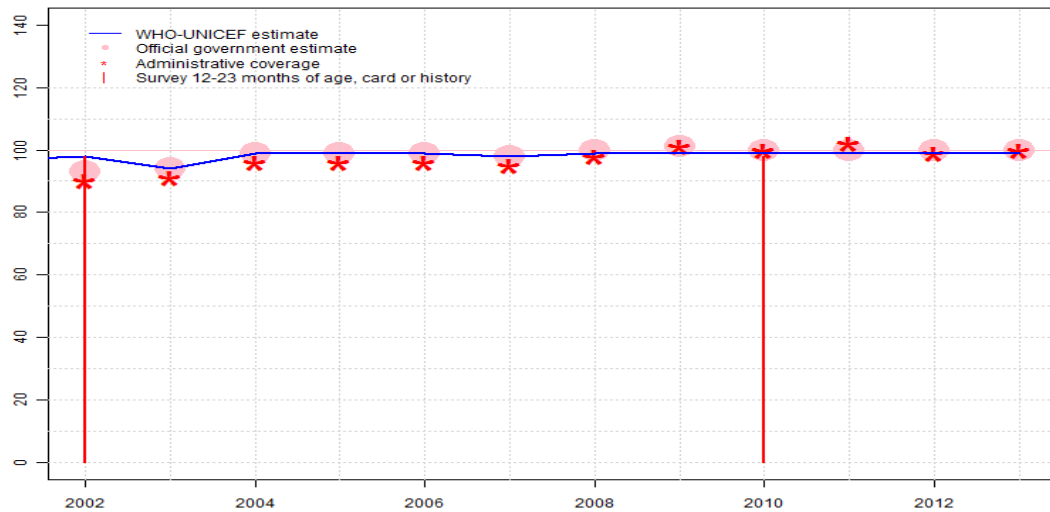
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2002: Estimate based on coverage reported by national government supported by survey. Survey evidence of 98 percent based on 1 survey(s). National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ S+ D+
- 2003: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ S+ D+
- 2004: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2006: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2007: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2008: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2009: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2010: Estimate based on coverage reported by national government. Survey results ignored. Sample size 0 less than 300. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+

# Morocco - DTP1

MAR - DTP1



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	98	94	99	99	99	98	99	99	99	99	99	99
Estimate GoC	•	•••	•••	••	••	••	••	•	••	••	••	••
Official	93	94	99	99	99	98	100	101	100	100	100	100
Administrative	90	91	96	96	96	95	98	101	100	102	99	100
Survey	98	NA	NA	NA	NA	NA	NA	NA	98	NA	NA	NA

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

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

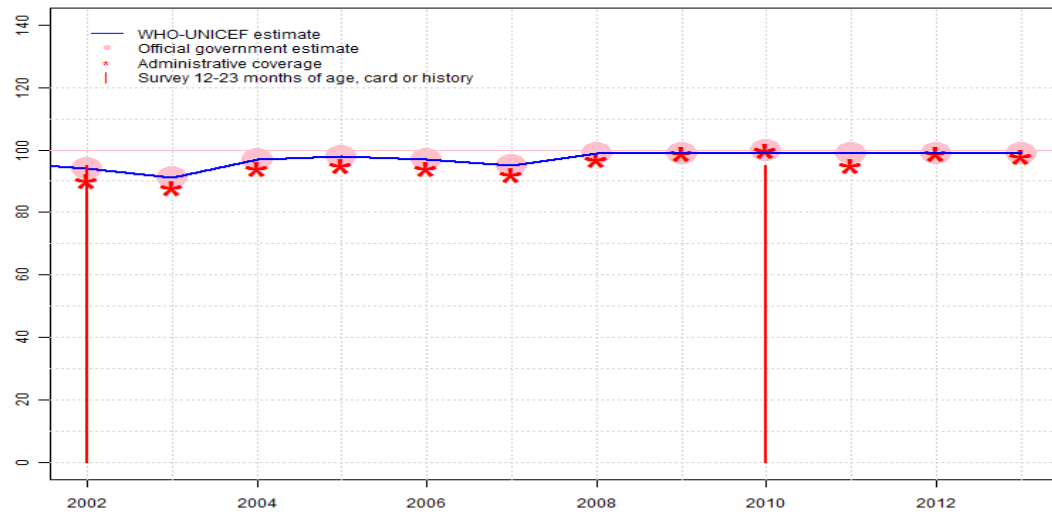
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2002: DTP1 coverage estimated based on DTP3 coverage of 94. National reported estimates include estimated number of immunizations provided in the private sector. Estimate challenged by: R-
- 2003: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ S+ D+
- 2004: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2006: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2007: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2008: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2009: Estimate based on interpolation between data reported by national government. Reported data excluded. 101 percent greater than 100 percent. National reported estimates include estimated number of immunizations provided in the private sector. GoC=No accepted empirical data
- 2010: Estimate based on coverage reported by national government. Survey results ignored. Sample size 0 less than 300. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+

# Morocco - DTP3

MAR - DTP3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	94	91	97	98	97	95	99	99	99	99	99	99
Estimate GoC	●●●	●●●	●●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
Official	94	91	97	98	97	95	99	99	100	99	99	99
Administrative	90	88	94	95	94	92	97	99	100	95	99	98
Survey	95	NA	NA	NA	NA	NA	NA	NA	95	NA	NA	NA

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

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

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

## Description:

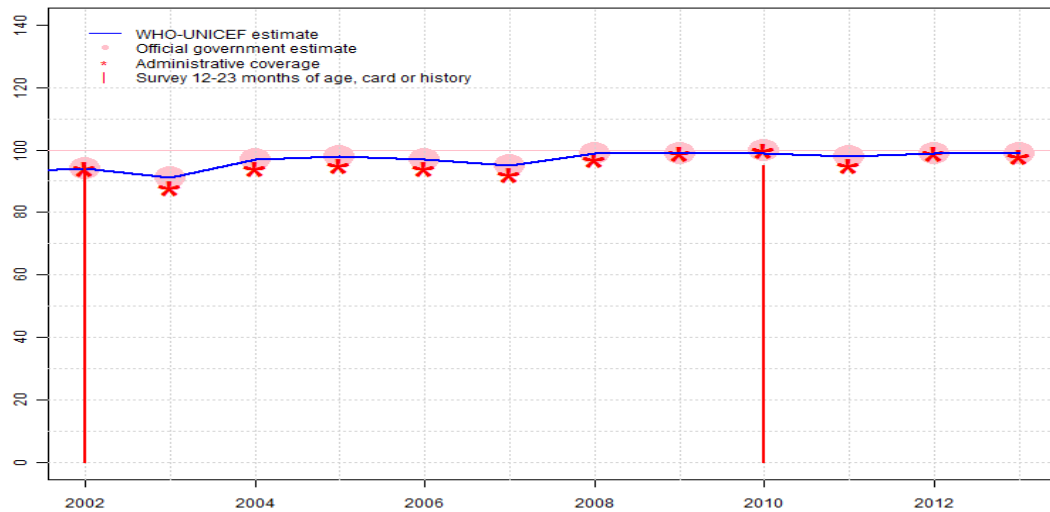
- 2002: Estimate based on coverage reported by national government supported by survey. Survey evidence of 94 percent based on 1 survey(s). Morocco Demographic and Health Survey 2003-2004 card or history results of 95 percent modified for recall bias to 94 percent based on 1st dose card or history coverage of 98 percent, 1st dose card only coverage of 78 percent and 3d dose card only coverage of 75 percent. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ S+ D+
- 2003: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ S+ D+
- 2004: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2006: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2007: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2008: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2009: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+
- 2010: Estimate based on coverage reported by national government. Survey results ignored. Sample size 0 less than 300. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in

# Morocco - DTP3

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the private sector. GoC=R+ D+

MAR - Pol3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	94	91	97	98	97	95	99	99	99	98	99	99
Estimate GoC	•••	•••	•••	••	••	••	••	••	••	••	••	••
Official	94	91	97	98	97	95	99	99	100	98	99	99
Administrative	94	88	94	95	94	92	97	99	100	95	99	98
Survey	95	NA	NA	NA	NA	NA	NA	NA	95	NA	NA	NA

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

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

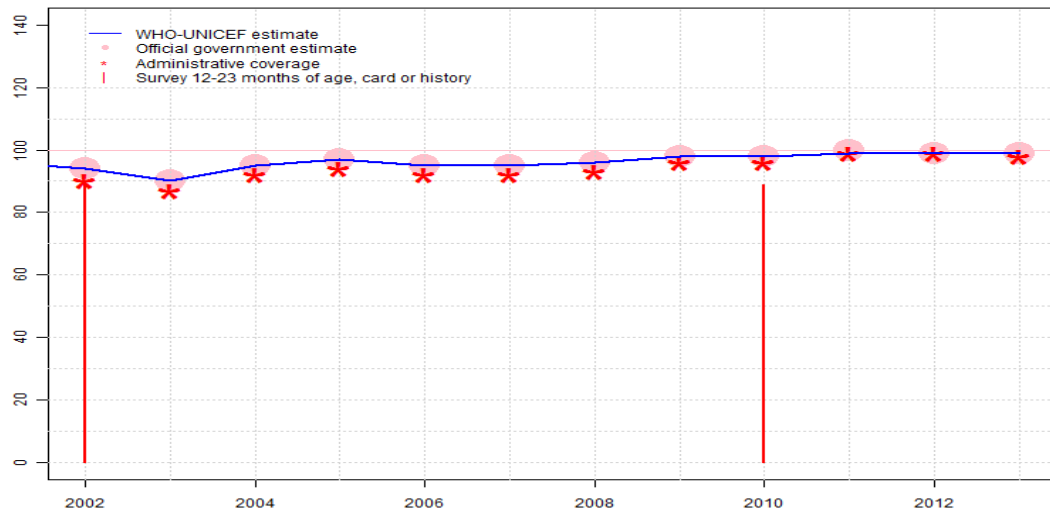
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2002: Estimate based on coverage reported by national government supported by survey. Survey evidence of 95 percent based on 1 survey(s). National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ S+ D+
- 2003: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ S+ D+
- 2004: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2006: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2007: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2008: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2009: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+
- 2010: Estimate based on coverage reported by national government. Survey results ignored. Sample size 0 less than 300. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+

# Morocco - MCV

MAR - MCV



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	94	90	95	97	95	95	96	98	98	99	99	99
Estimate GoC	•••	•••	•••	••	••	••	••	••	••	••	••	••
Official	94	90	95	97	95	95	96	98	98	100	99	99
Administrative	90	87	92	94	92	92	93	96	96	99	99	98
Survey	90	NA	NA	NA	NA	NA	NA	NA	89	NA	NA	NA

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

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

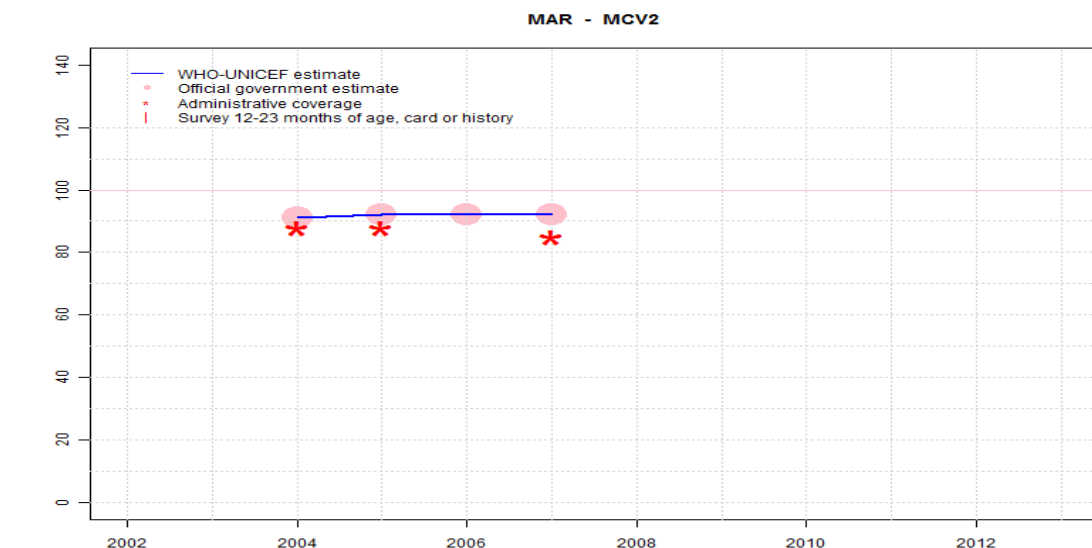
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2002: Estimate based on coverage reported by national government supported by survey. Survey evidence of 90 percent based on 1 survey(s). National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ S+ D+
- 2003: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ S+ D+
- 2004: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ S+ D+
- 2005: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2006: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2007: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2008: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2009: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+
- 2010: Estimate based on coverage reported by national government. Survey results ignored. Sample size 0 less than 300. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. Estimate of 99 percent changed from previous revision value of 95 percent. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+



# Morocco - MCV2



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	NA	NA	91	92	92	92	NA	NA	NA	NA	NA	NA
Estimate GoC	NA	NA	●	●●	●●	●	NA	NA	NA	NA	NA	NA
Official	NA	NA	91	92	92	92	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	88	88	NA	85	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

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

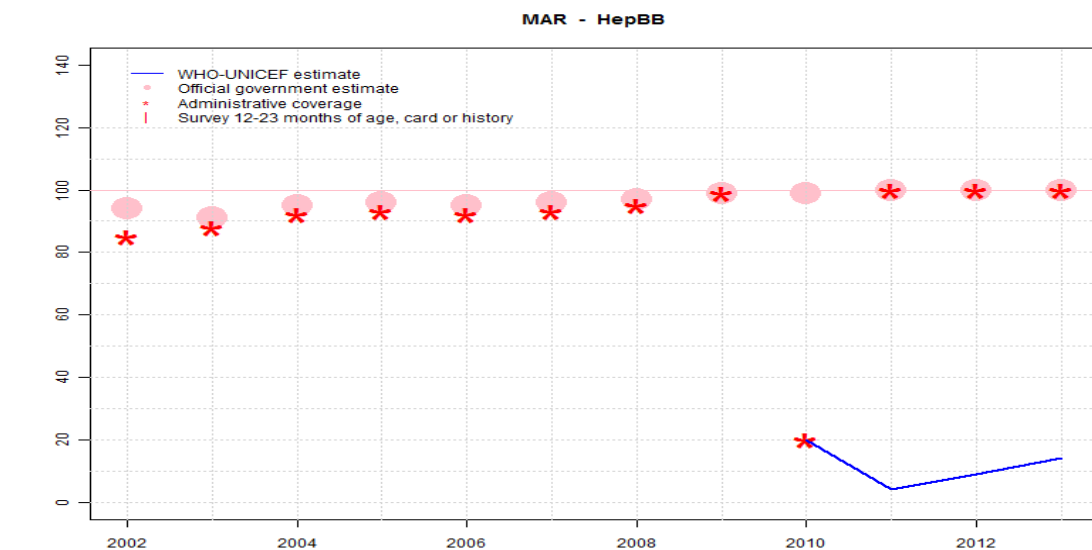
## Description:

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

- 2004: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. Estimate challenged by: D-
- 2005: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+
- 2006: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+
- 2007: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. Routine administration of the second dose of measles was discontinued in 2007. Estimate challenged by: D-



# Morocco - HepBB



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	20	4	9	14
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	•	•	•	•
Official	94	91	95	96	95	96	97	99	99	100	100	100
Administrative	85	88	92	93	92	93	95	99	20	100	100	100
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

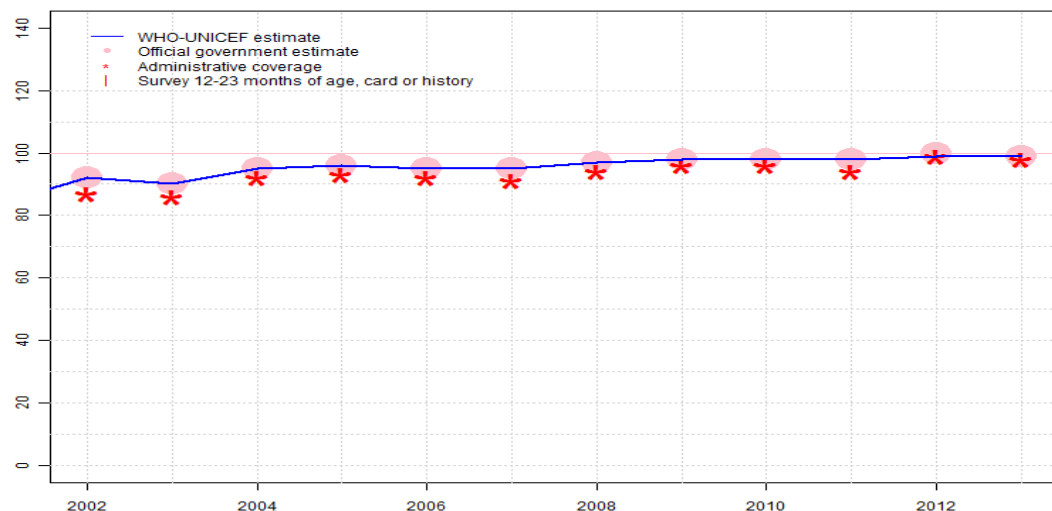
In all cases these estimates should be used with caution and should be assessed in light of the objective for which they are being used.

## Description:

- 2010: Reported coverage level reflects HepB coverage within 24 hours and beyond. Estimated coverage reflects doses administered within 24 hours. National reported estimates include estimated number of immunizations provided in the private sector. Estimate challenged by: D-R-
- 2011: Reported coverage level reflects HepB coverage within 24 hours and beyond. Estimated coverage reflects doses administered within 24 hours. National reported estimates include estimated number of immunizations provided in the private sector. Estimate challenged by: R-
- 2012: Reported coverage level reflects HepB coverage within 24 hours and beyond. Estimated coverage reflects doses administered within 24 hours. National reported estimates include estimated number of immunizations provided in the private sector. Estimate challenged by: R-
- 2013: Reported coverage level reflects HepB coverage within 24 hours and beyond. Estimated coverage reflects doses administered within 24 hours. National reported estimates include estimated number of immunizations provided in the private sector. Estimate challenged by: R-

# Morocco - HepB3

MAR - HepB3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	92	90	95	96	95	95	97	98	98	98	100	99
Estimate GoC	••	••	••	••	••	••	••	••	••	••	••	••
Official	92	90	95	96	95	95	97	98	98	98	100	99
Administrative	87	86	92	93	92	91	94	96	96	94	99	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.

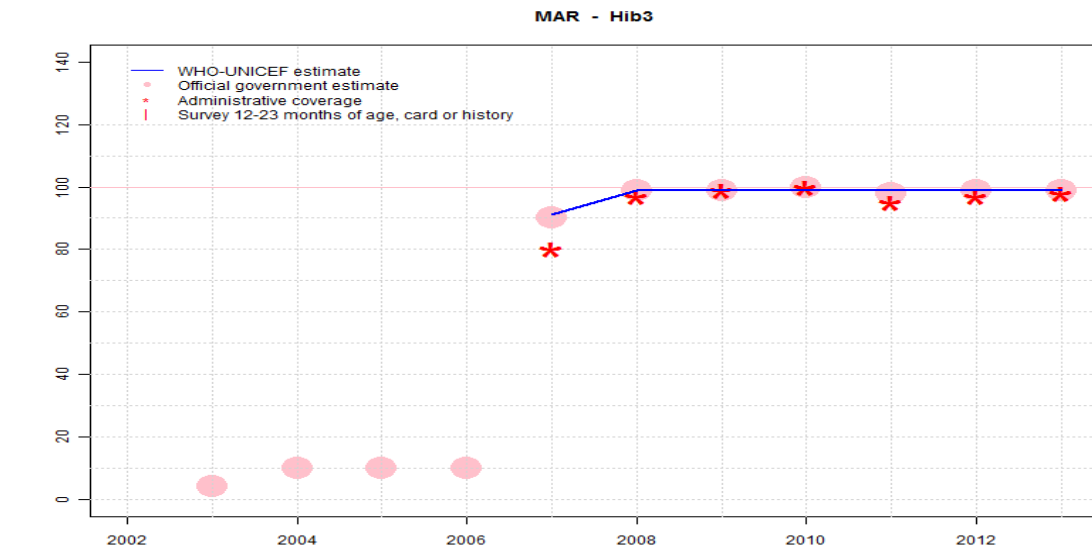
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

## Description:

- 2002: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2003: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2004: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2005: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2006: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2007: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2008: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2009: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+
- 2010: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+

# Morocco - Hib3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	NA	NA	NA	NA	NA	91	99	99	99	99	99	99
Estimate GoC	NA	NA	NA	NA	NA	••	••	•	••	•	••	••
Official	NA	4	10	10	10	90	99	99	100	98	99	99
Administrative	NA	NA	NA	NA	NA	80	97	99	100	95	97	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.

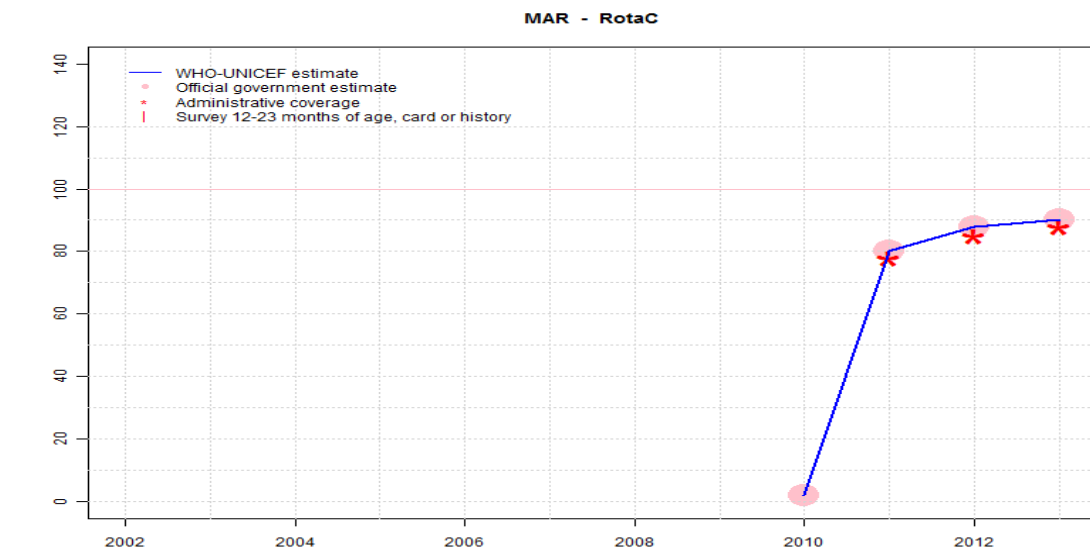
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

## Description:

- 2007: Reported data calibrated to 2011 levels. National reported estimates include estimated number of immunizations provided in the private sector. Hib vaccine introduced in 2007. Vaccine presentation is DTP-Hib. GoC=D+
- 2008: Reported data calibrated to 2011 levels. National reported estimates include estimated number of immunizations provided in the private sector. GoC=D+
- 2009: Reported data calibrated to 2011 levels. National reported estimates include estimated number of immunizations provided in the private sector. GoC=No accepted empirical data
- 2010: Reported data calibrated to 2011 levels. National reported estimates include estimated number of immunizations provided in the private sector. GoC=D+
- 2011: Estimate set to DTP3 level. National reported estimates include estimated number of immunizations provided in the private sector. Estimate challenged by: R-
- 2012: Reported data calibrated to 2011 levels. National reported estimates include estimated number of immunizations provided in the private sector. GoC=D+
- 2013: Reported data calibrated to 2011 levels. National reported estimates include estimated number of immunizations provided in the private sector. GoC=D+

# Morocco - RotaC



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	2	80	88	90
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	••	••	••	••
Official	NA	NA	NA	NA	NA	NA	NA	NA	2	80	88	90
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	78	85	88
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

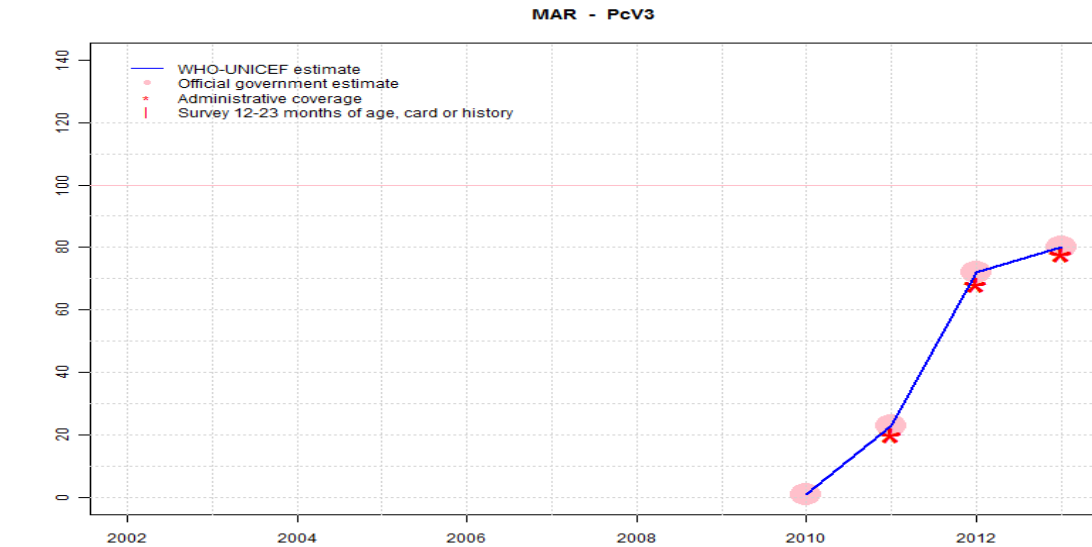
- Estimate is supported by reported data [R+], coverage recalculated with an independent denominator from the World Population Prospects: 2012 revision from the UN Population Division (D+), and at least one supporting survey within 2 years [S+]. While well supported, the estimate still carries a risk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

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

## Description:

- 2010: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. Rotavirus vaccine introduced in 2010. GoC=R+ D+
- 2011: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2012: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+

# Morocco - PcV3



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	1	23	72	80
Estimate GoC	NA	NA	NA	NA	NA	NA	NA	NA	••	••	••	••
Official	NA	NA	NA	NA	NA	NA	NA	NA	1	23	72	80
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	20	68	78
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

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

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

## Description:

- 2010: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. Pneumococcal conjugate vaccine introduced in 2010. GoC=R+
- 2011: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+
- 2012: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+
- 2013: Estimate based on coverage reported by national government. National reported estimates include estimated number of immunizations provided in the private sector. GoC=R+ D+

# Morocco - survey details

## 2010 Enquête Nationale sur la Population et la Santé Familiale (ENPSF) 2011

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	Card or History	98	12-23 m	-	86
DTP1	Card or History	98	12-23 m	-	86
DTP3	Card or History	95	12-23 m	-	86
MCV	Card or History	89	12-23 m	-	86
Pol1	Card or History	97	12-23 m	-	86
Pol3	Card or History	95	12-23 m	-	86

## 2002 L'Enquête Nationale sur la Population et la Santé Familiale du Maroc 2003-2004

Vaccine	Confirmation method	Coverage	Age cohort	Sample	Cards seen
BCG	C or H <12 months	98	12-23 m	1130	78
BCG	Card	78	12-23 m	1130	78
BCG	Card or history	98	12-23 m	1130	78
BCG	History	20	12-23 m	1130	78

DTP1	C or H <12 months	97	12-23 m	1130	78
DTP1	Card	78	12-23 m	1130	78
DTP1	Card or history	98	12-23 m	1130	78
DTP1	History	20	12-23 m	1130	78
DTP3	C or H <12 months	93	12-23 m	1130	78
DTP3	Card	75	12-23 m	1130	78
DTP3	Card or history	95	12-23 m	1130	78
DTP3	History	19	12-23 m	1130	78
MCV	C or H <12 months	85	12-23 m	1130	78
MCV	Card	72	12-23 m	1130	78
MCV	Card or history	90	12-23 m	1130	78
MCV	History	19	12-23 m	1130	78
Pol1	C or H <12 months	97	12-23 m	1130	78
Pol1	Card	78	12-23 m	1130	78
Pol1	Card or history	98	12-23 m	1130	78
Pol1	History	20	12-23 m	1130	78
Pol3	C or H <12 months	93	12-23 m	1130	78
Pol3	Card	76	12-23 m	1130	78
Pol3	Card or history	95	12-23 m	1130	78
Pol3	History	20	12-23 m	1130	78

Further information and estimates prior to 2002 are available at:

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

[http://www.who.int/immunization/monitoring\\_surveillance/routine/coverage/en/index4.html](http://www.who.int/immunization/monitoring_surveillance/routine/coverage/en/index4.html)

## Morocco

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

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

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

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

Year	PAB coverage estimate (%)
2002	84
2003	84
2004	84
2005	89
2006	87
2007	88
2008	90
2009	87
2010	89
2011	89
2012	89
2013	89

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<sup>1</sup> 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.