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Surveys of tuberculosis infection and disease, and death registrations, by country and year

Tables A3.1 National and subnational surveys of prevalence of tuberculosis disease

Tables A3.1 National surveys

Bangladesh	1964[1], 1987[2]
Cambodia	2002[3]
China	1979[4], 1984[5], 1990[6], 2000[7]
Eritrea	2005[8]
Gambia	1960[9]
Ghana	1957[10]
Indonesia	2004[11, 12]
Iraq	1970[13]
Japan	1953[14, 15], 1958[16, 17], 1963[18], 1968[19]
Kenya	1948[20], 1958[21]
Liberia	1959[22]
Libyan Arab Jamahiriya	1976[22, 23]
Malaysia	2003[24]
Mauritius	1958[25]
Myanmar	2006[26]
Netherlands	1970[27]
Nigeria	1957[28]
Pakistan	1959[29], 1987[29]
Philippines	1981[30, 31], 1997[32-34]
Rep. of Korea	1965[35], 1970[36], 1975[37], 1980[38], 1985[39], 1990[40, 41], 1995[42, 43]
Samoa	1975[44]
Sierra Leone	1958[45]
Somalia	1956[46, 47]
Sri Lanka	1970[48]
Uganda	1958[49]
Viet Nam	2006

Tables A3.1 Subnational surveys

Afghanistan	1982[50]
Bangladesh	1995[51], 2001[52], 2002[53, 54], 2006[55]
Botswana	1981[56-58], 1995[56-58]
Brunei Darussalam	1985[59]
China	1957[60], 1959[61]
Cambodia	1981[3], 1982[3], 1983[3], 1984[3], 1985[3], 1988[3, 62], 1995[3], 1998[3, 63]
Colombia	1988[64]
Cyprus	1963[65, 66]
Ethiopia	2001[67]
India	1948–1993 (numerous surveys)[68]
Indonesia	1979[69], 1983–1993[69], 1994[69]
Iraq	1961[70]
Japan	1954[16, 71], 1964[72]
Kenya	1958[73, 74], 2006
Liberia	1959[22]

Malawi	1960[75]
Malaysia	1970[76]
Mozambique	1961[77]
Myanmar	1972[78], 1989[79], 1990[79], 1991[79], 1994[80]
Nepal	1965[81], 1976[82], 1994[83]
Nigeria	1957[84], 1973[85]
Pakistan	1962[86]
South Africa	1972–1985[87]
Spain	1991[88]
Syrian Arab Republic	1960[89]
Thailand	1962[90], 1970[90], 1977[90], 1983[90], 1987[90], 1991[90]
Tunisia	1957, 1961[91]
Turkey	1971[92]
Uganda	2000
UR Tanzania	1958[93]
Viet Nam	1961[94]
Zambia	1980[95]

Tables A3.1 Planned surveys (national or subnational)

Afghanistan	2010
Armenia	
Bangladesh	2011
Cambodia	2010
China	2010
Djibouti*	
Gambia	
India	2007
Indonesia	2009
Kenya	
Malawi	
Mali	
Myanmar	2010
Nigeria	2007
Philippines	2007
Rwanda *	
South Africa	
Syrian Arab Republic*	
UR Tanzania	2007
Uganda	2007
Viet Nam	2007

Exact timing of surveys not always clear from reports; year given here is year in which survey apparently started. In some cases more than one subnational survey was completed in a country in a given year.

* Funding for surveys in these countries has been approved by the GFATM.

Table A3.2 National and subnational surveys of prevalence of tuberculosis infection

Table A3.2 National surveys

Afghanistan	1978[50], 1982[50]
Algeria	1949, 1966, 1980[96], 1985[96, 97]
Argentina	1979[98]
Bahrain	1969[99], 1981[99, 100], 1985[99], yearly 1988–1994[101]
Bangladesh	1964[102]
Benin	1987[103], 1994[104]
Botswana	1956[56], 1981[57, 58]
Cambodia	2002[3]
China, Hong Kong SAR	1999[105]
China	1970[4], 1979[4], 1984[5], 1990[6], 2000[7]
Cyprus	1955[65]
Djibouti	1994[106], 2001[106]
Egypt	1951[107], 1996[107]
Ethiopia	1954[108], 1989[108]
Gambia	1958[9]
Ghana	1957[10]
Greece	yearly 1981–1991[109]
India	2000[110]
Indonesia	2004[11]
Iraq	1995[13]
Japan	1953[14, 15], 1958[14, 17], 1963[18], 1968[19]
Jordan	1986[111], 1990[111]
Kenya	1958[21], 1986[112, 113], 1995[113]
Lao PDR	1995[114]
Lesotho	1956[56], 1981[57]
Libyan Arab Jamahiriya	1976[23]
Madagascar	1991[115]
Malawi	1994[116]
Mauritius	1956[25], 1958[25]
Mexico	1961[117]
Myanmar	1972[79]
Nepal	2006[118]
Netherlands	yearly 1956–1979[119], 1989[120]
Pakistan	1987[29]
Philippines	1981[30, 31], 1997[32-34]
Rep. of Korea	every 5 years 1965–1995[41, 43]
Samoa	1975[121]
Somalia	1956[46], 2006[47]
Sudan	1976[122], 1986[123]
Thailand	1980[124]
Tunisia	1959, 1986[125]
Uganda	1958[49], 1970[126], 1989[127]
UR Tanzania	1985[128], 1990[129], 1995[129], 2002[130]
Yemen	1991[131]

Table A3.2 Subnational surveys

Afghanistan	1985[132], 1989[132, 133]
Algeria	1938[96, 97], 1948[96, 97], 1958[96, 97], 1968[96, 97], 1976[96, 97], 1981[96, 97]
Angola	1991[134]
Bhutan	1991[135]
Botswana	1989[136]
Brazil	1970[137], 1973[137], 1979[137], 1983[137], 1986[137], 1988[137], 1990[137]
Burundi	1982[138]
Cambodia	1955, 1968, 1981, 1995[3, 63]
Cameroon	1984[139]
Central African Republic	1988[140]
Colombia	1970–1998[141]
Cyprus	1963[65], 1995[66]
Czech Republic	1961, 2001
France	1990[142]
Gabon	1987[143]
Gambia	1958[9], 1976[144]
Guinea	1989[145]
India, Bangalore	1962[146], 1963[147], 1965[147], 1967[147], 1977[148, 149]
India, Chingleput	1969[146], 1979[150], 1984[150]
India, other	1948–1993[68]
Indonesia	1952–1965[69], 2005[151], 2006[151]
Iran (Islamic Republic of)	1946, 1952, 1963, 1972, 1983, 1990[152, 153]
Iraq	1989[154]
Italy	1997[155]
Japan	1954[16, 71], 1964[72], 1992[156]
Jordan	1949, 1970, 1976, 1982[111]
Kenya	1974[157], 2006
Kuwait	1962, 1972–1981, 1991, 1993–1997[158]
Lebanon	1994
Lesotho	1962, 1992
Libyan Arab Jamahiriya	1954[159], 1959[159], 1971[23]
Morocco	1994[160]
Mozambique	1961[77], 1987, 1988
Myanmar	1991[79]
Nepal	1947[161], 1962[161], 1963[161], 1965[161], 1966[161], 1973[161], 1974[161], 1976[161], 1979[161], 1980[161], 1988[161], 1989[161], 1990[161], 1991[161], 1992[161], 1993[161], 1994[83]
Oman	1995
Pakistan	1992[29], 1994[29]
Peru	1981[162], 1982[162], 1987[162], 1993[162]
Philippines	1992[31]
Saudi Arabia	1988[163]
Sierra Leone	1958[45]
Somalia	1986[164]
South Africa	1972–1985[56], 1988[87, 165]
Syrian Arab Republic	1960[166], 1978[166], 1983[166], 1992
Togo	1978, 1986, 1988[167]

Tunisia	1980[125]
Turkey	1994[168]
Uganda	1971[127], 1987[127]
UR Tanzania	1958[93], 1988–1992[129], 1993–1998[129], 2000[130]
USA	1997[169]
Viet Nam	1955[94, 170], 1961[171], 1986[94], 1990[170], 1991[170], 1996[170]
Zambia	1980[95]

Table A3.2 Planned surveys (national or subnational)

Afghanistan	2010
Armenia	
Cambodia	2010
China	2010
Ghana	
India	2007
Nigeria	2007
Philippines	2007
South Africa	
UR Tanzania	2007
Viet Nam	

Exact timing of surveys not always clear from reports; year given here is year in which survey apparently started. In some cases more than one subnational survey was completed in a country in a given year.

Table A3.3 Availability of death registrations by cause-of-death, WHO Mortality Database, 2006

	Cov/qual ¹		
Albania	73	L	1987–1989, 1992–2003
Anguilla			1985–1995, 2000–2001, 2004
Antigua & Barbuda	74		1985–1995, 2000–2002
Argentina	100	L	1985–2003
Armenia	63	L	1985–2003
Australia	100	H	1985–2003
Austria	99	M	1985–2005
Azerbaijan	68	M	1985–2002
Bahamas	83	H	1985, 1987, 1993–2000
Bahrain	87	L	1985, 1987–1988, 1993–2000
Barbados	76	M	1985–1995, 2000–2001
Belarus	98	M	1985–2003
Belgium		M	1985–1997
Belize	81	M	1986–1987, 1989–1991, 1993–2001
Bermuda			1985–1994, 1996–2000, 2002
Bosnia & Herzegovina			1985–1991
Brazil	79	L	1985–2000, 2002
British Virgin Islands			1985–1998
Brunei Darussalam	100	M	1996–2000
Bulgaria	100	M	1985–2004
Canada	100	H	1985–2003
Cayman Islands			1985–2000
Chile	94	M	1985–2003
Colombia		M	1985–1999
Costa Rica	88	M	1985–2004
Croatia	95	M	1985–2004
Cuba	100	H	1985–2004
Czech Republic	100	M	1986–2004
Denmark	100	M	1985–2001
Dominica	100	M	1985–2003
Dominican Republic	45		1985–1992, 1994–2001
Ecuador	74	L	1985–2004
Egypt	81	L	1987, 1991, 1992, 2000
El Salvador	76	M	1990–1993, 1995–2003
Estonia	100	H	1985–2005
Fiji		L	1999
Finland	100	H	1985–2004
France	100	M	1985–2003
Georgia	97	M	1985–2001
Germany	99	M	1990–2004
Greece	99	L	1985–2004
Grenada		M	1985, 1988–1996
Guatemala	89	M	1986–2003
Guyana	72	M	1988–1990, 1993–1996, 2001–2003
Haiti	8		2001–2003
China, Hong Kong SAR			1985–2004
Hungary	100	H	1985–2003

Iceland	95	H	1985–2004
Iran (Islamic Republic of)			1985, 1987
Ireland	95	H	1985–2005
Israel	100	M	1985–2001, 2003
Italy	100	M	1985–2002
Jamaica			1985–1991
Japan	100	H	1985–2004
Kazakhstan	77	M	1985–2004
Kuwait	100	M	1985–1987, 1993–2002
Kyrgyzstan	70	M	1985–2004
Latvia	95	H	1985–2004
Lithuania	98	H	1985–2004
Luxembourg	96	M	1985–2004
China, Macao SAR			1994
Malaysia		M	1997
Malta	94	H	1985–2004
Mauritius	93	M	1985–2004
Mexico	96	H	1985–2003
Monaco			1986, 1987
Mongolia			1994
Montserrat			1990–1994
Myanmar			1998–2000
Netherlands	100	M	1985–2004
New Zealand	100	H	1985–2003
Nicaragua	58	L	1988–1994, 1996–2003
Norway	98	M	1985–2004
Pakistan			1993, 1994
Panama	91	M	1985–2003
Paraguay	74	L	1985–2001, 2003
Peru	54	L	1986–2000
Philippines		M	1992–1998
Poland	100	L	1985–1996, 1999–2004
Portugal	100	L	1985–2003
Puerto Rico			1985–2002
Qatar		L	1995
Rep. of Korea	87		1985–2004
Republic of Moldova	80	H	1985–2004
Romania	100	H	1985–2004
Russian Federation	100	M	1985–2004
Saint Kitts & Nevis			1985–1997
Saint Lucia	99	M	1986–2002
St Vincent & Grenadines	93		1985–1987, 1995–2003
San Marino	73	L	1995–2000
Sao Tome & Principe			1985, 1987
Serbia & Montenegro	89	M	1997–2002
Seychelles			1985–1987
Singapore	82	H	1985–2003
Slovakia	98	H	1992–2002
Slovenia	99	H	1985–2004
South Africa	78	L	1993–1996, 2004
Spain	100	M	1985–2004

Sri Lanka			1985–1989, 1991, 1992, 1995
Suriname	73		1985–2000
Sweden	100	M	1985–2002
Switzerland	99	M	1985–2004
Syrian Arab Republic			1985
Tajikistan	54	L	1985–2001
TFYR Macedonia	93	M	1991–2003
Thailand	87	L	1985–1987, 1994–2000, 2002
Trinidad & Tobago	83		1985–2000
Turkey			1987
Turkmenistan		M	1985–1998
Turks & Caicos Islands			1985–2001
Ukraine	100	M	1985–2004
United Kingdom	99	H	1985–1999, 2001–2004
USA	100		1985–2002
Uruguay	100	M	1985–1990, 1993–2001
Uzbekistan	73	M	1985–2000, 2002, 2003
Venezuela	99	H	1985–1990, 1992–1994, 1996–2002
US Virgin Islands			1997–2002
Zimbabwe			1990

Shown are years for which cause-of-death data (1985–2005) were available in the WHO Mortality Database at the end of 2006 (see also <http://www.who.int/healthinfo/morttables/en/index.html>). In some cases more recent data are available in the country in question, but have not yet been sent to WHO.

1Cov/qual: Coverage and quality. Coverage is calculated by dividing the total deaths reported for a country in a given year from the vital registration system by the total deaths estimated by WHO for that year for the national population (shown is coverage for most recent year, but not for data before 2000). Coverage can be low because vital registration is implemented in only part of the country, or because only a proportion of deaths is recorded, or both. Source: EIP/WHO.

Assessment of data quality based on coding system used, and on proportion of deaths assigned to ill-defined codes; L, indicates low; M, medium; H, high. Source: Mathers, C et al. Counting the dead and what they died from: an assessment of the global status of cause of death data. Bulletin of the World Health Organization, 2005, 83: 171–177.

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