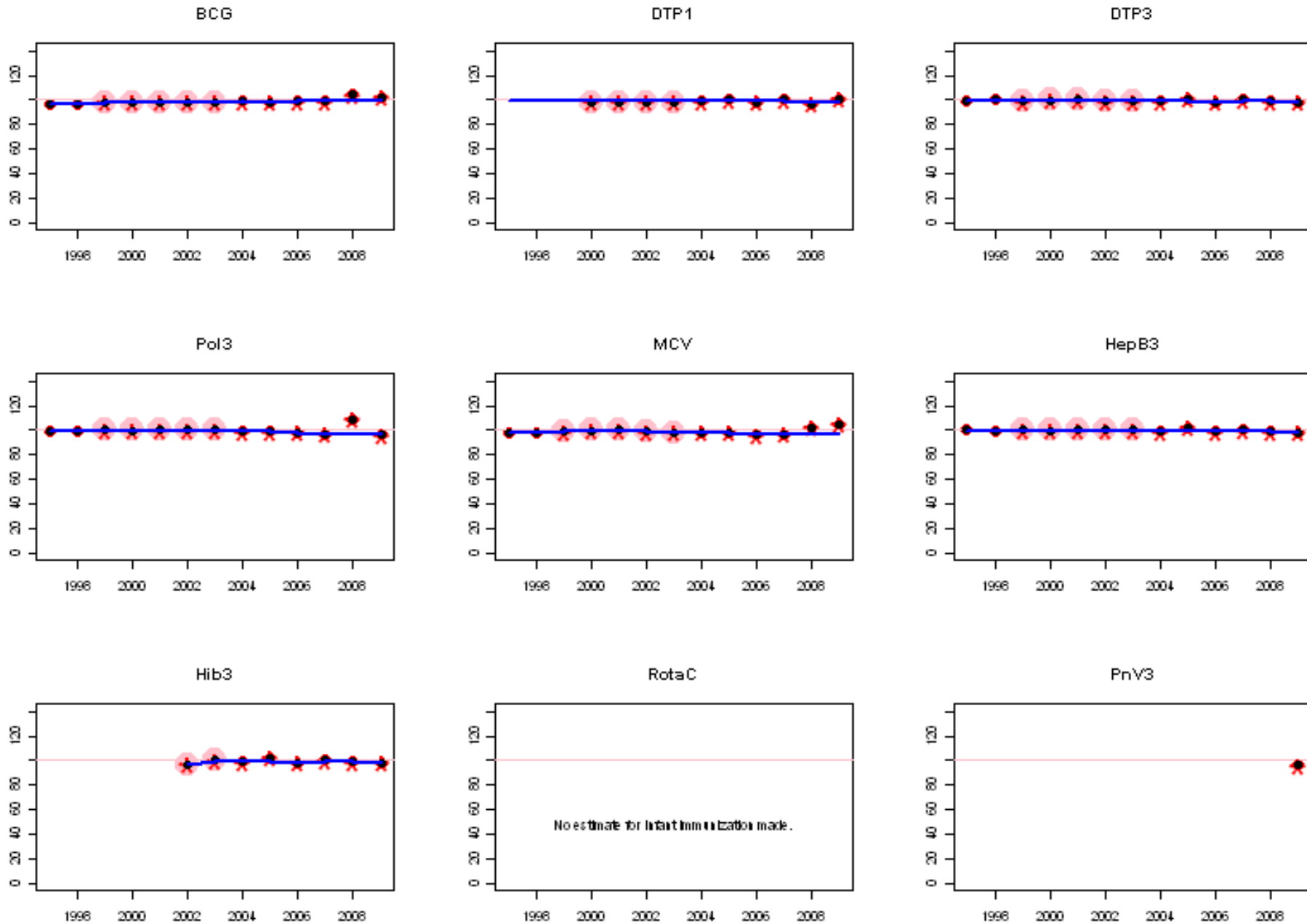
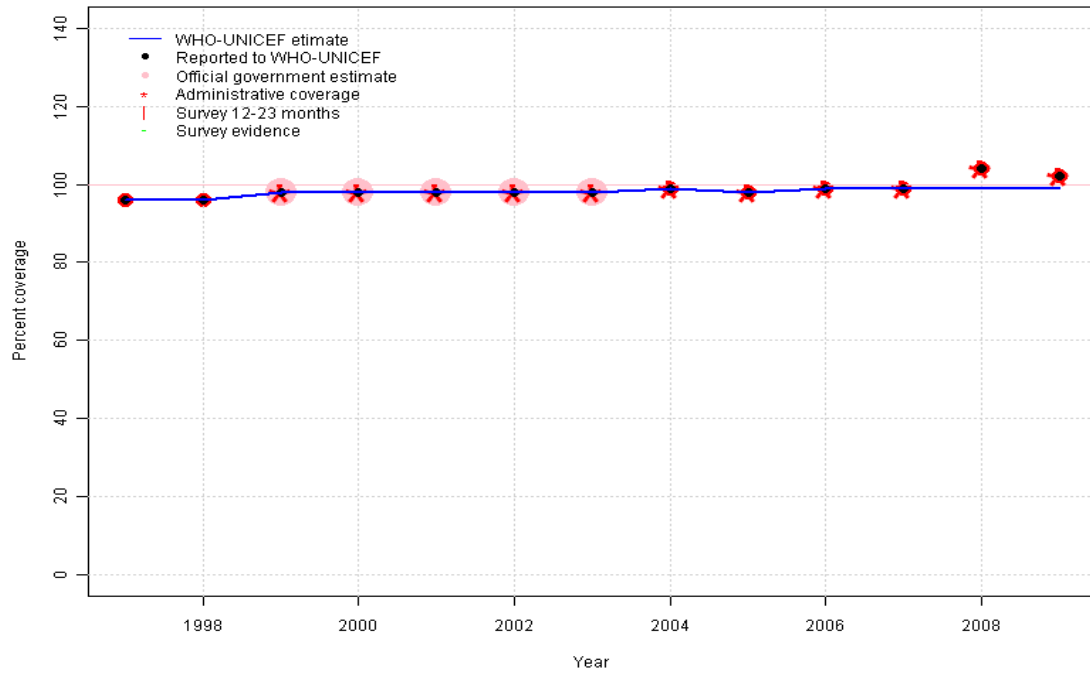


Oman: WHO and UNICEF estimates of immunization coverage, 1997 - 2009



Oman - BCG

OMN - BCG



Description:

1997: Legacy estimate.

1998: Estimate based on reported data.

1999: Estimate based on reported data.

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: Estimate based on reported data.

2006: Estimate based on reported data.

2007: Estimate based on reported data.

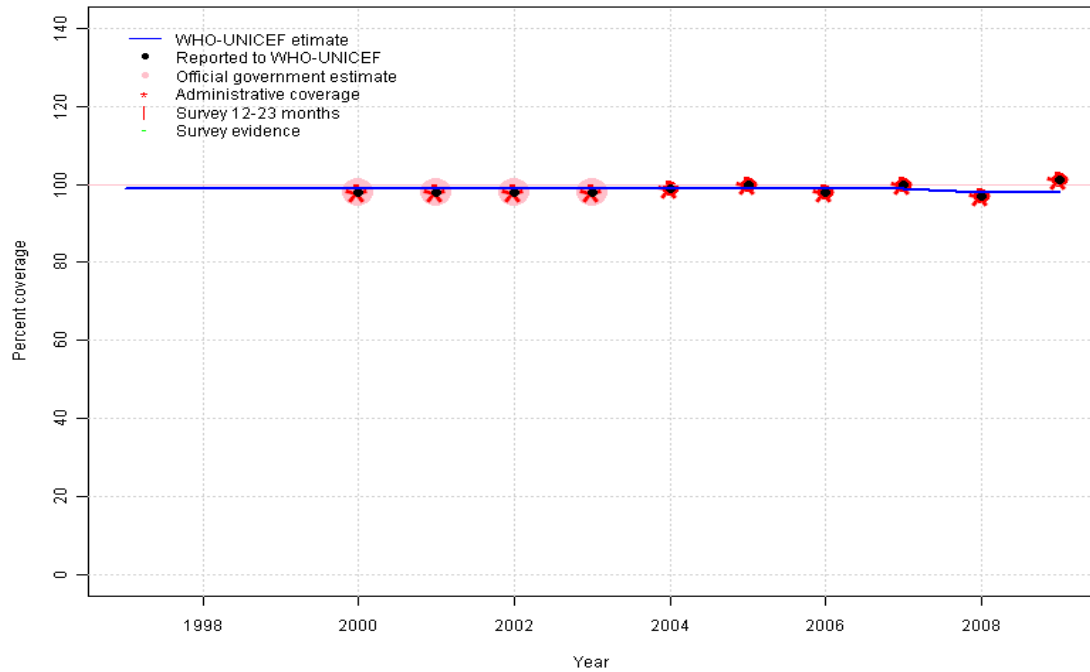
2008: Estimate based on trend in reported data. Missing or ignored reported value estimated by extrapolation from 2007 reported value of 99 percent. 2008 reported data (104 percent) ignored; greater than 100 percent.

2009: Estimate based on trend in reported data. Missing or ignored reported value estimated by extrapolation from 2007 reported value of 99 percent. 2009 reported data (102 percent) ignored; greater than 100 percent.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	96	96	98	98	98	98	98	99	98	99	99	99	99
Reported	96	96	98	98	98	98	98	99	98	99	99	104	102
Official	NA	NA	98	98	98	98	98	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	98	98	98	98	98	99	98	99	99	104	102
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Oman - DTP1

OMN - DTP1



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	99	99	99	99	99	99	99	99	99	99	99	98	98
Reported	NA	NA	NA	98	98	98	98	99	100	98	100	97	101
Official	NA	NA	NA	98	98	98	98	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	98	98	98	98	99	100	98	100	97	101
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Description:

1997: Legacy estimate.

1998: Estimate calibrated to 1997 level (99 percent) and reported coverage (98 percent).

1999: Estimate calibrated to 1997 level (99 percent) and reported coverage (98 percent).

2000: Estimate calibrated to 1997 level (99 percent) and reported coverage (98 percent).

2001: Estimate calibrated to 1997 level (99 percent) and reported coverage (98 percent).

2002: Estimate calibrated to 1997 level (99 percent) and reported coverage (98 percent).

2003: Estimate calibrated to 1997 level (99 percent) and reported coverage (98 percent).

2004: Estimate calibrated to 1997 level (99 percent) and reported coverage (99 percent).

2005: Estimate calibrated to 1997 level (99 percent) and reported coverage (99 percent).

2006: Estimate calibrated to 1997 level (99 percent) and reported coverage (98 percent).

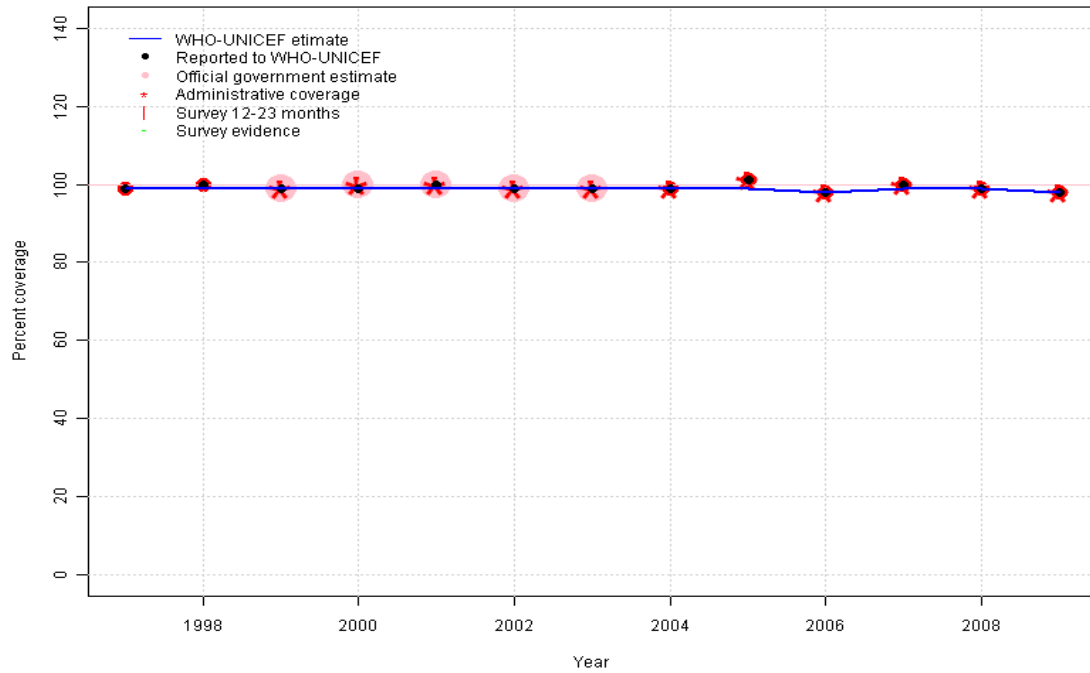
2007: Estimate calibrated to 1997 level (99 percent) and reported coverage (99 percent).

2008: Estimated DTP3 greater than estimated DTP1; DTP1 estimate based on the relationship between DTP1 and DTP3 from 282 surveys.

2009: Estimate calibrated to 1997 level (99 percent) and reported coverage (97 percent). 2009 reported data (101 percent) ignored; greater than 100 percent.

Oman - DTP3

OMN - DTP3

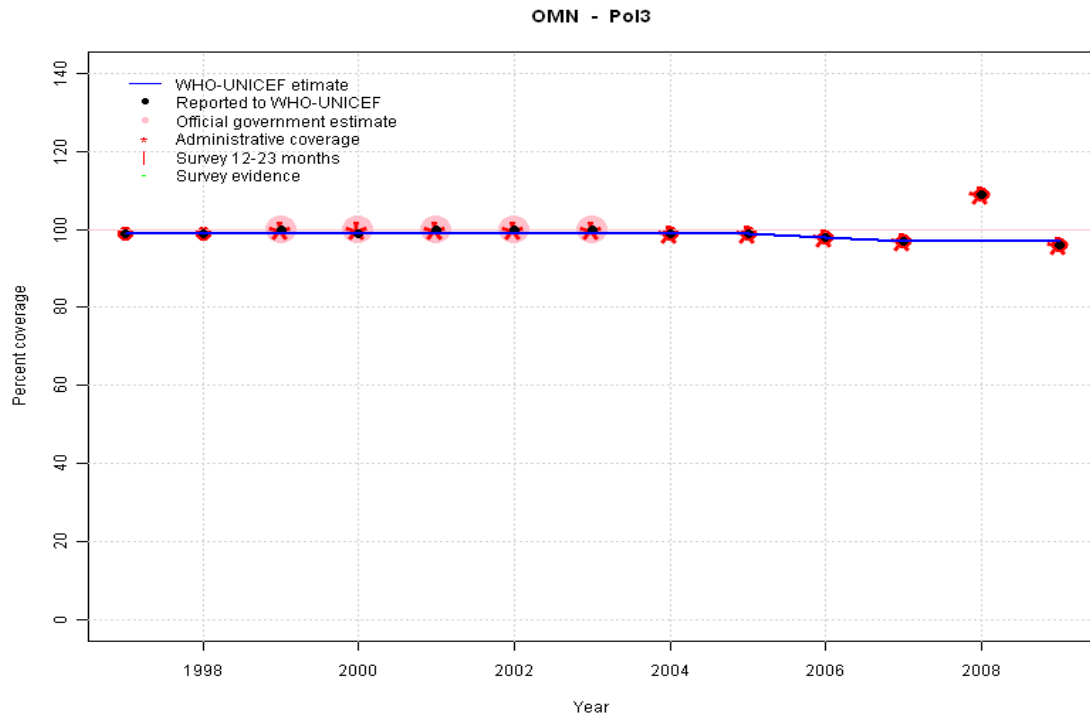


Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data.
- 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: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 99 percent in 2004 and 98 percent in 2006. 2005 reported data (101 percent) ignored; greater than 100 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	99	99	99	99	99	99	99	99	99	98	99	99	98
Reported	99	100	99	99	100	99	99	99	101	98	100	99	98
Official	NA	NA	99	100	100	99	99	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	99	100	100	99	99	99	101	98	100	99	98
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Oman - Pol3



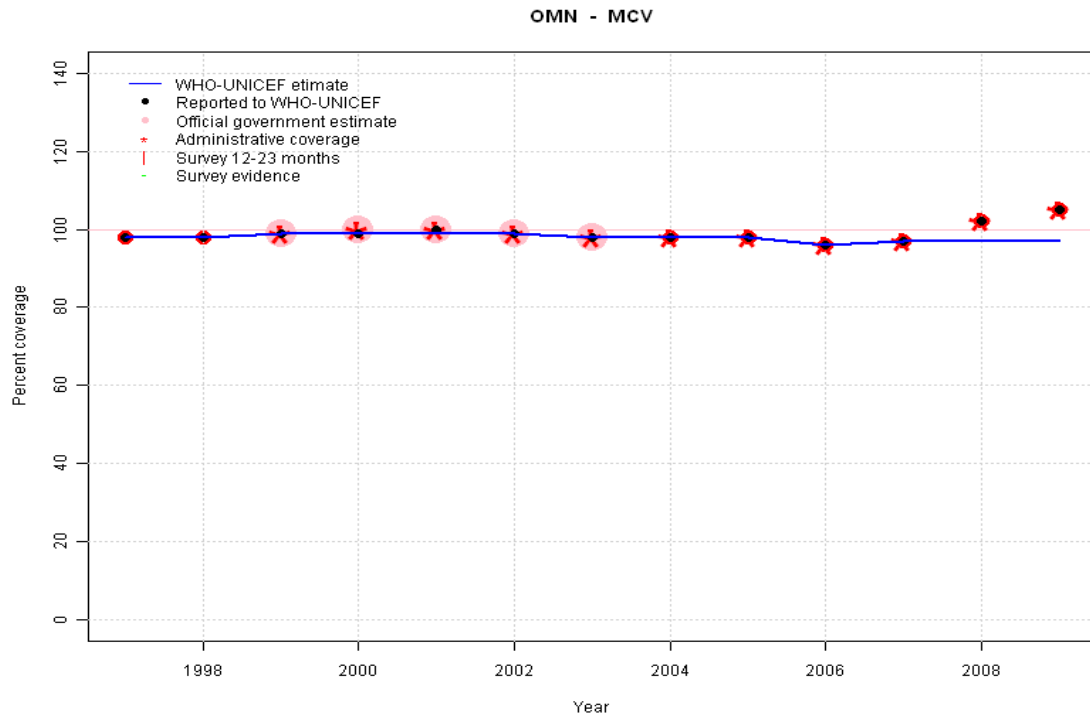
Description:

- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data.
- 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: Estimate based on reported data.
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimate based on trend in reported data. Missing or ignored reported value estimated by extrapolation from 2007 reported value of 97 percent. 2008 reported data (109 percent) ignored; greater than 100 percent. 2008 reported data (109 percent) inconsistent with data from other years. Increase in reported coverage is due to a change in recommended ages for polio vaccination.
- 2009: Estimate based on trend in reported data. Missing or ignored reported value estimated by extrapolation from 2007 reported value of 97 percent. 2009 reported data (96 percent) inconsistent with data from other years.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	99	99	99	99	99	99	99	99	99	98	97	97	97
Reported	99	99	100	99	100	100	100	99	99	98	97	109	96
Official	NA	NA	100	100	100	100	100	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	100	100	100	100	100	99	99	98	97	109	96
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Oman - MCV

Description:

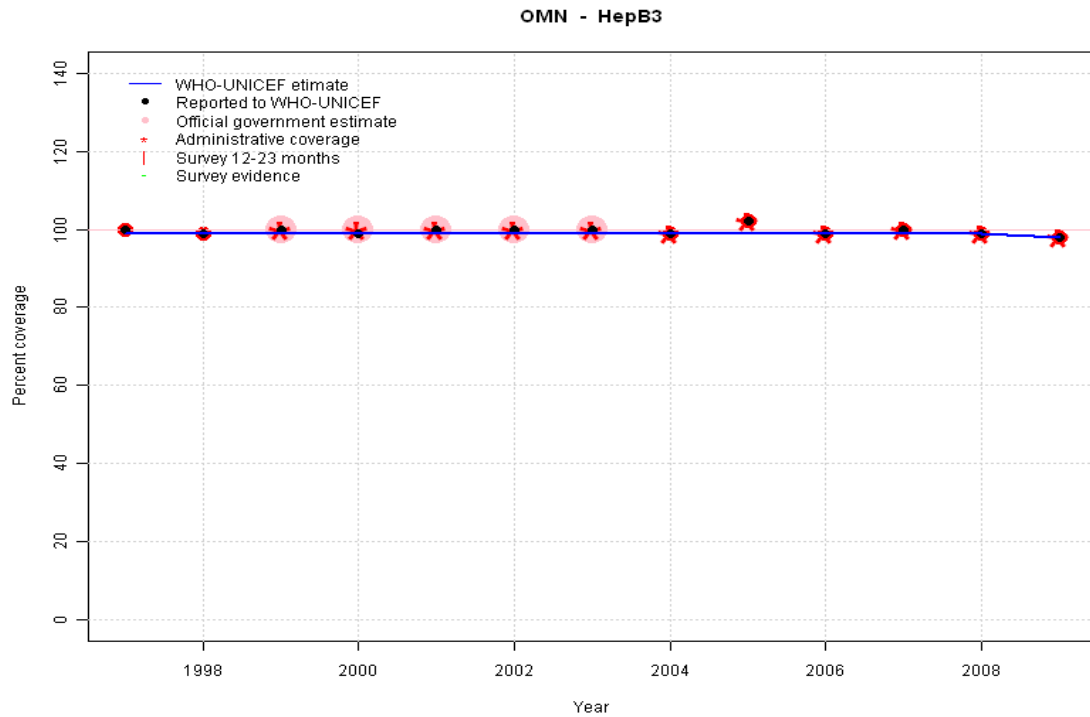


- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data.
- 2000: Estimate based on reported data.
- 2001: Estimate based on reported data.
- 2002: Estimate based on reported data.
- 2003: Estimate based on reported data.
- 2004: Estimate based on reported data.
- 2005: Estimate based on reported data.
- 2006: Estimate based on reported data.
- 2007: Estimate based on reported data.
- 2008: Estimate based on trend in reported data. Missing or ignored reported value estimated by extrapolation from 2007 reported value of 97 percent. 2008 reported data (102 percent) ignored; greater than 100 percent.
- 2009: Estimate based on trend in reported data. Missing or ignored reported value estimated by extrapolation from 2007 reported value of 97 percent. 2009 reported data (105 percent) ignored; greater than 100 percent.

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	98	98	99	99	99	99	98	98	98	96	97	97	97
Reported	98	98	99	99	100	99	98	98	98	96	97	102	105
Official	NA	NA	99	100	100	99	98	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	99	100	100	99	98	98	98	96	97	102	105
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Oman - HepB3

Description:

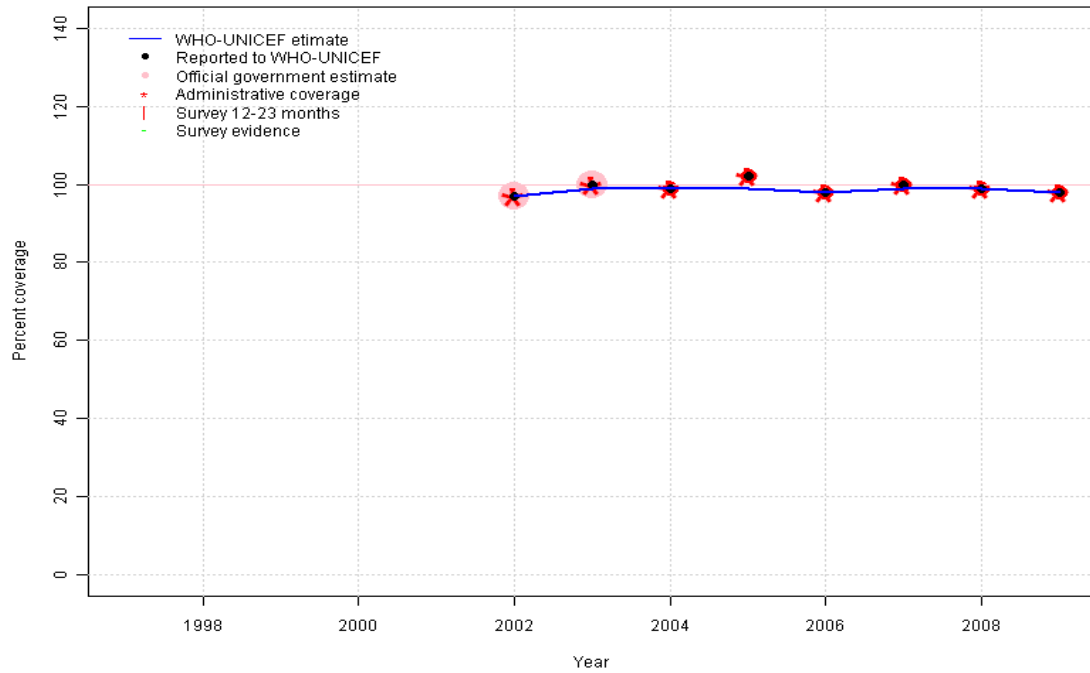


- 1997: Legacy estimate.
- 1998: Estimate based on reported data.
- 1999: Estimate based on reported data.
- 2000: Estimate based on reported data.
- 2001: Estimate based on reported data.
- 2002: Estimate based on reported data.
- 2003: Estimate based on reported data.
- 2004: Estimate based on reported data.
- 2005: Estimate based on trend in reported data. Missing or ignored reported value estimated by interpolation between reported values of 99 percent in 2004 and 99 percent in 2006. 2005 reported data (102 percent) ignored; greater than 100 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	99	99	99	99	99	99	99	99	99	99	99	99	98
Reported	100	99	100	99	100	100	100	99	102	99	100	99	98
Official	NA	NA	100	100	100	100	100	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	100	100	100	100	100	99	102	99	100	99	98
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Oman - Hib3

OMN - Hib3

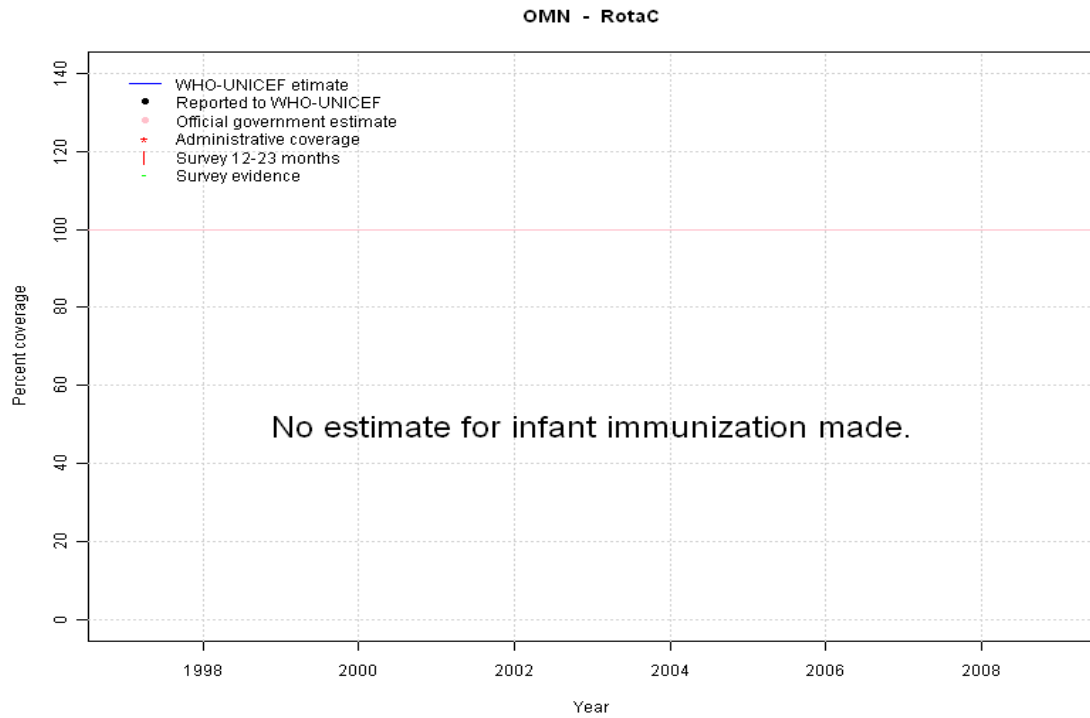


Description:

- 2002: Estimate based on reported data. Hib introduced in 2001. Reporting started in 2002. Vaccine presentation is DTP-HepB-Hib.
- 2003: Estimate based on reported data.
- 2004: Estimate based on reported data.
- 2005: Estimate based on reported data. Missing or ignored reported value estimated by interpolation between reported values of 99 percent in 2004 and 98 percent in 2006. 2005 reported data (102 percent) ignored; greater than 100 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	NA	NA	NA	NA	NA	97	99	99	99	98	99	99	98
Reported	NA	NA	NA	NA	NA	97	100	99	102	98	100	99	98
Official	NA	NA	NA	NA	NA	97	100	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	97	100	99	102	98	100	99	98
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Oman - RotaC

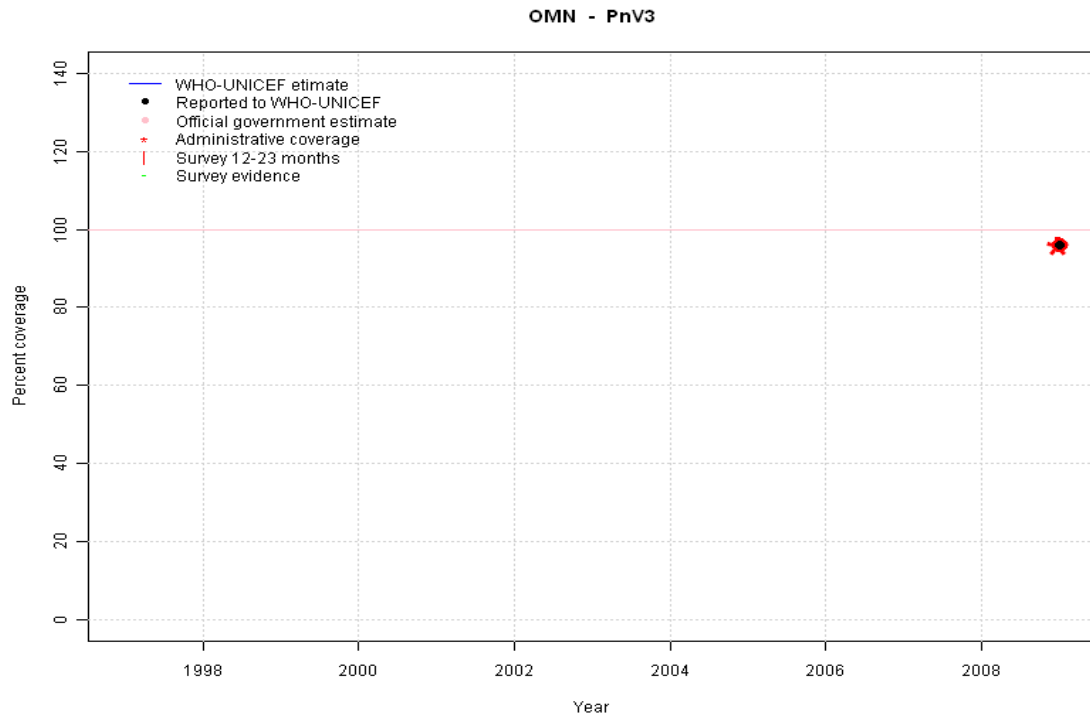


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Estimate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reported	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Official	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Administrative	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA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

Oman - PnV3

Description:

2009: Estimate based on reported data. PCV introduced in 2008 reporting started in 2009



	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	96
Reported	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	96
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	96
Survey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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

Oman

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	94
1998	94
1999	94
2000	94
2001	94
2002	94
2003	94
2004	94
2005	94
2006	94
2007	95
2008	91
2009	91

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.