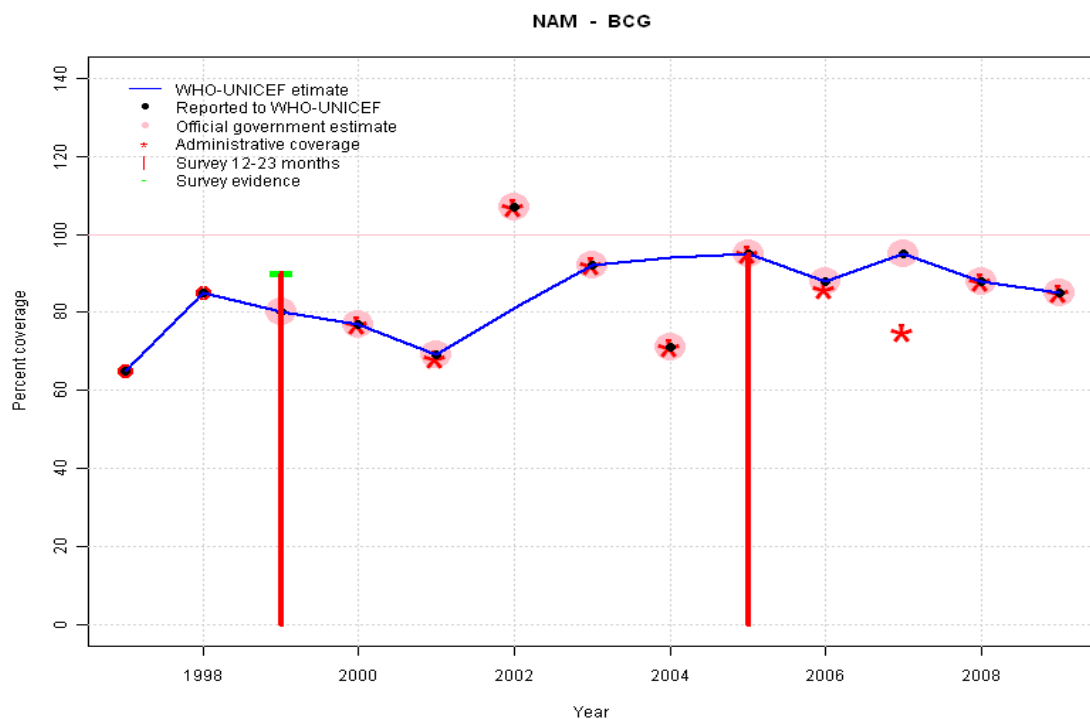


Namibia - BCG

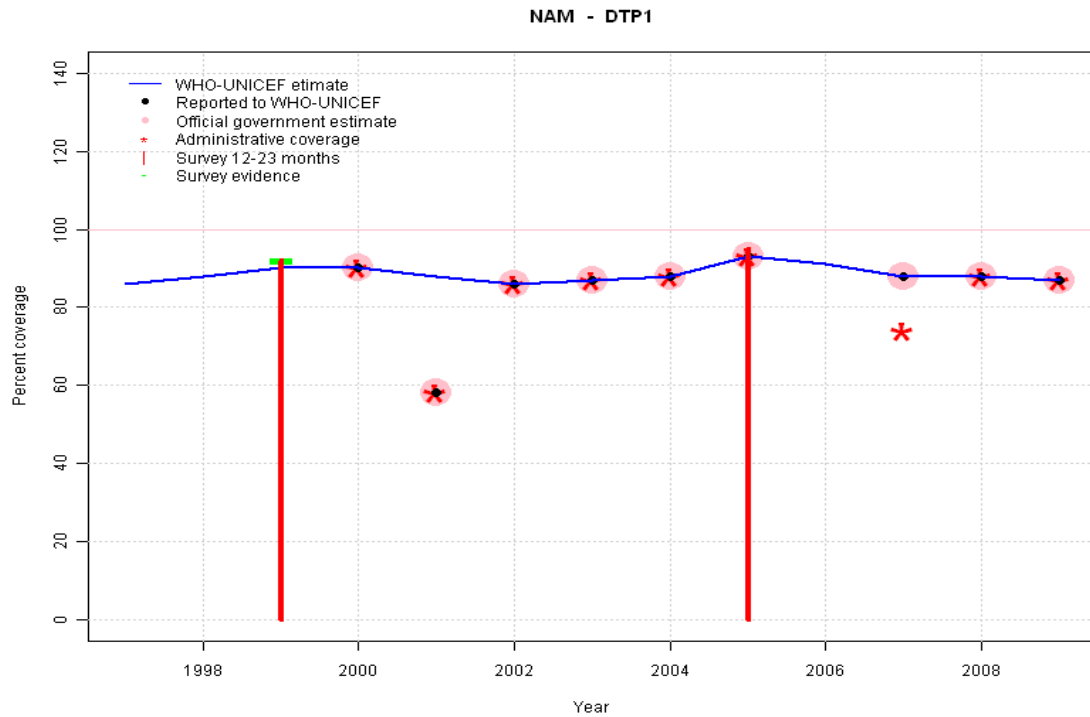


Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Survey confirms high levels of coverage.
- 2000: Estimate based on reported data.
- 2001: Estimate based on reported data.
- 2002: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 69 percent in 2001 and 92 percent in 2003. 2002 reported data (107 percent) ignored; greater than 100 percent. 2002 reported data (107 percent) inconsistent with data from other years.
- 2003: Estimate based on reported data.
- 2004: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 92 percent in 2003 and 95 percent in 2005. 2004 reported data (71 percent) inconsistent with data from other years.
- 2005: Estimate based on reported data (95 percent) confirmed by survey (95 percent).
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimate based on reported data.
- 2009: Estimate based on reported data.

| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 65 | 85 | 80 | 77 | 69 | 81 | 92 | 94 | 95 | 88 | 95 | 88 | 85 |
| Reported | 65 | 85 | 80 | 77 | 69 | 107 | 92 | 71 | 95 | 88 | 95 | 88 | 85 |
| Official | NA | NA | 80 | 77 | 69 | 107 | 92 | 71 | 95 | 88 | 95 | 88 | 85 |
| Administrative | NA | NA | NA | 77 | 68 | 107 | 92 | 71 | 95 | 86 | 75 | 88 | 85 |
| Survey | NA | NA | 90 | NA | NA | NA | NA | NA | 95 | NA | NA | NA | NA |

Namibia - DTP1



| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 86 | 88 | 90 | 90 | 88 | 86 | 87 | 88 | 93 | 91 | 88 | 88 | 87 |
| Reported | NA | NA | NA | 90 | 58 | 86 | 87 | 88 | 93 | NA | 88 | 88 | 87 |
| Official | NA | NA | NA | 90 | 58 | 86 | 87 | 88 | 93 | NA | 88 | 88 | 87 |
| Administrative | NA | NA | NA | 90 | 58 | 86 | 87 | 88 | 93 | NA | 74 | 88 | 87 |
| Survey | NA | NA | 92 | NA | NA | NA | NA | NA | 95 | NA | NA | NA | NA |

Description:

1997: Legacy estimate.

1998: Estimate interpolated between 1997 and 1999 estimates.

1999: Estimate based on interpolated value between reported data. Survey (92 percent) confirms trend in reported data.

2000: Estimate based on reported data.

2001: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 90 percent in 2000 and 86 percent in 2002. 2001 reported data (58 percent) inconsistent with data from other years.

2002: Estimate based on reported data.

2003: Estimate based on reported data.

2004: Estimate based on reported data.

2005: Estimate based on reported data (93 percent) confirmed by survey (95 percent).

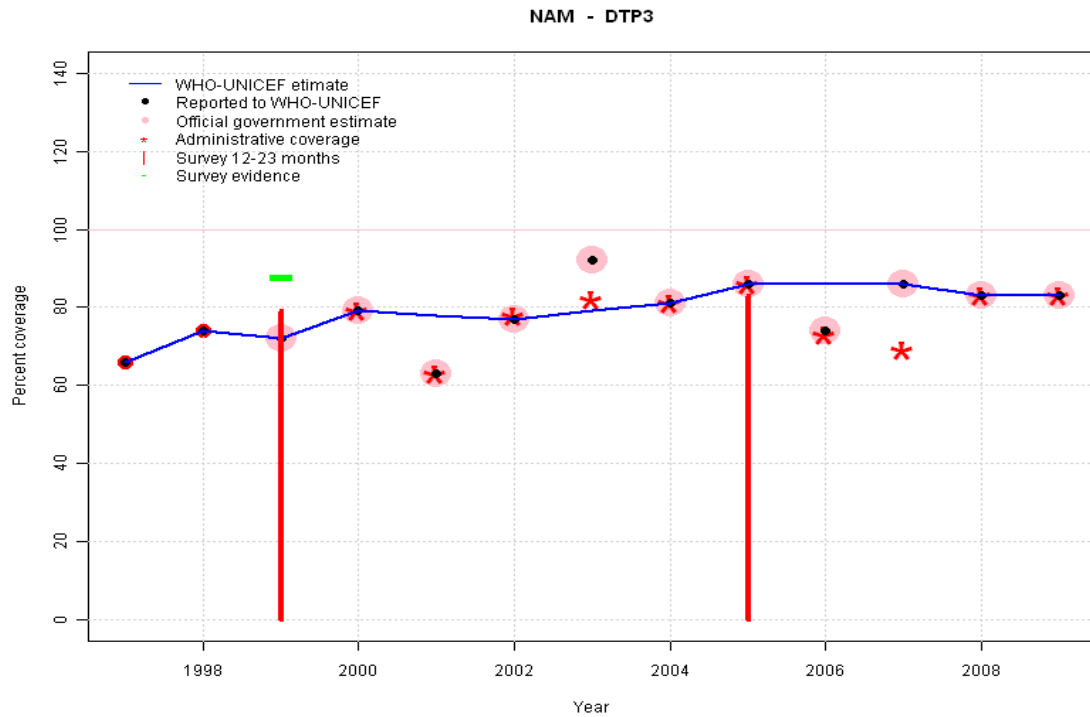
2006: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 93 percent in 2005 and 88 percent in 2007.

2007: Estimate based on reported data.

2008: Estimate based on reported data.

2009: Estimate based on reported data.

Namibia - DTP3



| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 66 | 74 | 72 | 79 | 78 | 77 | 79 | 81 | 86 | 86 | 86 | 83 | 83 |
| Reported | 66 | 74 | 72 | 79 | 63 | 77 | 92 | 81 | 86 | 74 | 86 | 83 | 83 |
| Official | NA | NA | 72 | 79 | 63 | 77 | 92 | 81 | 86 | 74 | 86 | 83 | 83 |
| Administrative | NA | NA | NA | 79 | 63 | 78 | 82 | 81 | 86 | 73 | 69 | 83 | 83 |
| Survey | NA | NA | 88 | NA | NA | NA | NA | NA | 88 | NA | NA | NA | NA |

Description:

1997: Legacy estimate.

1998: Estimate based on reported data.

1999: Survey confirms high levels of coverage. Survey results (79 percent) adjusted for recall bias to 88 percent based on first dose card or history coverage (92 percent) and documented drop-out between first (72 percent) and third (69 percent) doses.

2000: Estimate based on reported data.

2001: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 79 percent in 2000 and 77 percent in 2002. 2001 reported data (63 percent) inconsistent with data from other years.

2002: Estimate based on reported data.

2003: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 77 percent in 2002 and 81 percent in 2004. 2003 reported data (92 percent) inconsistent with data from other years.

2004: Estimate based on reported data.

2005: Estimate based on reported data (86 percent) confirmed by survey (88 percent). Survey results (83 percent) adjusted for recall bias to 88 percent based on first dose card or history coverage (95 percent) and documented drop-out between first (73 percent) and third (68 percent) doses.

2006: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 86 percent in 2005 and 86 percent in 2007. 2006 reported data (74 percent) inconsistent with data from other years.

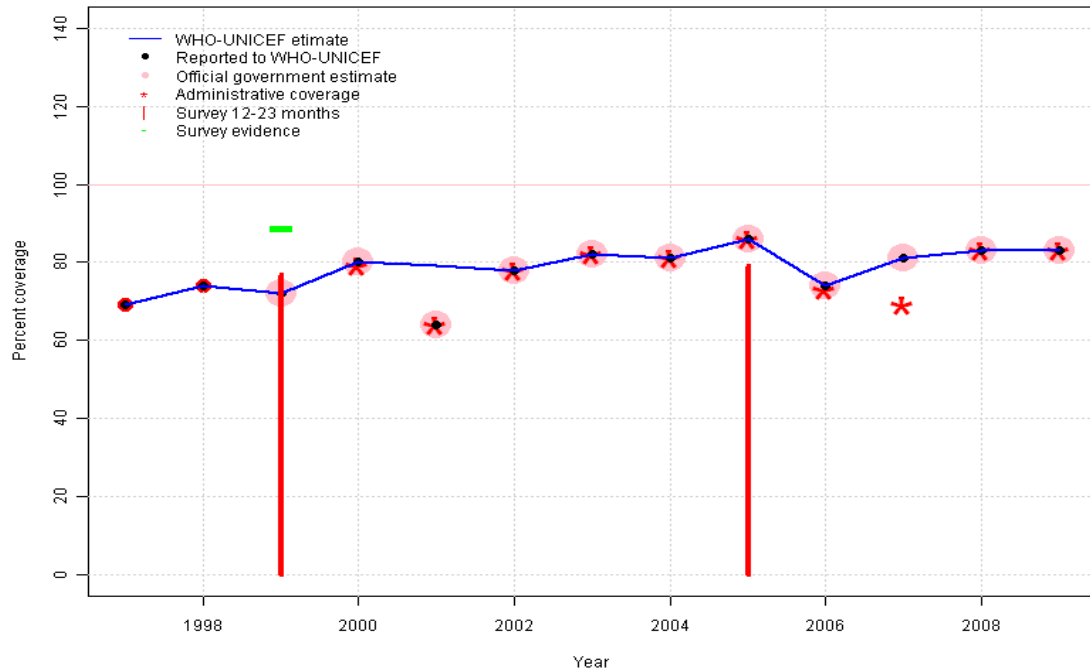
2007: Estimate based on reported data.

2008: Estimate based on reported data.

2009: Estimate based on reported data.

Namibia - Pol3

NAM - Pol3



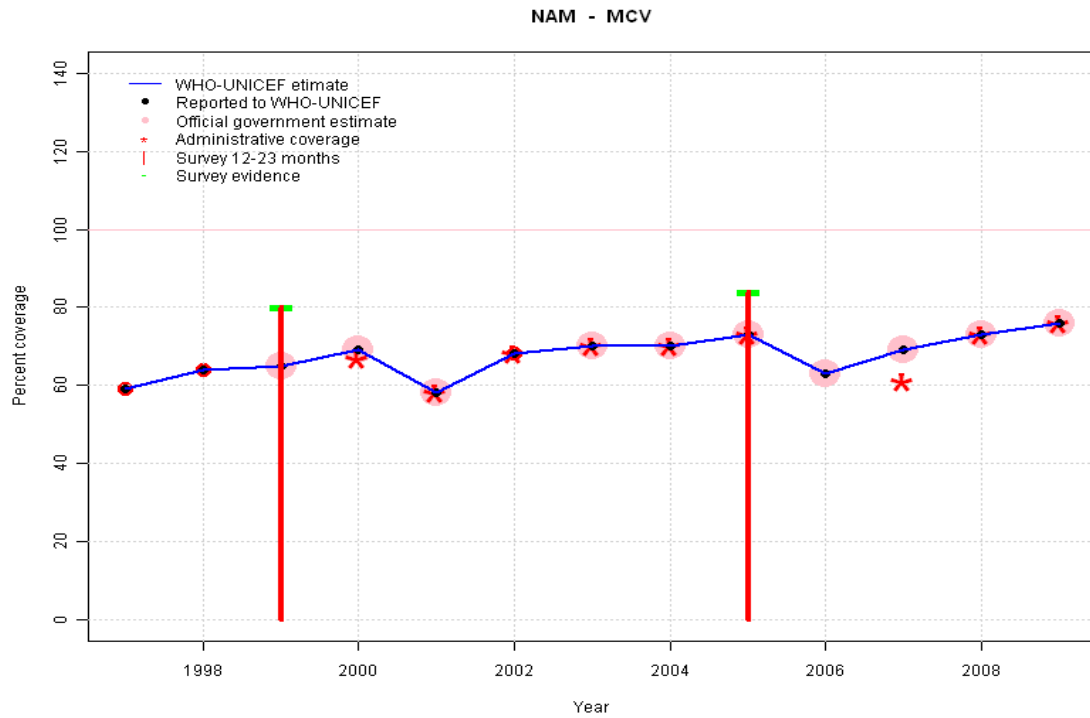
Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Survey confirms high levels of coverage. Survey results (77 percent) adjusted for recall bias to 89 percent based on first dose card or history coverage (94 percent) and documented drop-out between first (73 percent) and third (69 percent) doses.
- 2000: Estimate based on reported data.
- 2001: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 80 percent in 2000 and 78 percent in 2002. 2001 reported data (64 percent) inconsistent with data from other years.
- 2002: Estimate based on reported data.
- 2003: Estimate based on reported data.
- 2004: Estimate based on reported data.
- 2005: Estimate based on reported data (86 percent) confirmed by survey (88 percent). Survey results (79 percent) adjusted for recall bias to 88 percent based on first dose card or history coverage (95 percent) and documented drop-out between first (73 percent) and third (68 percent) doses.
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimate based on reported data.
- 2009: Estimate based on reported data.

| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 69 | 74 | 72 | 80 | 79 | 78 | 82 | 81 | 86 | 74 | 81 | 83 | 83 |
| Reported | 69 | 74 | 72 | 80 | 64 | 78 | 82 | 81 | 86 | 74 | 81 | 83 | 83 |
| Official | NA | NA | 72 | 80 | 64 | 78 | 82 | 81 | 86 | 74 | 81 | 83 | 83 |
| Administrative | NA | NA | NA | 79 | 64 | 78 | 82 | 81 | 86 | 73 | 69 | 83 | 83 |
| Survey | NA | NA | 89 | NA | NA | NA | NA | NA | 88 | NA | NA | NA | NA |

Namibia - MCV

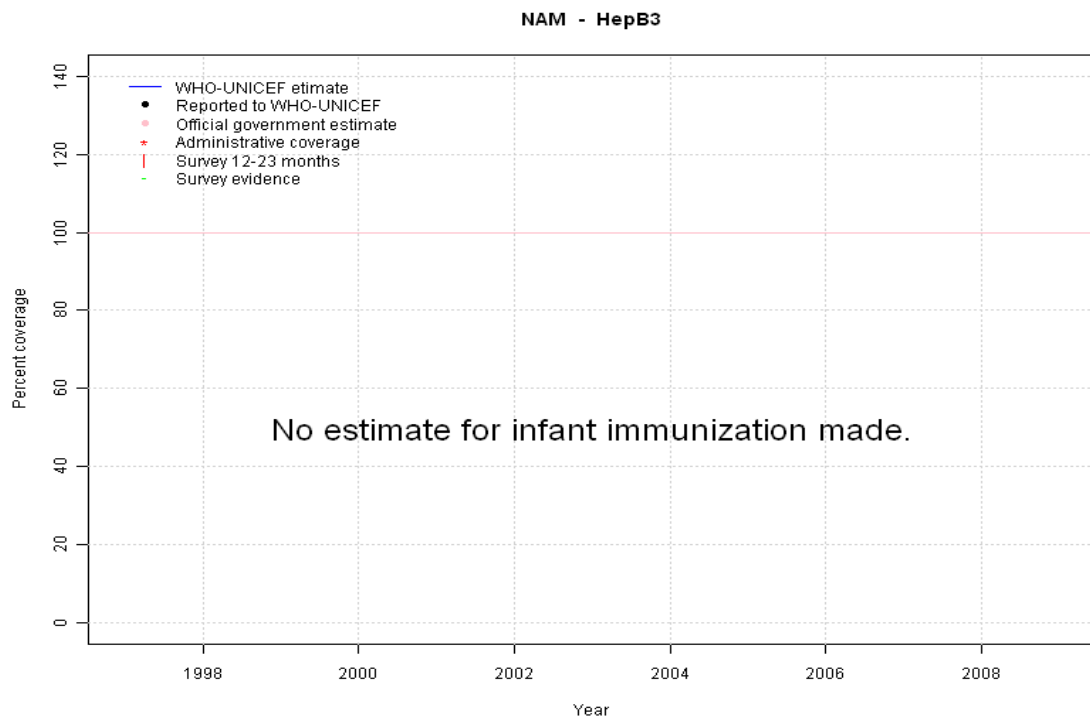
Description:



- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Survey confirms high levels of coverage.
- 2000: Estimate based on reported data.
- 2001: Estimate based on reported data.
- 2002: Estimate based on reported data.
- 2003: Estimate based on reported data.
- 2004: Estimate based on reported data.
- 2005: Survey supports reported for all other antigens.
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimate based on reported data.
- 2009: Estimate based on reported data. Nationally reported estimates accepted for other vaccines.

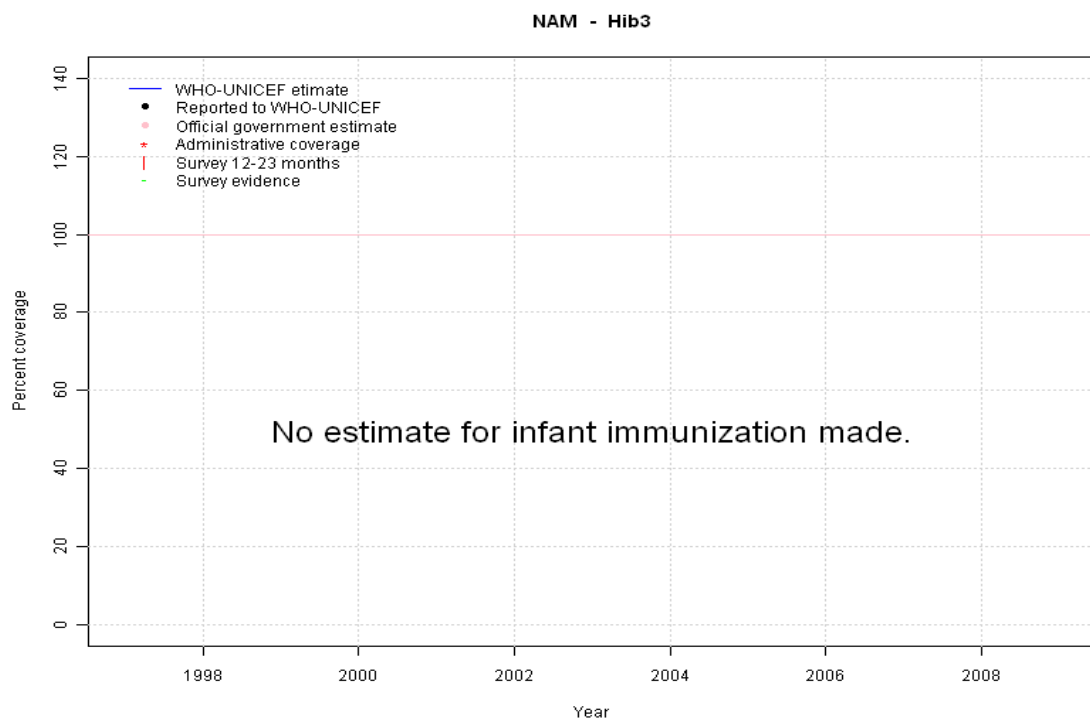
| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | 59 | 64 | 65 | 69 | 58 | 68 | 70 | 70 | 73 | 63 | 69 | 73 | 76 |
| Reported | 59 | 64 | 65 | 69 | 58 | 68 | 70 | 70 | 73 | 63 | 69 | 73 | 76 |
| Official | NA | NA | 65 | 69 | 58 | NA | 70 | 70 | 73 | 63 | 69 | 73 | 76 |
| Administrative | NA | NA | NA | 67 | 58 | 68 | 70 | 70 | 73 | NA | 61 | 73 | 76 |
| Survey | NA | NA | 80 | NA | NA | NA | NA | NA | 84 | NA | NA | NA | NA |

Namibia - HepB3



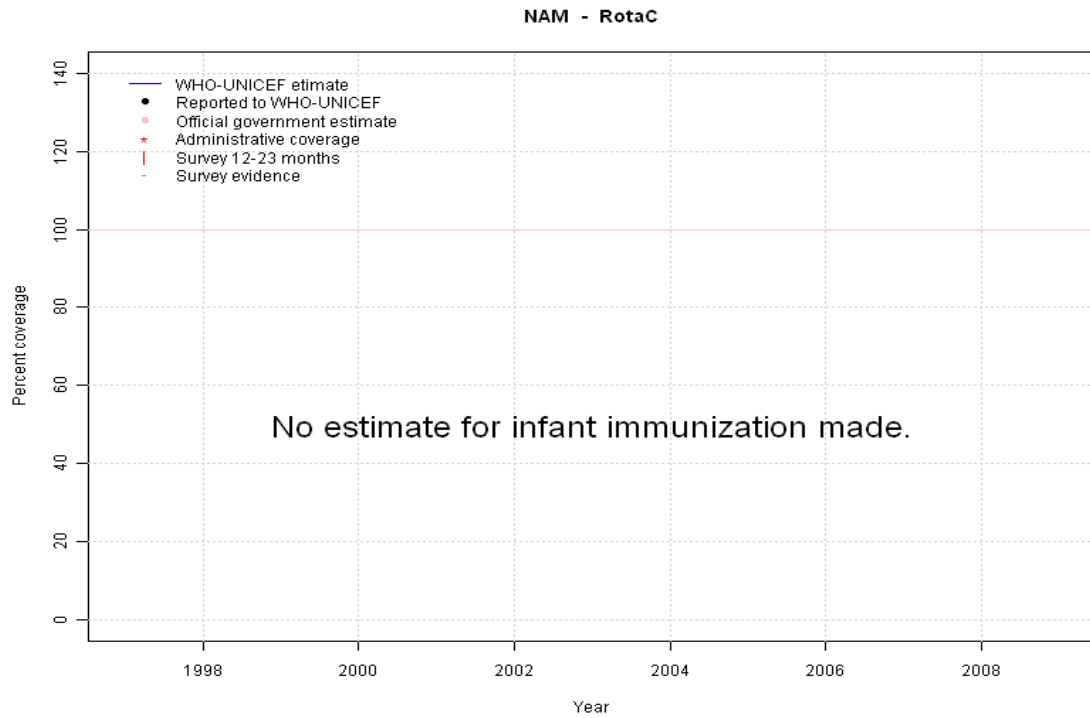
| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Reported | NA | 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 | NA |
| Administrative | NA | 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 | NA |

Namibia - Hib3



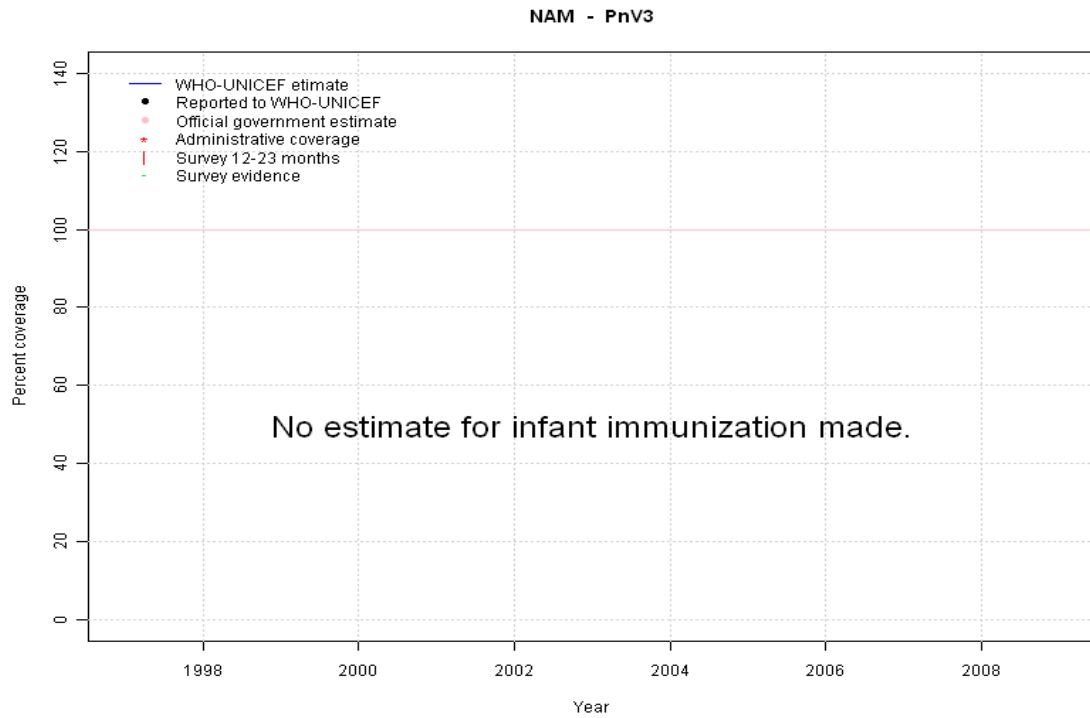
| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Reported | NA | 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 | NA |
| Administrative | NA | 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 | NA |

Namibia - RotaC



| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Reported | NA | 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 | NA |
| Administrative | NA | 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 | NA |

Namibia - PnV3



| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Estimate | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Reported | NA | 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 | NA |
| Administrative | NA | 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 | NA |

Namibia - survey details

2005 Namibia Demographic and Health Survey 2006

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | History | 22 | 12-23 m | 987 | 73 |
| BCG | C or H <12 months | 95 | 12-23 m | 987 | 73 |
| BCG | Card | 72 | 12-23 m | 987 | 73 |
| BCG | Card or History | 95 | 12-23 m | 987 | 73 |
| DTP1 | C or H <12 months | 93 | 12-23 m | 987 | 73 |
| DTP1 | Card | 73 | 12-23 m | 987 | 73 |
| DTP1 | Card or History | 95 | 12-23 m | 987 | 73 |
| DTP1 | History | 22 | 12-23 m | 987 | 73 |
| DTP3 | History | 15 | 12-23 m | 987 | 73 |
| DTP3 | C or H <12 months | 81 | 12-23 m | 987 | 73 |
| DTP3 | Card or History | 83 | 12-23 m | 987 | 73 |
| DTP3 | Card | 68 | 12-23 m | 987 | 73 |
| MCV | C or H <12 months | 78 | 12-23 m | 987 | 73 |
| MCV | Card | 63 | 12-23 m | 987 | 73 |
| MCV | Card or History | 84 | 12-23 m | 987 | 73 |
| MCV | History | 21 | 12-23 m | 987 | 73 |
| Pol1 | History | 23 | 12-23 m | 987 | 73 |
| Pol1 | C or H <12 months | 94 | 12-23 m | 987 | 73 |
| Pol1 | Card | 73 | 12-23 m | 987 | 73 |
| Pol1 | Card or History | 95 | 12-23 m | 987 | 73 |
| Pol3 | Card | 68 | 12-23 m | 987 | 73 |
| Pol3 | Card or History | 79 | 12-23 m | 987 | 73 |

| | | | | | |
|------|-------------------|----|---------|-----|----|
| Pol3 | History | 10 | 12-23 m | 987 | 73 |
| Pol3 | C or H <12 months | 76 | 12-23 m | 987 | 73 |

1999 Namibia Demographic and Health Survey 2000

| Vaccine | Confirmation method | Coverage | Age cohort | Sample | Cards seen |
|---------|---------------------|----------|------------|--------|------------|
| BCG | History | 19 | 12-23 m | 816 | 74 |
| BCG | Card or History | 90 | 12-23 m | 816 | 74 |
| DTP1 | Card | 72 | 12-23 m | 816 | 74 |
| DTP1 | Card or History | 92 | 12-23 m | 816 | 74 |
| DTP1 | History | 20 | 12-23 m | 816 | 74 |
| DTP3 | Card | 69 | 12-23 m | 816 | 74 |
| DTP3 | Card or History | 79 | 12-23 m | 816 | 74 |
| DTP3 | History | 10 | 12-23 m | 816 | 74 |
| MCV | History | 16 | 12-23 m | 816 | 74 |
| MCV | Card or History | 80 | 12-23 m | 816 | 74 |
| MCV | Card | 64 | 12-23 m | 816 | 74 |
| Pol1 | Card | 73 | 12-23 m | 816 | 74 |
| Pol1 | Card or History | 94 | 12-23 m | 816 | 74 |
| Pol1 | History | 20 | 12-23 m | 816 | 74 |
| Pol3 | Card | 69 | 12-23 m | 816 | 74 |
| Pol3 | Card or History | 77 | 12-23 m | 816 | 74 |
| Pol3 | History | 8 | 12-23 m | 816 | 74 |

Further information and estimates for 1980-1996 are available at:

http://www.childinfo.org/immunization_countryreports.html

http://www.who.int/immunization_monitoring/routine/immunization_coverage/en/index4.html

Namibia

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 (%) |
|------|---------------------------|
| 1997 | 79 |
| 1998 | 77 |
| 1999 | 83 |
| 2000 | 74 |
| 2001 | 86 |
| 2002 | 80 |
| 2003 | 78 |
| 2004 | 79 |
| 2005 | 80 |
| 2006 | 81 |
| 2007 | 82 |
| 2008 | 82 |
| 2009 | 82 |

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.