

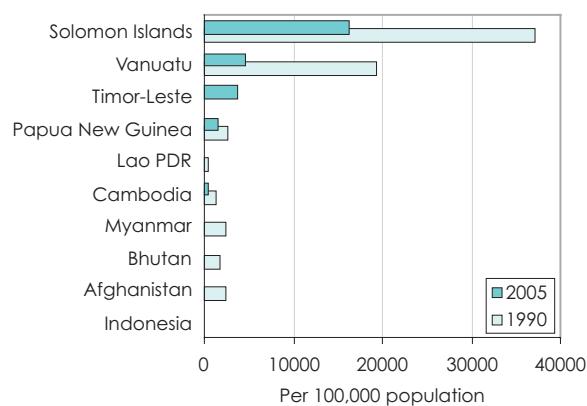
## 7. Other major infectious diseases

Malaria remains a problem in many parts of the Asian and Pacific region despite a decrease in the number of cases reported. And while tuberculosis prevalence and death rates are on the decline in the region, they remain far higher than in Latin America and the Caribbean.

The number of malaria cases declined from over 5 million in 1990 to just over 3.1 million in 2005. The reduction was the fastest in the ASEAN region, more than a half. In 2005, the SAARC region accounted for two thirds of all cases in Asia and the Pacific.

In terms of incidence, the Pacific is the most affected subregion. Timor-Leste had an incidence of 3,669 cases and Vanuatu had 4,566 new cases reported per 100,000 population, but both are dwarfed by Solomon Islands, where 16,249 cases per 100,000 population were reported in 2005.

**Figure 7.1 Ten most affected countries/areas for malaria incidence, 1990 and 2005**



In South-West Asia, Afghanistan and the Islamic Republic of Iran have considerably reduced malaria incidence since the early 1990s. While Afghanistan had an incidence of 2,508 cases per 100,000 population in 1990, by 2005 that incidence had been reduced to 266. During the same period, the Islamic Republic of Iran reduced malaria incidence from 137 to 27. Nonetheless,

Afghanistan still has one of the highest incidences of malaria in the region, despite an increase in the use of insecticide-treated mosquito nets, one of the simplest and most effective ways to reduce exposure.

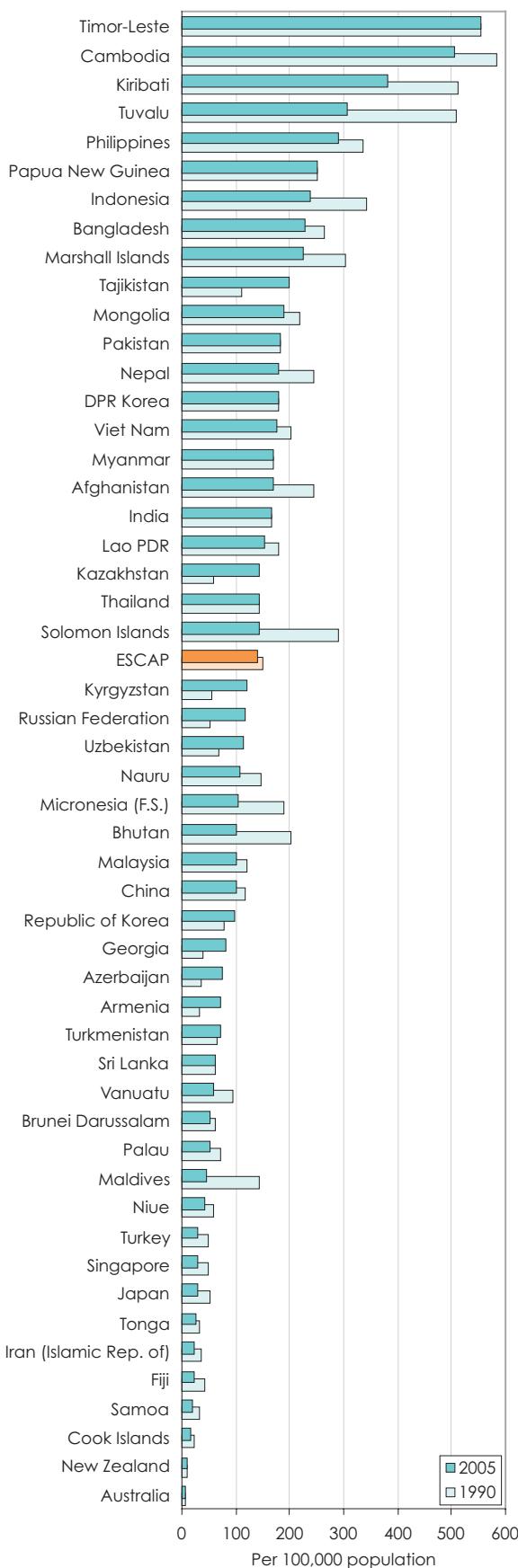
Another major disease of concern across Asia and the Pacific is tuberculosis. As in the rest of the world, both prevalence and death rates related to this disease have started to decline in the region. Nonetheless, while tuberculosis prevalence, at 238 per 100,000 population, is about half that in Africa, it is far higher than in Latin America and the Caribbean.

Most groups of countries have made good progress in reversing the incidence of tuberculosis and thus reducing prevalence. Although prevalence in Asia and the Pacific declined by 39 per cent between 1990 and 2005, in the ASEAN and SAARC regions they dropped by 43 per cent and 45 per cent, respectively. In Central Asia, however, tuberculosis prevalence, as well as incidence, has increased over the levels prevailing in 1990.

Annual incidence figures for Central Asia increased to 117 per 100,000 population in 2005, against 60 in 1990. This prompted an increase in prevalence figures from 100 to 141 per 100,000 population during the same period. In the Russian Federation, prevalence increased from 82 to 150 per 100,000 population in a decade and a half, while in Kazakhstan, prevalence increased from 96 to 155 per 100,000. Finally, the prevalence in Tajikistan, which had been 196 per 100,000 population in 1990, rose to 297 in 2005, the highest in the subregion.

Cambodia and Timor-Leste, with prevalence higher than 700 per 100,000 population, have the most serious tuberculosis problem among the countries of the region. In the Pacific, the most serious problems occur in Kiribati, Papua New Guinea and Tuvalu, with rates over 400 per 100,000 population, although the numbers for these countries are considerably lower than in 1990.

**Figure 7.2 Tuberculosis incidence in Asia and the Pacific, 1990 and 2005**



**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 total population as weight. Missing data for malaria incidence have been imputed. *Source:* World Health Organization, WHO Global Health Atlas, (online database, accessed in September 2007).

**Malaria reported cases (number):** The number of notified cases of malaria in a given time period. *Aggregates:* Sum of individual country values. Missing data for malaria reported cases have been imputed. *Source:* World Health Organization, WHO Global Health Atlas, (online database, accessed in September 2007).

**Malaria reported deaths (number):** The number of deaths attributable to malaria in a given time period. *Aggregates:* Sum of individual country values. *Source:* World Health Organization, *World Malaria Report 2005*, (online publication, accessed in September 2007).

**Tuberculosis prevalence (per 100,000 population):** The number of existing cases of all forms of tuberculosis (TB) in the population at a given point in time, expressed per 100,000 population. *Aggregates:* Averages are calculated using total population as weight. *Source:* United Nations Millennium Development Goals Indicators, (online database, accessed in September 2007).

**Tuberculosis incidence (per 100,000 population):** The estimated number of new tuberculosis cases in a year, expressed per 100,000 population. All forms of tuberculosis are included, including cases of people with HIV. *Aggregates:* Averages are calculated using total population as weight. *Source:* World Health Organization, WHO Statistical Information System, (online database, accessed in September 2007).

**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 in September 2007).

## 7.1 Malaria

	Incidence				Reported cases				Reported deaths			
	Per 100,000 population				Number				Number			
	1990	1995	2000	2005	1990	1995	2000	2005	1990	1995	2000	2005
<b>East and North-East Asia</b>												
China	8	4	1	2	89 000	47 118	18 620	21 935	35	34	39	48
DPR Korea			321	28		73 742		6 728				0
Hong Kong, China				0				32				
Macao, China				0				0				
Mongolia				0				0				
Republic of Korea	0	0	9	3	0	107	4 142	1 323	0	0	1	0
<b>South-East Asia</b>												
Brunei Darussalam												
Cambodia	1 277	675	489	354	123 796	76 923	62 439	49 436	1 020	614	608	296
Indonesia	94	62	116	192	171 908	123 226	245 612	433 326				97
Lao PDR	541	1 109	766		22 044	52 021	40 023		372	620	350	77
Malaysia	279	288	55	22	50 500	59 208	12 705	5 569	43	35	35	33
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	86 200	56 852	36 596	46 485	913	643	536	145
Singapore				4				166				
Thailand	504	144	135	47	273 880	82 743	81 692	29 782	1 464		625	71
Timor-Leste		6 089	3 669			49 836		39 164				71
Viet Nam	187	137	79	23	123 796	100 116	62 442	19 497	3 340	348	148	18
<b>South and South-West Asia</b>												
Afghanistan	2 508		983	266	317 479		203 911	66 798				
Bangladesh	48	121	40	31	53 875	152 729	55 599	48 121		742	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	77 470	67 532	19 716	18 966				4
Maldives	7	7	7		16	17	20					0
Nepal	120	45	31	18	22 856	9 718	7 616	4 962	0	0	0	10
Pakistan	71	88	57	81	79 689	111 836	82 526	127 825				
Sri Lanka	1 679	787	1 122	9	287 384	142 294	210 039	1 640				0
Turkey	15	131	17	3	8 680	82 096	11 432	2 084	0	0		0
<b>North and Central Asia</b>												
Armenia	0	16	5	0	0	502	141	7				0
Azerbaijan	0	36	19	3	24	2 840	1 526	242				0
Georgia	0	0	5	3	1	1	245	155	0	0		0
Kazakhstan				0				6				0
Kyrgyzstan	0	0	0	4	1	3	12	226	0	0		0
Russian Federation				0				205				3
Tajikistan	3	106	309	35	175	6 103	19 064	2 309				0
Turkmenistan	0	0	1	0	1	10	24	1	0	0		0
Uzbekistan	0	0	1	0	28	27	126	102	0	0		0
<b>Pacific</b>												
American Samoa												
Cook Islands												
Fiji												
French Polynesia												
Guam												
Kiribati												
Marshall Islands												
Micronesia (F.S.)												
Nauru												
New Caledonia												
Niue												
Northern Mariana Is.												
Palau												
Papua New Guinea	2 539	2 103	1 509	1 627	104 900	99 000	81 192	98 762	457	415	617	725
Samoa												
Solomon Islands	37 149	32 758	16 341	16 249	116 500	118 521	67 884	76 762	33	51	38	38
Tonga												
Tuvalu												
Vanuatu	19 274	6 941	3 385	4 566	28 805	11 954	6 422	9 834	32	4		0
<b>ESCAP Developed Economies</b>												
Australia												
Japan												
New Zealand												
ESCAP	163	155	112	80	5 068 987	5 280 249	4 086 663	3 102 418		7 162	4 788	
LLDC	396	265	237	74	372 117	290 553	278 390	95 372				92
LDC	844	575	436	170	1 694 242	1 308 079	1 092 039	467 304		2 031	4 211	2 685
SIDS												
ASEAN	419	251	218	136	1 841 345	1 207 815	1 134 042	754 676				2 444
SAARC	246	286	186	136	2 789 579	3 624 142	2 597 436	2 068 264		1 415	1 459	
Central Asia	0	14	30	4	242	9 498	21 150	3 048				
Low-income	308	318	217	146	3 984 381	4 579 321	3 430 556	2 513 521		5 922	4 386	
Middle-income	61	37	33	33	1 083 760	699 975	651 119	670 824	2 487	716	1 239	402
High-income												
Africa	6 987	5 077	5 552	6 809	44 364 561	36 736 743	45 408 376			259 510		
Latin America & Carib.	259	292	236	164	1 055 897	1 300 673	1 139 240					
North America					2							34
Europe												
Other Asia-Pacific					1 299	40		1 406 244	48 104			
World												

## 7.2 Tuberculosis

	Prevalence				Incidence				DOTS detection rate	
	Per 100,000 population				Per 100,000 population				Percentage	
	1990	1995	2000	2005	1990	1995	2000	2005	2000	2005
<b>East and North-East Asia</b>										
China	325	304	271	208	116	111	105	100	31	80
DPR Korea	428	400	368	179	178	178	178	178	26	99
Hong Kong, China	138	98	87	77					60	53
Macao, China	123	95	87	87					95	81
Mongolia	566	486	285	206	219	209	200	191	62	82
Republic of Korea	123	110	142	135	79	84	90	96		18
<b>South-East Asia</b>										
Brunei Darussalam	113	93	56	63	62	59	56	54	100	112
Cambodia	951	853	806	703	582	555	530	506	49	66
Indonesia	440	380	327	262	343	304	270	239	20	66
Lao PDR	472	407	346	306	178	170	162	155	40	68
Malaysia	195	154	139	131	122	115	108	102	73	73
Myanmar	417	385	287	170	171	171	171	171	48	95
Philippines	820	773	554	450	335	320	305	291	48	75
Singapore	52	49	39	28	50	47	37	29	16	100
Thailand	355	327	252	204	142	142	142	142	46	73
Timor-Leste	1 200	1 111	1 111	713	556	556	556	556		44
Viet Nam	470	346	251	235	202	192	184	175	82	84
<b>South and South-West Asia</b>										
Afghanistan	607	571	449	288	244	242	209	168	13	44
Bangladesh	630	575	494	406	264	251	239	227	26	59
Bhutan	374	272	218	174	203	162	129	103	31	31
India	570	533	457	299	168	168	168	168	12	61
Iran (Islamic Rep. of)	50	55	40	30	36	40	31	23	58	64
Maldives	151	89	90	53	142	98	68	47	73	95
Nepal	621	524	310	244	243	220	199	180	57	67
Pakistan	429	424	416	297	181	181	181	181	3	37
Sri Lanka	109	99	109	80	60	60	60	60	64	86
Turkey	83	62	49	44	49	40	31	29		3
<b>North and Central Asia</b>										
Armenia	53	70	96	79	33	46	71	71	47	60
Azerbaijan	58	76	113	85	35	50	75	76	6	55
Georgia	52	68	98	86	38	54	82	83	34	91
Kazakhstan	96	95	145	155	59	62	141	144	93	72
Kyrgyzstan	90	118	157	133	55	77	135	121	42	67
Russian Federation	82	133	190	150	51	82	127	119	4	30
Tajikistan	196	106	193	297	112	65	118	198		22
Turkmenistan	106	80	130	90	64	52	92	70	17	43
Uzbekistan	115	119	140	139	68	76	93	113	4	39
<b>Pacific</b>										
American Samoa	27	22	15	9					77	114
Cook Islands	49	39	26	26	22	20	18	16		77
Fiji	62	42	38	30	42	34	28	23	61	72
French Polynesia	167	107	51	32					70	65
Guam	116	93	58	39					146	93
Kiribati	1 157	928	559	426	513	464	420	380	32	73
Marshall Islands	682	547	430	269	302	274	248	224	19	77
Micronesia (F.S.)	311	216	171	123	188	155	128	105	24	61
Nauru	328	263	206	156	146	132	119	108	61	
New Caledonia	145	78	48	30					53	67
Niue	133	106	96	87	59	53	48	44		102
Northern Mariana Is.	232	186	84	92					54	64
Palau	88	64	115	61	70	64	58	52		64
Papua New Guinea	789	722	637	475	250	250	250	250	7	21
Samoa	44	31	27	27	32	27	23	20	70	66
Solomon Islands	658	459	289	201	292	229	181	142	32	55
Tonga	53	40	34	32	34	31	28	25	120	96
Tuvalu	1 146	857	723	495	508	429	362	305		35
Vanuatu	212	162	87	84	94	81	70	60	43	61
<b>ESCAP Developed Economies</b>										
Australia	7	7	6	6	7	7	6	6	23	42
Japan	70	60	45	38	52	45	34	28	23	57
New Zealand	10	11	11	9	10	10	11	9	41	51
ESCAP	389	366	322	238	150	147	145	141	24	65
LLDC	294	282	241	201	129	132	147	144	39	54
LDC	598	544	447	351	256	246	234	220	33	64
SIDS	469	421	366	275	188	183	173	174	12	34
ASEAN	483	424	338	275	273	253	234	218	39	73
SAARC	556	520	449	306	179	178	176	174	14	58
Central Asia	100	99	138	141	60	65	104	117	40	51
Low-income	545	505	434	300	183	181	179	177	20	61
Middle-income	309	292	260	204	136	131	128	121	30	72
High-income	77	67	64	57	53	50	44	42	23	37
Africa	284	379	434	445	139	209	270	298	41	50
Latin America & Carib.	158	125	100	78	104	86	72	61	45	64
North America	7	6	4	3	9	8	6	5	82	83
Europe	38	39	39	30	31	32	31	28		
Other Asia-Pacific	97	93	72	63	58	55	52	45	47	42