

comparable information exists for such ratios in the general population. Within the framework of an ecological study, however, the assertion of lung cancer is not straightforward where it is generally accepted that more than 80% of male lung cancer and 45% of female lung cancer are attributable to smoking.³³ There are limited comparable data on historical tobacco consumption that could be feasibly incorporated. Thus the ecological relation between national mortality rates of lung cancer and historical asbestos consumption, with valid adjustment for the concurrent effect of smoking, remains a subject warranting further investigation to improve understanding on the full impact of asbestos.

The independent variable was defined as the national asbestos consumption volume divided by the size of the national population, and thus represented the “average” consumption level of asbestos for each national population. As such, sex, age, job and other attributes of a population or consumed fiber types (e.g., amphiboles, chrysotile) were not accounted for. Whether, and the extent to which, the average *consumption* level represents average *exposure* level is also uncertain. However, this index has been widely used to describe the asbestos situation at national and regional levels^{11,18,34} including in ecological studies reported earlier.^{12,18,19} This provided the premises for us to consider the index as a reasonable surrogate for the average exposure level of a national population.

The dependent variables were the national mortality rates of ARDs for the most recent period with available data. The WHO Mortality Database was updated recently to include 2004 data and provided sex-specific data which were incorporated into our analyses. In general, risks and mortality rates of ARDs are much higher in males, probably due to the fact that males have had higher exposure to asbestos, usually through occupations.³⁵ On the other hand, biological responses to asbestos exposure may differ by sex. Thus regression models for each ARD were

constructed separately based on sex-specific mortality rates. It should be noted, however, that the exposure variable did not account for sex difference because consumption/exposure data cannot be apportioned between sexes.

Data on consumption and mortality were each extracted from a single, authoritative, and widely-used global database. This is likely to have enhanced comparability of data. Nevertheless, the quality of data from developing countries is likely to be poorer than those from developed countries. Because under-recognition of ARDs and lack of statistics on asbestos consumption are more likely in developing countries,^{34,36} a negative bias is surmised. Data points near the original point representing developing countries tended to fall below the regression line, suggesting that such a bias was in effect. On balance, the incorporation of experience of developing countries contributed to a better representation of the global situation with inclusion of data close to the original point (with low consumption and low mortality) allowing a valid interpretation of the intercept.

We used the consumption period 1960–1969, when consumption and production of asbestos is known to have increased massively on most continents.²⁴ The resulting time-difference until mortality in 2000–2004 is 37.5 years on average ranging 31–44 years. This corresponds to the higher consensus values typically reported for latency periods of ARDs. This choice can be justified because our analyses evaluated mortality rather than incidence (i.e., additional time to death is required after occurrence). Moreover, similar relations were generally maintained when data from other but close consumption periods were used, e.g., the adjusted R^2 ranged 0.16–0.83 when the consumption period of 1950–1979 was applied to the models.

Our study has several strengths, including being a comparative evaluation of a wide range of ARDs, using the maximum possible number of countries in the analyses, allowing a sufficient

latency time, applying age-adjustment to mortality rates for valid comparisons, and weighted by the size of sex-specific national populations in the regression model. A limitation of our study, however, is that we were restricted to analyses that included only those countries for which both consumption and mortality data are available, leading to the preclusion of populous countries such as China, India and Russia. Furthermore, lung cancer as an important contributor in the total ARD burden warrants a separate analytical framework. Thus all findings must be cautiously interpreted within the constraints of an ecological study.

In conclusion, this ecological study incorporating national-level data revealed clear and plausible positive relations between historical asbestos consumption levels and mortality rates of ARDs. These relations were most apparent in males, but were also apparent in females. Historical asbestos consumption alone explained the bulk of the variance in subsequent mortality rates of ARDs. Our results lend support to the notion that all countries should move towards eliminating the use of asbestos.

Conflict of Interest Statements

One of our co-authors (TH) served in the past as a member of the Occupational Safety and Health Committee of the Japan Asbestos Association. However, he has not been paid by the Association since 1996 nor has ever received funding to conduct research on asbestos. Another co-author (SF) works for an NGO which provides support to asbestos victims and advocates the banning of asbestos. **Neither of them have received funding or payment in relation to conducting this research.** We do not believe the involvement of these two co-authors in our paper constitutes conflict of interest (COI). None of the other co-authors, including the first and second, have any potential COI. However, in view of our respect towards COI issues, we felt that

we should disclose any potential COI prior to submission.

Acknowledgement

This research was supported in part by a Grant-in-Aid for “Research of Asbestos in the World” from the Ministry of Health Labor, and Welfare of Japan.

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Table

Regression analyses* for recent age-adjusted mortality rates† of asbestos-related diseases vs. historical asbestos consumption‡ (all dependent variables in logarithmic transformation), weighted by the size of sex-specific national populations

Dependent variable	Sex	N	Regression parameters				Adjusted		Figure panel		
			B_0 (95% CI)	SE	p value	B_1 (95% CI)	SE	p value		R ²	
All mesothelioma	Male	32	-0.135 (-0.325, 0.055)	0.093	0.157	0.382 (0.299, 0.465)	0.041	<0.001	0.738	<0.001	A
	Female	31	-0.326 (-0.477, -0.175)	0.074	<0.001	0.208 (0.143, 0.274)	0.032	<0.001	0.578	<0.001	
Pleural mesothelioma	Male	29	-0.408 (-0.756, -0.059)	0.170	0.024	0.257 (0.108, 0.406)	0.073	0.002	0.293	0.002	B
	Female	25	-0.748 (-1.108, -0.388)	0.174	<0.001	0.123 (-0.029, 0.275)	0.073	0.107	0.071	0.107	
Peritoneal mesothelioma	Male	25	-1.475 (-1.779, -1.171)	0.147	<0.001	0.333 (0.205, 0.461)	0.062	<0.001	0.539	<0.001	C
	Female	27	-1.190 (-1.359, -1.021)	0.082	<0.001	0.132 (0.061, 0.204)	0.035	<0.001	0.345	<0.001	
Asbestosis	Male	27	-1.255 (-1.462, -1.048)	0.100	<0.001	0.439 (0.348, 0.530)	0.044	<0.001	0.789	<0.001	D
	Female	19	-1.513 (-1.718, -1.307)	0.098	<0.001	0.050 (-0.036, 0.135)	0.041	0.238	0.027	0.238	

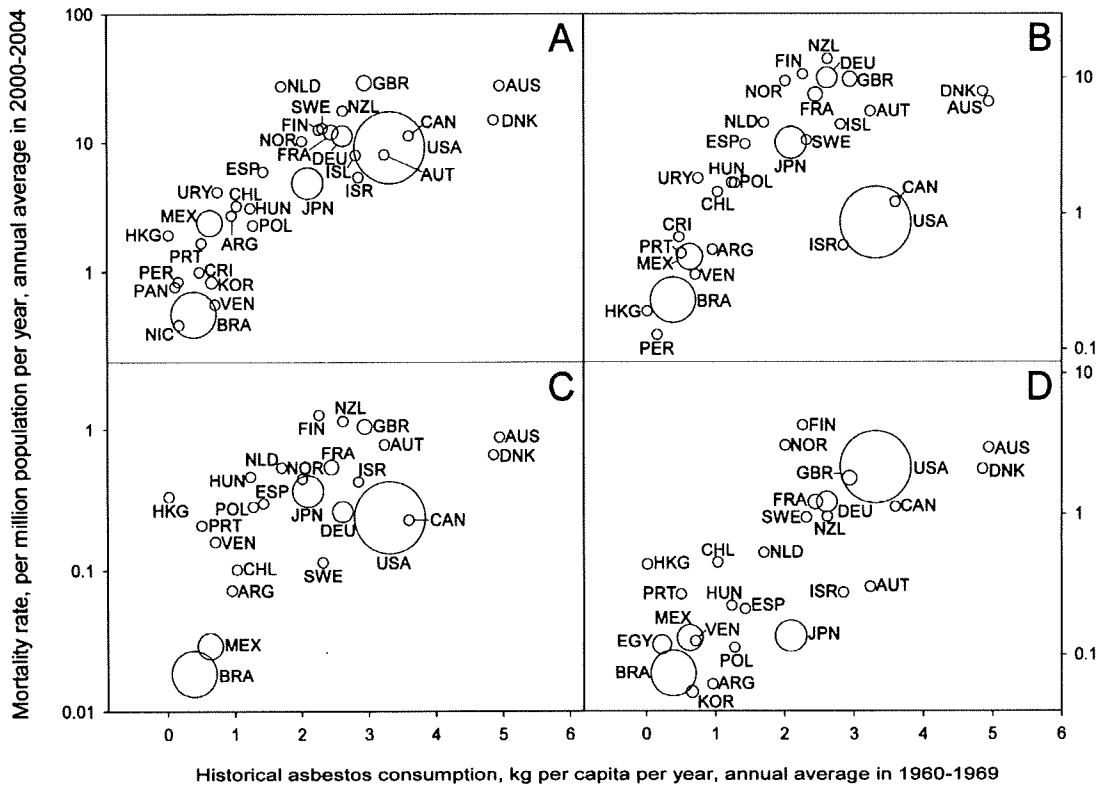
N=number of countries; SE=standard error

* Regression model: $\text{Log}_{10}(\text{age-adjusted mortality rates of asbestos-related diseases (cases per million population per year)}) = B_0 + B_1 \times \text{historical asbestos consumption (kg per capita per year)}$

† Period during 2000–2004

‡ Period during 1960–1969

Figure



1 **Figure Legends**

2 **Ecological relations between current mortality rates of asbestos-related diseases and**
3 **historical asbestos consumption (Panels A: All mesothelioma (males, N=32), B: Pleural**
4 **mesothelioma (males, N=29), C: Peritoneal mesothelioma (males, N=25), D: Asbestosis**
5 **(males, N=27)), weighted by the size of sex-specific national populations**

6 Circles are drawn proportional to the size of the sex-specific national populations (countries with
7 less than 20 million sex-specific national populations are drawn to the size of 20 million).

8 ARG=Argentina; AUS=Australia; AUT=Austria; BRA=Brazil; CAN=Canada; CHL=Chile; CRI=Costa Rica;

9 DEU=Germany; DNK=Denmark; EGY=Egypt; ESP=Spain; FIN=Finland; FRA=France; GBR=United Kingdom;

10 HKG=Hong Kong; HUN=Hungary; ISL=Iceland; ISR=Israel; JPN=Japan; KOR=South Korea; MEX=Mexico;

11 NIC=Nicaragua; NLD=Netherlands; NOR=Norway; NZL=New Zealand; PAN=Panama; PER=Peru; POL=Poland;

12 PRT=Portugal; SWE=Sweden; URY=Uruguay; USA=United States; and VEN=Venezuela

Ecological relations for asbestos-related diseases

資料② 各国の石綿関連疾患死亡数のまとめ

Mesothelioma (ICD-10: C45 or under C45)	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Argentina	.	.	.	60	60	64	73	87	92	109	.
Australia	403	390	435	519	489	.	.
Austria	68	75	75
Bahrain	1	.	.	.	.	.	.
Belize	.	.	.	1	.	.	.	.	.	.	.
Bermuda	1	.	.	.	.	.	.
Brazil	.	.	44	54	54	45	57	.	.	.	.
Canada	292	297	331	.	.
Cayman Islands	1	.	.	.	.
Chile	.	.	.	26	32	31	38	32	44	.	.
Colombia	.	.	.	24	35	32	.	.	.	.	.
Costa Rica	.	.	.	5	3	2	2	.	3	.	.
Croatia	.	7	17	22	28	21	45	37	48	34	41
Cuba	9	5	6	.
Czech Republic	39	40	40	33	32	49	30	46	49	54	36
Denmark	67	62	51	61	82	69	89	75	.	.	.
Dominican Republic	.	.	1	1	1	1	.	.	.	.	.
Ecuador	4	2	2	1	.	3	.
Estonia	.	.	.	2	4	4	8	1	2	2	.
Finland	.	.	59	67	78	63	74	67	70	74	78
France	768	732	816	.	.
Georgia	3	1	.	1	.	.	.
Germany	818	976	1,055	1,094	1,094	1,083	1,117
Guadeloupe	2	.	.	.	.
Hong Kong	8	20	.	.
Hungary	.	.	32	28	38	36	34	36	42	39	.
Iceland	.	.	1	2	3	.	2	1	5	1	.
Israel	22	20	17	.	.	37	.
Japan	.	500	576	597	570	647	710	772	810	878	.
Korea, South	.	6	24	23	24	16	21	24	27	.	.
Kyrgyzstan	2	.	1	1	1
Latvia	.	.	3	9	12	6	10	7	11	11	9
Lithuania	18	10	15	15	13	12	10
Luxembourg	4	5	2	3	3	7	7
Malta	.	.	2	3	1	3	5	2	6	3	5
Mexico	108	116	142	114	139	.	.
Netherlands	.	.	326	377	325	402	389	401	394	393	398
New Zealand	56	.	.	.	.
Nicaragua	1	.	1	.	.	.	.
Norway	.	.	55	42	53	61	39	48	53	45	.
Panama	1	2	1	2	.	2	.
Paraguay	.	.	.	1	1	2	.	.	.	.	.
Peru	652	10	.	.	.	.
Poland	58	70	83	85	88	.
Portugal	27	19	.
Puerto Rico	4	5	3	.	.	.
Republic of Moldova	.	.	7	3	6	2	2	4	5	4	5
Réunion	1	.	.	.
Romania	45	73	66	62	54	51
Serbia and Montenegro	.	.	.	13	18	32	25	26	28	.	.
Slovakia	12	11	10	15	15	18	11	12	12	.	.
Slovenia	.	.	.	8	13	21	18	12	29	29	.
South Africa	.	.	192	.	.	.	.	.	.	.	.
Spain	236	217	291	295	260	.
Sweden	.	.	.	118	117	116	130	119	139	.	.
Trinidad and Tobago	2	.	.	.	.	.
United Kingdom	1,767	1,755	1,795	.
United States of America	2,343	2,384	2,371	2,430	.	.
Uruguay	.	.	.	4	7	5	9	.	.	.	.
Venezuela	.	.	13	12	10	13	13	8	6	.	.
Virgin Islands (UK)	.	.	1	.	.	.	.	.	.	.	.
Virgin Islands (USA)	1	.	.	.	.

Pleural cancer (ICD-9: 163)	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Albania	.	.	.	.	.	.	.	.	6	10	10	.	.	4	7
Australia	48	50	46	71	93	66	66	95	107	130	134	192	150	177	188
Austria	.	54	52	63	38	46	49	39	54	53	50	57	52	60	73
Bahrain	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
Belgium	37	32	45	31	22	60	.	68	.	.	.	.	.	119	96
Bosnia and Herzegovina	.	.	.	.	.	.	5	14	10	13	21	13	5	.	.
Bulgaria	.	5	10	9	.	5	5	3	6	13	20	25	5	6	10
Canada	46	57	46	71	66	75	107	69	90	114	94	94	87	85	78
Chile	.	.	.	.	26	.	.	.	.	.	.	.	.	.	.
Croatia	.	.	.	.	.	.	39	25	25	23	32	33	20	28	38
Cuba	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Czech Republic	.	.	.	.	.	.	.	61	66	45	59	57	62	58	54
Czechoslovakia, Former	164	103	110	99	101	107	91	118	106	88	90	105	104	.	.
Dominica	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Egypt	.	.	.	.	.	.	.	.	0	.	.	.	.	.	.
Estonia	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Fiji	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Finland	.	.	.	.	.	.	.	.	55	.	71	49	58	55	59
France	540	561	591	619	647	667	709	795	783	799	809	874	845	902	904
Germany	.	.	.	.	.	.	.	.	.	.	.	959	1,002	1,027	1,024
Greece	8	3	8	2	3	1	5	.	6	4	3	2	4	3	6
Hong Kong	5	5	0	.	10	3	1	2	1	7	6	.	3	4	6
Hungary	61	56	48	55	63	75	64	71	66	71	57	57	78	75	73
Iceland	.	.	0	0	0	0	1	1	1	1	3	1	1	0	0
Ireland	2	3	4	4	2	5	4	6	1	8	5	5	12	7	13
Israel	2	4	2	3	3	7	6	3	7	7	10	7	7	6	2
Italy	553	545	573	603	658	665	690	724	781	754	792	829	910	943	975
Japan	62	64	70	78	73	88	111	101	137	149	133	167	163	174	232
Korea, South	.	.	.	.	.	.	16	11	13	.	.	.	.	.	.
Kuwait	.	.	.	.	2	1	2	1	0	.	.	.	.	.	1
Lithuania	.	.	.	.	.	.	.	.	.	.	.	.	.	.	8
Luxembourg	3	2	3	4	4	1	4	0	1	3	2	4	3	6	5
Macau	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Malaysia	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Malta	0	1	3	0	1	1	0	1	1	3	2	2	2	2	1
Mauritius	.	.	0	0	0	.	0	0	1	0	0	0	0	0	0
Mongolia	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Netherlands	137	186	157	166	180	209	178	193	232	260	243	273	249	284	332
New Zealand	8	12	11	7	8	10	7	3	14	9	15	16	22	19	43
Norway	.	.	.	.	.	.	.	40	29	48	48	41	37	46	56
Philippines	.	.	.	.	.	.	.	.	.	.	.	.	.	3	1
Portugal	.	.	.	.	.	8	16	13	22	14	21	25	16	13	8
San Marino	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Sao Tome and Principe	.	.	.	.	.	0	.	.	.	.	.	.	.	.	.
Singapore	0	.	0	0	0	0	0	1	0	1	2	0	1	1	0
Slovakia	.	.	.	.	.	.	.	.	.	.	.	.	.	32	30
Slovenia	.	.	.	.	.	.	15	18	20	19	10	20	20	15	27
South Africa	.	.	.	.	.	.	.	.	.	.	.	.	.	.	188
Spain	.	106	136	117	113	121	134	134	133	124	137	133	168	154	168
Sri Lanka	.	0	0	.	.	.	.	.	.	.	.	.	.	.	.
Sweden	.	.	.	.	.	.	.	.	118	111	94	136	118	122	117
Syrian Arab Republic	.	.	.	.	.	.	0	.	.	.	.	.	.	.	.
TFYR Macedonia	.	.	.	.	.	.	.	.	.	.	.	.	11	13	15
Thailand	4	.	4	10	10	6	.	9	4	.	.	.	.	.	.
United Kingdom	263	306	288	286	387	408	400	480	521	576	579	584	625	703	570
United States of America	340	357	351	401	400	433	371	389	411	400	458	461	453	477	418
Venezuela	.	6	.	.	.	.	.	.	.	.	.	.	.	.	.
Yugoslavia, Former	96	93	137	145	109	158	120	140	115	98	110	121	.	.	.
Zimbabwe	.	.	.	.	.	.	.	.	.	.	.	0	.	.	.

WHO死亡DBにデータがある国のみ同データを抽出

《禁無断転載》

Pleural cancer (ICD-9: 163)	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Albania	8	8	4	8	8	6	3	6	19	15	.
Australia	208	199	230	263	.	.	.	.	.	.	.
Austria	81	66	66	57	63	62	75	66	.	.	.
Bahrain	.	.	.	.	.	.	.	.	.	.	.
Belgium	108	123	134	146	.	.	.	.	.	.	.
Bosnia and Herzegovina	.	.	.	.	.	.	.	.	.	.	.
Bulgaria	13	11	13	14	25	18	20	30	19	31	20
Canada	90	87	68	83	81	84	.	.	.	.	.
Chile	.	.	.	.	.	.	.	.	.	.	.
Croatia	38	.	.	.	.	.	.	.	.	.	.
Cuba	.	.	.	.	.	.	6	.	.	.	.
Czech Republic	.	.	.	.	.	.	.	.	.	.	.
Czechoslovakia, Former	.	.	.	.	.	.	.	.	.	.	.
Dominica	.	.	.	.	.	.	0	.	.	.	.
Egypt	.	.	.	.	.	.	.	.	.	.	.
Estonia	2	4	6	.	.	.	.	.	.	.	.
Fiji	.	.	.	.	.	0	.	.	.	.	.
Finland	42	59	.	.	.	.	.	.	.	.	.
France	887	949	1,083	1,038	1,013	1,054	.	.	.	.	.
Germany	1,033	1,027	1,004	1,007	.	.	.	.	.	.	.
Greece	7	8	7	6	3	3	6	14	9	9	.
Hong Kong	4	9	7	6	8	9	12	.	.	.	.
Hungary	71	68	.	.	.	.	.	.	.	.	.
Iceland	1	0	.	.	.	.	.	.	.	.	.
Ireland	10	7	13	17	15	12	10	15	19	.	.
Israel	18	12	6	6	.	.	.	.	.	.	.
Italy	998	925	1,014	972	978	1,096	1,141	1,193	1,203	.	.
Japan	256	.	.	.	.	.	.	.	.	.	.
Korea, South	.	.	.	.	.	.	.	.	.	.	.
Kuwait	0	.	.	.	.	.	.	.	.	.	.
Lithuania	5	2	10	9	.	.	.	.	.	.	.
Luxembourg	0	3	0	7	.	.	.	.	.	.	.
Macau	1	.	.	.	.	.	.	.	.	.	.
Malaysia	.	.	.	0	.	.	.	.	.	.	.
Malta	0	.	.	.	.	.	.	.	.	.	.
Mauritius	0	0	0	0	0	0	0	1	0	1	.
Mongolia	2	.	.	.	.	.	.	.	.	.	.
Netherlands	352	323	.	.	.	.	.	.	.	.	.
New Zealand	32	48	55	45	59	57	.	.	.	.	.
Norway	48	48	.	.	.	.	.	.	.	.	.
Philippines	8	29	27	38	29	.	.	.	.	.	.
Portugal	15	20	16	21	17	17	18	28	.	.	.
San Marino	.	0	1	0	0	0	0	.	.	.	.
Sao Tome and Principe	.	.	.	.	.	.	.	.	.	.	.
Singapore	1	0	0	1	2	0	2	8	5	6	.
Slovakia	.	.	.	.	.	.	.	.	.	.	.
Slovenia	12	21	25	.	.	.	.	.	.	.	.
South Africa	188	196	.	.	.	.	.	.	.	.	.
Spain	168	197	159	168	201	.	.	.	.	.	.
Sri Lanka	.	.	.	.	.	.	.	.	.	.	.
Sweden	121	110	105	.	.	.	.	.	.	.	.
Syrian Arab Republic	.	.	.	.	.	.	.	.	.	.	.
TFYR Macedonia	10	19	15	9	15	11	21	17	18	12	.
Thailand	.	.	.	.	.	.	.	.	.	.	.
United Kingdom	557	559	554	578	611	641	.	.	.	.	.
United States of America	432	429	438	430	411	.	.	.	.	.	.
Venezuela	.	.	.	.	.	.	.	.	.	.	.
Yugoslavia, Former	.	.	.	.	.	.	.	.	.	.	.
Zimbabwe	.	.	.	.	.	.	.	.	.	.	.

WHO死亡DBIにデータがある国のみ同データを抽出

《禁無断転載》

Pleural mesothelioma (ICD-10: C45.0)											
Country	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Argentina	.	.	.	13	14	13	20	14	17	25	.
Australia	213	65	88	162	96	.	.
Austria	45	58	46
Brazil	.	.	11	25	18	15	22	.	.	.	.
Canada	34	40	20	.	.
Chile	.	.	.	14	12	13	16	8	18	.	.
Colombia	.	.	.	3	4	6	.	.	.	.	.
Costa Rica	.	.	.	2	1	1	.	.	1	.	.
Croatia	.	6	12	15	22	17	37	30	45	27	28
Cuba	5	3	2	.
Czech Republic	20	21	19	20	21	22	17	27	29	29	26
Denmark	55	43	40	31	51	41	49	34	.	.	.
Ecuador	2	1	.	.	.	1	.
Finland	.	.	52	55	65	56	59	51	57	63	65
France	498	436	505	.	.
Germany	708	874	900	961	967	943	992
Guadeloupe	2	.	.	.	.
Hong Kong	2	.	.
Hungary	.	.	9	9	18	15	15	13	21	18	.
Iceland	.	.	.	1	1	.	1	1	.	1	.
Israel	1	3	1	.	.	2	.
Japan	.	275	358	355	361	404	456	530	523	566	.
Korea, South	.	1	3	1	.	.	.	.	.	.	.
Lithuania	2	.	5	6	10	3
Luxembourg	1	2	1	1	1	2	3
Malta	3	2	.	.	2
Mexico	19	18	24	22	27	.	.
Netherlands	.	.	85	106	86	128	80	61	64	65	58
New Zealand	44	.	.	.	.
Norway	.	.	48	39	51	58	37	48	47	38	.
Panama	1	.	.	.	.	.	.
Peru	14	2	.	.	.	.
Poland	46	50	61	65	67	.
Portugal	8	5	.
Puerto Rico	1	1	.	.	.
Réunion	1	.	.	.
Romania	31	39	46	40	28	37
Serbia and Montenegro	.	.	.	7	11	18	16	22	23	.	.
Spain	121	119	162	157	137	.
Sweden	.	.	.	33	42	30	34	30	43	.	.
Trinidad and Tobago	1	.	.	.	.	.
United Kingdom	595	579	601	.
United States of America	227	196	242	217	.	.
Uruguay	.	.	.	2	5	.	4	.	.	.	.
Venezuela	.	.	2	3	2	1	3	.	.	.	.
Virgin Islands (UK)	.	.	1	.	.	.	.	.	.	.	.

WHO死亡DBにデータがある国のみ同データを抽出

《禁無断転載》

Peritoneal mesothelioma (ICD-10: C45.1)	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Argentina	.	.	.	1	.	1	2	1	1	3	.
Australia	8	13	15	17	15	.	.
Austria	4	7	9
Brazil	.	.	8	6	6	2	6	.	.	.	.
Canada	8	6	8	.	.
Cayman Islands	1	.	.	.	.
Chile	1	2	1	1	1	.	.
Costa Rica	1	.	1	.	.	.	.
Croatia	.	.	3	5	3	3	5	4	.	1	2
Czech Republic	7	6	10	7	6	9	7	7	4	6	4
Denmark	5	6	3	6	6	2	6	2	.	.	.
Ecuador	1	.	.	.	.	.	.
Finland	.	.	4	7	6	4	9	10	10	7	11
France	37	28	33	.	.
Germany	16	22	36	31	29	35	28
Hong Kong	2	.	.	.
Hungary	.	.	13	10	8	7	8	9	8	5	.
Iceland	1	.	.	.	.
Israel	2	.
Japan	.	51	45	48	62	48	54	61	70	85	.
Lithuania	4	.	5	1	1	3
Mexico	2	.	.	1	3	.	.
Netherlands	.	.	9	8	4	15	8	13	8	8	5
New Zealand	3	.	.	.	.
Norway	.	.	2	1	1	.	2	.	4	1	.
Panama	1	.	1	.	.	.
Poland	3	9	10	6	11	.
Portugal	3	3	.
Romania	9	23	12	13	14	5
Serbia and Montenegro	.	.	.	2	4	5	6	1	3	.	.
Spain	11	13	15	23	17	.
Sweden	.	.	.	5	1	5	1	1	3	.	.
United Kingdom	60	58	65	.
United States of America	83	77	75	78	.	.
Venezuela	.	.	1	.	1	2	2	.	1	.	.

WHO死亡DBIにデータがある国のみ同データを抽出

《禁無断転載》

Asbestosis (ICD-10: J61)											
Country	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Argentina	.	.	.	1	2	1	1	1	1	1	.
Australia	41	39	53	49	59	.	.
Austria	1	2	2
Brazil	.	.	3	3	3	7	6	.	.	.	.
Canada	27	27	31	.	.
Chile	.	.	.	3	.	3	4	.	3	.	.
Colombia	.	.	.	1	.	.	.	.	.	.	.
Croatia	.	2	.	4	2	1	1	.	1	1	4
Czech Republic	1	1	1	1	2	2	.	.	.	.	1
Denmark	11	12	15	17	12	15	11	14	.	.	.
Dominican Republic	1	.	.	.	.	.	.
Ecuador	.	.	.	1	.	.	1	2	.	.	.
Egypt	4	.	.	.	.
Estonia	.	.	.	1	.	.	.	.	.	.	.
Finland	.	.	13	17	17	24	17	24	16	35	19
France	66	74	93	.	.
Georgia	1	.	3	.	.	.	.
Germany	111	112	113	100	108	109	95
Hong Kong	3	2	.	.
Hungary	.	.	.	1	.	.	.	1	.	2	.
Iceland	1	.	.	.	.	.	.
Israel	1	1	.	.	.	1	.
Japan	.	15	21	26	27	42	25	25	16	22	.
Korea, South	.	2	1	1	.	1	.	.	1	.	.
Luxembourg	1	.	1	.	.	.
Malta	.	.	.	1	.	.	.	1	.	.	1
Martinique	1	.	.	.	.
Mexico	7	9	6	3	4	.	.
Netherlands	.	.	9	13	11	7	3	13	6	10	5
New Zealand	4	.	.	.	.
Norway	.	.	13	11	12	15	13	10	19	14	.
Poland	1	2	7	2	3	.
Portugal	2	.	.
Puerto Rico	1	1	.	.	.	.
Romania	1	.	.	1	.	.
Serbia and Montenegro	8	1	.	.
Slovakia	10	1	3	2	.	.	.	2	1	.	.
Slovenia	.	.	.	2	2	4	2	1	3	3	.
South Africa	.	.	41	.	.	.	.	.	.	.	.
Spain	5	10	12	6	9	.
Sweden	.	.	.	3	7	8	11	14	12	.	.
United Kingdom	94	120	125	.
United States of America	449	558	550	529	.	.
Venezuela	2	.	.	1	2	.	.

WHO死亡DBにデータがある国のみ同データを抽出

《禁無断転載》

Lung Cancer (ICD-9:162 or ICD-10: C33-34)	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Albania	.	.	.	.	.	.	.	.	441	493
Anguilla	.	.	.	.	0	0	1	1	0	0
Antigua and Barbuda	.	.	.	.	0	.	2	3	2	7
Argentina	6,841	6,907	7,290	6,877	7,281	7,273	7,199	7,112	7,580	7,609
Armenia	.	.	400	433	.	.	544	595	572	678
Australia	4,658	4,997	5,073	5,288	5,433	5,554	5,647	5,687	5,814	6,114
Austria	.	3,243	3,175	3,148	3,167	3,330	3,153	3,073	3,160	3,169
Azerbaijan	.	.	744	789	.	.	794	920	979	961
Bahamas	.	20	17	.	.	32	26	.	34	.
Bahrain	.	.	.	.	.	.	44	.	41	46
Barbados	18	23	30	24	20	26	22	24	24	21
Belarus	.	.	1,991	2,146	.	.	2,699	2,785	3,084	3,152
Belgium	5,962	6,115	6,295	6,184	6,488	6,411	6,620	6,516	6,458	6,567
Belize	.	1	.	6	3	10	.	6	7	.
Bermuda	.	14	.	.	5	11	20	24	20	20
Bosnia and Herzegovina	.	.	.	.	.	.	1,122	1,102	1,197	1,294
Brazil	5,941	6,470	6,610	7,172	7,621	7,878	8,174	17,316	18,094	19,248
Brunei	.	.	.	.	.	.	.	.	.	.
Bulgaria	.	2,430	2,668	2,735	2,905	2,970	2,990	3,049	3,100	3,034
Canada	8,587	9,085	9,317	10,140	10,515	11,246	11,442	11,833	12,280	13,103
Cayman Islands	.	.	.	.	.	4	2	2	3	6
Chile	.	1,071	1,060	1,160	1,196	1,202	1,299	1,261	1,266	1,308
China	.	.	.	.	.	.	.	.	21,684	20,956
Colombia	.	.	.	.	.	1,467	1,650	1,704	1,872	1,818
Costa Rica	.	118	148	152	146	167	168	147	178	186
Croatia	.	.	.	.	.	.	1,919	1,953	2,092	2,173
Cuba	2,402	2,405	2,506	2,562	2,655	2,825	2,799	2,922	2,959	3,135
Czech Republic	.	.	.	.	.	.	.	5,891	5,760	5,781
Czechoslovakia, Former	7,252	7,471	7,371	7,371	7,585	7,716	7,681	7,920	7,867	7,909
Denmark	.	.	.	.	.	.	.	.	.	.
Dominica	0	3	0	1	2	9	3	15	5	4
Dominican Republic	.	97	111	136	160	163	142	155	186	189
Ecuador	167	163	181	209	204	235	258	249	261	270
Egypt	.	528	.	.	.	.	.	.	852	.
El Salvador	.	.	47	41	46	38	.	.	.	.
Estonia	.	.	553	558	.	.	561	579	603	687
Falkland Islands (Malvinas)	1	1	0	0	1	.	.	.	.	.
Fiji	.	.	.	.	.	.	.	.	.	.
Finland	.	.	.	.	.	.	.	.	1,970	1,928
France	16,767	17,219	17,705	18,045	18,293	18,853	19,401	19,839	20,639	21,158
French Guiana	0	.	.	.	.	.	.	.	.	.
Georgia	.	.	826	828	.	.	959	966	993	1,045
Germany	.	.	.	.	.	.	.	.	.	.
Germany, Former Democratic Republic	.	6,317	6,355	6,129	6,347	6,436	6,174	5,998	5,955	5,968
Germany, Former Federal Republic	24,320	25,081	25,090	25,317	25,748	25,631	26,267	26,296	26,876	27,440
Greece	3,621	3,482	3,643	3,817	3,955	4,010	4,315	4,269	4,339	4,456
Grenada	.	.	.	.	.	.	4	.	.	0
Guadeloupe	.	.	19	.	.	.	.	.	.	.
Guatemala	8	61	56	.	.	60	.	100	126	111
Guyana	.	.	.	.	.	15	.	.	.	22
Haiti	.	13	.	.	.	.	.	.	.	.
Honduras	26	28	10	.	.	.	.	.	.	.
Hong Kong	1,662	1,806	1,826	1,962	2,002	2,128	2,223	2,347	2,465	2,361
Hungary	5,036	5,158	5,360	5,571	5,688	5,864	5,836	6,300	6,526	6,397
Iceland	.	.	72	73	66	54	68	65	78	90
Ireland	1,312	1,268	1,424	1,332	1,484	1,541	1,542	1,554	1,434	1,546
Israel	661	709	630	675	682	710	745	733	721	741
Italy	22,527	23,803	24,036	25,013	25,833	26,268	27,311	27,421	28,790	29,442
Jamaica	.	125	164	166	195	221	211	198	234	215
Japan	19,923	21,294	22,798	24,216	25,650	27,356	28,590	29,533	31,727	33,388
Kazakhstan	.	.	3,115	3,104	.	.	3,669	3,954	4,049	4,309
Korea, South	.	.	.	.	.	.	2,913	3,270	3,578	4,103
Kuwait	60	66	50	86	75	81	70	63	66	.
Kyrgyzstan	.	.	369	432	.	.	442	477	496	560
Latvia	.	816	817	918	929	922	967	1,070	1,088	1,113
Lithuania	.	.	1,051	1,068	.	.	1,168	1,195	1,251	1,315
Luxembourg	191	198	200	193	204	213	210	210	205	221