

Table 1: Disease burden attributable to the environment, and selected exposures, by country, year 2002^{s,†}

Country	Population ('000)	Water, sanitation & hygiene			Indoor air pollution		Outdoor air pollution			Total environment		
		Improved water (%)	Improved sanitation (%)	Deaths per year ^s	Population using solid fuel (%)	Deaths per year	Annual PM10 [$\mu\text{g}/\text{m}^3$]	Urban population (%)#	Deaths per year	Percent of total burden (%)	Environmental DALYs/1000 capita	Environmental deaths
Afghanistan	22 930	39	34	36 800	>95	23 900	27	16	400	29%	217	144 700
Albania	3 141	96	91	300	50	<100	58	9	200	19%	30	4 400
Algeria	31 266	85	92	7 000	<5	400	65	25	1 900	24%	42	42 700
Andorra	69	100	100	-	<5	-	41	39	-	14%	18	100
Angola	13 184	53	31	43 500	>95	22 000	113	20	1 800	37%	304	116 200
Antigua & Barbuda	73	91	95	-	46	-	26	33	-	13%	23	100
Argentina	37 981	96	91	400	<5	-	78	74	12 200	15%	25	50 100
Armenia	3 072	92	83	<100	26	100	84	54	1 600	16%	26	4 700
Australia	19 544	100	100	-	<5	-	18	72	700	14%	16	21 700
Austria	8 111	100	100	-	<5	-	32	37	1 100	14%	16	11 400
Azerbaijan	8 297	77	54	800	49	1 800	64	23	1 400	19%	36	12 900
Bahamas	310	97	100	-	<5	-	18	72	-	15%	26	300
Bahrain	709	na	na	-	<5	-	65	26	<100	14%	16	400
Bangladesh	143 809	74	39	60 300	89	46 000	157	9	8 200	25%	65	300 900
Barbados	269	100	100	-	<5	-	95	4	-	13%	22	300
Belarus	9 940	100	84	-	19	200	9	49	-	20%	43	29 700
Belgium	10 296	100	100	-	<5	-	41	34	2 000	14%	19	17 000
Belize	251	91	47	-	43	-	12	25	-	19%	35	300
Benin	6 558	67	33	6 500	95	6 300	51	19	300	34%	156	29 300
Bhutan	2 190	62	70	1 200	no data	-	13	3	-	25%	72	5 600
Bolivia	8 645	85	46	3 700	34	1 200	72	45	1 000	23%	63	17 400
Bosnia-Herzegovina	4 126	97	95	-	50	<100	22	37	300	16%	26	6 200
Botswana	1 770	95	42	300	65	200	25	13	<10	13%	91	5 000
Brazil	176 257	90	75	15 000	13	4 100	35	45	12 900	17%	36	228 000
Brunei Darussalam	350	na	na	-	no data	-	48	30	-	14%	17	200
Bulgaria	7 965	99	99	-	17	<100	59	37	3 400	16%	29	18 500
Burkina Faso	12 624	61	13	19 500	>95	21 500	97	14	1 100	34%	231	83 100
Burundi	6 602	79	36	8 200	>95	6 600	99	7	200	27%	167	32 000
Cambodia	13 810	41	17	10 600	>95	1 600	51	8	200	26%	100	41 600
Cameroon	15 729	66	51	12 700	83	12 900	86	27	2 000	28%	138	64 500
Canada	31 271	100	100	-	<5	-	21	79	2 700	13%	16	36 500
Cape Verde	454	80	43	<100	36	<100	33	5	<10	23%	40	600
Central African Rep.	3 819	75	27	4 200	>95	2 900	24	20	<100	25%	156	18 500
Chad	8 348	42	9	10 200	>95	8 700	73	19	600	31%	190	45 900
Chile	15 613	95	91	200	<5	-	62	57	2 300	15%	21	14 800
China	1 302 307	77	44	95 600	80	380 700	80	37	275 600	22%	34	2 346 900
Colombia	43 526	93	86	2 300	20	1 900	42	41	2 700	17%	33	46 300
Comoros	747	86	33	300	77	100	125	7	<100	29%	78	1 600
Congo	3 633	58	27	1 400	85	700	74	54	500	23%	95	10 100
Cook Islands	18	94	100	-	no data	-	no data	na	-	19%	31	<100
Costa Rica	4 094	97	92	100	23	100	40	46	200	16%	22	3 200
Croatia	4 439	100	100	-	12	-	35	32	900	14%	23	8 400
Cuba	11 271	91	98	200	21	100	38	39	1 600	16%	23	15 300
Cyprus	796	100	100	-	<5	-	60	48	300	13%	17	1 400
Czech Republic	10 246	100	98	-	<5	-	42	24	1 700	15%	21	17 600
Côte d'Ivoire	16 365	84	37	14 700	74	9 300	38	26	700	27%	140	68 500
Dem. Peo. Rep. Korea	22 541	100	59	2 800	no data	-	88	31	4 900	20%	43	45 500
Dem. Rep. Congo	51 201	46	30	100 300	>95	47 100	57	22	2 900	33%	219	324 900
Denmark	5 351	100	100	-	<5	-	24	38	600	14%	19	9 200
Djibouti	693	73	82	700	5	<100	68	76	200	30%	123	2 400
Dominica	78	97	84	-	21	-	34	22	-	15%	26	100
Dominican Republic	8 616	95	78	1 100	15	<100	36	43	500	17%	34	10 200
Ecuador	12 810	94	89	1 700	<5	100	34	48	500	19%	35	15 100
Egypt	70 507	98	70	11 400	<5	700	136	32	15 000	19%	38	96 800
El Salvador	6 415	84	62	800	33	400	48	27	300	18%	37	8 000
Equatorial Guinea	481	43	53	400	no data	-	12	25	-	27%	144	2 000
Eritrea	3 991	60	9	2 300	80	2 800	109	16	200	28%	103	11 500
Estonia	1 338	100	97	-	16	-	19	37	100	20%	39	3 700
Ethiopia	68 961	22	13	57 000	>95	56 700	88	7	2 000	28%	147	299 400
Fiji	831	47	72	<100	40	<100	17	25	-	17%	34	1 100
Finland	5 197	100	100	-	<5	-	16	42	200	15%	19	8 200
France	59 850	100	na	-	<5	-	25	42	4 800	14%	17	80 100

Country	Population ('000)	Water, sanitation & hygiene			Indoor air pollution		Outdoor air pollution			Total environment		
		Improved water (%)	Improved sanitation (%)	Deaths per year*	Population using solid fuel (%)	Deaths per year	Annual PM10 [$\mu\text{g}/\text{m}^3$]	Urban population (%)#	Deaths per year	Percent of total burden (%)	Environmental DALYs/ 1000 capita	Environmental deaths
Gabon	1 306	88	36	400	28	200	13	45	-	23%	83	3 400
Gambia	1 388	82	53	800	>95	600	138	19	200	30%	111	4 700
Georgia	5 177	82	94	-	43	100	46	40	2 200	16%	27	10 900
Germany	82 414	100	100	-	<5	-	29	32	10 400	14%	17	132 200
Ghana	20 471	75	18	8 600	87	5 600	42	20	600	27%	93	55 600
Greece	10 970	na	na	-	<5	-	34	46	2 800	16%	20	20 000
Grenada	80	95	96	-	48	-	49	na	-	16%	35	100
Guatemala	12 036	95	86	2 900	62	3 300	60	23	400	22%	52	20 700
Guinea	8 359	50	18	8 500	>95	800	63	22	400	29%	140	33 600
Guinea-Bissau	1 449	59	35	1 400	95	1 200	84	20	100	31%	192	8 200
Guyana	764	83	70	300	59	<100	13	28	-	18%	48	1 300
Haiti	8 218	54	30	5 000	>95	2 900	47	31	500	20%	86	23 400
Honduras	6 781	87	69	1 500	57	500	69	31	500	19%	41	8 100
Hungary	9 923	99	95	-	<5	-	34	32	1 900	16%	28	21 700
Iceland	287	100	100	-	<5	-	21	59	<100	14%	14	300
India	1 049 550	86	33	402 200	82	407 100	84	19	120 600	24%	68	2 621 100
Indonesia	217 131	77	55	31 200	72	15 300	114	22	28 800	20%	42	356 100
Iran	68 070	94	na	na	<5	200	68	42	9 000	20%	37	81 200
Iraq	24 510	81	79	12 200	<5	600	167	58	7 500	26%	88	58 600
Ireland	3 911	na	na	-	<5	-	15	32	<100	14%	18	5 300
Israel	6 304	100	na	na	<5	-	53	80	1 500	13%	14	5 600
Italy	57 482	na	na	-	<5	-	37	27	8 400	14%	16	90 800
Jamaica	2 627	93	80	100	45	<100	43	27	200	14%	21	3 000
Japan	127 478	100	100	-	<5	-	33	64	23 800	15%	15	174 800
Jordan	5 329	97	93	600	<5	-	69	49	500	20%	31	5 200
Kazakhstan	15 469	86	72	300	<5	<100	25	43	2 300	20%	49	39 300
Kenya	31 540	61	43	21 800	63	13 000	38	16	600	24%	101	93 900
Kiribati	87	65	40	-	no data	-	no data	na	-	16%	45	100
Kuwait	2 443	na	na	-	<5	-	129	74	300	14%	15	800
Kyrgyzstan	5 067	77	59	600	76	1 600	36	16	400	21%	46	9 700
Lao Peo. Dem. Rep.	5 529	51	30	4 900	>95	2 400	25	4	<100	29%	117	20 300
Latvia	2 329	99	78	-	10	-	17	42	<100	18%	38	6 500
Lebanon	3 596	100	98	200	<5	-	43	74	600	18%	32	4 500
Lesotho	1 800	79	37	1 300	83	400	94	10	<100	16%	122	7 500
Liberia	3 239	61	27	4 300	no data	-	39	17	<100	30%	231	21 300
Libyan Arab Jamahiriya	5 445	na	97	na	<5	<100	121	85	1 600	17%	25	4 500
Lithuania	3 465	na	na	-	<5	-	29	42	700	19%	34	8 300
Luxembourg	447	100	100	-	<5	-	17	19	-	15%	18	600
Madagascar	16 916	46	32	16 900	>95	11 700	51	15	600	32%	134	65 600
Malawi	11 871	73	61	17 100	>95	13 300	88	10	600	27%	191	68 400
Malaysia	23 965	99	94	300	<5	<100	28	28	500	18%	26	25 600
Maldives	309	83	59	<100	no data	-	54	27	<100	21%	41	500
Mali	12 623	50	46	20 200	>95	16 900	102	11	700	35%	239	85 400
Malta	393	100	na	-	<5	-	no data	na	-	14%	16	500
Marshall Islands	52	87	82	-	no data	-	no data	na	-	21%	51	100
Mauritania	2 807	53	34	3 200	56	2 300	42	34	200	33%	160	13 200
Mauritius	1 210	100	94	-	<5	-	47	12	<100	18%	32	1 300
Mexico	101 965	97	79	4 800	14	2 400	49	56	7 200	17%	25	80 300
Micronesia	108	94	28	<100	no data	-	no data	na	-	24%	48	200
Monaco	34	100	100	-	<5	-	no data	na	-	14%	15	<100
Mongolia	2 559	62	59	800	51	300	16	29	-	22%	50	4 400
Morocco	30 072	81	73	6 000	5	600	27	37	700	20%	35	32 300
Mozambique	18 537	43	32	26 900	80	9 700	44	25	900	28%	186	108 500
Myanmar	48 852	78	77	21 700	>95	14 700	75	14	3 900	25%	73	132 300
Namibia	1 961	87	25	700	65	200	50	12	<100	17%	76	4 700
Nauru	13	na	na	-	no data	-	no data	na	-	18%	43	<100
Nepal	24 609	90	35	14 700	81	7 500	161	4	700	25%	76	62 900
Netherlands	16 067	100	100	-	<5	-	38	52	3 600	14%	16	21 800
New Zealand	3 846	na	na	-	<5	-	16	70	<100	14%	17	4 500
Nicaragua	5 335	79	47	1 200	64	700	32	26	<100	22%	39	5 800
Niger	11 544	46	13	22 700	>95	13 600	86	10	500	34%	265	86 400
Nigeria	120 911	48	44	119 700	67	79 000	95	27	14 700	29%	166	581 400
Niue	2	100	100	-	no data	-	no data	na	-	19%	34	<100
Norway	4 514	100	100	-	<5	-	22	33	400	14%	16	7 500
Oman	2 768	na	na	-	<5	-	124	36	300	19%	25	1 600
Pakistan	149 911	91	59	103 300	81	70 700	165	27	28 700	28%	82	402 200

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Palau	20	85	83	-	no data	-	no data	na	-	18%	33	<100
Panama	3 064	90	73	200	33	<100	58	29	200	17%	26	2 600
Papua New Guinea	5 586	39	44	2 100	90	1 600	11	6	-	25%	71	12 400
Paraguay	5 740	86	80	700	53	300	103	25	400	17%	31	5 300
Peru	26 767	83	63	3 900	33	1 500	62	53	3 100	20%	38	37 100
Philippines	78 580	85	72	10 600	45	6 900	34	41	3 900	20%	39	102 100
Poland	38 622	na	na	-	<5	-	40	32	6 000	17%	25	66 100
Portugal	10 049	na	na	-	<5	-	27	56	1 900	14%	20	15 400
Qatar	601	100	100	-	<5	-	57	65	<100	16%	18	200
Republic of Korea	47 430	92	na	na	<5	-	43	74	6 800	20%	26	54 500
Republic of Moldova	4 270	92	68	100	63	200	41	27	900	17%	34	9 000
Romania	22 387	57	na	na	23	300	76	33	9 400	17%	31	46 900
Russian Federation	144 082	97	87	700	9	400	25	48	37 200	20%	54	493 100
Rwanda	8 272	74	42	11 700	>95	8 100	100	6	200	31%	167	40 400
Saint Kitts and Nevis	42	99	95	-	<5	-	33	29	-	16%	31	100
Saint Lucia	148	98	89	-	63	-	74	na	-	16%	26	100
Saint Vincent & Gren.	119	na	na	-	31	-	56	19	-	15%	28	100
Samoa	176	88	100	-	70	-	no data	na	-	20%	33	200
San Marino	27	na	na	-	<5	-	19	na	-	15%	16	<100
Sao Tome & Principe	157	79	25	<100	95	<100	76	27	-	27%	73	400
Saudi Arabia	23 520	na	na	na	<5	-	91	40	2 400	20%	32	20 700
Senegal	9 855	76	57	6 500	53	5 400	93	29	900	31%	120	32 300
Serbia-Montenegro	10 535	93	87	-	no data	-	17	20	100	15%	27	21 000
Seychelles	80	88	na	-	<5	-	no data	na	-	19%	38	100
Sierra Leone	4 764	57	39	11 500	92	7 600	69	20	400	33%	316	44 300
Singapore	4 183	100	100	-	<5	-	48	79	1 000	13%	14	3 200
Slovakia	5 398	100	99	-	<5	-	31	17	400	16%	25	9 300
Slovenia	1 986	na	na	-	8	-	44	21	300	14%	20	2 900
Solomon Islands	463	70	31	200	95	<100	16	na	-	24%	56	800
Somalia	9 480	29	26	14 000	no data	-	35	20	300	27%	184	47 800
South Africa	44 759	88	65	11 900	18	1 000	24	43	1 000	16%	73	109 100
Spain	40 977	100	100	-	<5	-	30	42	5 800	14%	17	58 500
Sri Lanka	18 910	79	91	600	67	3 100	93	8	1 000	18%	33	29 500
Sudan	32 878	70	34	17 200	>95	4 400	219	17	3 700	24%	86	78 000
Suriname	432	92	94	<100	no data	-	13	55	-	19%	38	600
Swaziland	1 069	62	48	500	64	400	71	7	<100	17%	130	4 400
Sweden	8 867	100	100	-	<5	-	19	30	500	14%	15	14 500
Switzerland	7 171	100	100	-	<5	-	27	42	800	13%	15	9 500
Syrian Arab Republic	17 381	93	90	1 800	32	400	89	38	1 600	17%	26	13 300
Tajikistan	6 195	59	51	1 800	75	1 600	57	11	500	21%	47	12 000
Thailand	62 193	99	99	2 800	72	4 600	77	16	2 800	19%	39	86 100
TFYR of Macedonia	2 046	na	na	na	30	-	29	29	200	15%	24	3 100
Timor-Leste	739	58	36	100	no data	-	no data	na	-	30%	61	1 800
Togo	4 801	52	35	2 600	87	4 100	45	16	200	28%	122	16 900
Tonga	103	100	96	-	56	-	no data	na	-	19%	30	100
Trinidad and Tobago	1 298	91	100	-	8	-	22	4	<10	13%	26	1 700
Tunisia	9 728	93	85	600	<5	100	46	30	700	17%	27	10 300
Turkey	70 318	96	88	6 000	11	2 500	56	61	18 800	19%	30	86 700
Turkmenistan	4 794	72	62	1 000	<5	-	73	18	700	22%	49	9 100
Tuvalu	10	93	90	-	no data	-	no data	na	-	22%	61	<100
Uganda	25 004	60	43	26 800	>95	19 900	33	5	100	28%	151	106 900
Ukraine	48 902	96	96	<100	6	200	29	42	15 200	19%	43	155 200
United Arab Emirates	2 937	100	98	<100	<5	-	109	70	400	18%	25	2 000
United Kingdom	59 068	100	na	-	<5	-	26	53	12 400	14%	18	101 300
Unit. Rep. of Tanzania	36 276	62	47	28 200	>95	27 500	38	21	1 000	26%	148	154 800
US of America	291 038	100	100	-	<5	-	24	72	41 200	13%	19	397 800
Uruguay	3 391	100	100	<100	<5	-	154	44	1 300	16%	26	5 800
Uzbekistan	25 705	82	67	500	72	5 300	81	21	4 300	18%	30	33 500
Vanuatu	207	60	50	<100	79	-	10	14	-	20%	37	300
Venezuela	25 226	83	68	1 400	5	100	16	62	-	17%	27	22 000
Viet Nam	80 278	85	61	9 400	70	10 600	66	21	6 300	23%	38	125 600
Yemen	19 315	67	43	16 900	42	7 000	82	15	1 000	28%	100	51 300
Zambia	10 698	58	55	13 700	87	8 600	71	29	1 100	25%	176	57 900
Zimbabwe	12 835	81	53	5 400	72	1 900	43	26	600	15%	102	44 200
WORLD	6 213 869	78	49	1 635 200	52	1 497 000	61	34	865 000	24%	55	13 475 900

- § Additional information on data sources can be found at
http://www.who.int/quantifying_ehimpacts/countryprofilesexplanatoryandsources.pdf
- † 2002 is the most recent year of health data available from WHO
- ‡ Only diarrhoea deaths
- # Population living in cities of more than 100 000 inhabitants