Goal 6: Combat HIV/AIDS, Malaria, and Other Diseases

Snapshots

- In 2009, the highest prevalence of HIV among the population 15–49 years was in Papua New Guinea (PNG) (0.9%) and the Southeast Asian countries: Thailand (1.3%), Myanmar (0.6%), Cambodia (0.5%), and Malaysia (0.5%). Access to antiretroviral drugs for the population with advanced HIV infection is highest at over 50% in Brunei Darussalam, Georgia, the Lao PDR, PNG, and Thailand—the last two countries have a relatively high HIV prevalence. By 2009, HIV prevalence had declined significantly in countries where it was high in 2001. Almost all economies increased access to antiretroviral drugs to those with advanced HIV infection.
- The incidence and prevalence rates of tuberculosis and the death rates associated with it declined in most of the region's economies. However, in the Marshall Islands and some Central and West Asian economies, the incidence of tuberculosis is higher in 2010 than in 1990.
- Though the incidence of malaria remains high in many of the region's economies that have data available, the death rates associated with malaria in 2008 were generally low, at less than 7 per 100,000 population, except in Myanmar and the Pacific.

Introduction

Goal 6 has three targets:

6.A *Have halted by 2015 and begun to reverse the spread of HIV/AIDS*. This is targeted at the 15–24 age group, but most economies have comparable data on HIV prevalence only for people aged 15–49 years.

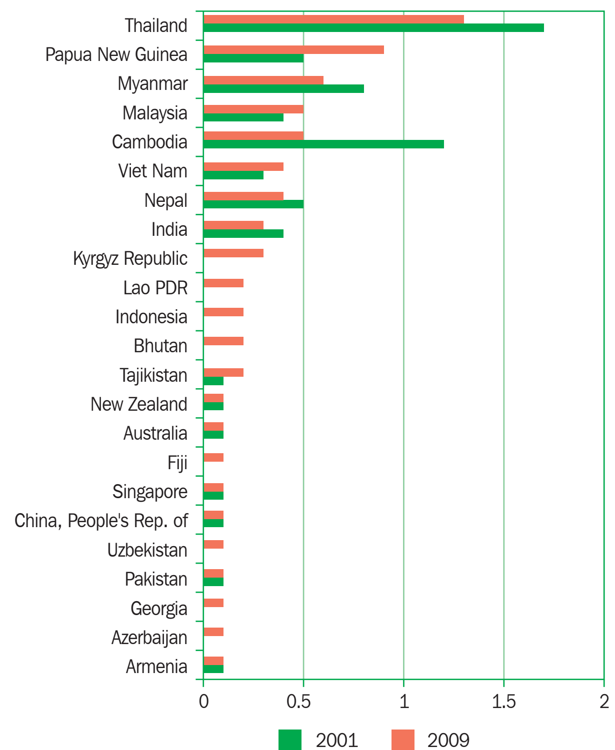
6.B *Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it.* No economy is yet providing universal access and the availability of data to measure the progress has been improving.

6.B *Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases*. Tuberculosis is one of the "other major diseases" and several indicators are available for this disease.

Key Trends

While HIV has been generally on the uptrend from 2001 to 2009 in most of the reporting economies, major achievements in reducing the prevalence of the disease are also evident in some economies (Figure 6.1). PNG showed the largest increase in HIV prevalence, measured as a percentage of the population 15–49 years, at 0.40 percentage points. However, HIV prevalence declined in five economies, with the biggest cut in Cambodia, at 0.70 percentage, points followed by Thailand, at 0.40 percentage points, then India, Myanmar, and Nepal.

Figure 6.1 **HIV Prevalence (Percent of Population 15–49 Years), 2001 and 2009**



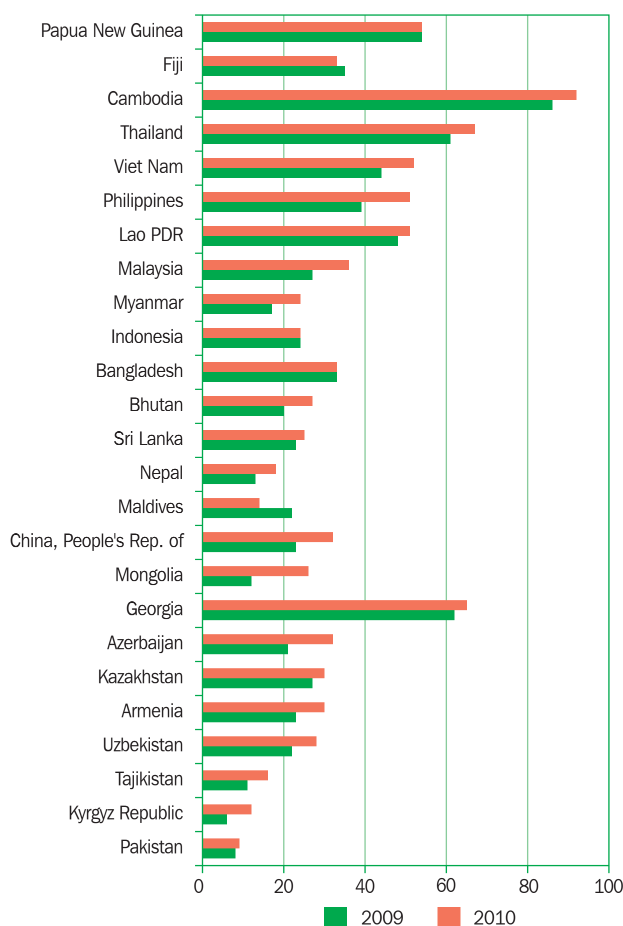
Source: Table 6.1.

In 2001, the prevalence of HIV was highest in Cambodia, Thailand, and Myanmar, where HIV prevalence had declined but remained high. In 2009, Cambodia, Malaysia, Myanmar, PNG, and Thailand had prevalence rates greater than 0.5% in the population 15–49 years. Economies with large populations, such as the PRC, India, Pakistan, and Viet Nam, all had rates below 0.5%.

Almost all economies have substantially increased access to antiretroviral drugs to those with advanced HIV infection (Figure 6.2). Only Fiji and the Maldives report less access in 2010 than in 2009; Bangladesh, Indonesia, and PNG report no change.

In 2009, over 90% of Cambodia's population with advanced HIV had access to antiretroviral drugs; in Thailand, the share exceeded 65%. The greater access to antiretroviral drugs may partly explain the large decreases in their HIV prevalence from 1990 levels.

Figure 6.2 **Proportion of Population with Advanced HIV Infection with Access to Antiretroviral Drugs, 2009 and 2010**



Source: Table 6.1.

There were also significant improvements in access to antiretroviral drugs for those with advanced HIV infection in Azerbaijan, Mongolia, and the Philippines.

Incidence rates of tuberculosis in most countries in the region declined or stabilized between 1990 or 2010. The incidence of tuberculosis in 37 of the reporting 47 economies, including those with large populations, have either declined or stabilized since the 1990, but it increased in five economies in Central and West Asia, one in Southeast Asia, and four in the Pacific. The total population with tuberculosis detected and cured through the Directly Observed Treatment Short (DOTS) course has increased since 1995. The intensive efforts to implement the DOTS program has made progress against the disease.

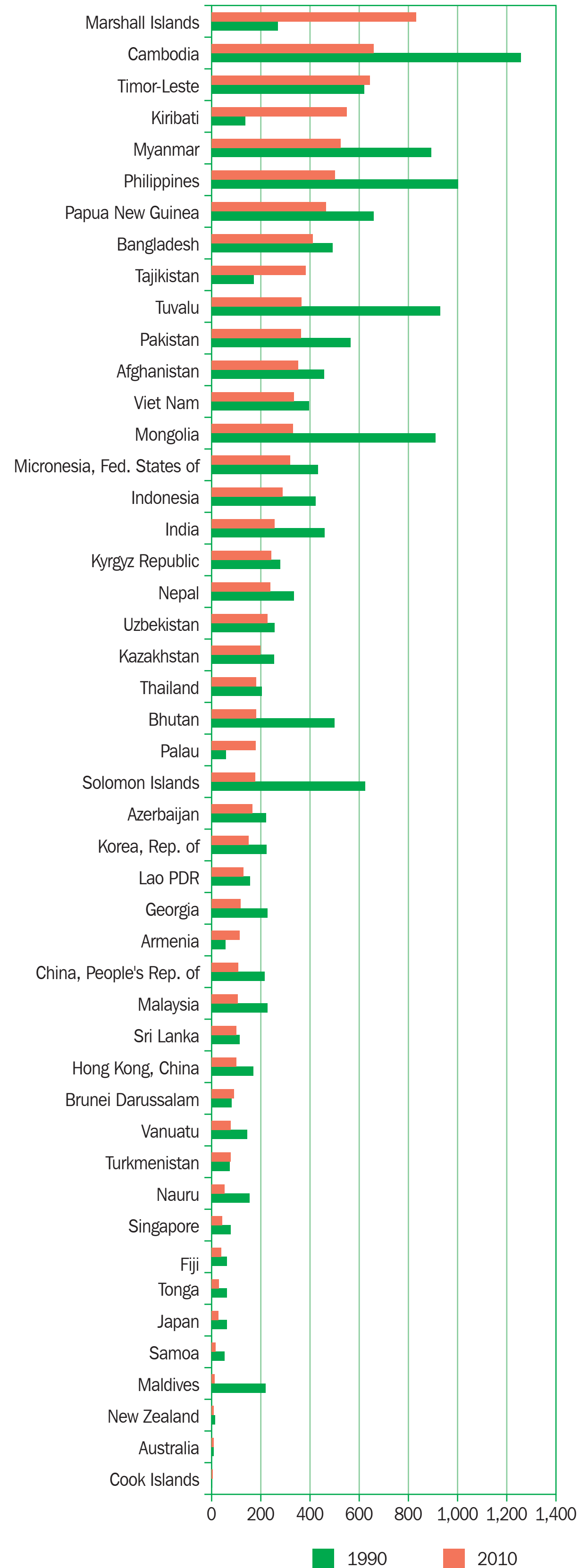
Tuberculosis prevalence rates are falling in most economies in the region. Cambodia, Mongolia, Tuvalu, and the Philippines, the economies with the highest prevalence in 1990, showed the largest decreases; their prevalence rates decreased by more than 500 persons per 100,000 population between 1990 and 2010 (Figures 6.3–6.5). However, Kiribati, the Marshall Islands, and Tajikistan, which had relatively low tuberculosis prevalences in 1990, recorded increases in 2010 of more than 200 persons per 100,000 population.

A regional downtrend is seen in the death rates associated with tuberculosis, with the highest reductions in Cambodia and Myanmar in Southeast Asia and Timor-Leste and Tuvalu in the Pacific. However, Cambodia, which had the highest death rate in 1990, still had a relatively high rate in 2010.

Figure 6.3 **Change in Tuberculosis Incidence Rates, 1990 and 2010**

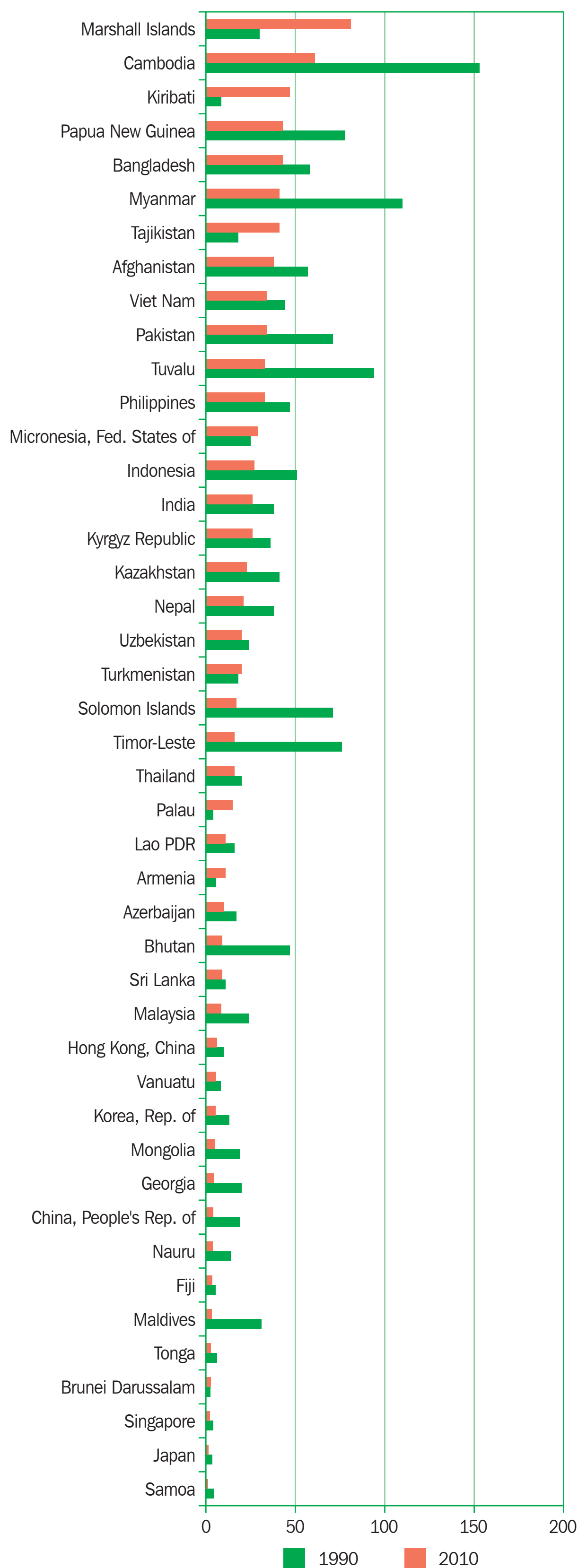
Source: Table 6.2.

Figure 6.4 **Prevalence of Tuberculosis, per 100,000 Population, 1990 and 2010**



Source: Table 6.2.

Figure 6.5 **Death Rates Asssociated with Tuberculosis, per 100,000 Population, 1990 and 2010**



Source: Table 6.2.

Though the incidence of malaria remains high in many economies in the region, the associated death rates are generally low, at less than 7 per 100,000 population (Box 6.1). In Central and West Asia**,** five economies did not report any malaria incidence in 2008; however, the incidence remains high in Afghanistan and Pakistan. Countries in East Asia reported incidences below 10 per 100,000 people, and no mortality during the year. The malaria incidence is low in 8 reporting countries, with less than 100 new cases per 100,000 population. Ten economies reported a high incidence of 1,000 or more per 100,000 population. Malaria remains a threat, in terms of incidence, mainly in Afghanistan, Cambodia, Southeast Asia (Cambodia and Indonesia), South Asia (Bangladesh and India) and the Pacific. Except for Myanmar and the Pacific, death rates associated with malaria are reported at 7 or less per 100,000 population.

Coverage of populations with malaria prevention and control measures continues to increase, bringing about a further decline in the number of malaria cases and deaths. International funding has continued to rise, enabling countries where malaria is endemic to greatly improve access to insecticide-treated mosquito nets. Further, several diagnostic tests and artemisinin-based combination therapies have also been made available (UN 2012).

Box 6.1 **Incidence of Malaria, 2008** (per 100,000 population)

Less than 1			
Armenia	0	Turkmenistan	0
Georgia	0	Uzbekistan	0
Kyrgyz Republic	0		
1–99			
Azerbaijan	1	Sri Lanka	21
China, People's Rep. of	3	Viet Nam	55
Korea, Rep. of	8	Malaysia	75
Tajikistan	9	Philippines	96
100–999			
Bhutan	100	Lao PDR	327
Nepal	103	Pakistan	881
Thailand	322		
1000 or more			
India	1,124	Vanuatu	6,036
Bangladesh	1,510	Myanmar	7,943
Indonesia	1,645	Solomon Islands	13,718
Cambodia	1,798	Papua New Guinea	18,012
Afghanistan	2,428	Timor-Leste	46,380

Source: Table 6.2.

Data Limitations and Comparability

Data for estimating trends in HIV/AIDS, malaria, and tuberculosis are difficult to compare because of the many varied practices and methods, changing processes, and assumptions used to arrive at the desired data. This results in widening data gaps and more volatile data, and difficulty reconciling data and applying corrective policies. Data may not be comparable as a result.

For HIV/AIDS, the quality of data varies among countries, with the range of uncertainty depending on the actual HIV prevalence, concentration of HIV epidemic levels, and the number of steps or assumptions used to arrive at the estimate. Data on the prevalence of HIV is only available until 2009, with a 3-year lag in reported data, which makes it difficult to assess the current progress of the disease.

The proportion of population with comprehensive correct knowledge of HIV/AIDS (Table 6.1) is gender-related. However, the data are not comparable across the years due to the variation in the years for which data are observed. HIV trends by gender cannot be determined for a specific year, and there are fewer data points for males than females. The earliest data for both female and males are for 2005, and the latest year varies for both.

Estimating the number of people receiving or having access to antiretroviral therapy is difficult because there are no established regular reporting systems on patients who underwent treatment for the first time, received or discontinued treatment, were not followed up, or died. Hence, data may be underreported. Data for 2009 and 2010 are not comparable to that of 2004 because of the revised guidelines for estimating the number of people receiving antiretroviral therapy.

Malaria cases declined substantially in all the years, but the accuracy of the data is uncertain. Malaria estimates are mostly based on reporting systems that are not firmly established, tested, or accepted. Health facilities are therefore unable to report a complete, accurate, and scientific estimate of the actual counts of malaria cases. The latest available data on the incidence and death rates of malaria are for 2008 which may not be applicable to the current situation.

The DOTS course is the internationally recommended strategy for controlling tuberculosis, and has been recognized as highly efficient and cost effective. Data on tuberculosis cases treated through DOTS and other strategies are not comparable because the data are mostly sourced from administrative records of health agencies or services, which may not have established reporting systems (similar to the problem for estimating malaria cases). These agencies may not have established patterns of measuring accurate information, which may result in the delay of reporting data. Using 2011 as a reference year, the data for DOTS tuberculosis cases are available for 2010 (a 1-year lag in reported data), while the data for cases cured through DOTS are for 2009 (a 2-year lag).

References

United Nations (UN). 2011. *The Millennium Development Goals Report 2011*. New York: UN.

_____. 2012. *The Millennium Development Goals Report 2012*. New York: UN.

United Nations Statistics Division (UNSD). 2012. *UNSD Statistical Databases* (http://mdgs.un.org/unsd/mdg/Default.aspx), accessed July 2012.

World Bank. 2012. *World Development Indicators*. (http://data.worldbank.org/indicator), accessed June 2012.

World Health Organization (WHO). 2012. *World Health Organization Statistical Information System*. (http://www.who.int/whosis/en/), accessed June 2012.

Goal 6 Targets and Indicators

Table 6.1 Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS and Target 6.B: Achieve by 2010, universal access to treatment for HIV/AIDS for all those who need it

Regional Member	6.1 HIV Prevalence[a] (% of population 15–49 years)		6.3 Proportion of Population Aged 15–24 Years with Comprehensive Correct Knowledge of HIV/AIDS (%)		6.5 Proportion of Population with Advanced HIV infection with Access to Antiretroviral Drugs (%)		
	2001	2009	Female	Male	2004[b]	2009	2010
Developing Member Economies							
Central and West Asia							
Afghanistan	...	...	...	...	...	...	...
Armenia	0.1	0.1	22.6 (2005)	15.1 (2005)	8 (2006)	23	30
Azerbaijan	0.0	0.1	4.8 (2006)	5.3 (2006)	1 (2006)	21	32
Georgia	0.0	0.1	15.0 (2005)	...	16	62	65
Kazakhstan	...	...	22.4 (2006)	...	1	27	30
Kyrgyz Republic	0.0	0.3	(2006)	...	9 (2005)	6	12
Pakistan	0.1	0.1	3.4 (2007)	...	1	8	9
Tajikistan	0.1	0.2	13.9 (2010)	12.8 (2010)	2 (2006)	11	16
Turkmenistan	...	...	4.8 (2006)	...	...	...	...
Uzbekistan	0.0	0.1	31.0 (2006)	...	30 (2006)	22	28
East Asia							
China, People's Rep. of	0.1	0.1	...	...	19 (2006)	23	32
Hong Kong, China	...	...	...	...	...	...	...
Korea, Rep. of	0.0	0.0	...	...	...	...	...
Mongolia	0.0	0.0	31.4 (2005)	...	3 (2006)	12	26
Taipei,China	...	...	...	...	...	...	...
South Asia							
Bangladesh	0.0	0.0	8.0 (2007)	17.9 (2007)	1	33	33
Bhutan	0.0	0.2	21.0 (2010)	...	10	20	27
India	0.4	0.3	19.9 (2006)	36.1 (2006)	...	...	...
Maldives	0.0	0.0	35.0 (2009)	...	6 (2006)	22	14
Nepal	0.5	0.4	27.6 (2006)	43.6 (2006)	2 (2006)	13	18
Sri Lanka	0.0	0.0	...	...	5	23	25
Southeast Asia							
Brunei Darussalam[c]	...	...	...	...		...	...
Cambodia	1.2	0.5	50.1 (2005)	45.2 (2005)	...	86	92
Indonesia	0.0	0.2	9.5 (2007)	14.7 (2007)	12	24	24
Lao PDR	0.0	0.2	...	...	26	48	51
Malaysia	0.4	0.5	...	...	12	27	36
Myanmar	0.8	0.6	31.8 (2010)	...	2	17	24
Philippines	0.0	0.0	20.7 (2008)	...	10	39	51
Singapore	0.1	0.1	...	...	...	...	...
Thailand	1.7	1.3	46.1 (2006)	...	17	61	67
Viet Nam	0.3	0.4	43.6 (2006)	...	1	44	52
The Pacific							
Cook Islands	...	...	...	...	...	...	...
Fiji	0.0	0.1	...	...	22 (2007)	35	33
Kiribati	...	...	...	...	...	...	...
Marshall Islands	...	...	26.6 (2007)	39.4 (2007)	...	...	...
Micronesia, Fed. States of	...	...	...	...	...	...	...
Nauru	...	...	13.3 (2007)	9.6 (2007)	...	...	...
Palau	...	...	...	...	...	...	...
Papua New Guinea	0.5	0.9	...	...	3	54	54
Samoa	...	...	3.0 (2009)	5.8 (2009)	...	...	...
Solomon Islands	...	...	29.3 (2007)	35.1 (2007)	...	...	...
Timor-Leste	...	...	12.2 (2010)	19.7 (2010)	...	...	...
Tonga	...	...	...	...	...	...	...
Tuvalu	...	...	39.4 (2007)	60.7 (2007)	...	...	...
Vanuatu	...	...	15.4 (2007)	...		...	...
Developed Member Economies							
Australia	0.1	0.1	...	...	...	...	...
Japan	0.0	0.0	...	...	...	...	...
New Zealand	0.1	0.1	...	...	...	...	...

... = Data not available at cutoff date, 0.0 = Magnitude is less than half of unit employed, HIV = human immunodeficiency virus, AIDS = Acquired immunodeficiency syndrome.

a The value "0.0" refers to < 0.1.
b Data in 2004 may not be consistent with the later years because of the change in the WHO guidelines for treatment of adults and adolescents with HIV, including pregnant women in 2009. As a consequence, the number of people needing the antiretroviral therapy expanded.
c Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member.

Sources: Millennium Indicators Database Online (UNSD 2012) and World Health Organization Online (WHO 2012).

Table 6.2 **Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases**

Regional Member	6.6 Incidence of Malaria (per 100,000 population)	6.6 Death Rates Associated with Malaria (per 100,000 population)	6.9 Incidence of Tuberculosis (per 100,000 population)		6.9 Prevalence of Tuberculosis (per 100,000 population)	
	2008	2008	1990	2010	1990	2010
Developing Member Economies						
Central and West Asia						
Afghanistan	2428	0	189	189	457	352
Armenia	0	0	33	73	56	114
Azerbaijan	1	0	110	110	222	166
Georgia	0	0	107	107	227	118
Kazakhstan[a]	...	...	139	151	255	198
Kyrgyz Republic	0	0	143	159	280	243
Pakistan	881	1	231	231	565	364
Tajikistan	9	0	93	206	172	382
Turkmenistan	0	0	64	66	73	77
Uzbekistan	0	0	128	128	256	227
East Asia						
China, People's Rep. of	3	0	153	78	215	108
Hong Kong, China[a]	...	...	129	80	169	100
Korea, Rep. of	8	0	163	97	223	151
Mongolia[a]	...	...	405	224	910	331
Taipei,China	...	...	...	...	...	...
South Asia						
Bangladesh	1510	3	225	225	493	411
Bhutan	100	0	308	151	500	181
India	1124	2	216	185	459	256
Maldives[a]	...	...	150	36	220	13
Nepal	103	0	163	163	335	238
Sri Lanka	21	0	66	66	114	101
Southeast Asia						
Brunei Darussalam[a,b]	...	...	66	68	81	91
Cambodia	1798	4	574	437	1258	660
Indonesia	1645	2	189	189	423	289
Lao PDR	327	1	88	90	157	130
Malaysia	75	0	127	82	227	107
Myanmar	7943	17	393	384	894	525
Philippines	96	0	393	275	1003	502
Singapore[a]	...	...	62	35	77	44
Thailand	322	0	137	137	204	182
Viet Nam	55	0	204	199	396	334
The Pacific						
Cook Islands[a]	...	...	1	4	3	6
Fiji	...	...	43	27	63	40
Kiribati[a]	...	...	116	370	138	550
Marshall Islands[a]	...	...	137	502	269	831
Micronesia, Fed. States of[a]	...	...	379	206	433	320
Nauru[a]	...	...	102	40	155	52
Palau[a]	...	...	45	124	58	179
Papua New Guinea	18012	36	303	303	659	465
Samoa[a]	...	...	36	11	52	16
Solomon Islands	13718	19	312	108	625	178
Timor-Leste	46380	108	500	498	620	643
Tonga[a]	...	...	38	17	63	29
Tuvalu[a]	...	...	536	237	930	366
Vanuatu	6036	7	127	69	145	78
Developed Member Economies						
Australia[a]	...	...	7	6	8	8
Japan[a]	...	...	49	21	63	27
New Zealand[a]	...	...	11	8	14	9

continued

Goal 6 Targets and Indicators

Table 6.2 **Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases** *(continued)*

Regional Member	6.9 Death Rates Associated with Tuberculosis (per 100,000 population)		6.10 Proportion of Tuberculosis Cases under DOTS (%)			
			Detected		Cured	
	1990	2010	1995	2010	1995	2009
Developing Member Economies						
Central and West Asia						
Afghanistan	57	38	3 (1997)	47	45 (1997)	86
Armenia	6	11	77	62	55	73
Azerbaijan	17	10	19	63	65	62
Georgia	20	5	30	100	58	75
Kazakhstan[a]	41	23	51	82	74 (1997)	62
Kyrgyz Republic	36	26	52	66	50 (1996)	82
Pakistan	71	34	5	65	70	91
Tajikistan	18	41	38	44	...	...
Turkmenistan	18	20	88	96	73	84
Uzbekistan	24	20	34	48	78	81
East Asia						
China, People's Rep. of	19	4	33	87	93	95
Hong Kong, China[a]	10	6	87	87	85 (1998)	70
Korea, Rep. of	13	5	92	90	76	83
Mongolia[a]	19	5	38	72	74	88
Taipei,China	...	...	...	...	...	...
South Asia						
Bangladesh	58	43	21	46	71	92
Bhutan	47	9	81	120	97	92
India	38	26	58	59	25	88
Maldives[a]	31	3	88	83	97	47
Nepal	38	21	56	72	73	90
Sri Lanka	11	9	49	69	79	86
Southeast Asia						
Brunei Darussalam[a,b]	3	3	82 (1997)	88	85 (1998)	71
Cambodia	153	61	25	65	91	95
Indonesia	51	27	9	66	91	91
Lao PDR	16	11	20	72	70	93
Malaysia	24	9	53	80	69	78
Myanmar	110	41	11	71	67	85
Philippines	47	33	48	65	60	89
Singapore[a]	4	2	89	87	86	82
Thailand	20	16	56	70	64	86
Viet Nam	44	34	37	54	89	92
The Pacific						
Cook Islands[a]	0	0	58	0	100	50 (2008)
Fiji	5	4	76	82	86	94
Kiribati[a]	9	47	71 (1996)	78	87	97
Marshall Islands[a]	30	81	57 (1996)	70	25	84
Micronesia, Fed. States of[a]	25	29	49	70	80	88
Nauru[a]	14	4	62 (1999)	73	83 (1998)	100 (2008)
Palau[a]	4	15	75	75	67	75
Papua New Guinea	78	43	56	70	56	72
Samoa[a]	4	1	90	71	80	90
Solomon Islands	71	17	41	58	65	88
Timor-Leste	76	16	62 (2002)	87 (2009)	73 (2001)	85 (2008)
Tonga[a]	6	3	63	63	75	83
Tuvalu[a]	94	33	89	60	100 (1999)	88
Vanuatu	8	6	75	70	85	96
Developed Member Economies						
Australia[a]	0	0	89	84	55 (1996)	80
Japan[a]	4	2	87	84	80 (1998)	52
New Zealand[a]	0	0	96	90	30 (2000)	76

... = Data not available at cutoff date, 0 = Magnitude is less than half of unit employed, DOTS = directly observed treatment short course.

a The indicators incidence and death rates associated with malaria, as defined for the global monitoring, do not apply to the circumstances of the country.
b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member.

Sources: Millennium Indicators Database Online (UNSD 2012) and World Health Organization Database Online (WHO 2012).