

8. Chronic diseases and other health risks

The Asian and Pacific region is undergoing a "health transition" characterized by a rise in the prevalence of non-communicable or chronic diseases.

Infectious and parasitic diseases have historically been the main causes of death in Asia and the Pacific. The contribution of cancer, cardiovascular diseases, chronic obstructive pulmonary diseases and others to mortality has increased considerably in the last few years. In 2005, chronic diseases accounted for 64 per cent of all deaths in the Asian and Pacific region, and they are now the leading causes of mortality in almost all subregions.

Chronic diseases account for 81 per cent of deaths in high-income economies, compared with 76 per cent in middle-income economies and half of all deaths in low-income economies. Cancer and cardiovascular diseases, accounting for 31 per cent each, are the leading causes of death in high-income economies (table 8.1).

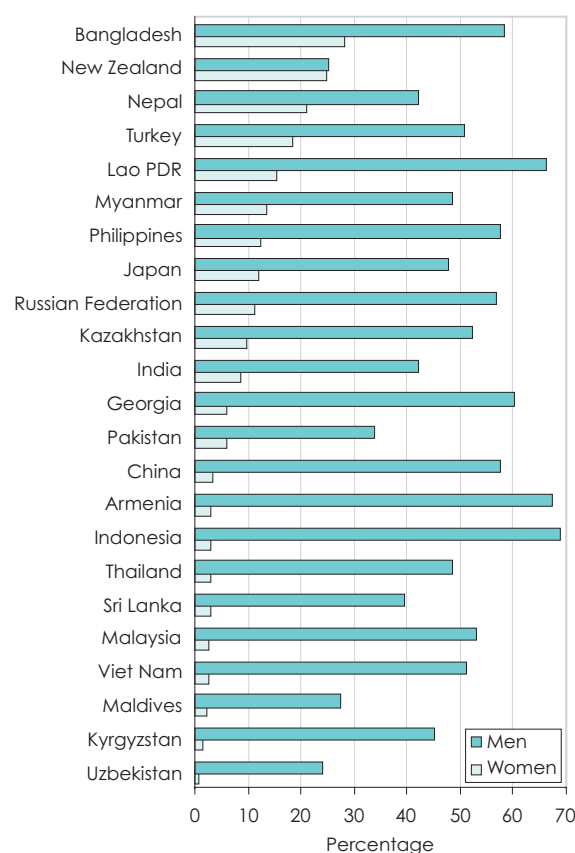
In Central Asia, 80 per cent of deaths are caused by chronic diseases — the highest percentage among all subregions. Cardiovascular diseases are the main single cause, accounting for 55 per cent of all deaths. In Georgia, three quarters of all deaths are caused by cardiovascular diseases, while in the Russian Federation three in five deaths are due to such diseases.

An increasing prevalence of risk factors, such as tobacco and alcohol consumption, unhealthy diets and physical inactivity, contribute to the surge in chronic diseases, particularly in high-income economies.

Several Asian countries have some of the highest proportions of the population smoking in the world. In Indonesia, the Lao People's Democratic Republic and Armenia, the prevalence of smoking among male adults exceeds 65 per cent. In others, such as Malaysia, the Philippines, Bangladesh, China and the Russian Federation, more than half of the male population smokes. Although the prevalence of smoking among women is lower than among men everywhere, there are still countries where a considerable part of the female population smokes, as in Bangladesh, Nepal and Turkey.

This high prevalence of smoking in the region does not appear to be likely to fade in the near future, since smoking among youths aged 13–15 is also widespread. In the Russian Federation and Georgia, more than a quarter of all adolescents

Figure 8.1 Prevalence of smoking among women compared with men in Asia, latest year between 2001 and 2005



smoke, while in Bhutan and India, the number is close to one in five. In the Pacific, the Cook Islands and Palau are noteworthy in that the prevalence of smoking among youngsters reaches levels of 45 and 33 per cent, respectively (table 8.2).

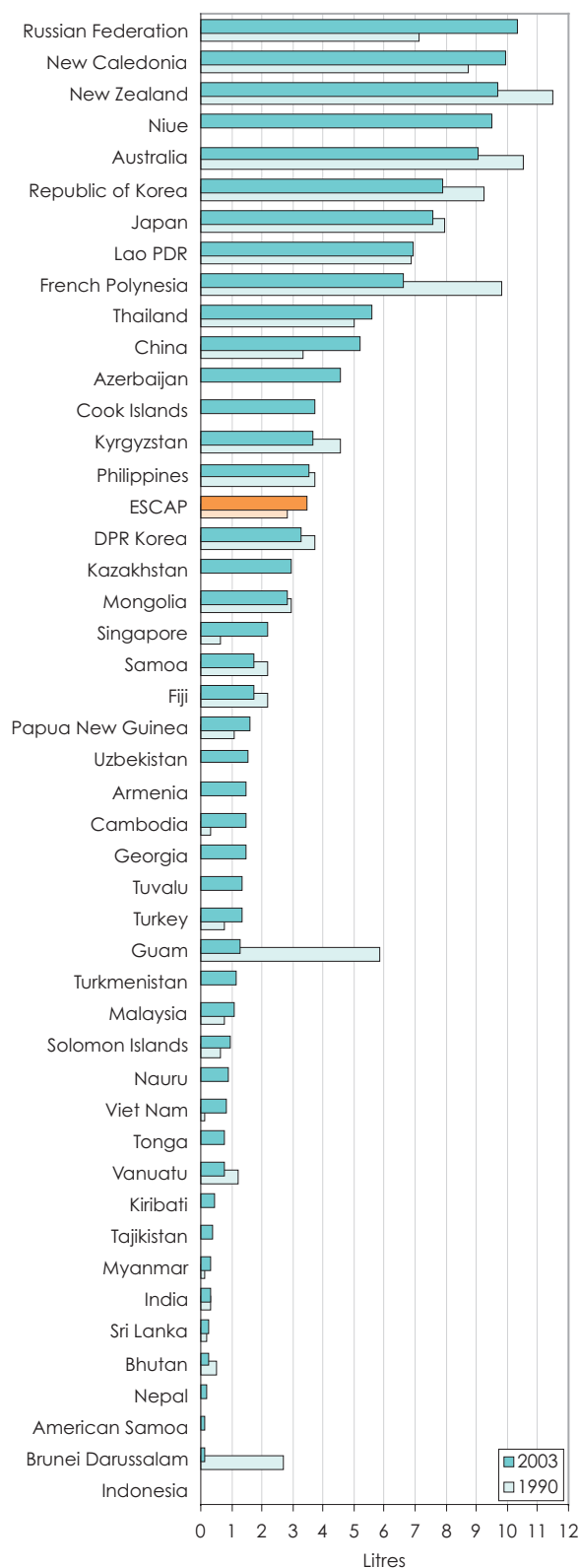
Alcohol consumption is also a risk factor in the Asia and the Pacific region although, at 3.5 litres per adult annually, it is still lower than in Europe, North America and Latin America and the Caribbean. Asia and the Pacific, along with Africa, on the other hand, are the only regions where per capita alcohol consumption increased between 1990 and 2003.

Across subregions, per capita alcohol consumption in Central Asia declined from the levels in 1990. Small island developing States, on the other hand, registered the largest increase in alcohol consumption in Asia and the Pacific. Among country income groupings, only middle-income economies recorded an increase in alcohol consumption between 1990 and 2003.

While several countries registered an increase in their alcohol consumption levels, the highest increase took place in the Russian Federation, where consumption increased from 7.1 litres per person in

1990 to 10.3 litres in 2003. In China, alcohol consumption increased from 3.4 to 5.2 litres per person during the same period.

Figure 8.2 Alcohol consumption per capita among adults aged 15 years and over in Asia and the Pacific, 1990 and 2003



Causes of death (% of all deaths): Estimated causes of deaths, expressed as the percentage of all deaths. Refers to all diseases, morbid conditions or injuries that either resulted in or contributed to death, and the circumstances of the accident or violence that produced any such injuries, in accordance with the International Classification of Diseases. Symptoms or modes of dying, such as heart failure or asthenia, are not considered to be causes of death for statistical purposes. WHO uses a combination of data sources in the estimation, including administrative data and models. The level of evidence and uncertainty vary by country. *Aggregates:* Averages are calculated using the total number of deaths as weight. *Source:* World Health Organization, Causes of Death database, (online database, accessed in September 2007).

Suicide rate (per 100,000 population): The number of deaths caused by suicide, expressed per 100,000 population. Cross-country comparability of suicide data is affected by the criteria retained by certifying officers to establish the person's intention of killing themselves, by who is responsible for filling the death certificate, the frequency of forensic investigations and confidentiality rules on the causes of death of each person. All of these factors are affected by the cultural and religious context of each country. *Source:* World Health Organization, Suicide statistics, (online database, accessed in September 2007).

Prevalence of smoking among women (% of women): The prevalence among females aged 15 years and above of current tobacco smoking, including cigarettes, cigars, pipes or any other smoked tobacco products. Current smoking includes both daily and non-daily or occasional smoking. *Source:* World Health Organization, WHO Statistical Information System, (online database, accessed in September 2007).

Prevalence of smoking among men (% of men): The prevalence among males aged 15 years and above of current tobacco smoking, including cigarettes, cigars, pipes or any other smoked tobacco products. Current smoking includes both daily and non-daily or occasional smoking. *Source:* World Health Organization, WHO Statistical Information System, (online database, accessed in September 2007).

Prevalence of smoking among adolescents (% of population aged 13-15): The prevalence among boys and girls aged 13-15 of tobacco use, including smoking, oral tobacco and snuff, on more than one occasion in the 30 days preceding the survey. *Source:* World Health Organization, WHO Statistical Information System, (online database, accessed in September 2007).

Alcohol consumption per capita (litres per adult aged 15 and above): The sum of alcohol production and imports, less alcohol exports, divided by the adult population, expressed as litres of pure alcohol per capita in population 15 years or older. *Aggregates:* Averages are calculated using population aged 15 and above as weight. *Source:* World Health Organization, WHO Statistical Information System, (online database, accessed in September 2007).

8.1 Causes of death

	Injuries	Cardio-vascular diseases	Cancer	Chronic respiratory diseases	Diabetes	Other chronic diseases	Communicable, maternal & perinatal, nutritional deficiencies	Suicide rate		
								Female	Male	Total
	% of total deaths (Year: 2002)							Per 100,000 population		
East and North-East Asia										
China	11	33	20	17	1	8	10	15	13	14 (99)
DPR Korea	7	31	10	7	3	10	32			
Hong Kong, China								12	25	19 (04)
Macao, China										
Mongolia	11	30	21	3	0	12	23			
Republic of Korea	12	28	28	6	5	15	6	15	33	24 (04)
South-East Asia										
Brunei Darussalam	11	30	19	8	8	14	10			
Cambodia	5	14	6	3	2	9	61			
Indonesia	10	28	12	7	3	11	29	0	0	0 (91)
Lao PDR	9	17	6	5	1	7	55			
Malaysia	9	30	17	8	4	12	20			
Myanmar	9	24	7	5	2	9	44			
Philippines	9	27	9	6	3	12	34	2	3	2 (93)
Singapore	5	38	29	4	4	8	12	8	13	10 (03)
Thailand	11	20	14	7	5	13	30	4	12	8 (02)
Timor-Leste	9	20	6	5	1	8	51			
Viet Nam	9	32	12	10	2	10	25			
South and South-West Asia										
Afghanistan	6	14	4	2	1	9	64			
Bangladesh	10	23	7	5	1	8	46			
Bhutan	9	24	6	5	1	7	48			
India	11	28	8	7	2	8	36	8	13	11 (02)
Iran (Islamic Rep. of)	18	42	11	4	1	12	12			
Maldives	7	30	8	6	2	9	38			
Nepal	9	21	7	5	2	7	49			
Pakistan	8	22	6	5	1	8	50			
Sri Lanka	10	34	13	11	4	15	13	17	45	31 (91)
Turkey	6	55	11	6	1	6	15			
North and Central Asia										
Armenia	5	54	18	4	6	8	5	1	3	2 (03)
Azerbaijan	4	51	11	4	3	10	17	1	2	1 (02)
Georgia	2	75	11	1	2	5	4	1	3	2 (01)
Kazakhstan	13	53	13	4	1	8	8	9	51	29 (03)
Kyrgyzstan	9	47	9	7	1	10	17	3	15	9 (04)
Russian Federation	14	61	12	2	0	6	5	11	62	34 (04)
Tajikistan	6	47	6	4	1	9	27	2	3	3 (01)
Turkmenistan	8	53	7	3	1	9	19	4	14	9 (98)
Uzbekistan	7	56	7	4	2	10	14	3	8	6 (03)
Pacific										
American Samoa										
Cook Islands										
Fiji	6	39	8	8	4	15	20			
French Polynesia										
Guam										
Kiribati	3	20	4	4	7	29	33			
Marshall Islands	6	36	8	6	4	17	23			
Micronesia (F.S.)	6	31	8	7	4	14	30			
Nauru	8	44	10	6	5	13	14			
New Caledonia										
Niue										
Northern Mariana Is.										
Palau	5	37	9	7	5	15	22			
Papua New Guinea	9	18	6	4	1	9	53			
Samoa	6	37	8	7	5	14	23			
Solomon Islands	5	24	7	7	3	15	39			
Tonga	5	37	10	8	5	13	22			
Tuvalu	7	32	8	7	4	16	26			
Vanuatu	6	31	8	7	4	15	29	2	8	5 (02)
ESCAP Developed Economies										
Australia	6	37	29	6	3	15	4	5	17	11 (03)
Japan	8	31	32	5	1	11	12	13	36	24 (04)
New Zealand	5	41	27	7	3	14	3	4	20	12 (00)
ESCAP	11	32	13	9	2	8	25			
LLDC	8	32	7	4	1	9	39			
LDC	9	21	6	4	1	8	50			
SIDS	8	25	11	5	2	10	40			
ASEAN	9	26	11	7	3	11	33			
SAARC	10	26	8	6	2	8	39			
Central Asia	8	55	10	4	2	9	13			
Low-income	10	27	8	6	2	8	39			
Middle-income	11	38	17	12	1	8	13			
High-income	9	31	31	5	2	12	10			
Africa										
Latin America & Carib.										
North America										
Europe										
Other Asia-Pacific										
World										

8.2 Tobacco and alcohol consumption

	Prevalence of smoking			Alcohol consumption per capita					
	Women	Men	Adolescents	Litres per adult aged 15 and above					
	% of women	% of men	% of population aged 13-15	1990	1995	2000	2001	2002	2003
East and North-East Asia									
China	4 (03)	57 (03)		3.4	5.0	5.2	5.2	5.1	5.2
DPR Korea				3.7	3.9	3.7	2.5	3.2	3.3
Hong Kong, China									
Macao, China									
Mongolia			15 (03)	2.9	1.5	2.8	2.6	2.9	2.8
Republic of Korea			10 (05)	9.3	7.8	7.3	7.8	7.8	7.9
South-East Asia									
Brunei Darussalam				2.7	0.7	0.4	0.5	0.1	0.1
Cambodia			5 (03)	0.4	0.3	1.5	1.9	1.4	1.5
Indonesia	3 (01)	69 (01)		0.1	0.1	0.1	0.1	0.1	0.1
Lao PDR	15 (03)	66 (03)		6.9	9.2	6.8	6.9	6.9	6.9
Malaysia	3 (03)	53 (03)	17 (04)	0.8	0.9	1.1	1.1	1.1	1.1
Myanmar	14 (03)	49 (03)	13 (04)	0.1	0.2	0.3	0.4	0.3	0.3
Philippines	12 (03)	58 (03)	16 (04)	3.7	3.8	3.8	3.8	3.6	3.5
Singapore			9 (00)	0.6	2.0	2.1	2.1	2.2	2.2
Thailand	3 (01)	49 (01)	16 (05)	5.0	5.0	5.2	5.8	5.8	5.6
Timor-Leste									
Viet Nam	3 (03)	51 (03)		0.2	0.3	0.7	0.7	0.9	0.9
South and South-West Asia									
Afghanistan									
Bangladesh	28 (03)	58 (03)							
Bhutan			18 (04)	0.5	0.5	0.6	0.6	0.2	0.2
India	9 (03)	42 (03)	18 (04)	0.3	0.3	0.3	0.3	0.3	0.3
Iran (Islamic Rep. of)			13 (03)						
Maldives	2 (01)	27 (01)							
Nepal	21 (03)	42 (03)			0.1	0.1	0.1	0.2	0.2
Pakistan	6 (03)	34 (03)							
Sri Lanka	3 (03)	40 (03)	8 (03)	0.2	0.2	0.2	0.2	0.3	0.3
Turkey	19 (03)	51 (03)	8 (03)	0.8	1.5	1.4	1.4	1.4	1.4
North and Central Asia									
Armenia	3 (01)	68 (01)	7 (04)		2.5	1.6	1.4	1.4	1.5
Azerbaijan					1.2	6.7	5.8	5.0	4.5
Georgia	6 (03)	60 (03)	25 (03)		6.8	1.8	1.7	1.6	1.5
Kazakhstan	10 (03)	52 (03)	11 (04)		4.7	3.4	2.8	3.7	3.0
Kyrgyzstan	2 (05)	45 (05)	7 (04)	4.5	3.2	2.2	2.2	3.0	3.6
Russian Federation	11 (03)	57 (03)	27 (04)	7.1	11.2	10.5	10.4	10.3	10.3
Tajikistan			5 (04)		1.8	0.3	0.8	0.5	0.4
Turkmenistan					2.1	1.5	1.1	1.1	1.2
Uzbekistan	1 (02)	24 (02)			1.5	1.6	1.6	1.5	1.5
Pacific									
American Samoa						0.2	0.1	0.1	0.2
Cook Islands			45 (03)			2.3	0.7	0.4	3.7
Fiji			12 (05)	2.2	1.7	2.1	2.0	2.0	1.7
French Polynesia				9.8	9.6	7.1	7.5	6.9	6.6
Guam				5.8	4.7	5.0	4.9	4.5	1.3
Kiribati						1.0	1.2	0.7	0.5
Marshall Islands									
Micronesia (F.S.)									
Nauru						4.9	3.7	1.0	0.9
New Caledonia				8.7	9.8	7.6	9.2	10.2	10.0
Niue						9.0	10.9	6.0	9.5
Northern Mariana Is.									
Palau			33 (05)						
Papua New Guinea				1.1	1.0	2.1	2.3	1.8	1.6
Samoa				2.2	2.3	2.3	2.5	2.1	1.7
Solomon Islands				0.6	0.3	0.3	0.6	0.6	1.0
Tonga						0.7	0.8	0.8	0.8
Tuvalu						1.1	1.9	0.5	1.4
Vanuatu				1.3	1.8	0.9	0.8	0.8	0.8
ESCAP Developed Economies									
Australia				10.5	9.7	9.5	9.3	9.2	9.0
Japan	12 (03)	48 (03)		8.0	7.9	7.6	7.6	7.6	7.6
New Zealand	25 (01)	25 (01)		11.5	10.4	8.8	8.5	9.8	9.7
ESCAP				2.8	3.6	3.5	3.5	3.5	3.5
LLDC					2.3	2.2	2.0	2.1	2.0
LDC									
SIDS				1.4	1.9	2.2	2.4	2.2	2.1
ASEAN				1.3	1.4	1.5	1.6	1.6	1.5
SAARC				0.3	0.3	0.3	0.3	0.3	0.3
Central Asia					3.0	2.6	2.3	2.4	2.2
Low-income				0.4	0.4	0.4	0.4	0.4	0.4
Middle-income				3.3	4.8	4.8	4.7	4.7	4.8
High-income				8.4	7.9	7.6	7.7	7.7	7.7
Africa				2.8	2.8	3.5	3.4	3.4	3.4
Latin America & Carib.				5.6	5.7	5.5	5.3	5.5	5.4
North America				9.3	8.5	8.5	8.5	8.4	8.5
Europe				11.0	10.4	10.1	10.0	10.1	10.0
Other Asia-Pacific				1.1	1.1	0.7	0.6	0.6	
World									