

8 Other major infectious diseases

The United Nations Millennium Declaration calls upon countries to have halted and begun to reverse the scourge of malaria and other major diseases by 2015. The Asia-Pacific region as a whole, and nearly every country in it, has achieved that goal.

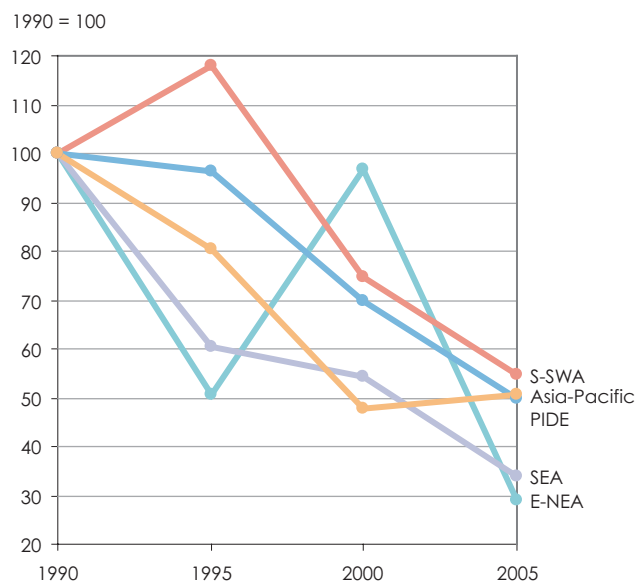
Asia and the Pacific has seen a significant decline in the incidence of malaria – the number of new cases in a year per 100,000 population. Between 1995 and 2000, the incidence fell from 155 to 112 and by 2005 was down to 80. The 3.1 million cases reported in 2005 constituted less than five per cent of the world's cases. The incidence is generally higher in the poorest tropical countries: while in 2005 was relatively low at 142 in South-East Asia and 126 in South and South-West Asia, it was 2,729 in the Pacific developing economies.

In 2005, the only countries in the region with recorded rates above 1,000 were Solomon Islands (16,249), Timor-Leste (4,109), Papua New Guinea (1,627), and Vanuatu (4,566). Because annual incidence rates fluctuate it is not clear whether these countries have reversed the spread of the disease on a sustained basis but between 2003 and 2006 Solomon Islands and Vanuatu did record declines. The situation in Indonesia bears watching; the incidence of 192 in 2005 was the highest ever recorded, though the incidence might previously have been under-reported.

Most of the reported cases and deaths from malaria in Asia and the Pacific occur in South-East Asia and in South and South-West Asia for, although those subregions have modest incidences, they have the region's largest populations. Of the reported cases in Asia and the Pacific, 67 per cent occurred in South and South-West Asia, 26 per cent in South-East Asia and 6 per cent in the Pacific. Of the 3.1 million reported cases in 2005, 1.8 million were in India and 433,000 were in Indonesia. The figure for India represented a decline from 2000, but that for Indonesia was a 76 per cent increase.

Figure 8.1

Index of change of malaria incidence, selected groups of Asia-Pacific countries, 1990-2005



In 2005, Myanmar and Pakistan reported more than 100,000 cases, and Papua New Guinea 99,000.

For the region as a whole, the annual number of malaria deaths declined steadily between 1996 and 2005, from 10,833 to 4,816. In 2005, more than half the deaths were in South-East Asia, with one third in Myanmar alone. South and South-West Asia accounted for 31 per cent of the deaths, including 963 in India. In the Pacific, there were 725 malaria deaths in Papua New Guinea.

For Asia and the Pacific a more widespread infectious disease is tuberculosis – although since 1990 the prevalence has been declining steadily. Between 2000 and 2006 the prevalence per 100,000 population fell from 323 to 230. The problem has been greatest in South-East Asia, in South and South-West Asia, and in the Pacific developing economies – though in these three subregions too it has also declined steadily. In 2006, the region's highest prevalences were in Timor-Leste (789) and Cambodia (665), followed by Papua New Guinea (513) and Tuvalu (504). Nevertheless between 2000

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Figure 8.2

Tuberculosis incidence, Asia and the Pacific, 1990 and 2006

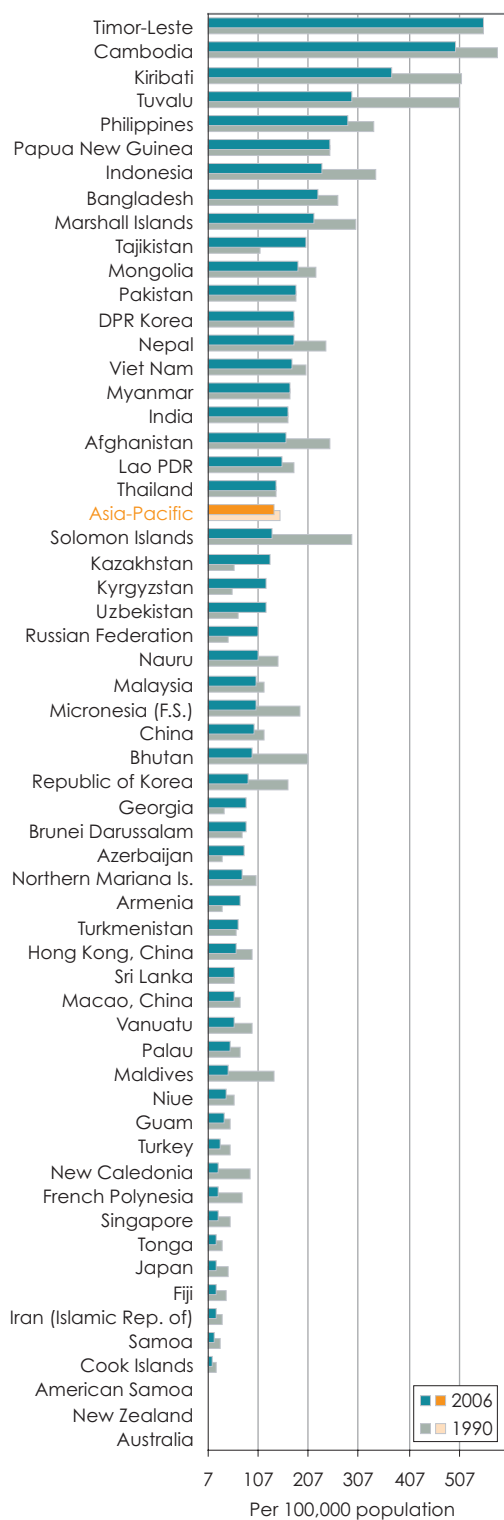
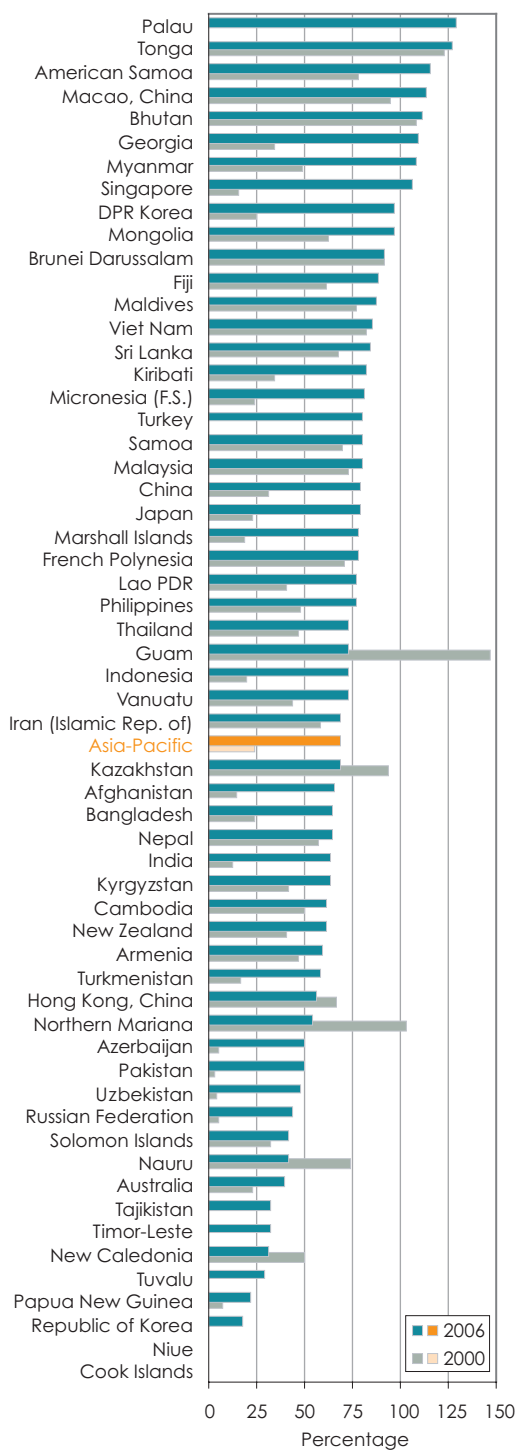


Figure 8.3

DOTS detection rates, Asia and the Pacific, 2000 and 2006



and 2006 in all four countries the prevalences fell significantly.

The other main way of tracking progress is via the incidence – the number of new cases reported in a year per 100,000 population. Across the region, since 1990 tuberculosis incidences have changed less than prevalences but have also declined steadily. In 2006, the incidence was higher than the regional average in South-East Asia, in South and South-West Asia and in the Pacific developing economies. Although the incidence was lower in North and Central Asia it increased marginally between 2000

and 2006. Among individual countries in 2006, the highest incidences were in Timor-Leste (556), Cambodia (500), Kiribati (373) and Tuvalu (295).

For some countries, the reported numbers of new cases are estimates; Myanmar, Papua New Guinea and Timor-Leste, for example reported the same number each year from 1990 to 2006.

Treatment for tuberculosis is the “directly observable treatment – short course” (DOTS). One encouraging trend is that between 2000 and 2006 the proportion of cases being detected rose in all subregions of Asia and the Pacific – implying stronger systems of national surveillance.

Malaria incidence (per 100,000 population)

The number of reported new cases of malaria in a given time period expressed per 100,000 population. **Aggregates:** Averages are calculated using the total population as weights. Missing data for some countries have been imputed. **Source:** WHO Statistical Information System (WHOSIS) (online database, accessed on 17 June 2008).

Malaria reported cases (number)

The number of notified cases of malaria in a given time period. **Aggregates:** Sum of the individual country values. Missing data for some countries and years have been imputed. **Source:** World Health Organization, WHO Global Health Atlas (online database, accessed on 17 June 2008).

Malaria reported deaths (number)

The number of deaths caused by malaria in a given time period. **Aggregates:** Sum of the individual country values. Missing data of some countries and years have been imputed. **Source:** World Health Organization, WHO Global Health Atlas (online database, accessed on 17 June 2008).

Tuberculosis prevalence (per 100,000 population)

The number of cases of tuberculosis (TB) (all forms) in a population at a given point in time (sometimes referred

to as point prevalence). It is expressed in this database as the number of cases per 100,000 population. Estimates include cases of TB in people with HIV. **Aggregates:** Averages are calculated using total population as weight. **Source:** United Nations Millennium Development Goals Indicators (online database, accessed on 19 August 2008).

Tuberculosis incidence (per 100,000 population)

The estimated number of new tuberculosis cases arising in one year per 100,000 population. All forms of TB are included, as are cases in people with HIV. **Aggregates:** Averages are calculated using the total population as weight. **Source:** United Nations Millennium Development Goals Indicators (online database, accessed on 19 August 2008).

DOTS detection rate (percentage)

The ratio of the annual new smear-positive notifications (under DOTS) to estimated annual new smear-positive incidence, expressed as a percentage. DOTS, Directly Observable Treatment - Short course, is an internationally-recommended TB control strategy. Case detection means that TB is diagnosed in a patient and is reported within the national surveillance system, and then to WHO. **Aggregates:** Averages are calculated using the number of TB cases per year as weight. **Source:** United Nations Millennium Development Goals Indicators (online database, accessed on 21 August 2008).

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8.1 Malaria

	Incidence					Reported cases					Reported deaths		
	Per 100,000 population					Number					Number		
	1990	1995	2000	2005	2006	1990	1995	2000	2005	2006	2000	2005	2006
East and North-East Asia	7	4	7	2	3	90 117	48 342	96 536	30 018	44 178	41	49	38
China	8	4	1	2	3	89 000	47 118	18 620	21 935	35 397	39	48	37
DPR Korea			321	28				73 742	6 728				0
Hong Kong, China				0					32				
Japan													
Macao, China				0					0				0
Mongolia				0					0				0
Republic of Korea	0	0	9	3	4	0	107	4 142	1 323	2 021	1	0	0
South-East Asia	420	253	228	142		1 851 677	1 218 147	1 183 878	793 241		2 515		
Brunei Darussalam													
Cambodia	1 277	675	489	354	554	123 796	76 923	62 439	49 436	78 696	608	296	396
Indonesia	94	62	116	192		171 908	123 226	245 612	433 326				97
Lao PDR	541	1 109	766	240	319	22 044	52 021	40 023	13 602	18 382	350	77	21
Malaysia	279	288	55	22	20	50 500	59 208	12 705	5 569	5 294	35	33	22
Myanmar	2 464	1 522	1 291	316		989 042	656 547	592 354	151 508		2 746	1 707	
Philippines	141	83	48	55	41	86 200	56 852	36 596	46 485	35 405	536	145	124
Singapore				4					166				
Thailand	504	144	135	47		273 880	82 743	81 692	29 782		625	71	
Timor-Leste			6 089	4 109				49 836	43 857				71
Viet Nam	187	137	79	23	26	123 796	100 116	62 442	19 497	22 637	148	18	41
South and South-West Asia	230	271	172	126		2 875 729	3 773 770	2 628 584	2 089 292		1 530	1 483	
Afghanistan	2 508		983	266	317	317 479		203 911	66 798	82 692			
Bangladesh	48	121	40	31		53 875	152 729	55 599	48 096		469	481	
Bhutan	1 735	4 573	1 063	286		9 497	23 188	5 935	1 825				5
India	235	313	194	160		2 018 783	2 988 231	2 031 790	1 817 093		946	963	
Iran (Islamic Rep. of)	137	109	30	27	23	77 470	67 532	19 716	18 966	15 909	4		
Maldives	7	7	7			16	17	20			0		
Nepal	120	45	31	18		22 856	9 718	7 616	4 962		0	10	
Pakistan	71	88	57	81	77	79 689	111 836	82 526	127 825	124 000			
Sri Lanka	1 679	787	1 122	9		287 384	142 294	210 039	1 640				0
Turkey	15	131	17	3	1	8 680	82 096	11 432	2 084	796	0	0	0
North and Central Asia	0	5	10	1	1	449	9 952	21 970	3 246	2 087	2	3	4
Armenia	0	16	5	0	0	0	502	141	0	0	0	0	0
Azerbaijan	0	36	19	3	2	24	2 840	1 526	242	143	0	0	0
Georgia	0	0	5	3	1	1	1	245	155	60	0	0	0
Kazakhstan	0	0	0	0	0	3	41	37	6	2	0	0	0
Kyrgyzstan	0	0	0	4	6	1	3	12	226	318	0	0	0
Russian Federation	0	0	1	0	0	216	425	795	205	143	2	3	4
Tajikistan	3	106	309	35	20	175	6 103	19 064	2 309	1 344	0	0	0
Turkmenistan	0	0	1	0		1	10	24	1				0
Uzbekistan	0	0	1	0	0	28	27	126	102	76	0	0	0
Pacific													
Australia													
American Samoa													
Cook Islands													
Fiji													
French Polynesia													
Guam													
Kiribati													
Marshall Islands													
Micronesia (F.S.)													
Nauru													
New Caledonia													
New Zealand													
Niue				0					0				0
Northern Mariana Is.													
Palau													
Papua New Guinea	2 539	2 103	1 509	1 627	1 311	104 900	99 000	81 192	98 762	81 303	617	725	668
Samoa													
Solomon Islands	37 149	32 758	16 341	16 249	15 565	116 500	118 521	67 884	76 762	75 337	38	38	12
Tonga													
Tuvalu													
Vanuatu	19 274	6 941	3 385	4 566	3 649	28 805	11 954	6 422	9 834	8 055		0	6
Asia and the Pacific	161	155	112	80		5 068 812	5 280 321	4 087 101	3 101 790		7 348	4 816	
LLDC	373	260	232	69	82	372 108	290 582	278 415	90 073	109 745			114
LDC	844	575	436	169		1 694 242	1 308 079	1 092 039	466 683		4 257	2 707	
ASEAN	419	251	218	135		1 841 345	1 207 815	1 134 042	749 384				2 444
ECO	163	140	93	56	57	483 550	466 617	338 374	218 559	225 281			
SAARC	246	286	186	136		2 789 579	3 624 142	2 597 436	2 068 242		1 526	1 481	
Central Asia	0	14	30	4	3	233	9 527	21 175	3 041	1 944			0
Pacific island dev. econ.	5 405	4 346	2 582	2 729	2 372	250 206	229 476	155 499	185 359	164 696	656	763	686
Low-income	452	325	251	114		1 955 266	1 580 758	1 348 930	666 613				3 374
Middle-income	118	130	90	76		3 112 700	3 698 610	2 733 183	2 433 008		2 345	1 438	
High-income													
Other world regions													
Africa	6 987	5 077	5 517	6 889		44 364 437	36 736 619	45 127 166	63 288 194		284 776		
Europe	2	2	2	2	2	9 794	9 661	14 473	10 095	10 014	71	35	29
Latin America & Carib.	259	292	236	203	154	1 055 897	1 300 673	1 139 240	1 046 955	808 368			149
North America													
Other countries/areas	88	683	1 338	171	181	68 821	624 179	1 406 253	204 514	221 412			
World	1 044	838	919	1 127		50 567 761	43 951 452	51 774 232	67 651 548				

8.2 Tuberculosis

	Prevalence				Incidence				DOTS detection rate		
	Per 100,000 population				Per 100,000 population				Percentage		
	1990	1995	2000	2006	1990	1995	2000	2006	1995	2000	2006
East and North-East Asia	296	276	247	183	113	105	99	94	15	31	78
China	322	304	271	201	117	111	105	99	15	31	79
DPR Korea	431	400	368	180	178	178	178	178		25	97
Hong Kong, China	96	86	78	64	94	84	76	62		67	56
Japan	62	51	45	29	47	39	34	22		23	79
Macao, China	73	92	87	59	69	87	85	59	88	95	113
Mongolia	569	486	283	191	220	210	199	188	7	63	97
Republic of Korea	221	131	113	123	166	98	72	88	30		18
South-East Asia	476	422	335	267	273	253	235	216	9	39	77
Brunei Darussalam	117	115	62	99	75	75	62	83		91	91
Cambodia	915	797	745	665	586	557	530	500	40	50	62
Indonesia	438	380	327	253	343	304	270	234	1	20	73
Lao PDR	476	407	344	293	179	170	162	152		40	77
Malaysia	192	152	136	125	120	114	109	103	64	73	80
Myanmar	411	389	289	169	171	171	171	171		49	109
Philippines	819	774	554	432	337	320	305	287	0	48	77
Singapore	52	49	39	25	50	47	38	26	62	16	107
Thailand	340	305	237	198	142	142	142	142		47	73
Timor-Leste	1 208	1 111	1 111	789	556	556	556	556			33
Viet Nam	444	346	249	225	203	193	183	173	30	82	85
South and South-West Asia	509	483	419	277	167	166	163	161	2	14	63
Afghanistan	614	583	440	231	248	247	208	161		15	66
Bangladesh	621	576	499	391	264	251	239	225	6	24	65
Bhutan	244	164	128	96	207	163	128	96	99	108	112
India	568	539	464	299	168	168	168	168	0	12	64
Iran (Islamic Rep. of)	50	55	40	28	36	40	31	22	42	58	69
Maldives	147	86	86	54	139	98	69	45	105	77	87
Nepal	625	527	311	244	243	220	199	176		57	64
Pakistan	428	424	416	263	181	181	181	181	1	3	50
Sri Lanka	108	97	107	80	61	61	61	61	62	67	85
Turkey	83	62	49	32	49	40	31	29			80
North and Central Asia	80	111	158	130	50	70	110	111	11	15	48
Armenia	53	70	96	81	33	47	71	72	12	47	59
Azerbaijan	58	76	113	87	35	50	75	77	5	6	50
Georgia	53	69	98	84	39	54	82	84	18	34	109
Kazakhstan	95	94	145	142	58	62	141	130		94	69
Kyrgyzstan	90	118	157	137	55	77	135	123		42	63
Russian Federation	72	116	168	125	45	73	113	107		5	44
Tajikistan	195	106	192	298	112	65	117	204			33
Turkmenistan	106	80	130	78	64	52	92	65		17	58
Uzbekistan	114	119	140	145	68	76	93	122		4	48
Pacific	148	138	128	106	54	54	55	56	47	14	28
Australia	7	7	6	7	7	7	6	7		23	40
American Samoa	28	22	15	12	12	11	10	9		78	115
Cook Islands	39	30	26	24	22	20	18	16	126	0	0
Fiji	63	42	38	31	42	34	28	22	57	61	88
French Polynesia	149	107	51	29	74	54	39	26		70	78
Guam	103	93	58	49	51	46	42	37		147	73
Kiribati	1 162	928	545	402	513	464	420	373		34	82
Marshall Islands	685	547	430	241	302	274	248	220		19	79
Micronesia (F.S.)	313	217	171	109	189	155	128	101	12	24	82
Nauru	330	263	199	134	146	132	119	106		74	42
New Caledonia	114	71	50	35	91	57	41	27	43	50	32
New Zealand	10	11	11	9	10	11	11	9		40	61
Niue	133	106	96	85	59	53	48	43			0
Northern Mariana Is.	233	186	84	90	103	93	84	75		103	54
Palau	89	64	115	51	70	64	58	51	184		129
Papua New Guinea	790	723	651	513	250	250	250	250		7	22
Samoa	44	31	27	25	32	27	23	19	73	70	80
Solomon Islands	661	459	288	194	292	230	181	135		32	42
Tonga	54	41	34	34	34	31	28	25	67	123	127
Tuvalu	1 150	857	723	504	508	429	362	295			29
Vanuatu	213	162	87	65	94	81	70	58		44	73
Asia and the Pacific	386	366	323	230	150	146	144	139	8	24	69
LLDC	295	284	239	189	130	133	147	142	0	1	16
LDC	590	544	57	49	257	247	233	218	12	33	70
ASEAN	475	421	334	265	273	253	234	215	9	39	77
ECO	235	236	232	157	108	110	114	114	5	13	54
SAARC	553	525	455	300	179	178	176	174	2	14	63
Central Asia	100	99	139	140	60	65	104	118	11	40	55
Pacific island dev. econ.	590	531	471	374	201	196	193	190	47	12	26
Low-income	487	449	388	284	212	206	201	194	12	31	66
Middle-income	391	374	330	233	146	143	141	136	7	23	70
High-income	92	65	57	49	70	50	41	37	31	28	45
Other world regions											
Africa	303	368	446	475	150	204	277	316	35	40	48
Europe	39	39	39	29	32	32	32	29	73	24	68
Latin America & Carib.	153	121	95	69	100	83	69	56	80	46	71
North America	7	6	4	3	9	8	6	4	81	82	84
Other countries/areas	99	94	73	64	59	55	52	44	683	1 338	181
World	294	289	272	219	124	128	136	139	14	30	62