

Mesothelioma Mortality in Great Britain: Analyses by Geographical Area and Occupation 2005



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Introduction

1. Mesothelioma is a formally rare form of cancer that principally affects the pleura (the lining of the lung) and the peritoneum (the lining of the lower digestive tract) [1]. Symptoms are non specific and appear late in the development of the disease with most tumours being diagnosed at an advanced stage [2]. It is almost always fatal with most of those affected dying within a year of diagnosis [3]. Mesothelioma has a strong association with exposure to asbestos. There is a long latency period between initial exposure and the manifestation of mesothelioma that is typically between 30 and 40 years.
2. The causal link between asbestos exposure and the development of mesothelioma in humans was first reported by *Wagner et al* in 1960 [4] following reports of cases among asbestos workers in South Africa, and has since been confirmed by many other studies. As a consequence of widespread use of asbestos, the incidence of mesothelioma has risen dramatically in many countries since the 1960s and rates in Great Britain are now among the highest in the world [5].

The mesothelioma register

3. The British Mesothelioma Register was established in 1967 [1] in response to the emerging evidence about the association between asbestos and mesothelioma. By including all deaths where the cause of death on the death certificate mentions the word “mesothelioma” the register now provides a consistent series of mesothelioma mortality in Great Britain over almost 4 decades [3]. In addition to cause(s) of death, other data held on the register includes date of birth, date of death, last known occupation and the postcode of residence at time of death. The register is currently maintained by the Health and Safety Executive’s Epidemiology Unit.
4. Mesothelioma death records are currently supplied to the Health and Safety Executive electronically by the Office for National Statistics for deaths occurring in England and Wales and by the General Register Office for Scotland for Scottish deaths. Prior to the introduction of the 10th revision of the International Classification of Diseases (ICD) [6] which introduced a specific ICD code for mesothelioma, mesothelioma was coded according to site of the cancer and was often confused with other malignancies at the same site. Hence, additional checks on the completeness of the register were carried out by textual searches of national death data for possible occurrences of mesothelioma, as well as the flagging of all cancer registrations registered with mesothelioma at the National Health Service Central Registers in order to obtain death details when the subject died.
5. The aim of this fact sheet is to provide updated descriptive statistics of mesothelioma mortality in Great Britain from 1968-2005 using mesothelioma register data, together with analyses by geographical area (for 1981-2005) and occupation (for 2002-2005).

Methods

Geographical analysis

6. The current local government structure divides each of the 11 Government Office Regions (GORs) in Great Britain into Unitary Authorities (UAs) and counties, with counties further subdivided into Local Authorities (LAs) (<http://www.statistics.gov.uk/geography/default.asp>). Deaths included in the mesothelioma register have been assigned to areas within this structure from 1981 onwards based on postcode of residence at time of death. The geographical analysis is therefore restricted to the period 1981-2005. Mortality in the different geographical areas is represented by Standardised Mortality Ratios (SMRs) and associated 95% confidence intervals, with Great Britain used as the reference population. SMRs are also presented for each of five five-year time periods with age standardisation within each period.

Occupational analysis

7. The most recent full time occupation of the deceased (i.e. the occupation at retirement or death) is routinely recorded for all deaths in Great Britain at ages 16-74 and since 2002 occupations have been classified according to the Standard Occupational Classification 2000 (SOC 2000) [7]. Previous analyses of mesothelioma deaths by occupation have used the Southampton Classification of Occupations and the Standard Occupational Classification 1990 (SOC 90) [8]. Due to difficulties in mapping between these classifications and the more recent SOC 2000, this updated analysis is restricted to the four-year period 2002-2005 for which SOC 2000 applies. Mortality in the different occupational groups is represented by Proportional Mortality Ratios (PMRs) and associated 95% confidence intervals. PMRs summarise the mortality among the occupational groups relative to the average level for Great Britain as a whole and thus do not represent absolute measures of risk.

Results

Descriptive statistics

- 8. The number of deaths for each year from 1968 to 2005 for males, females and the two sexes combined are set out in Figure 1 and Table 1. Table 1 also shows the number of deaths by tumour site (pleura or peritoneum) and by country (England Scotland and Wales).
- 9. The annual number of mesothelioma deaths has increased from 153 in 1968 to 2037 in 2005. The majority of mesothelioma deaths are in males. The proportion of deaths among women has tended to fall slightly over the last few years from over 20% in the early 1970s to around 14% now.

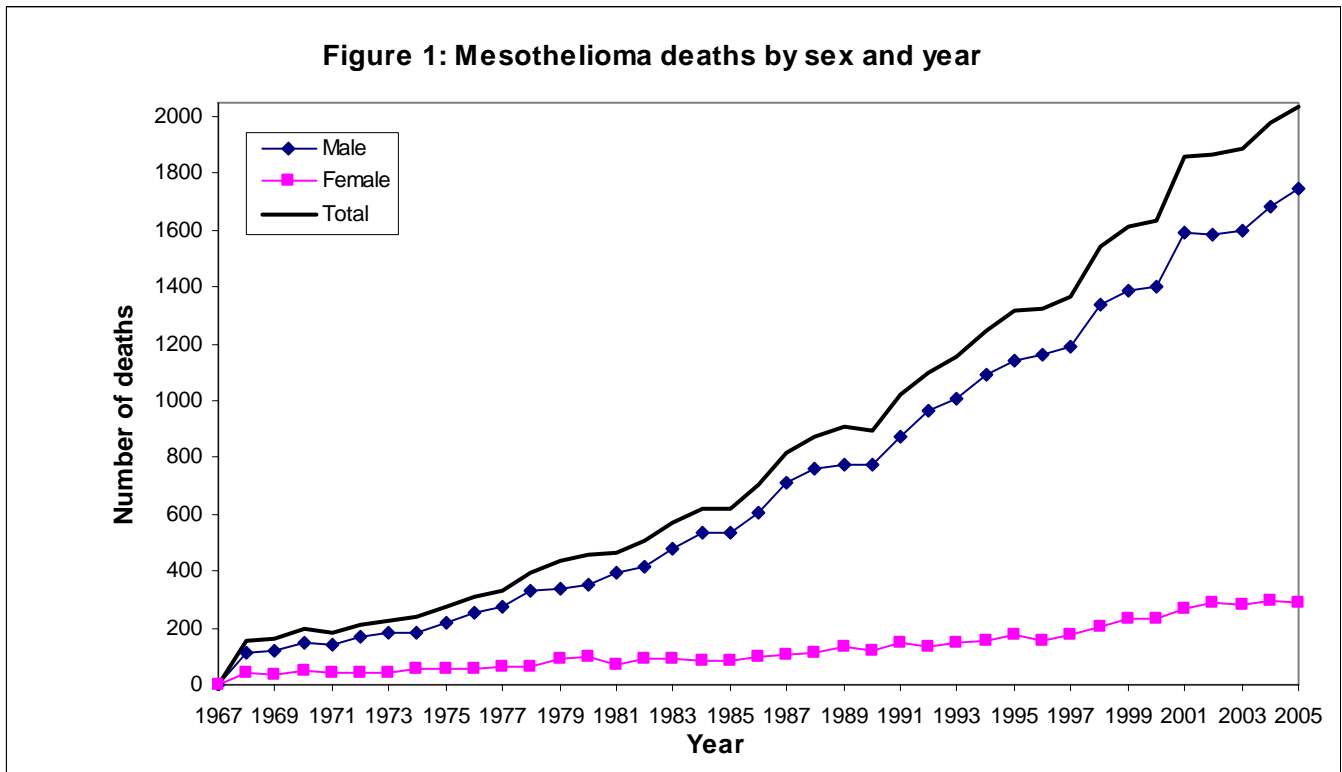


Table 1: Death certificates mentioning mesothelioma, 1968-2005 ^{(a)(b)(c)}

Year of death	<i>Mesothelioma site</i>				Sex		Country			
	Of pleura (b)	Of peritoneum (b)	Of pleura and peritoneum (b)	Site not specified (b)	Males	Females	England	Scotland	Wales	Great Britain (c)
1968	111	17	4	21	114	39	130	18	5	153
1969	114	20	6	19	123	36	135	19	5	159
1970	138	18	4	34	145	49	170	17	7	194
1971	131	15	7	28	141	40	157	18	6	181
1972	154	22	3	33	169	43	187	17	8	212
1973	162	25	10	27	182	42	193	22	9	224
1974	181	24	5	33	185	58	214	22	7	243
1975	208	20	6	38	219	53	234	28	10	272
1976	231	32	7	42	256	56	267	33	12	312
1977	258	25	11	38	272	60	293	26	12	332
1978	282	33	23	54	329	63	347	35	10	392
1979	342	38	13	41	341	93	376	45	12	434
1980	368	43	8	38	355	102	387	56	14	457
1981	326	27	7	108	395	73	400	57	10	468
1982	347	31	20	109	415	92	433	55	19	507
1983	469	40	9	53	476	95	499	58	14	571
1984	484	44	13	82	538	85	545	64	13	623
1985	455	48	16	99	533	85	546	54	18	618
1986	533	43	14	116	605	101	612	65	29	706
1987	610	44	19	141	708	106	698	93	23	814
1988	645	55	20	152	759	113	747	107	14	872
1989	645	54	15	195	774	135	763	119	26	909
1990	658	59	17	161	777	118	766	106	23	895
1991	751	50	18	204	872	151	879	110	34	1 023

Table 1: Death certificates mentioning mesothelioma, 1968-2005 ^{(a)(b)(c)}

Year of death	Mesothelioma site				Sex		Country			
	Of pleura (b)	Of peritoneum (b)	Of pleura and peritoneum (b)	Site not specified (b)	Males	Females	England	Scotland	Wales	Great Britain (c)
1992	758	58	19	262	962	135	919	133	43	1 097
1993	586	47	15	504	1 006	146	979	122	51	1 152
1994	572	51	15	608	1 093	153	1 067	128	51	1 246
1995	606	54	17	640	1 138	179	1 111	150	53	1 317
1996	572	49	16	685	1 165	157	1 131	141	50	1 322
1997	636	60	16	655	1 189	178	1 181	131	55	1 367
1998	655	61	10	815	1 338	203	1 334	155	51	1 541
1999	689	61	12	853	1 386	229	1 406	158	50	1 615
2000	710	62	17	844	1 404	229	1 425	140	66	1 633
2001	758	76	14	1 014	1 591	271	1 630	158	73	1 862
2002	693	70	16	1 089	1 582	286	1 622	170	75	1 868
2003	683	77	30	1 096	1 601	285	1 642	166	74	1 886
2004 ^(p)	712	60	22	1 184	1 681	297	1 731	179	67	1 978
2005 ^(p)	692	74	13	1 258	1 749	288	1 787	176	73	2 037

Notes:

(p) Provisional

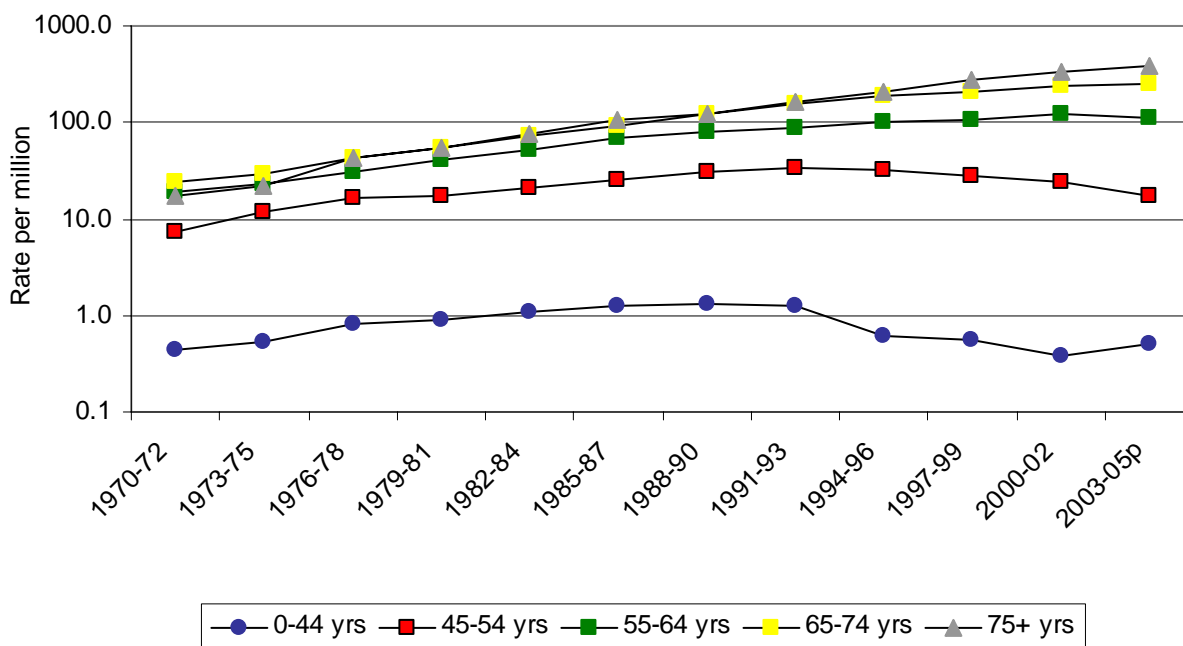
(a) Data for 2004-2005 remains provisional for mesothelioma until the completeness of the register has been checked against details recorded by national cancer registries. The latest year for which cancer registrations are complete is 2003.

(b) The Office for National Statistics (ONS) discontinued medical enquiries in 1993. Therefore, for deaths registered from 1993 onwards, there is often less information available to accurately code the specific site of the mesothelioma.

(c) Total for Great Britain may include a small number of persons with overseas addresses.

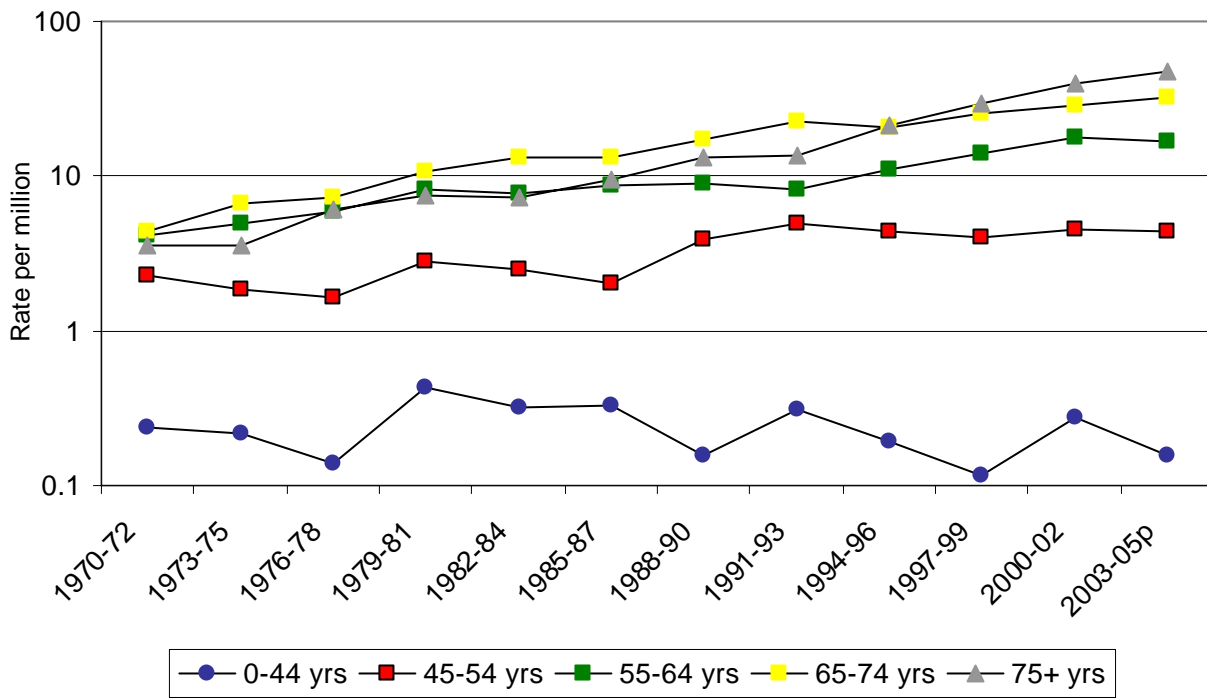
10. Mesothelioma death rates by age group and time period for males are shown in [Figure 2a](#). There are large differences in the magnitude of the rates between the different age groups. For example, the rates in the two oldest age groups (65-74 and 75+) since 1990 are 2 to 3 orders of magnitude higher than those in the lowest age category (0-44). Up to around 1990, the mesothelioma mortality rate increased in all age groups. Since then, however the rate has fallen for the two youngest age groups (0-44 and 45-54), with a hint that the rate has begun to decline very recently in the 55-64 age group.

Figure 2a: Average annual male mesothelioma death rates per million by age and time period, 1970-2005p



11. Death rates for females are shown in [Figure 2b](#). The rates for females over time tend to fluctuate to some extent because of greater statistical variation due to the smaller overall numbers. Rates for females are generally an order of magnitude lower than those for males.

Figure 2b: Average annual female mesothelioma death rates per million by age and time period, 1970-2005p



12. Numbers of mesothelioma deaths and rates for males and females are shown in [Tables 2](#) and [3](#) and [Figures 3](#) and [4](#) respectively by five year age group and birth cohort. For male subjects born up to around the 1920s, the death rate per million increased proportionally with successive birth cohorts. Since then, however, the pattern is less clear, with the rates for successive birth cohorts appearing to be becoming similar. This is consistent with the approach to a peak of the mesothelioma epidemic. The pattern in women is similar, but slightly less clear, since there are much fewer female deaths.

Table 2: Male mesothelioma deaths and rates per million in Great Britain by age and birth cohort, 1968-2005

Year of birth		Age at death													
		20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
1878-82	Number														3
	<i>Rate per million</i>														15.46
1883-87	Number													5	12
	<i>Rate per million</i>												9.18	25.25	
1888-92	Number											13	27	11	
	<i>Rate per million</i>											12.64	22.25	22.05	
1893-97	Number											38	48	44	25
	<i>Rate per million</i>											22.91	20.86	35.00	46.96
1898-02	Number										56	107	124	131	52
	<i>Rate per million</i>										20.82	26.26	45.86	86.42	78.06
1903-07	Number									76	144	220	253	202	123
	<i>Rate per million</i>									21.46	23.83	47.09	79.24	108.59	143.12
1908-12	Number								52	181	275	372	409	354	240
	<i>Rate per million</i>								13.03	24.62	43.86	75.14	117.24	167.20	233.43
1913-17	Number							30	153	241	368	521	625	555	360
	<i>Rate per million</i>							8.04	20.52	35.63	62.98	111.10	182.89	258.05	346.09
1918-22	Number						25	88	202	403	642	901	1055	851	108
	<i>Rate per million</i>						5.55	10.59	25.78	56.36	102.78	176.03	273.96	354.81	404.27
1923-27	Number					16	75	184	356	635	917	1255	1388	228	
	<i>Rate per million</i>					3.85	9.07	23.05	47.07	91.06	148.49	243.20	373.54	412.26	
1928-32	Number				6	19	89	191	451	744	1137	1380	288		
	<i>Rate per million</i>				1.49	2.38	11.39	25.19	62.33	110.32	187.18	285.41	361.24		
1933-37	Number			1	11	40	104	268	544	884	1199	278			
	<i>Rate per million</i>			0.25	1.39	5.15	13.70	36.27	76.45	131.40	211.21	282.12			
1938-42	Number		4	5	18	68	168	387	632	1004	233				
	<i>Rate per million</i>		0.97	0.61	2.25	8.63	21.72	51.22	86.35	157.41	196.44				

Table 2: Male mesothelioma deaths and rates per million in Great Britain by age and birth cohort, 1968-2005

Year of birth		Age at death													
		20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
1943-47	Number	0	3	6	30	81	202	404	693	178					
	Rate per million	0.00	0.30	0.61	3.10	8.44	21.37	43.58	84.80	123.99					
1948-52	Number	0	3	5	28	63	129	253	92						
	Rate per million	0.00	0.31	0.52	2.95	6.68	13.83	29.91	54.01						
1953-57	Number	0	2	5	11	34	80	37							
	Rate per million	0.00	0.21	0.53	1.18	3.65	9.45	23.12							
1958-62	Number	1	1	4	8	20	9								
	Rate per million	0.09	0.09	0.38	0.76	2.09	5.00								
1963-67	Number	0	2	2	7	4									
	Rate per million	0.00	0.18	0.18	0.67	1.97									
1968-72	Number	0	2	5	1										
	Rate per million	0.00	0.19	0.51	0.50										
1973-77	Number	0	0	0											
	Rate per million	0.00	0.00	0.00											
1978-82	Number	1	0												
	Rate per million	0.12	0.00												
1983-87	Number	0													
	Rate per million	0.00													

Figure 3: Mesothelioma death rates by age group and birth cohort, males aged 20-89, 1968-2005

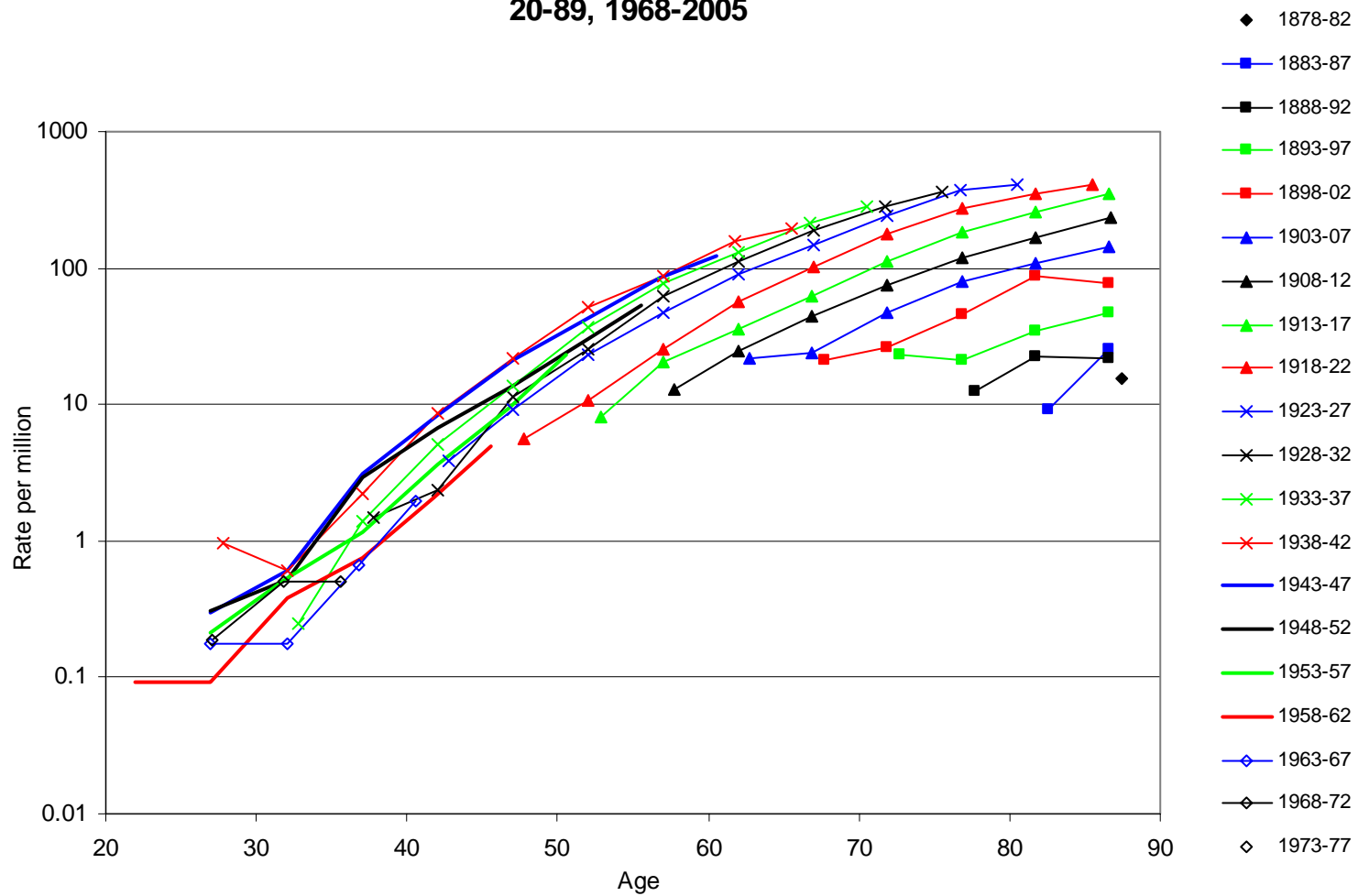


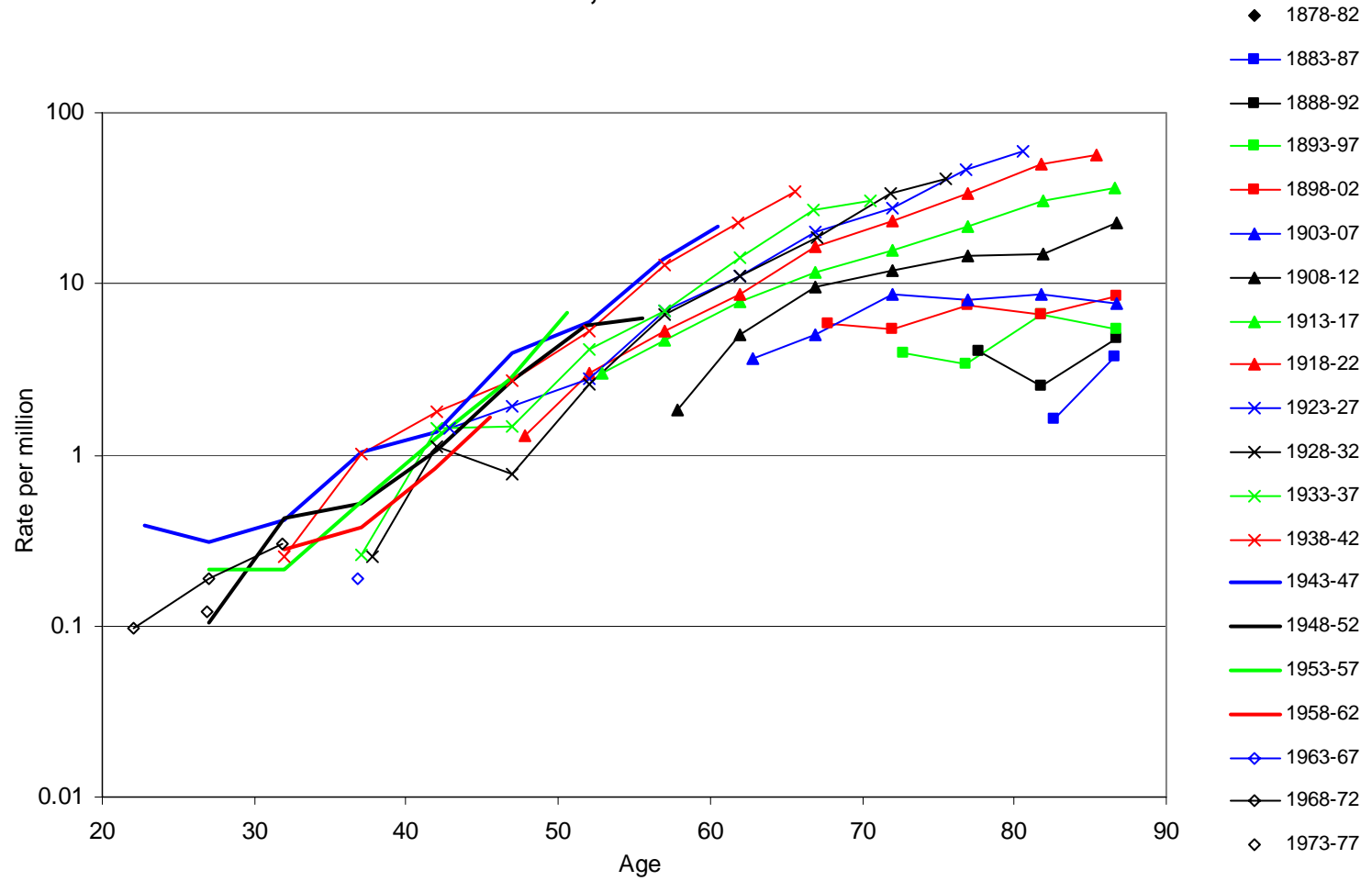
Table 3: Female mesothelioma deaths and rates per million in Great Britain by age and birth cohort, 1968-2005

Year of birth		Age at death													
		20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
1878-82	Number														0
	Rate per million														0.00
1883-87	Number													2	5
	Rate per million													1.63	3.76
1888-92	Number											8	7	7	
	Rate per million											4.05	2.53	4.82	
1893-97	Number										11	15	20	9	
	Rate per million										3.97	3.38	6.66	5.45	
1898-02	Number									21	34	37	23	17	
	Rate per million									5.91	5.48	7.49	6.64	8.56	
1903-07	Number								15	38	57	43	34	18	
	Rate per million								3.66	5.02	8.58	7.97	8.72	7.73	
1908-12	Number							8	42	73	82	82	61	58	
	Rate per million							1.85	5.03	9.49	12.06	14.66	14.77	22.92	
1913-17	Number						12	38	61	83	99	114	121	84	
	Rate per million						3.03	4.69	7.92	11.65	15.62	21.53	30.55	35.99	
1918-22	Number					6	26	45	70	123	157	192	200	29	
	Rate per million					1.29	2.98	5.33	8.71	16.47	23.47	33.94	49.55	56.18	
1923-27	Number				6	16	23	55	84	141	175	238	50		
	Rate per million				1.43	1.91	2.81	6.94	11.08	19.91	27.37	46.96	59.00		
1928-32	Number			1	9	6	20	50	81	128	196	42			
	Rate per million			0.25	1.13	0.76	2.59	6.67	11.24	18.84	34.07	41.24			
1933-37	Number		0	2	11	11	31	50	99	165	34				
	Rate per million		0.00	0.26	1.45	1.46	4.19	6.91	14.13	26.86	30.45				
1938-42	Number	0	2	8	14	21	40	96	153	44					
	Rate per million	0.00	0.25	1.02	1.80	2.73	5.26	12.83	22.96	34.69					

Table 3: Female mesothelioma deaths and rates per million in Great Britain by age and birth cohort, 1968-2005

Year of birth		Age at death													
		20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
1943-47	Number	2	3	4	10	13	37	56	117	32					
	Rate per million	0.39	0.31	0.41	1.04	1.36	3.91	5.98	14.01	21.54					
1948-52	Number	0	1	4	5	10	26	49	11						
	Rate per million	0.00	0.10	0.42	0.53	1.05	2.75	5.68	6.31						
1953-57	Number	0	2	2	5	12	24	11							
	Rate per million	0.00	0.21	0.21	0.53	1.27	2.78	6.72							
1958-62	Number	2	0	3	4	8	3								
	Rate per million	0.19	0.00	0.28	0.38	0.82	1.64								
1963-67	Number	0	0	0	2	0									
	Rate per million	0.00	0.00	0.00	0.19	0.00									
1968-72	Number	1	2	3	0										
	Rate per million	0.10	0.19	0.30	0.00										
1973-77	Number	0	1	0											
	Rate per million	0.00	0.12	0.00											
1978-82	Number	0	0												
	Rate per million	0.00	0.00												
1983-87	Number	0													
	Rate per million	0.00													

Figure 4: Mesothelioma death rates by age group and birth cohort, females aged 20-89, 1968-2005



Geographical Analysis

13. SMRs for males by geographical area for the 25-year period 1981-2005 are set out in [Tables 4](#) and [5](#) and [Figure 5](#) while those for females are set out in [Tables 6](#) and [7](#) and [Figure 6](#). [Tables 4](#) and [6](#) show the 20 areas with the highest SMRs and the 20 areas with the lowest SMRs for male and females respectively, while [Tables 5](#) and [7](#) show the results for all areas in Great Britain. [Figures 5](#) and [6](#) show a graphical representation of the data contained in [Tables 5](#) and [7](#) showing the distribution of SMRs by LA and UA for males and females.
14. For men, the geographical areas with the highest mesothelioma death rates were West Dunbartonshire (SMR 537, 95% CI; 468 to 614, 216 deaths), Barrow-in-Furness (SMR 540, 95% CI 465 to 623, 186 deaths), and Plymouth (SMR 341, 95% CI 308 to 378, 373 deaths). For women, the geographical areas with the highest mesothelioma death rates were Barking & Dagenham (SMR 501, 95% CI 382 to 644, 60 deaths), Sunderland (SMR 470, 95% CI 381 to 573, 97 deaths) and West Dunbartonshire (SMR 398, 95% CI 267 to 572, 29 deaths).
15. SMRs and numbers of mesothelioma deaths by geographical area and 5-year time period of death (1981-85, 1986-90, 1991-95, 1996-2000 and 2001-05) are shown for males and females in [Tables 8](#) and [9](#) respectively. Counties and UAs are presented in alphabetical order within GORs. LAs are sorted in alphabetical order within Counties.

Occupational Analysis

16. [Tables 10](#) and [12](#) show the occupations with the highest and lowest PMRs for males and females over the period 2002-2005. [Tables 11](#) and [13](#) show mesothelioma PMRs for males and females aged 16-74 in Great Britain for the full list of groups with the Standard Occupational Classification SOC 2000 for 2002-2005.
17. For males the occupations with the highest PMRs were Carpenters and joiners (PMR 385, 95% CI 385 to 427, 358 deaths) Plumbers; heating and ventilating engineers (PMR 336, 95% CI 289 to 388, 181 deaths) and Electricians; electrical fitters (PMR 312, 95% CI 277 to 349, 296 deaths). The occupations with the highest risk for females were Labourers in process and plant operations n.e.c. (PMR 230, 95% CI 142 to 351, 21 deaths) General office assistants/clerks (PMR 125, 95% CI 82 to 183, 26 deaths) and Cleaners; domestics (PMR 106, 95% CI 77 to 142, 45 deaths).

Discussion

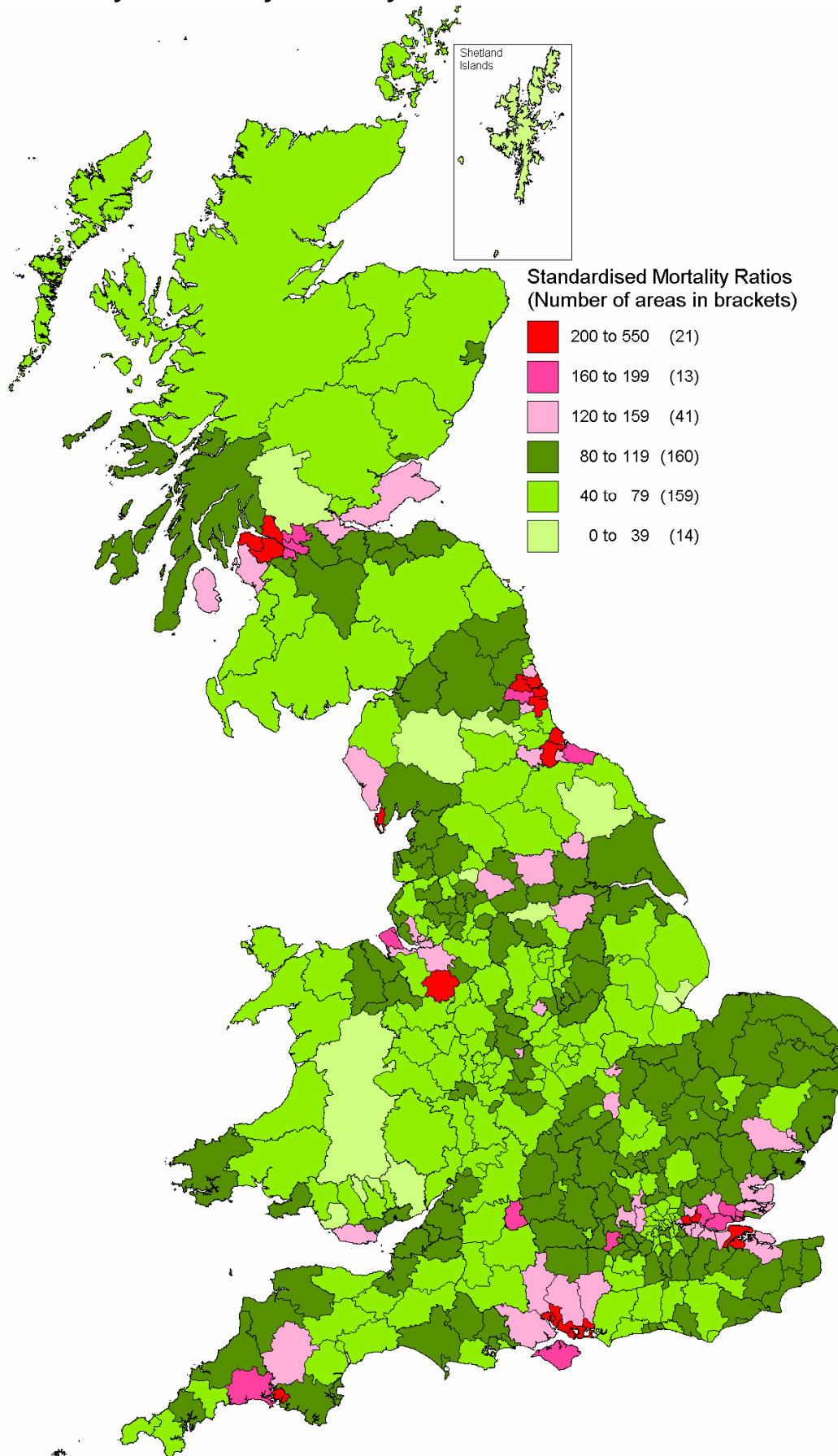
18. These statistics further highlight the dramatic increase in mesothelioma mortality in Great Britain over the last four decades and provide updated information about the geographical and occupation distribution of these deaths.
19. The analyses by geographical area are limited by the fact that death certificates record only the last address of residence. A case of mesothelioma caused by work in one geographical area will only be assigned to that area in this analysis if the individual was resident in the area when they died. The long latency period of mesothelioma means that individuals may move between areas before the onset of the disease and thus there is considerable potential for dilution of the observed difference in risk between areas. The extent of this dilution will be strongest for those areas where there have been substantial migrations. Areas with the highest SMRs will be those which are genuine sources of risk, but their SMRs will understate the true risk level relative to the rest of Great Britain. Conversely, SMRs of other areas will overstate the level of risk (if any) associated with these locations. The areas recording the lowest SMRs will be those areas not associated with asbestos exposure and which are unlikely to be the final area of residence for individuals with asbestos exposure.
20. A similar potential for dilution of the observed differences in risk between occupational groups affects the analysis of PMRs since these are based on the last occupation of the deceased. A case of mesothelioma caused by work in, say, the construction industry will only be assigned to the construction work category in this analysis if the individual is still in that kind of work when they retired (or died). The dilution will be even stronger for those kinds of work where there have been substantial reductions in the relevant workforce (e.g. shipyards, railway rolling stock). Again, the occupations with the highest PMRs will be those which are genuine sources of risk, but PMRs will understate the true relative risk level. PMRs of other occupations will overstate the level of risk (if any) associated with these occupations and occupations with the lowest PMRs will be those which do not entail asbestos exposure and which are unlikely to be the final full-time occupation for individuals with asbestos exposure.
21. As in previous geographical analyses of mesothelioma deaths, the results presented here show that areas with the highest excess of mesothelioma in males tend to be those which contain ports and dockyards, further supporting the well documented link between mesothelioma and past heavy asbestos exposures in the shipbuilding industry. However, the analysis by five-year period shows that these areas tend to have much higher SMRs for early time periods than for later periods. Mesothelioma rates in these areas thus tend to be rising more slowly than the overall rate for Great Britain or even falling. This may to some extent reflect the effect of risks being diluted due to the migration of those exposed in an industry which has declined substantially into lower risk areas.
22. The updated analysis of mesothelioma deaths by occupational group shows that high levels of mortality continue to be seen among occupations associated with construction work such as carpenters, joiners, plumbers and electricians. Previous analyses showed that metal plate workers – an occupation closely associated with shipbuilding – had a particularly high risk. Although still relatively high, the PMR for this group has now substantially lower than in these earlier analyses.

23. Taken together the results of the geographical and occupational analysis add further support to indications from earlier analyses that exposures in construction trades – which are likely to have been prevalent over a wide range of geographical areas – continued to be an important source of risk after exposures in specific high-risk industries such as shipbuilding began to decline.

Table 4: Highest and lowest risk UAs and LAs for males

<i>Top 20 areas with SMRs greater than 100</i>	95% Confidence Interval			
	Deaths	SMR	Lower	Upper
West Dunbartonshire UA	216	537	468	614
Barrow-In-Furness	186	540	465	623
Plymouth UA	373	341	308	378
North Tyneside	315	336	300	375
Portsmouth UA	277	335	297	377
South Tyneside	240	317	278	360
Medway UA	265	284	251	321
Southampton UA	259	282	248	318
Barking & Dagenham	187	265	228	306
Eastleigh	118	253	209	303
Havant	139	243	204	287
Sunderland	288	230	204	258
Crewe & Nantwich	123	245	203	292
Newcastle-Upon-Tyne	279	228	202	257
Inverclyde UA	98	249	202	304
Hartlepool UA	97	240	195	293
Newham	172	227	194	264
Renfrewshire UA	165	224	191	261
Gosport	76	240	189	300
Glasgow City UA	519	198	181	215
<i>Bottom 20 areas with SMRs less than 100</i>				
Barnsley	30	29	20	41
Powys UA	23	34	21	50
Merthyr Tydfil UA	7	26	10	54
Stirling UA	11	30	15	54
Bridgend UA	22	36	23	55
Monmouthshire UA	14	33	18	56
East Lindsey	31	41	28	58
Blaenau Gwent UA	12	34	18	60
Neath Port Talbot UA	29	42	28	60
Scottish Borders UA	22	40	25	61
Burnley	15	37	21	62
Perth And Kinross UA	29	43	29	62
Eden	8	32	14	62
Dumfries And Galloway UA	35	45	32	63
Wear Valley	11	36	18	64
Rhondda, Cynon, Taff UA	52	49	36	64
Coventry	69	50	39	64
Herefordshire, County Of UA	42	47	34	64
Kensington & Chelsea	25	44	29	65
Cheltenham	22	44	27	66

Figure 5 Map of Great Britain showing Male Standardised Mortality Ratios (SMRs) by Local Authority and Unitary Authority 1981 – 2005



Detailed regional maps can be found at <http://www.hse.gov.uk/statistics/regions/index.htm>

Table 5: Mesothelioma mortality in Great Britain: number of deaths and SMRs for males by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
GREAT BRITAIN	25 716	100	99	101		
ENGLAND & WALES	23 099	98	97	100		
ENGLAND	22 166	100	99	102		
NORTH EAST	2 087	177	169	184		
Darlington UA	60	128	98	165	64	
Hartlepool UA	97	240	195	293	16	
Middlesbrough UA	82	140	111	173	49	
Redcar And Cleveland UA	108	167	137	201	32	
Stockton-On-Tees UA	154	211	179	247	21	
Durham	164	70	60	82		
Chester-Le-Street	29	123	82	176	101	1
Derwentside	36	85	60	118	217	2
Easington	36	78	55	108	253	3
Durham	23	63	40	94	341	4
Sedgefield	22	54	34	81	369	5
Teesdale	7	53	21	108	392	6
Wear Valley	11	36	18	64	401	7
Northumberland	147	96	81	113		
Blyth Valley	49	147	109	195	52	1
Tynedale	27	91	60	132	216	2
Castle Morpeth	23	85	54	128	256	3
Wansbeck	23	75	47	112	294	4
Alnwick	14	84	46	141	304	5
Berwick Upon Tweed	11	72	36	128	357	6
Tyne And Wear (Met County)	1 275	249	236	263		
North Tyneside	315	336	300	375	4	1
South Tyneside	240	317	278	360	6	2
Sunderland	288	230	204	258	12	3
Newcastle-Upon-Tyne	279	228	202	257	14	4
Gateshead	153	162	137	189	31	5
NORTH WEST	3 101	101	97	104		
Blackburn With Darwen UA	38	68	48	93	291	
Blackpool UA	76	94	74	117	133	
Halton UA	74	156	122	196	35	
Warrington UA	55	70	53	92	263	
Cheshire	377	121	109	134		
Crewe & Nantwich	123	245	203	292	13	1
Ellesmere Port & Neston	57	159	121	206	36	2
Vale Royal	69	130	101	165	58	3
Congleton	37	92	65	127	180	4
Macclesfield	54	72	54	94	255	5
Chester	37	65	46	89	305	6

Table 5: Mesothelioma mortality in Great Britain: number of deaths and SMRs for males by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
Cumbria	363	147	132	163		
Barrow-In-Furness	186	540	465	623	2	1
Copeland	40	123	88	168	81	2
South Lakeland	54	95	72	125	144	3
Carlisle	47	94	69	125	156	4
Allerdale	28	58	39	84	345	5
Eden	8	32	14	62	404	6
Greater Manchester (Met County)	917	84	78	89		
Tameside	108	115	94	139	71	1
Bolton	114	101	84	122	97	2
Salford	98	95	77	115	118	3
Wigan	108	84	69	102	157	4
Trafford	82	84	67	104	168	5
Bury	66	86	66	109	173	6
Rochdale	72	85	66	106	176	7
Manchester	128	74	62	88	199	8
Stockport	86	66	53	81	265	9
Oldham	55	59	45	77	309	10
Lancashire	425	80	73	88		
Wyre	69	113	88	143	79	1
Lancaster	56	85	64	110	185	2
Chorley	37	91	64	125	188	3
Preston	48	85	63	113	191	4
Ribble Valley	25	93	60	137	211	5
Rosendale	25	90	58	133	227	6
Pendle	31	78	53	111	260	7
West Lancashire	34	72	50	100	281	8
Fylde	31	73	49	103	287	9
South Ribble	30	67	45	96	306	10
Hyndburn	24	67	43	99	322	11
Burnley	15	37	21	62	393	12
Merseyside (Met County)	776	122	113	131		
Wirral	278	178	158	200	23	1
Knowsley	90	149	120	183	38	2
Sefton	158	113	96	132	67	3
Liverpool	197	98	85	112	93	4
St Helens	53	67	50	87	279	5
YORKSHIRE AND THE HUMBER	2 129	94	90	98		
East Riding Of Yorkshire UA	125	81	67	96	167	
Kingston Upon Hull, City Of UA	110	100	82	120	104	
North East Lincolnshire UA	58	80	60	103	209	
North Lincolnshire UA	70	97	75	122	124	
York UA	114	139	115	167	43	

Table 5: Mesothelioma mortality in Great Britain: number of deaths and SMRs for males by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
North Yorkshire	197	70	61	80		
Selby	34	106	73	148	137	1
Scarborough	47	77	57	102	238	2
Harrogate	49	69	51	91	273	3
Craven	19	67	41	105	335	4
Hambleton	25	61	40	91	339	5
Richmondshire	12	60	31	104	372	6
Ryedale	11	39	19	70	397	7
South Yorkshire (Met County)	491	82	75	90		
Doncaster	183	137	118	159	39	1
Sheffield	207	83	72	96	141	2
Rotherham	71	64	50	80	282	3
Barnsley	30	29	20	41	396	4
West Yorkshire (Met County)	964	108	101	115		
Leeds	417	133	120	146	37	1
Calderdale	107	124	101	150	57	2
Kirklees	157	96	82	113	106	3
Bradford	165	86	73	100	135	4
Wakefield	118	85	70	102	152	5
EAST MIDLANDS	1 420	75	71	79		
Derby UA	142	138	116	162	42	
Leicester UA	65	57	44	72	315	
Nottingham UA	110	94	77	113	117	
Rutland UA	9	58	27	110	384	
Derbyshire	225	64	56	73		
Erewash	46	92	67	123	165	1
High Peak	32	82	56	116	241	2
South Derbyshire	26	76	49	111	286	3
North East Derbyshire	29	59	40	85	342	4
Chesterfield	26	53	35	77	362	5
Amber Valley	29	51	34	73	365	6
Bolsover	20	55	34	85	367	7
The Derbyshire Dales	17	46	27	74	382	8
Leicestershire	177	66	57	77		
Blaby	28	74	49	107	289	1
Harborough	25	76	49	112	290	2
Charnwood	43	66	48	89	292	3
Oadby And Wigston	18	72	43	114	321	4
North West Leicestershire	25	63	41	94	333	5
Melton	14	65	35	108	358	6
Hinckley And Bosworth	24	54	34	80	363	7

Table 5: Mesothelioma mortality in Great Britain: number of deaths and SMRs for males by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
Lincolnshire	174	54	46	62		
West Lindsey	31	77	52	109	267	1
Lincoln	23	63	40	94	340	2
South Kesteven	30	55	37	78	353	3
North Kesteven	25	56	36	82	356	4
South Holland	23	55	35	82	360	5
East Lindsey	31	41	28	58	380	6
Boston	11	37	19	66	398	7
Northamptonshire	242	94	82	107		
Corby	34	156	108	217	54	1
Wellingborough	40	130	93	177	74	2
East Northamptonshire	34	104	72	146	142	3
Daventry	25	87	57	129	236	4
Northampton	56	74	56	96	243	5
South Northamptonshire	26	81	53	118	264	6
Kettering	27	75	49	109	288	7
Nottinghamshire	276	79	70	89		
Bassetlaw	48	96	70	127	151	1
Rushcliffe	42	89	64	121	182	2
Gedling	46	88	64	117	183	3
Newark And Sherwood	43	85	62	115	201	4
Broxtowe	41	82	59	111	224	5
Mansfield	31	66	45	94	308	6
Ashfield	25	49	32	73	370	7
WEST MIDLANDS	1 596	67	64	70		
Herefordshire, County Of UA	42	47	34	64	366	
Stoke-On-Trent UA	68	60	47	76	297	
Telford And Wrekin UA	33	60	41	84	334	
Shropshire	73	53	41	66		
Oswestry	14	79	43	132	320	1
Shrewsbury And Atcham	24	53	34	80	364	2
South Shropshire	12	51	27	90	383	3
Bridgnorth	12	47	24	82	387	4
North Shropshire	11	40	20	72	395	5
Staffordshire	273	77	68	87		
Tamworth	37	156	110	215	51	1
East Staffordshire	46	101	74	134	131	2
Lichfield	38	94	66	128	174	3
Stafford	45	79	57	105	232	4
Cannock Chase	30	83	56	118	246	5
South Staffordshire	26	56	37	82	354	6
Newcastle-Under-Lyme	29	50	34	72	368	7
Staffordshire Moorlands	22	47	29	70	374	8

Table 5: Mesothelioma mortality in Great Britain: number of deaths and SMRs for males by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
Warwickshire	165	71	61	83		
North Warwickshire	30	109	73	155	136	1
Warwick	52	92	68	120	159	2
Rugby	27	66	43	96	317	3
Stratford-On-Avon	33	59	41	83	336	4
Nuneaton And Bedworth	23	45	29	68	377	5
West Midlands (Met County)	771	66	62	71		
Solihull	85	93	74	115	128	1
Birmingham	297	70	62	78	197	2
Sandwell	101	74	61	91	207	3
Walsall	76	65	51	82	270	4
Wolverhampton	67	58	45	74	307	5
Dudley	76	54	42	67	326	6
Coventry	69	50	39	64	344	7
Worcestershire	171	70	60	82		
Wyre Forest	46	103	75	137	125	1
Redditch	24	88	56	130	242	2
Wychavon	34	64	44	89	312	3
Malvern Hills	26	65	42	95	324	4
Bromsgrove	26	63	41	92	331	5
Worcester	15	41	23	67	388	6
EAST OF ENGLAND	2 440	100	96	104		
Luton UA	65	97	75	124	126	
Peterborough UA	69	110	86	139	92	
Southend-On-Sea UA	90	107	86	131	91	
Thurrock UA	91	172	139	211	30	
Bedfordshire	115	75	62	90		
South Bedfordshire	39	87	62	119	198	1
Bedford	47	77	56	102	240	2
Mid Bedfordshire	29	62	42	89	328	3
Cambridgeshire	197	86	75	99		
Fenland	41	99	71	134	150	1
Huntingdonshire	49	85	63	113	193	2
South Cambridgeshire	47	85	63	114	194	3
East Cambridgeshire	28	86	57	124	234	4
Cambridge	32	77	53	108	266	5

Table 5: Mesothelioma mortality in Great Britain: number of deaths and SMRs for males by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
Essex	704	118	110	128		
Castle Point	77	191	150	238	25	1
Basildon	112	175	144	211	28	2
Brentwood	48	137	101	182	59	3
Rochford	45	121	88	161	80	4
Maldon	33	128	88	179	83	5
Chelmsford	72	112	87	141	85	6
Tendring	93	104	84	128	94	7
Epping Forest	63	107	82	137	102	8
Braintree	53	97	72	127	140	9
Colchester	54	85	64	111	186	10
Harlow	28	91	61	132	206	11
Uttlesford	26	85	55	124	250	12
Hertfordshire	377	85	77	94		
Three Rivers	51	130	96	171	66	1
Stevenage	29	99	66	142	172	2
Watford	30	97	65	138	178	3
Hertsmere	39	90	64	123	187	4
Welwyn Hatfield	40	87	63	119	196	5
North Hertfordshire	44	84	61	113	203	6
Dacorum	46	79	58	105	230	7
Broxbourne	30	85	57	121	233	8
East Hertfordshire	36	71	50	99	280	9
St Albans	32	56	39	80	346	10
Norfolk	396	93	85	103		
Broadland	68	114	88	144	78	1
Great Yarmouth	55	115	87	150	87	2
Norwich	61	108	83	139	100	3
South Norfolk	50	85	63	112	190	4
Kings Lynn And West Norfolk	61	80	61	103	202	5
North Norfolk	52	82	61	108	204	6
Breckland	49	80	59	105	220	7
Suffolk	336	102	91	113		
Ipswich	68	123	95	156	69	1
Babergh	52	125	93	164	72	2
Waveney	71	112	88	142	82	3
St Edmundsbury	45	102	74	136	129	4
Suffolk Coastal	55	90	68	117	164	5
Forest Heath	18	78	46	123	303	6
Mid Suffolk	27	64	42	93	325	7

Table 5: Mesothelioma mortality in Great Britain: number of deaths and SMRs for males by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
LONDON	2 663	96	92	99		
Inner London	854	88	83	95		
Newham	172	227	194	264	17	1
Tower Hamlets	91	145	117	178	40	2
Lewisham	104	114	93	138	73	3
Wandsworth	78	83	65	103	179	4
Southwark	68	78	60	99	210	5
Islington	46	74	54	99	254	6
Camden	49	69	51	92	271	7
Hammersmith & Fulham	38	67	47	92	295	8
Lambeth	54	62	46	81	298	9
Hackney	41	62	44	84	310	10
Westminster, City Of	47	60	44	79	314	11
Haringey	40	56	40	76	338	12
Kensington & Chelsea	25	44	29	65	378	13
City Of London	1	29	1	162	408	14
Outer London	1 809	100	95	104		
Barking & Dagenham	187	265	228	306	9	1
Havering	193	177	153	204	24	2
Greenwich	119	141	117	169	41	3
Hillingdon	135	134	112	158	46	4
Bexley	130	134	112	159	47	5
Redbridge	120	120	100	144	61	6
Sutton	77	103	81	129	108	7
Bromley	128	92	77	109	120	8
Waltham Forest	79	93	74	116	134	9
Harrow	70	79	62	100	200	10
Hounslow	62	78	60	101	213	11
Merton	54	74	55	96	248	12
Kingston Upon Thames	44	74	54	100	258	13
Croydon	86	67	53	82	261	14
Enfield	76	67	53	84	262	15
Ealing	74	66	52	83	269	16
Barnet	77	59	46	73	301	17
Richmond Upon Thames	45	61	44	81	311	18
Brent	53	55	42	73	329	19

Table 5: Mesothelioma mortality in Great Britain: number of deaths and SMRs for males by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
SOUTH EAST	4 293	119	116	123		
Bracknell Forest UA	55	163	123	212	34	
Brighton And Hove UA	84	71	57	88	235	
Isle Of Wight UA	135	175	146	207	26	
Medway UA	265	284	251	321	7	
Milton Keynes UA	66	113	88	144	84	
Portsmouth UA	277	335	297	377	5	
Reading UA	41	77	55	104	252	
Slough UA	48	116	86	154	90	
Southampton UA	259	282	248	318	8	
West Berkshire UA	60	108	82	138	103	
Windsor And Maidenhead UA	55	92	69	120	155	
Wokingham UA	50	96	71	127	147	
Buckinghamshire	177	88	76	102		
South Bucks	38	122	86	168	88	1
Aylesbury Vale	52	86	64	113	184	2
Wycombe	53	80	60	105	215	3
Chiltern	34	80	55	111	249	4
East Sussex	216	76	66	87		
Lewes	45	86	63	115	195	1
Rother	49	81	60	108	212	2
Hastings	35	84	58	117	225	3
Wealden	52	67	50	88	278	4
Eastbourne	35	66	46	92	300	5
Hampshire	867	161	151	172		
Eastleigh	118	253	209	303	10	1
Havant	139	243	204	287	11	2
Gosport	76	240	189	300	19	3
Fareham	100	208	169	253	22	4
New Forest	129	133	111	158	48	5
Winchester	68	139	108	177	53	6
Test Valley	59	130	99	167	63	7
East Hampshire	60	127	97	163	65	8
Basingstoke And Deane	65	116	89	148	76	9
Hart	30	98	66	140	175	10
Rushmoor	23	78	50	117	285	11

Table 5: Mesothelioma mortality in Great Britain: number of deaths and SMRs for males by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
Kent	684	108	100	117		
Dartford	54	151	114	197	44	1
Gravesham	61	147	112	189	45	2
Swale	74	140	110	176	50	3
Canterbury	74	107	84	134	96	4
Tonbridge And Malling	51	112	83	148	98	5
Thanet	78	105	83	131	99	6
Maidstone	64	104	80	133	110	7
Shepway	52	101	75	132	123	8
Dover	54	100	75	130	127	9
Sevenoaks	51	97	72	127	143	10
Ashford	42	93	67	125	169	11
Tunbridge Wells	29	62	41	89	330	12
Oxfordshire	202	82	71	94		
Vale Of White Horse	49	98	73	130	139	1
South Oxfordshire	53	95	71	125	146	2
West Oxfordshire	36	87	61	120	205	3
Cherwell	41	84	60	113	214	4
Oxford	23	45	29	68	376	5
Surrey	440	90	82	99		
Woking	42	114	82	154	105	1
Surrey Heath	36	116	81	161	107	2
Reigate And Banstead	57	98	74	126	130	3
Runnymede	37	103	73	143	138	4
Mole Valley	42	99	71	133	148	5
Spelthorne	36	84	59	116	223	6
Elmbridge	45	80	58	107	228	7
Guildford	45	79	58	106	229	8
Waverley	44	78	56	104	239	9
Tandridge	31	82	56	116	247	10
Epsom And Ewell	25	74	48	109	293	11
West Sussex	312	80	71	89		
Adur	34	101	70	141	154	1
Worthing	52	91	68	120	160	2
Arun	67	76	59	96	222	3
Crawley	32	84	58	119	231	4
Horsham	43	78	57	105	237	5
Chichester	44	70	51	95	272	6
Mid Sussex	40	70	50	96	275	7

Table 5: Mesothelioma mortality in Great Britain: number of deaths and SMRs for males by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
SOUTH WEST	2 437	99	95	103		
Bath And North East Somerset UA	80	96	76	119	121	
Bournemouth UA	69	76	59	96	219	
Bristol, City Of UA	182	105	90	121	75	
North Somerset UA	90	94	76	116	122	
Plymouth UA	373	341	308	378	3	
Poole UA	77	106	84	133	95	
South Gloucestershire UA	104	107	87	129	86	
Swindon UA	123	175	146	209	27	
Torbay UA	67	88	69	112	158	
Cornwall And Isles Of Scilly	250	94	82	106		
Caradon	74	178	140	224	29	1
Carrick	52	107	80	140	111	2
North Cornwall	37	84	59	116	218	3
Kerrier	33	69	47	96	296	4
Restormel	31	64	43	91	318	5
Penwith	22	63	39	95	343	6
Isles Of Scilly	1	92	2	515	407	7
Devon	331	86	77	96		
West Devon	36	136	95	189	68	1
South Hams	49	108	80	143	112	2
Torridge	34	107	74	149	132	3
North Devon	46	96	70	128	153	4
Exeter	37	79	56	109	244	5
East Devon	60	72	55	93	251	6
Teignbridge	49	72	54	96	259	7
Mid Devon	20	57	35	88	361	8
Dorset	197	86	74	99		
Christchurch	33	104	72	146	145	1
East Dorset	49	92	68	121	162	2
Weymouth And Portland	31	96	65	136	177	3
West Dorset	46	83	61	110	208	4
North Dorset	26	83	54	121	257	5
Purbeck	12	48	25	83	386	6
Gloucestershire	194	73	63	84		
Gloucester	48	105	78	139	116	1
Stroud	43	81	59	110	221	2
Forest Of Dean	29	75	50	108	277	3
Cotswold	28	66	44	96	313	4
Tewkesbury	24	67	43	99	323	5
Cheltenham	22	44	27	66	381	6

Table 5: Mesothelioma mortality in Great Britain: number of deaths and SMRs for males by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
Somerset	171	68	58	78		
Sedgemoor	49	92	68	121	161	1
Mendip	35	73	50	101	274	2
Taunton Deane	32	64	44	90	316	3
South Somerset	45	58	42	77	327	4
West Somerset	10	43	21	79	394	5
Wiltshire	129	67	56	79		
North Wiltshire	37	71	50	98	276	1
West Wiltshire	38	70	50	96	284	2
Salisbury	34	63	43	87	319	3
Kennet	20	61	37	94	352	4
WALES	933	67	62	71		
Blaenau Gwent UA	12	34	18	60	402	
Bridgend UA	22	36	23	55	389	
Caerphilly UA	40	54	38	73	347	
Cardiff UA	122	97	80	115	109	
Carmarthenshire UA	57	61	46	79	302	
Ceredigion UA	21	57	35	87	359	
Conwy UA	35	54	38	75	349	
Denbighshire UA	44	87	63	116	192	
Flintshire UA	56	88	67	115	170	
Gwynedd UA	35	59	41	82	332	
Isle Of Anglesey UA	21	60	37	92	351	
Merthyr Tydfil UA	7	26	10	54	405	
Monmouthshire UA	14	33	18	56	400	
Neath Port Talbot UA	29	42	28	60	379	
Newport UA	53	87	65	113	181	
Pembrokeshire UA	50	86	64	113	189	
Powys UA	23	34	21	50	391	
Rhondda, Cynon, Taff UA	52	49	36	64	355	
Swansea UA	94	84	68	103	163	
Torfaen UA	20	48	29	74	373	
The Vale Of Glamorgan UA	67	122	95	155	70	
Wrexham UA	59	102	78	132	115	

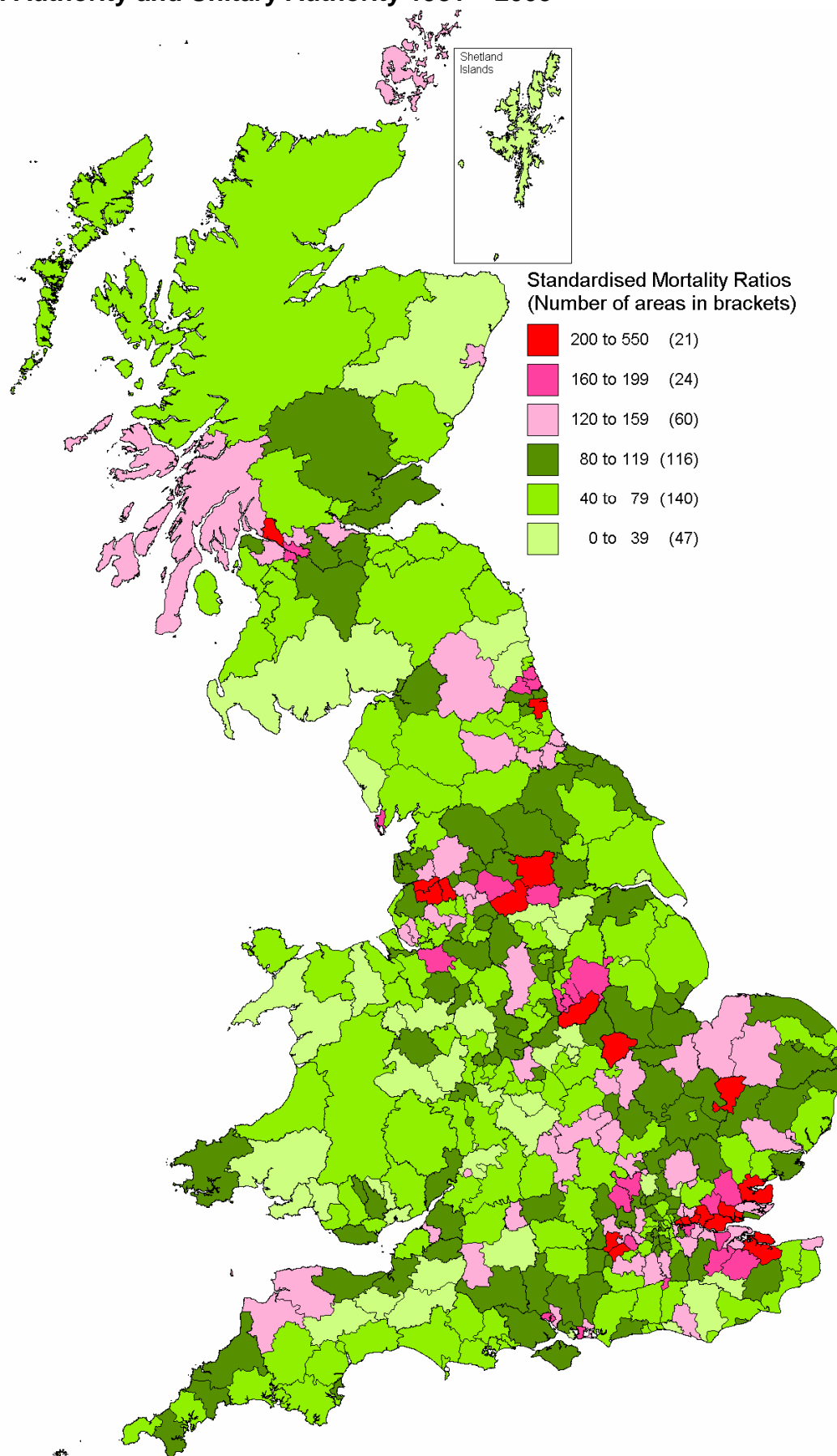
Table 5: Mesothelioma mortality in Great Britain: number of deaths and SMRs for males by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
SCOTLAND	2 617	118	113	122		
Aberdeen City UA	88	99	80	123	113	
Aberdeenshire UA	47	51	38	68	350	
Angus UA	37	71	50	97	283	
Argyll And Bute UA	52	115	86	151	89	
Clackmannanshire UA	14	70	38	118	348	
Dumfries And Galloway UA	35	45	32	63	371	
Dundee City UA	61	87	67	112	171	
East Ayrshire UA	32	59	40	83	337	
East Dunbartonshire UA	74	163	128	204	33	
East Lothian UA	41	99	71	134	149	
East Renfrewshire UA	31	86	58	122	226	
Edinburgh, City Of UA	194	103	89	118	77	
Eilean Siar (Western Isles) UA	7	46	18	94	399	
Falkirk UA	79	125	99	156	62	
Fife UA	188	121	105	140	56	
Glasgow City UA	519	198	181	215	20	
Highland UA	68	72	56	91	245	
Inverclyde UA	98	249	202	304	15	
Midlothian UA	33	98	67	137	166	
Moray UA	27	70	46	102	299	
North Ayrshire UA	79	134	106	167	55	
North Lanarkshire UA	119	94	78	113	114	
Orkney Islands UA	6	61	22	133	390	
Perth And Kinross UA	29	43	29	62	375	
Renfrewshire UA	165	224	191	261	18	
Scottish Borders UA	22	40	25	61	385	
Shetland Islands UA	2	21	3	76	406	
South Ayrshire UA	41	73	52	98	268	
South Lanarkshire UA	148	119	101	140	60	
Stirling UA	11	30	15	54	403	
West Dunbartonshire UA	216	537	468	614	1	
West Lothian UA	54	102	77	133	119	

Table 6: Highest and lowest risk UAs and LAs for females

Area	Deaths	SMR	95% Confidence Interval	
			Lower	Upper
<i>Top 20 areas with SMRs greater than 100</i>				
Barking & Dagenham	60	501	382	644
Sunderland	97	470	381	573
West Dunbartonshire UA	29	398	267	572
Leeds	162	310	264	361
Newham	43	356	258	480
Blackburn With Darwen UA	34	360	249	503
Havering	40	227	162	309
Chorley	18	273	162	431
Kirklees	56	204	154	266
South Ribble	18	252	150	399
Newcastle-Upon-Tyne	42	199	143	269
Portsmouth UA	28	199	132	287
Basildon	22	210	132	318
Southampton UA	29	196	131	281
Surrey Heath	12	253	131	442
Bracknell Forest UA	13	244	130	418
Swale	18	218	129	345
Nottingham UA	35	185	129	257
Glasgow City UA	79	161	128	201
Thurrock UA	18	215	127	340
<i>Bottom 20 areas with SMRs less than 100</i>				
Wealden	1	8	0	44
Brighton And Hove UA	4	19	5	48
Torfaen UA	0	0	0	54
Blaenau Gwent UA	0	0	0	64
Cheltenham	1	12	0	65
Taunton Deane	1	12	0	67
Doncaster	7	34	14	70
Barnsley	5	31	10	71
Swansea UA	6	33	12	71
South Somerset	3	24	5	71
Rotherham	6	34	12	74
Leicester UA	7	37	15	77
Carmarthenshire UA	5	33	11	77
Kingston Upon Hull, City Of UA	7	38	15	79
Hinckley and Bosworth	1	15	0	81
Aberdeenshire UA	5	35	11	82
Dumfries and Galloway UA	4	33	9	83
Sheffield	23	56	35	83
Sefton	12	48	25	84
North Shropshire	0	0	0	86

Figure 6 Map of Great Britain showing Female Standardised Mortality Ratios (SMRs) by Local Authority and Unitary Authority 1981 – 2005



Detailed regional maps can be found at <http://www.hse.gov.uk/statistics/regions/index.htm>

Table 7: Mesothelioma mortality in Great Britain: number of deaths and SMRs for females by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
GREAT BRITAIN	4 187	100	97	103		
ENGLAND & WALES	3 809	100	97	103		
ENGLAND	3 687	103	100	106		
NORTH EAST	300	155	138	173		
Darlington UA	12	154	80	269	58	
Hartlepool UA	10	153	73	281	66	
Middlesbrough UA	7	74	30	152	232	
Redcar And Cleveland UA	11	106	53	189	119	
Stockton-On-Tees UA	17	146	85	234	52	
Durham	27	72	47	104		
Chester-Le-Street	4	108	30	277	235	1
Teesdale	3	142	29	414	240	2
Derwentside	5	72	23	168	276	3
Wear Valley	4	78	21	199	286	4
Sedgefield	4	61	17	156	325	5
Easington	4	55	15	141	331	6
Durham	3	50	10	147	350	7
Northumberland	20	83	51	128		
Blyth Valley	9	171	78	325	60	1
Tynedale	6	126	46	273	146	2
Wansbeck	2	41	5	149	380	3
Berwick Upon Tweed	1	40	1	223	389	4
Alnwick	1	38	1	211	390	5
Castle Morpeth	1	25	1	137	393	6
Tyne And Wear (Met County)	196	228	197	262		
Sunderland	97	470	381	573	2	1
Newcastle-Upon-Tyne	42	199	143	269	11	2
North Tyneside	26	163	106	239	27	3
Gateshead	17	108	63	172	90	4
South Tyneside	14	112	61	188	95	5
NORTH WEST	513	100	91	109		
Blackburn With Darwen UA	34	360	249	503	6	
Blackpool UA	13	93	49	158	131	
Halton UA	5	65	21	152	287	
Warrington UA	6	48	18	104	314	
Cheshire	47	95	70	126		
Vale Royal	14	167	92	281	45	1
Crewe & Nantwich	8	101	44	199	159	2
Macclesfield	10	83	40	152	176	3
Ellesmere Port & Neston	5	89	29	208	241	4
Chester	6	65	24	141	271	5
Congleton	4	64	17	163	317	6

Table 7: Mesothelioma mortality in Great Britain: number of deaths and SMRs for females by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
Cumbria	33	83	57	116		
Barrow-In-Furness	11	197	98	353	35	1
Carlisle	9	110	50	208	125	2
Allerdale	5	64	21	150	289	3
South Lakeland	5	53	17	124	318	4
Eden	2	52	6	187	370	5
Copeland	1	19	0	108	394	6
Greater Manchester (Met County)	165	90	77	105		
Wigan	28	131	87	190	50	1
Rochdale	19	134	81	209	56	2
Salford	22	125	78	189	61	3
Tameside	14	88	48	148	138	4
Trafford	14	86	47	145	142	5
Oldham	13	84	44	143	156	6
Bolton	15	79	44	131	157	7
Manchester	18	62	37	97	189	8
Stockport	14	63	35	107	198	9
Bury	8	62	27	122	253	10
Lancashire	111	127	104	152		
Chorley	18	273	162	431	8	1
South Ribble	18	252	150	399	10	2
Preston	12	130	67	226	78	3
Rosendale	7	148	60	306	99	4
Wyre	11	108	54	193	115	5
Ribble Valley	6	140	52	306	124	6
Pendle	7	106	43	218	163	7
West Lancashire	7	92	37	190	187	8
Burnley	6	90	33	196	214	9
Lancaster	8	71	31	140	225	10
Fylde	6	81	30	177	231	11
Hyndburn	5	84	27	195	249	12
Merseyside (Met County)	99	90	73	109		
Liverpool	46	132	96	176	41	1
Knowsley	13	128	68	218	75	2
Wirral	20	74	45	114	153	3
St Helens	8	61	26	120	255	4
Sefton	12	48	25	84	267	5
YORKSHIRE AND THE HUMBER	435	117	107	129		
East Riding Of Yorkshire UA	15	61	34	101	204	
Kingston Upon Hull, City Of UA	7	38	15	79	330	
North East Lincolnshire UA	6	51	19	111	301	
North Lincolnshire UA	9	81	37	154	186	
York UA	7	52	21	107	290	

Table 7: Mesothelioma mortality in Great Britain: number of deaths and SMRs for females by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
North Yorkshire	39	86	61	117		
Scarborough	11	106	53	189	117	1
Harrogate	10	83	40	152	177	2
Craven	5	107	35	249	199	3
Hambleton	5	81	26	189	256	4
Selby	4	82	22	209	280	5
Richmondshire	2	65	8	233	361	6
Ryedale	2	48	6	172	375	7
South Yorkshire (Met County)	41	43	31	58		
Sheffield	23	56	35	83	196	1
Doncaster	7	34	14	70	335	2
Rotherham	6	34	12	74	339	3
Barnsley	5	31	10	71	353	4
West Yorkshire (Met County)	311	208	186	233		
Leeds	162	310	264	361	4	1
Kirklees	56	204	154	266	9	2
Wakefield	37	166	117	229	25	3
Calderdale	24	162	104	241	30	4
Bradford	32	98	67	139	77	5
EAST MIDLANDS	267	91	80	102		
Derby UA	8	49	21	97	285	
Leicester UA	7	37	15	77	332	
Nottingham UA	35	185	129	257	18	
Rutland UA	5	210	68	490	74	
Derbyshire	46	84	61	112		
The Derbyshire Dales	7	120	48	246	139	1
North East Derbyshire	8	109	47	214	144	2
High Peak	7	111	45	230	155	3
Erewash	7	89	36	183	194	4
Bolsover	5	91	30	213	233	5
Amber Valley	5	56	18	132	308	6
Chesterfield	4	50	14	129	334	7
South Derbyshire	3	58	12	170	342	8
Leicestershire	17	42	24	67		
North West Leicestershire	5	83	27	195	250	1
Melton	3	90	19	264	305	2
Blaby	3	52	11	153	347	3
Charnwood	3	30	6	87	373	4
Harborough	2	41	5	147	381	5
Hinckley And Bosworth	1	15	0	81	397	6
Oadby And Wigston	0	0	0	96	401	7

Table 7: Mesothelioma mortality in Great Britain: number of deaths and SMRs for females by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
Lincolnshire	34	69	48	97		
South Kesteven	9	107	49	204	133	1
South Holland	6	97	36	212	195	2
North Kesteven	5	74	24	174	269	3
Boston	4	88	24	225	270	4
East Lindsey	6	53	20	116	296	5
West Lindsey	3	50	10	146	351	6
Lincoln	1	16	0	92	396	7
Northamptonshire	44	111	80	148		
Northampton	15	125	70	206	73	1
East Northamptonshire	7	139	56	287	110	2
Kettering	7	122	49	251	135	3
South Northamptonshire	6	126	46	275	145	4
Wellingborough	5	106	34	247	203	5
Corby	2	61	7	220	363	6
Daventry	2	47	6	170	377	7
Nottinghamshire	71	131	103	166		
Rushcliffe	16	215	123	350	22	1
Broxtowe	15	191	107	316	26	2
Newark And Sherwood	13	165	88	283	49	3
Gedling	13	160	85	273	51	4
Bassetlaw	6	78	29	170	244	5
Ashfield	5	63	21	148	292	6
Mansfield	3	42	9	122	359	7
WEST MIDLANDS	253	67	59	76		
Herefordshire, County Of UA	9	66	30	125	229	
Stoke-On-Trent UA	12	64	33	112	212	
Telford And Wrekin UA	5	57	19	134	304	
Shropshire	9	41	19	78		
Shrewsbury And Atcham	7	96	39	198	179	1
South Shropshire	1	28	1	157	391	2
Bridgnorth	1	26	1	146	392	3
North Shropshire	0	0	0	86	401	4
Oswestry	0	0	0	129	401	4
Staffordshire	38	69	49	95		
Lichfield	7	112	45	230	154	1
Newcastle-Under-Lyme	9	96	44	183	158	2
East Staffordshire	7	97	39	200	178	3
Staffordshire Moorlands	5	69	22	161	279	4
Tamworth	3	82	17	239	322	5
South Staffordshire	3	43	9	126	356	6
Stafford	3	34	7	99	367	7
Cannock Chase	1	18	0	100	395	8

Table 7: Mesothelioma mortality in Great Britain: number of deaths and SMRs for females by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
Warwickshire	23	64	41	96		
North Warwickshire	6	146	53	317	116	1
Nuneaton And Bedworth	7	90	36	185	193	2
Rugby	4	64	18	165	315	3
Stratford-On-Avon	3	34	7	101	366	4
Warwick	3	33	7	97	369	5
West Midlands (Met County)	132	71	59	84		
Wolverhampton	19	105	63	165	88	1
Birmingham	47	68	50	90	127	2
Walsall	15	81	45	133	150	3
Dudley	16	71	40	115	173	4
Sandwell	15	67	38	111	184	5
Solihull	9	62	28	118	245	6
Coventry	11	51	26	92	261	7
Worcestershire	25	65	42	96		
Wyre Forest	6	84	31	183	221	1
Worcester	5	83	27	193	252	2
Malvern Hills	5	79	26	184	262	3
Wychavon	5	61	20	143	295	4
Redditch	2	48	6	172	376	5
Bromsgrove	2	31	4	113	387	6
EAST OF ENGLAND	428	112	102	124		
Luton UA	11	112	56	201	109	
Peterborough UA	9	94	43	178	161	
Southend-On-Sea UA	16	108	62	175	93	
Thurrock UA	18	215	127	340	20	
Bedfordshire	22	95	60	144		
South Bedfordshire	9	133	61	253	96	1
Bedford	8	84	36	166	190	2
Mid Bedfordshire	5	72	24	169	273	3
Cambridgeshire	34	97	67	136		
Fenland	9	143	65	272	82	1
Huntingdonshire	9	104	48	197	141	2
South Cambridgeshire	7	85	34	176	202	3
Cambridge	5	71	23	165	277	4
East Cambridgeshire	4	83	23	213	278	5

Table 7: Mesothelioma mortality in Great Britain: number of deaths and SMRs for females by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
Essex	127	135	112	160		
Basildon	22	210	132	318	13	1
Castle Point	14	222	121	373	23	2
Maldon	9	230	105	436	29	3
Brentwood	11	198	99	354	33	4
Chelmsford	17	169	98	270	36	5
Rochford	9	156	71	296	70	6
Harlow	7	145	58	298	104	7
Tendring	15	103	58	170	105	8
Uttlesford	5	107	35	250	197	9
Epping Forest	7	76	31	156	226	10
Colchester	6	59	22	128	283	11
Braintree	5	58	19	135	299	12
Hertfordshire	65	93	72	119		
Dacorum	16	175	100	284	32	1
East Hertfordshire	10	128	62	236	94	2
Hertsmere	8	114	49	224	134	3
North Hertfordshire	7	85	34	175	205	4
Welwyn Hatfield	6	84	31	184	220	5
Three Rivers	5	81	26	188	257	6
Stevenage	4	86	23	221	274	7
Watford	4	80	22	205	282	8
St Albans	3	34	7	99	368	9
Broxbourne	2	37	4	132	385	10
Norfolk	66	102	79	129		
Kings Lynn And West Norfolk	14	122	67	205	80	1
Breckland	11	122	61	218	97	2
North Norfolk	11	115	57	205	106	3
Norwich	11	114	57	205	107	4
South Norfolk	8	93	40	183	174	5
Broadland	7	78	31	160	218	6
Great Yarmouth	4	53	14	135	333	7
Suffolk	60	117	89	151		
Forest Heath	8	227	98	448	38	1
Ipswich	13	144	77	247	63	2
Babergh	9	142	65	270	83	3
Waveney	10	101	48	186	137	4
Mid Suffolk	7	114	46	235	147	5
St Edmundsbury	6	88	32	192	216	6
Suffolk Coastal	7	73	29	150	237	7

Table 7: Mesothelioma mortality in Great Britain: number of deaths and SMRs for females by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
LONDON	568	123	114	134		
Inner London	183	115	99	133		
Newham	43	356	258	480	5	1
Tower Hamlets	19	205	123	319	21	2
Southwark	21	146	91	224	46	3
Lewisham	17	109	63	175	87	4
Hackney	12	113	59	198	103	5
Hammersmith & Fulham	10	104	50	192	126	6
Wandsworth	13	79	42	134	166	7
Haringey	10	84	40	155	171	8
Lambeth	11	77	39	138	180	9
Camden	8	68	29	133	239	10
Islington	7	69	28	142	247	11
Westminster, City Of	7	54	22	112	281	12
Kensington & Chelsea	5	52	17	122	321	13
City Of London	0	0	0	862	401	14
Outer London	385	128	115	141		
Barking & Dagenham	60	501	382	644	1	1
Havering	40	227	162	309	7	2
Greenwich	26	180	118	264	24	3
Bromley	34	145	100	202	31	4
Redbridge	25	152	98	224	37	5
Bexley	23	146	92	219	44	6
Hillingdon	22	135	85	205	53	7
Waltham Forest	19	132	80	206	59	8
Enfield	17	90	53	145	121	9
Brent	14	95	52	159	123	10
Richmond Upon Thames	12	94	49	164	136	11
Sutton	12	92	48	161	140	12
Harrow	13	88	47	151	143	13
Ealing	14	78	43	131	162	14
Kingston Upon Thames	9	89	41	169	170	15
Merton	10	80	38	147	181	16
Hounslow	10	79	38	145	182	17
Barnet	14	63	34	105	201	18
Croydon	11	52	26	93	259	19

Table 7: Mesothelioma mortality in Great Britain: number of deaths and SMRs for females by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
SOUTH EAST	618	105	97	114		
Bracknell Forest UA	13	244	130	418	16	
Brighton And Hove UA	4	19	5	48	378	
Isle Of Wight UA	14	109	59	182	100	
Medway UA	23	154	98	232	39	
Milton Keynes UA	13	143	76	244	64	
Portsmouth UA	28	199	132	287	12	
Reading UA	6	69	25	151	264	
Slough UA	7	112	45	231	152	
Southampton UA	29	196	131	281	14	
West Berkshire UA	4	47	13	120	337	
Windsor And Maidenhead UA	12	125	65	219	85	
Wokingham UA	9	115	53	218	120	
Buckinghamshire	30	98	66	139		
Chiltern	11	164	82	293	55	1
Wycombe	9	90	41	170	168	2
South Bucks	5	105	34	245	206	3
Aylesbury Vale	5	54	18	126	313	4
East Sussex	35	71	49	98		
Lewes	12	136	70	237	72	1
Hastings	9	119	54	225	113	2
Rother	8	76	33	150	215	3
Eastbourne	5	50	16	117	326	4
Wealden	1	8	0	44	400	5
Hampshire	83	97	78	121		
Havant	12	131	68	229	76	1
Eastleigh	10	138	66	255	81	2
Fareham	9	119	54	226	112	3
New Forest	13	85	45	145	151	4
Winchester	8	101	44	199	160	5
Test Valley	7	99	40	204	175	6
Hart	5	107	35	249	200	7
Rushmoor	5	103	33	241	210	8
East Hampshire	6	80	29	175	236	9
Basingstoke And Deane	6	70	26	152	263	10
Gosport	2	37	5	135	383	11

Table 7: Mesothelioma mortality in Great Britain: number of deaths and SMRs for females by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
Kent	117	113	94	136		
Swale	18	218	129	345	17	1
Gravesham	13	197	105	337	28	2
Tonbridge And Malling	13	183	98	313	40	3
Maidstone	16	163	93	265	43	4
Thanet	17	133	77	213	62	5
Dartford	7	123	50	254	128	6
Sevenoaks	7	84	34	174	207	7
Ashford	6	84	31	183	224	8
Canterbury	7	59	24	122	272	9
Shepway	5	57	18	132	306	10
Dover	5	56	18	131	310	11
Tunbridge Wells	3	37	8	108	362	12
Oxfordshire	37	97	68	134		
Cherwell	11	146	73	262	67	1
Oxford	10	122	59	225	102	2
Vale Of White Horse	6	80	29	174	238	3
West Oxfordshire	5	78	25	182	265	4
South Oxfordshire	5	58	19	136	298	5
Surrey	95	120	97	147		
Surrey Heath	12	253	131	442	15	1
Runnymede	11	198	99	354	34	2
Guildford	14	152	83	255	54	3
Spelthorne	10	152	73	279	68	4
Reigate And Banstead	12	126	65	219	84	5
Mole Valley	9	131	60	249	98	6
Tandridge	6	99	36	216	191	7
Elmbridge	7	76	30	156	228	8
Epsom And Ewell	5	89	29	208	242	9
Woking	4	67	18	172	309	10
Waverley	5	53	17	123	320	11
West Sussex	59	88	67	113		
Crawley	11	191	95	341	42	1
Arun	16	104	59	168	101	2
Chichester	8	77	33	152	213	3
Worthing	8	71	30	139	227	4
Mid Sussex	7	73	30	151	234	5
Adur	4	69	19	176	302	6
Horsham	5	56	18	132	307	7

Table 7: Mesothelioma mortality in Great Britain: number of deaths and SMRs for females by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
SOUTH WEST	305	77	68	86		
Bath And North East Somerset UA	14	103	56	173	108	
Bournemouth UA	11	68	34	121	208	
Bristol, City Of UA	37	128	90	177	47	
North Somerset UA	7	45	18	92	311	
Plymouth UA	14	77	42	129	164	
Poole UA	7	58	23	120	275	
South Gloucestershire UA	12	81	42	142	165	
Swindon UA	14	129	71	217	71	
Torbay UA	13	99	53	170	118	
Cornwall And Isles Of Scilly	36	85	59	118		
Kerrier	8	105	46	208	148	1
North Cornwall	7	103	42	213	167	2
Restormel	7	91	37	188	188	3
Caradon	5	77	25	180	266	4
Carrick	5	63	20	147	293	5
Penwith	4	69	19	176	303	6
Isles Of Scilly	0	0	0	2505	401	7
Devon	44	71	52	95		
North Devon	10	131	63	241	89	1
Torridge	6	124	45	269	149	2
East Devon	9	66	30	124	230	3
Teignbridge	7	64	26	131	260	4
Exeter	5	62	20	144	294	5
South Hams	3	42	9	124	358	6
West Devon	2	48	6	174	374	7
Mid Devon	2	37	4	134	384	8
Dorset	24	66	42	98		
West Dorset	7	78	31	160	219	1
Weymouth And Portland	4	77	21	197	288	2
Christchurch	4	76	21	194	291	3
East Dorset	4	49	13	126	336	4
North Dorset	3	61	13	178	338	5
Purbeck	2	51	6	186	371	6
Gloucestershire	29	68	46	98		
Gloucester	10	139	67	256	79	1
Forest Of Dean	5	83	27	194	251	2
Stroud	6	72	26	156	254	3
Cotswold	5	75	24	174	268	4
Tewkesbury	2	36	4	129	386	5
Cheltenham	1	12	0	65	399	6

Table 7: Mesothelioma mortality in Great Britain: number of deaths and SMRs for females by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
Somerset	17	42	25	67		
Sedgemoor	7	83	33	171	211	1
West Somerset	3	81	17	236	324	2
Mendip	3	39	8	115	360	3
South Somerset	3	24	5	71	379	4
Taunton Deane	1	12	0	67	398	5
Wiltshire	26	85	56	125		
West Wiltshire	11	129	65	231	86	1
Salisbury	7	80	32	165	217	2
North Wiltshire	6	75	27	163	248	3
Kennet	2	39	5	139	382	4
WALES	122	53	44	64		
Blaenau Gwent UA	0	0	0	64	401	
Bridgend UA	4	41	11	104	346	
Caerphilly UA	12	101	52	176	122	
Cardiff UA	11	52	26	93	258	
Carmarthenshire UA	5	33	11	77	348	
Ceredigion UA	4	69	19	176	300	
Conwy UA	8	71	31	141	222	
Denbighshire UA	3	35	7	102	365	
Flintshire UA	5	50	16	116	327	
Gwynedd UA	4	39	11	100	349	
Isle Of Anglesey UA	4	71	19	181	297	
Merthyr Tydfil UA	5	111	36	260	192	
Monmouthshire UA	4	62	17	158	323	
Neath Port Talbot UA	4	35	9	89	355	
Newport UA	3	30	6	88	372	
Pembrokeshire UA	8	88	38	172	183	
Powys UA	6	59	22	128	284	
Rhondda, Cynon, Taff UA	11	62	31	111	223	
Swansea UA	6	33	12	71	341	
Torfaen UA	0	0	0	54	401	
The Vale Of Glamorgan UA	10	113	54	207	114	
Wrexham UA	5	53	17	124	319	

Table 7: Mesothelioma mortality in Great Britain: number of deaths and SMRs for females by area 1981-2005

Area	Deaths	SMR	95% Confidence Interval		Rank within GB	Rank within county
			Lower	Upper		
SCOTLAND	378	99	89	110		
Aberdeen City UA	22	141	88	213	48	
Aberdeenshire UA	5	35	11	82	344	
Angus UA	4	45	12	116	340	
Argyll And Bute UA	10	130	62	239	91	
Clackmannanshire UA	2	60	7	218	364	
Dumfries And Galloway UA	4	33	9	83	357	
Dundee City UA	8	64	28	127	246	
East Ayrshire UA	5	55	18	128	312	
East Dunbartonshire UA	9	120	55	228	111	
East Lothian UA	4	58	16	148	329	
East Renfrewshire UA	4	64	17	164	316	
Edinburgh, City Of UA	26	76	49	111	130	
Eilean Siar (Western Isles) UA	1	40	1	224	388	
Falkirk UA	15	144	81	238	57	
Fife UA	25	96	62	141	92	
Glasgow City UA	79	161	128	201	19	
Highland UA	12	79	41	138	169	
Inverclyde UA	8	115	49	226	129	
Midlothian UA	3	55	11	161	345	
Moray UA	3	48	10	140	354	
North Ayrshire UA	8	78	34	154	209	
North Lanarkshire UA	18	83	49	131	132	
Orkney Islands UA	2	132	16	478	328	
Perth And Kinross UA	9	81	37	154	185	
Renfrewshire UA	16	125	72	204	69	
Scottish Borders UA	4	44	12	112	343	
Shetland Islands UA	0	0	0	247	401	
South Ayrshire UA	7	72	29	148	243	
South Lanarkshire UA	25	117	76	172	65	
Stirling UA	3	49	10	143	352	
West Dunbartonshire UA	29	398	267	572	3	
West Lothian UA	8	93	40	184	172	

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
GREAT BRITAIN	2 356	100	3 619	100	5 066	100	6 478	100	8 197	100	25 716	25 716
ENGLAND & WALES	2 097	98	3 183	96	4 517	98	5 849	99	7 453	99	23 099	23 493
ENGLAND	2 033	100	3 078	99	4 322	99	5 606	101	7 127	101	22 166	22 085
NORTH EAST	241	216	317	187	427	182	500	169	602	162	2 087	1 183
Darlington UA	2	45	10	148	15	162	14	120	19	131	60	47
Hartlepool UA	7	180	15	260	23	286	22	218	30	235	97	41
Middlesbrough UA	6	105	17	198	17	146	18	122	24	132	82	59
Redcar And Cleveland UA	15	257	15	164	22	169	25	150	31	145	108	66
Stockton-On-Tees UA	26	402	27	264	26	178	28	148	47	192	154	75
Durham	16	73	13	39	32	69	45	77	58	78	164	234
Chester-Le-Street	5	242	2	61	4	85	4	66	14	176	29	24
Derwentside	3	74	3	49	8	97	14	135	8	61	36	42
Durham	2	59	0	0	2	27	10	107	9	76	23	37
Easington	3	67	5	76	8	87	8	70	12	84	36	46
Sedgefield	2	52	2	34	6	72	4	39	8	61	22	41
Wear Valley	1	34	0	0	4	65	2	26	4	42	11	31
Northumberland	14	103	21	99	28	93	34	88	50	100	147	154
Blyth Valley	8	276	4	87	12	182	11	128	14	125	49	34
Castle Morpeth	3	123	8	210	1	19	6	88	5	57	23	27
Tynedale	1	39	4	98	6	102	3	40	13	133	27	30
Wansbeck	1	34	3	68	5	82	7	93	7	74	23	31
Tyne And Wear (Met County)	155	312	199	267	264	260	314	248	343	220	1 275	509
Gateshead	20	217	28	202	38	202	33	141	34	117	153	94
Newcastle-Upon-Tyne	40	324	43	239	52	217	67	228	77	218	279	119
North Tyneside	31	349	56	415	67	360	65	278	96	328	315	94
South Tyneside	30	409	41	373	52	346	64	339	53	228	240	75
Sunderland	34	287	31	170	55	219	85	269	83	212	288	126

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
NORTH WEST	291	100	427	97	610	100	772	101	1 001	104	3 101	3 068
Blackburn With Darwen UA	2	35	7	85	11	100	7	52	11	68	38	54
Blackpool UA	9	114	10	86	18	112	19	97	20	84	76	79
Halton UA	7	160	4	58	20	209	13	108	30	199	74	48
Warrington UA	0	0	5	46	13	83	13	65	24	93	55	79
Cheshire	23	85	35	82	83	135	95	118	141	135	377	316
Chester	2	39	2	25	9	79	10	68	14	76	37	58
Congleton	4	121	2	37	4	51	13	123	14	100	37	41
Crewe & Nantwich	11	248	16	234	28	283	26	203	42	248	123	51
Ellesmere Port & Neston	3	97	7	141	12	167	11	117	24	198	57	37
Macclesfield	2	30	2	19	13	88	14	73	23	94	54	76
Vale Royal	1	22	6	82	17	162	21	152	24	133	69	54
Cumbria	41	186	59	173	61	126	87	139	115	141	363	249
Allerdale	1	23	4	59	1	10	10	82	12	76	28	49
Barrow-In-Furness	30	916	29	595	40	594	41	478	46	423	186	34
Carlisle	3	65	4	57	7	71	16	128	17	107	47	50
Copeland	3	100	12	260	3	47	7	85	15	140	40	33
Eden	1	48	1	30	1	21	2	30	3	34	8	26
South Lakeland	3	63	9	119	9	82	11	76	22	114	54	57

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
Greater Manchester (Met County)	86	80	137	86	179	82	234	87	281	85	917	1 082
Bolton	12	113	18	112	29	130	38	135	17	48	114	112
Bury	6	83	10	92	11	72	21	109	18	74	66	77
Manchester	18	95	29	110	22	65	23	58	36	77	128	166
Oldham	4	44	4	30	13	71	19	84	15	54	55	92
Rochdale	10	123	12	98	9	53	15	71	26	99	72	85
Salford	10	93	18	116	15	73	25	101	30	102	98	101
Stockport	5	41	9	48	20	77	21	63	31	75	86	131
Tameside	9	98	16	117	18	96	27	117	38	134	108	93
Trafford	7	75	9	64	17	87	20	82	29	98	82	97
Wigan	5	42	12	66	25	98	25	77	41	100	108	129
Lancashire	34	70	54	73	89	86	98	74	150	88	425	528
Burnley	1	26	3	53	2	25	5	51	4	33	15	40
Chorley	4	115	6	107	5	62	8	75	14	101	37	42
Fylde	2	54	0	0	9	108	8	74	12	85	31	43
Hyndburn	2	57	4	77	7	100	5	57	6	54	24	35
Lancaster	1	16	9	97	10	78	10	62	26	128	56	65
Pendle	2	52	3	54	9	117	8	84	9	74	31	39
Preston	6	109	4	49	16	146	9	66	13	77	48	55
Ribble Valley	1	41	1	26	3	58	11	165	9	101	25	27
Rossendale	4	152	8	201	2	37	4	58	7	81	25	28
South Ribble	3	79	5	82	8	90	2	17	12	79	30	46
West Lancashire	5	125	4	62	5	53	10	80	10	61	34	49
Wyre	3	57	7	84	13	109	18	117	28	139	69	61

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
Merseyside (Met County)	89	143	116	125	136	107	206	131	229	119	776	632
Knowsley	7	120	14	159	10	83	31	203	28	148	90	61
Liverpool	22	104	37	122	36	90	58	122	44	78	197	195
Sefton	16	125	20	100	32	114	38	107	52	117	158	141
St Helens	4	53	4	35	10	63	11	55	24	96	53	80
Wirral	40	273	41	183	48	155	68	176	81	168	278	155
YORKSHIRE AND THE HUMBER	187	89	260	81	435	97	559	99	688	96	2 129	2 259
East Riding Of Yorkshire UA	5	39	13	63	22	72	34	84	51	94	125	159
Kingston Upon Hull, City Of UA	9	82	20	124	18	82	30	112	33	102	110	108
North East Lincolnshire UA	2	30	9	87	17	117	15	81	15	64	58	73
North Lincolnshire UA	8	125	3	30	19	132	16	87	24	100	70	74
York UA	5	68	11	96	31	194	35	168	32	120	114	82
North Yorkshire	18	75	16	42	39	71	49	68	75	79	197	284
Craven	0	0	1	27	6	108	7	96	5	52	19	28
Hambleton	4	119	1	19	5	63	5	47	10	70	25	42
Harrogate	3	48	4	41	10	73	13	73	19	81	49	71
Richmondshire	1	57	0	0	1	26	7	136	3	43	12	20
Ryedale	1	43	0	0	1	18	3	40	6	61	11	29
Scarborough	5	95	7	85	9	75	7	45	19	96	47	61
Selby	4	151	3	70	7	110	7	83	13	118	34	33
South Yorkshire (Met County)	37	65	63	73	107	91	122	83	162	89	491	591
Barnsley	3	30	3	20	6	29	4	16	14	44	30	103
Doncaster	19	155	18	95	38	142	49	145	59	139	183	134
Rotherham	1	10	12	75	18	81	16	57	24	67	71	112
Sheffield	14	56	30	82	45	92	53	89	65	90	207	242

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
West Yorkshire (Met County)	103	120	125	97	182	103	258	116	296	107	964	888
Bradford	14	76	19	69	37	97	37	78	58	99	165	190
Calderdale	14	169	17	138	22	131	29	137	25	94	107	85
Kirklees	17	111	18	78	20	62	50	123	52	102	157	162
Leeds	47	154	57	125	78	126	114	147	121	127	417	311
Wakefield	11	85	14	71	25	91	28	80	40	90	118	139
EAST MIDLANDS	105	63	185	70	272	73	368	76	490	78	1 420	1 916
Derby UA	12	125	22	150	26	128	35	135	47	144	142	103
Leicester UA	11	94	9	53	13	57	13	47	19	59	65	111
Nottingham UA	9	75	20	114	15	64	30	107	36	112	110	113
Derbyshire	15	47	25	51	34	49	58	65	93	81	225	353
Amber Valley	2	38	6	76	7	63	6	42	8	44	29	57
Bolsover	1	30	0	0	4	56	5	55	10	88	20	36
Chesterfield	3	66	3	43	6	61	5	41	9	59	26	49
Erewash	3	66	6	85	8	81	10	80	19	119	46	50
High Peak	0	0	2	38	4	53	8	80	18	138	32	39
North East Derbyshire	2	47	3	44	3	31	11	87	10	61	29	50
South Derbyshire	2	68	3	64	2	30	7	80	12	102	26	35
The Derbyshire Dales	2	61	2	40	0	0	6	64	7	57	17	37
Leicestershire	12	54	25	69	25	47	58	83	57	62	177	273
Blaby	3	96	3	59	2	26	9	90	11	82	28	39
Charnwood	0	0	7	79	6	46	12	71	18	84	43	66
Harborough	1	38	5	117	5	77	6	68	8	67	25	34
Hinckley And Bosworth	5	136	2	33	4	45	7	60	6	39	24	46
Melton	1	54	2	68	4	93	5	89	2	27	14	22
North West Leicestershire	1	29	2	37	1	13	13	128	8	61	25	40
Oadby And Wigston	1	48	4	118	3	60	6	89	4	46	18	26

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
Lincolnshire	12	46	17	40	41	65	46	54	58	50	174	334
Boston	1	40	2	50	2	35	3	39	3	30	11	30
East Lindsey	1	18	2	21	7	47	12	59	9	32	31	79
Lincoln	0	0	2	38	9	123	6	65	6	52	23	37
North Kesteven	2	57	4	69	5	57	5	42	9	54	25	47
South Holland	1	31	2	37	5	61	9	81	6	39	23	43
South Kesteven	1	23	5	70	6	56	8	55	10	51	30	56
West Lindsey	6	182	0	0	7	88	3	28	15	104	31	42
Northamptonshire	15	68	34	97	46	91	66	99	81	94	242	260
Corby	1	50	4	130	5	114	10	176	14	198	34	22
Daventry	3	128	3	78	8	143	4	53	7	70	25	29
East Northamptonshire	2	73	3	69	6	95	12	145	11	98	34	33
Kettering	1	31	8	162	2	29	9	98	7	59	27	36
Northampton	2	30	8	76	10	67	17	88	19	78	56	76
South Northamptonshire	0	0	5	118	5	80	6	70	10	88	26	33
Wellingborough	6	227	3	71	10	165	8	101	13	125	40	31
Nottinghamshire	19	62	31	64	71	102	61	68	94	82	276	352
Ashfield	1	22	4	57	6	60	5	39	9	55	25	51
Bassetlaw	3	68	7	100	13	130	12	93	13	78	48	51
Broxtowe	2	45	6	86	5	50	15	116	13	80	41	51
Gedling	4	88	3	41	14	134	9	66	16	91	46	53
Mansfield	2	46	3	45	5	54	4	34	17	115	31	47
Newark And Sherwood	5	115	2	29	16	160	7	54	13	76	43	51
Rushcliffe	2	51	6	93	12	127	9	73	13	83	42	48

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
WEST MIDLANDS	103	47	156	46	309	65	464	76	564	74	1 596	2 406
Herefordshire, County Of UA	0	0	3	26	8	46	9	39	22	71	42	91
Stoke-On-Trent UA	1	9	5	30	15	67	24	86	23	68	68	112
Telford And Wrekin UA	2	44	6	80	7	63	9	62	9	46	33	57
Shropshire	6	52	7	37	15	55	19	52	26	55	73	142
Bridgnorth	2	93	0	0	3	60	1	15	6	68	12	26
North Shropshire	0	0	1	28	2	37	3	41	5	53	11	28
Shrewsbury And Atcham	0	0	4	65	6	67	7	60	7	47	24	46
South Shropshire	2	109	0	0	1	22	4	65	5	60	12	24
Staffordshire	14	46	12	25	53	75	84	91	110	91	273	364
Cannock Chase	3	94	2	40	6	83	10	106	9	74	30	37
East Staffordshire	2	49	2	31	10	111	18	154	14	94	46	46
Lichfield	1	31	2	36	5	61	16	147	14	95	38	42
Newcastle-Under-Lyme	0	0	0	0	6	52	6	41	17	92	29	58
South Staffordshire	1	27	1	16	5	54	7	55	12	70	26	49
Stafford	3	61	0	0	9	79	16	107	17	88	45	59
Staffordshire Moorlands	2	48	1	15	1	11	4	33	14	88	22	48
Tamworth	2	107	4	127	11	229	7	110	13	151	37	25
Warwickshire	9	44	13	40	32	69	51	85	60	77	165	236
North Warwickshire	1	40	4	104	8	147	8	113	9	97	30	28
Nuneaton And Bedworth	1	22	0	0	5	49	9	69	8	47	23	52
Rugby	1	27	2	35	2	24	10	95	12	90	27	41
Stratford-On-Avon	2	43	4	53	3	27	12	82	12	63	33	57
Warwick	4	81	3	38	14	124	12	82	19	101	52	58

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
West Midlands (Met County)	57	50	88	52	155	67	218	76	253	72	771	1 154
Birmingham	23	53	38	60	72	85	80	78	84	69	297	415
Coventry	1	7	6	30	8	30	23	69	31	77	69	135
Dudley	5	39	6	30	18	63	22	60	25	54	76	144
Sandwell	11	81	16	79	15	55	30	91	29	73	101	134
Solihull	6	76	10	78	18	98	21	87	30	98	85	94
Walsall	4	37	3	18	13	55	24	81	32	86	76	118
Wolverhampton	7	63	9	54	11	48	18	63	22	63	67	114
Worcestershire	14	70	22	67	24	50	50	78	61	72	171	250
Bromsgrove	4	117	2	36	4	49	9	82	7	49	26	43
Malvern Hills	1	31	4	73	3	38	6	57	12	87	26	41
Redditch	3	144	2	54	4	71	10	136	5	51	24	29
Worcester	1	31	0	0	1	14	2	21	11	92	15	37
Wychavon	2	48	6	86	5	48	10	70	11	57	34	55
Wyre Forest	3	80	8	132	7	79	13	111	15	96	46	46
EAST OF ENGLAND	171	81	311	93	440	92	643	102	875	107	2 440	2 469
Luton UA	7	113	11	118	7	53	13	76	27	123	65	68
Peterborough UA	2	37	3	34	12	94	20	124	32	157	69	63
Southend-On-Sea UA	5	62	10	84	22	135	27	132	26	105	90	82
Thurrock UA	5	101	17	225	18	174	22	165	29	170	91	53
Bedfordshire	3	23	15	72	23	77	21	53	53	102	115	156
Bedford	1	19	7	83	12	100	6	38	21	101	47	62
Mid Bedfordshire	1	25	4	63	3	33	7	58	14	87	29	48
South Bedfordshire	1	26	4	65	8	90	8	68	18	118	39	46

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
Cambridgeshire	7	37	19	63	39	87	47	78	85	108	197	233
Cambridge	5	127	3	51	5	60	9	87	10	81	32	41
East Cambridgeshire	0	0	3	71	8	129	9	104	8	69	28	33
Fenland	1	30	2	37	10	121	8	72	20	135	41	43
Huntingdonshire	0	0	4	54	6	53	9	58	30	143	49	60
South Cambridgeshire	1	22	7	95	10	92	12	82	17	90	47	56
Essex	53	105	98	121	124	106	187	121	242	120	704	605
Basildon	7	133	18	203	26	199	28	163	33	150	112	66
Braintree	5	108	4	55	11	104	19	134	14	74	53	56
Brentwood	1	31	12	239	8	114	9	101	18	160	48	35
Castle Point	6	179	11	204	13	164	21	197	26	179	77	42
Chelmsford	4	73	9	102	8	62	19	112	32	146	72	66
Colchester	8	148	5	58	7	56	18	110	16	75	54	64
Epping Forest	7	128	8	95	11	94	15	101	22	119	63	59
Harlow	3	109	3	67	9	143	8	100	5	50	28	32
Maldon	1	48	8	237	7	140	5	74	12	130	33	26
Rochford	2	64	7	138	7	94	13	132	16	124	45	38
Tendring	7	98	9	78	16	94	27	117	34	110	93	90
Uttlesford	2	75	4	96	1	17	5	63	14	134	26	31
Hertfordshire	31	76	53	85	67	77	101	90	125	88	377	445
Broxbourne	4	130	4	80	3	42	11	118	8	67	30	36
Dacorum	3	57	7	85	13	112	12	80	11	58	46	59
East Hertfordshire	3	68	3	43	5	50	9	68	16	94	36	51
Hertsmere	4	97	5	80	6	70	6	55	18	136	39	43
North Hertfordshire	3	64	7	97	6	58	13	97	15	89	44	52
St Albans	1	19	5	61	3	27	12	84	11	63	32	57
Stevenage	0	0	12	292	4	67	5	65	8	82	29	30
Three Rivers	6	159	2	36	11	143	17	173	15	124	51	39
Watford	3	98	1	22	5	84	10	133	11	118	30	30
Welwyn Hatfield	4	94	7	106	11	121	6	52	12	84	40	46

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
Norfolk	28	80	47	84	76	92	104	94	141	96	396	430
Breckland	3	64	8	101	9	75	10	61	19	86	49	63
Broadland	3	63	9	116	9	77	18	113	29	136	68	61
Great Yarmouth	4	98	3	46	12	129	14	115	22	136	55	48
Kings Lynn And West Norfolk	9	146	2	20	14	94	13	65	23	87	61	78
North Norfolk	3	61	4	49	14	116	11	66	20	89	52	64
Norwich	6	110	13	161	10	90	19	137	13	77	61	55
South Norfolk	0	0	8	104	8	70	19	123	15	73	50	60
Suffolk	30	108	38	86	52	81	101	118	115	102	336	335
Babergh	7	206	5	90	14	173	13	120	13	89	52	42
Forest Heath	0	0	6	190	3	66	4	67	5	66	18	23
Ipswich	9	169	8	100	14	130	17	126	20	119	68	54
Mid Suffolk	4	116	1	18	3	37	10	91	9	60	27	43
St Edmundsbury	1	28	2	34	7	81	13	112	22	143	45	45
Suffolk Coastal	6	122	6	76	3	25	18	112	22	101	55	63
Waveney	3	58	10	118	8	65	26	160	24	111	71	64
LONDON	312	108	434	105	540	100	647	98	730	92	2 663	2 695
Inner London	125	120	142	97	173	92	193	86	221	85	854	923
Camden	8	109	4	38	12	86	14	85	11	57	49	68
Hackney	8	108	8	78	11	86	5	33	9	52	41	63
Hammersmith & Fulham	7	112	8	94	6	56	7	54	10	64	38	54
Haringey	2	25	6	56	7	50	10	60	15	79	40	68
Islington	8	120	11	114	10	81	9	62	8	49	46	59
Kensington & Chelsea	1	19	7	90	3	27	4	28	10	53	25	57
Lambeth	11	110	5	37	6	35	15	76	17	76	54	83
Lewisham	13	127	15	105	18	101	27	131	31	133	104	86
Newham	31	368	34	292	40	270	31	178	36	182	172	72
Southwark	6	62	10	74	12	70	19	95	21	91	68	83
Tower Hamlets	18	275	16	165	20	158	10	67	27	161	91	61
Wandsworth	8	75	15	102	18	98	24	113	13	54	78	89
Westminster, City Of	4	50	3	26	10	66	17	91	13	56	47	77

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
Outer London	187	102	292	110	367	104	454	104	509	96	1 809	1 772
Barking & Dagenham	28	373	35	328	40	288	44	267	40	209	187	68
Barnet	4	31	11	58	21	83	20	63	21	54	77	128
Bexley	14	152	22	158	31	162	30	123	33	108	130	97
Brent	2	20	15	107	4	22	18	78	14	49	53	94
Bromley	6	45	9	45	25	91	39	113	49	115	128	138
Croydon	2	16	12	64	15	60	24	76	33	85	86	127
Ealing	10	85	13	77	13	60	23	86	15	47	74	109
Enfield	4	35	14	85	7	32	27	100	24	72	76	110
Greenwich	11	124	20	157	28	169	28	143	32	138	119	81
Harrow	7	80	15	118	14	82	16	75	18	68	70	86
Havering	22	209	31	195	46	212	39	143	55	161	193	110
Hillingdon	9	90	27	181	32	162	35	142	32	108	135	99
Hounslow	11	135	6	51	15	96	14	74	16	72	62	77
Kingston Upon Thames	7	117	8	93	8	70	8	57	13	76	44	57
Merton	8	106	11	103	8	57	13	75	14	67	54	71
Redbridge	20	199	16	110	27	140	29	121	28	96	120	97
Richmond Upon Thames	5	66	5	46	9	62	10	57	16	77	45	71
Sutton	9	123	13	120	11	75	16	88	28	125	77	73
Waltham Forest	8	85	9	70	13	80	21	109	28	127	79	80

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
SOUTH EAST	399	126	633	128	845	120	1 028	112	1 388	118	4 293	3 610
Bracknell Forest UA	8	290	12	261	7	102	13	143	15	130	55	35
Brighton And Hove UA	7	59	8	47	9	39	24	86	36	111	84	112
Isle Of Wight UA	12	184	24	230	30	202	30	154	39	152	135	77
Medway UA	39	451	42	319	50	273	58	247	76	253	265	94
Milton Keynes UA	3	74	5	67	16	138	20	123	22	101	66	61
Portsmouth UA	48	587	52	438	70	437	53	266	54	224	277	80
Reading UA	2	38	2	26	10	96	12	90	15	95	41	53
Slough UA	7	175	4	68	15	187	13	126	9	70	48	41
Southampton UA	37	414	63	476	52	289	55	243	52	189	259	90
West Berkshire UA	2	43	7	92	11	99	17	116	23	122	60	57
Windsor And Maidenhead UA	4	72	5	59	14	116	20	131	12	64	55	60
Wokingham UA	4	97	6	85	6	57	12	84	22	120	50	54
Buckinghamshire	18	102	25	90	38	95	43	82	53	80	177	204
Aylesbury Vale	7	139	6	74	8	67	9	56	22	104	52	62
Chiltern	3	79	4	68	7	82	13	117	7	50	34	43
South Bucks	3	105	7	159	10	161	9	113	9	90	38	31
Wycombe	5	83	8	86	13	99	12	70	15	70	53	67
East Sussex	12	50	26	69	32	59	54	75	92	99	216	281
Eastbourne	2	44	5	72	7	70	9	69	12	70	35	52
Hastings	1	27	3	51	7	87	12	118	12	94	35	40
Lewes	1	23	8	115	4	39	13	96	19	107	45	53
Rother	4	80	5	63	9	79	11	72	20	102	49	59
Wealden	4	62	5	49	5	34	9	46	29	111	52	77

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
Hampshire	73	165	135	187	177	167	202	142	280	150	867	551
Basingstoke And Deane	4	84	6	78	15	133	16	109	24	127	65	57
East Hampshire	9	235	7	111	16	171	9	72	19	116	60	48
Eastleigh	14	357	25	398	29	317	26	213	24	149	118	48
Fareham	10	270	17	269	17	178	24	183	32	183	100	50
Gosport	5	181	13	299	12	196	22	273	24	223	76	32
Hart	2	85	4	99	5	81	8	95	11	99	30	32
Havant	11	234	20	256	35	306	27	178	46	232	139	59
New Forest	7	91	22	172	20	106	37	145	43	127	129	99
Rushmoor	1	37	3	74	3	52	4	53	12	125	23	30
Test Valley	3	81	14	229	12	134	12	100	18	113	59	47
Winchester	7	174	4	61	13	136	17	132	27	161	68	50
Kent	62	111	98	112	118	95	159	99	247	121	684	631
Ashford	0	0	7	115	10	114	7	60	18	115	42	46
Canterbury	6	100	10	105	17	126	16	91	25	114	74	69
Dartford	9	261	8	158	10	143	14	158	13	115	54	36
Dover	5	102	8	107	8	76	17	126	16	93	54	54
Gravesham	8	210	10	171	11	133	15	141	17	126	61	42
Maidstone	8	148	10	118	6	49	12	76	28	138	64	62
Sevenoaks	4	86	7	95	9	86	15	110	16	93	51	53
Shepway	4	89	7	100	12	120	8	62	21	125	52	51
Swale	9	198	10	139	10	96	21	156	24	136	74	53
Thanet	3	45	11	106	12	83	22	121	30	132	78	72
Tonbridge And Malling	2	51	7	112	8	89	5	42	29	187	51	47
Tunbridge Wells	4	95	3	46	5	54	7	59	10	68	29	46
Oxfordshire	8	37	29	86	45	93	49	77	71	87	202	250
Cherwell	2	49	3	46	11	114	8	62	17	101	41	50
Oxford	1	20	3	42	5	51	5	40	9	59	23	50
South Oxfordshire	3	61	6	78	12	110	14	97	18	98	53	56
Vale Of White Horse	2	48	9	132	8	80	14	107	16	94	49	51
West Oxfordshire	0	0	8	145	9	110	8	73	11	76	36	43

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
Surrey	30	67	58	84	78	81	116	94	158	102	440	489
Elmbridge	4	76	2	25	1	9	20	141	18	102	45	56
Epsom And Ewell	1	30	5	102	5	75	7	85	7	70	25	33
Guildford	2	38	11	136	9	80	7	49	16	92	45	56
Mole Valley	5	133	2	34	8	95	12	110	15	110	42	43
Reigate And Banstead	2	36	6	73	12	106	12	83	25	138	57	58
Runnymede	2	60	8	158	7	99	7	78	13	116	37	36
Spelthorne	2	50	7	114	6	70	13	118	8	58	36	44
Surrey Heath	2	77	5	117	7	111	12	144	10	94	36	32
Tandridge	2	58	4	76	11	148	3	31	11	89	31	38
Waverley	4	80	6	76	4	36	12	84	18	100	44	56
Woking	4	117	2	38	8	110	11	118	17	144	42	37
West Sussex	23	69	32	60	67	89	78	78	112	87	312	390
Adur	4	134	4	86	7	106	9	106	10	94	34	33
Arun	2	28	2	17	16	96	18	80	29	98	67	88
Chichester	2	38	4	47	11	91	10	63	17	82	44	62
Crawley	6	182	4	77	9	120	3	29	10	76	32	39
Horsham	2	44	7	96	7	66	12	83	15	80	43	56
Mid Sussex	3	61	4	51	10	89	13	89	10	53	40	57
Worthing	4	77	7	88	7	65	13	95	21	125	52	54

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
SOUTH WEST	224	107	355	107	444	93	625	99	789	96	2 437	2 478
Bath And North East Somerset UA	5	67	11	94	12	73	22	104	30	113	80	83
Bournemouth UA	4	48	9	70	12	68	19	85	25	93	69	88
Bristol, City Of UA	17	96	34	133	34	100	32	77	65	132	182	168
North Somerset UA	10	130	7	55	14	75	27	108	32	97	90	97
Plymouth UA	56	544	77	492	85	393	80	296	75	223	373	108
Poole UA	4	66	9	92	13	92	29	154	22	91	77	73
South Gloucestershire UA	7	88	11	84	14	72	29	111	43	125	104	101
Swindon UA	27	439	20	204	27	193	21	116	28	121	123	71
Torbay UA	4	61	10	99	12	84	17	90	24	97	67	75
Cornwall And Isles Of Scilly	21	96	34	96	39	75	66	95	90	97	250	271
Caradon	10	297	11	200	13	162	18	166	22	151	74	42
Carrick	4	100	10	152	7	73	14	111	17	104	52	49
Kerrier	4	98	6	93	1	11	12	97	10	60	33	49
North Cornwall	1	29	2	35	7	83	9	78	18	115	37	45
Penwith	0	0	1	22	3	44	7	76	11	92	22	35
Restormel	2	51	4	63	7	74	6	47	12	70	31	50
Devon	28	89	38	75	48	65	94	95	123	94	331	387
East Devon	7	106	4	37	10	63	15	70	24	85	60	83
Exeter	3	70	9	139	5	55	8	68	12	81	37	46
Mid Devon	2	70	0	0	4	59	4	44	10	82	20	36
North Devon	3	75	8	124	8	86	12	97	15	93	46	48
South Hams	5	136	6	100	7	78	14	119	17	110	49	46
Teignbridge	2	37	3	34	5	38	19	108	20	86	49	68
Torrige	1	39	2	49	5	83	12	145	14	119	34	33
West Devon	5	229	6	171	4	79	10	147	11	121	36	27

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
Dorset	11	60	21	70	35	79	68	113	62	77	197	233
Christchurch	4	157	3	72	8	132	12	144	6	56	33	32
East Dorset	1	25	8	116	7	67	19	133	14	74	49	55
North Dorset	1	41	2	50	5	83	5	60	13	115	26	32
Purbeck	0	0	1	30	1	20	5	76	5	57	12	26
West Dorset	3	68	5	69	6	55	16	110	16	82	46	57
Weymouth And Portland	2	73	2	46	8	129	11	134	8	73	31	32
Gloucestershire	11	48	22	61	42	80	50	73	69	78	194	269
Cheltenham	1	22	0	0	3	31	6	47	12	74	22	50
Cotswold	3	86	4	72	4	48	7	63	10	70	28	43
Forest Of Dean	4	121	4	76	2	26	7	70	12	92	29	39
Gloucester	1	24	6	95	11	123	14	120	16	107	48	46
Stroud	0	0	4	55	12	115	12	88	15	86	43	53
Tewkesbury	2	70	4	84	10	139	4	41	4	32	24	37
Somerset	12	58	30	89	36	73	33	50	60	69	171	257
Mendip	4	99	6	92	5	53	9	73	11	66	35	49
Sedgemoor	3	69	11	155	15	143	6	43	14	75	49	55
South Somerset	1	16	8	77	11	72	10	49	15	56	45	79
Taunton Deane	3	71	1	15	4	41	6	46	18	105	32	51
West Somerset	1	54	4	136	1	23	2	33	2	25	10	23
Wiltshire	7	43	22	85	21	56	38	76	41	62	129	196
Kennet	1	36	7	160	1	16	4	47	7	63	20	33
North Wiltshire	4	91	8	115	7	69	7	52	11	62	37	53
Salisbury	0	0	3	41	5	47	16	113	10	54	34	55
West Wiltshire	2	45	4	56	8	76	11	78	13	68	38	55

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
WALES	64	51	105	54	195	70	243	68	326	72	933	1 408
Blaenau Gwent UA	0	0	0	0	2	29	6	70	4	38	12	35
Bridgend UA	0	0	2	23	2	16	8	53	10	52	22	61
Caerphilly UA	3	44	4	38	15	101	8	42	10	42	40	75
Cardiff UA	13	109	15	83	17	67	37	116	40	105	122	125
Carmarthenshire UA	3	36	5	38	16	86	18	76	15	49	57	94
Ceredigion UA	0	0	3	62	6	83	2	20	10	76	21	38
Conwy UA	2	37	6	69	6	47	10	61	11	51	35	65
Denbighshire UA	2	45	7	100	12	122	11	88	12	74	44	50
Flintshire UA	5	92	6	69	13	103	12	73	20	94	56	65
Gwynedd UA	3	58	2	24	5	43	6	40	19	98	35	60
Isle Of Anglesey UA	0	0	3	63	5	72	3	33	10	85	21	35
Merthyr Tydfil UA	0	0	1	25	1	18	3	46	2	25	7	26
Monmouthshire UA	0	0	0	0	3	36	6	54	5	35	14	43
Neath Port Talbot UA	3	46	3	30	7	51	8	46	8	37	29	69
Newport UA	3	54	7	80	11	89	15	96	17	87	53	62
Pembrokeshire UA	5	104	6	76	10	86	12	79	17	84	50	60
Powys UA	2	35	3	33	4	30	3	17	11	46	23	70
Rhondda, Cynon, Taff UA	5	49	6	39	13	61	14	52	14	42	52	107
Swansea UA	5	49	13	83	22	98	25	87	29	81	94	113
Torfaen UA	0	0	0	0	3	36	7	66	10	73	20	42
The Vale Of Glamorgan UA	7	150	6	78	11	100	16	112	27	147	67	56
Wrexham UA	3	58	7	87	11	96	13	89	25	134	59	58

Table 8: Mesothelioma Standardised Mortality Ratios (SMRs) for males in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
SCOTLAND	259	125	436	138	549	125	629	113	744	106	2 617	2 223
Aberdeen City UA	5	59	11	87	18	103	25	114	29	106	88	88
Aberdeenshire UA	1	13	4	33	8	45	14	59	20	62	47	93
Angus UA	2	44	2	28	2	19	13	97	18	103	37	53
Argyll And Bute UA	2	51	11	181	10	114	14	121	15	98	52	46
Clackmannanshire UA	0	0	2	71	7	175	1	20	4	62	14	20
Dumfries And Galloway UA	1	15	2	19	7	46	13	66	12	46	35	78
Dundee City UA	6	88	9	88	10	73	22	127	14	66	61	69
East Ayrshire UA	2	39	7	90	8	74	7	51	8	47	32	54
East Dunbartonshire UA	9	227	13	204	20	218	13	109	19	122	74	47
East Lothian UA	1	27	3	52	11	134	12	114	14	103	41	42
East Renfrewshire UA	3	97	7	142	2	28	10	105	9	73	31	37
Edinburgh, City Of UA	19	103	32	117	35	95	40	87	68	120	194	185
Falkirk UA	8	136	18	200	8	64	17	107	28	140	79	63
Fife UA	22	157	28	130	43	141	44	113	51	101	188	156
Glasgow City UA	84	291	109	267	123	236	97	161	106	154	519	251
Highland UA	5	62	7	55	13	70	18	73	25	77	68	96
Inverclyde UA	4	102	16	274	23	291	24	253	31	269	98	39
Midlothian UA	4	132	1	21	6	89	7	80	15	136	33	34
Moray UA	0	0	4	76	5	66	9	91	9	70	27	39
North Ayrshire UA	3	57	8	98	18	153	21	139	29	148	79	60
North Lanarkshire UA	9	75	21	115	18	71	33	104	38	96	119	127
Perth And Kinross UA	2	35	2	22	2	15	11	65	12	53	29	67
Renfrewshire UA	18	261	33	311	35	237	43	231	36	155	165	74
Scottish Borders UA	2	42	2	27	4	37	4	29	10	55	22	55
South Ayrshire UA	2	40	3	39	10	90	14	97	12	64	41	57
South Lanarkshire UA	10	88	22	125	33	132	36	114	47	116	148	126
Stirling UA	1	31	1	20	2	28	4	43	3	25	11	37
West Dunbartonshire UA	31	778	46	778	54	677	47	479	38	316	216	40
West Lothian UA	2	44	10	138	12	114	11	80	19	105	54	54

Note: Only areas with 20 or more observed or expected mesothelioma deaths over the period 1981-2005 are included.

Table 9: Mesothelioma Standardised Mortality Ratios (SMRs) for females in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
GREAT BRITAIN	429	100	572	100	764	100	996	100	1 426	100	4 187	4 187
ENGLAND & WALES	400	103	518	100	670	97	900	99	1 321	102	3 809	3 806
ENGLAND	390	106	508	104	633	97	871	102	1 285	105	3 687	3 577
NORTH EAST	39	193	54	201	50	140	73	159	84	129	300	194
Durham	4	103	5	97	2	29	8	89	8	62	27	38
Northumberland	0	0	3	92	3	68	6	104	8	94	20	24
Tyne And Wear (Met County)	32	346	34	281	34	214	46	230	50	180	196	85
Newcastle-Upon-Tyne	5	211	8	265	9	235	7	147	13	202	42	20
North Tyneside	0	0	8	358	4	135	7	185	7	133	26	16
Sunderland	22	1020	14	487	19	495	24	492	18	262	97	21
NORTH WEST	64	117	82	115	77	82	109	91	181	107	513	510
Blackburn With Darwen UA	9	834	11	818	8	469	3	142	3	105	34	9
Cheshire	3	62	4	61	6	66	12	99	22	124	47	50
Cumbria	3	75	4	74	5	69	8	83	13	93	33	40
Greater Manchester (Met County)	17	84	28	108	28	83	33	78	59	101	165	180
Manchester	2	56	4	93	3	57	1	16	8	97	18	28
Salford	3	147	4	156	3	93	6	151	6	114	22	17
Stockport	1	44	2	66	2	50	3	57	6	81	14	22
Wigan	2	89	5	170	5	127	7	139	9	126	28	21
Lancashire	20	222	17	142	13	82	25	121	36	122	111	87
Merseyside (Met County)	10	83	17	109	11	55	21	83	40	114	99	108
Liverpool	5	120	10	195	6	95	9	119	16	159	46	33
Sefton	1	39	2	58	2	44	5	84	2	24	12	25
Wirral	4	140	3	79	0	0	4	63	9	101	20	27

Table 9: Mesothelioma Standardised Mortality Ratios (SMRs) for females in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
YORKSHIRE AND THE HUMBER	49	128	57	112	75	111	109	124	145	116	435	369
East Riding Of Yorkshire UA	1	44	3	94	2	45	3	49	6	65	15	25
North Yorkshire	5	114	3	50	10	122	6	54	15	92	39	46
South Yorkshire (Met County)	3	30	6	45	7	39	9	40	16	50	41	96
Doncaster	0	0	1	35	1	26	1	20	4	55	7	21
Sheffield	3	65	4	68	3	40	5	53	8	63	23	40
West Yorkshire (Met County)	37	233	43	208	49	180	84	241	98	200	311	148
Bradford	2	58	3	67	2	34	10	132	15	142	32	32
Calderdale	4	250	4	193	3	113	5	147	8	167	24	15
Kirklees	3	104	9	239	12	241	17	266	15	165	56	27
Leeds	24	424	24	329	22	232	45	372	47	280	162	51
Wakefield	4	177	3	99	10	242	7	131	13	167	37	23
EAST MIDLANDS	31	107	29	73	51	94	65	91	91	87	267	299
Nottingham UA	4	185	8	291	9	258	7	164	7	126	35	18
Derbyshire	2	37	8	108	4	40	19	143	13	67	46	56
Leicestershire	3	79	1	19	4	53	1	10	8	53	17	42
Lincolnshire	2	45	0	0	8	88	9	73	15	80	34	51
Northamptonshire	5	131	4	76	7	96	9	93	19	131	44	41
Nottinghamshire	12	228	6	83	15	150	18	136	20	103	71	55
WEST MIDLANDS	23	60	36	70	35	50	64	70	95	72	253	383
Shropshire	0	0	2	70	2	50	2	37	3	37	9	22
Staffordshire	4	77	4	55	4	39	8	58	18	88	38	57
Warwickshire	2	58	7	146	0	0	3	34	11	84	23	37
West Midlands (Met County)	13	65	18	68	22	64	29	66	50	82	132	186
Birmingham	6	77	7	70	8	63	9	57	17	80	47	68
Coventry	0	0	0	0	5	125	2	39	4	57	11	21
Dudley	0	0	2	65	2	47	5	90	7	88	16	23
Sandwell	1	41	5	157	3	73	3	58	3	43	15	22
Worcestershire	3	85	4	80	4	56	10	104	4	28	25	39

Table 9: Mesothelioma Standardised Mortality Ratios (SMRs) for females in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
EAST OF ENGLAND	38	104	44	87	82	118	94	101	170	123	428	388
Bedfordshire	1	46	2	66	4	94	5	87	10	116	22	24
Cambridgeshire	3	93	4	88	6	94	6	69	15	115	34	36
Essex	13	146	11	88	24	139	33	141	46	133	127	97
Basildon	2	213	1	72	2	101	8	299	9	228	22	11
Hertfordshire	4	57	7	74	21	165	13	77	20	82	65	70
Norfolk	8	133	8	94	11	93	15	93	24	100	66	67
Suffolk	4	82	6	89	8	86	13	103	29	154	60	52
LONDON	88	166	98	149	98	119	118	115	166	119	568	444
Inner London	35	181	28	120	27	95	37	109	56	124	183	150
Newham	11	733	7	392	5	231	6	234	14	415	43	11
Southwark	2	113	3	141	2	78	7	230	7	171	21	14
Outer London	53	158	70	165	71	131	81	118	110	116	385	294
Barking & Dagenham	15	1093	14	804	15	684	9	331	7	194	60	12
Barnet	1	41	3	97	2	51	5	99	3	42	14	22
Bexley	2	122	5	231	3	104	4	107	9	167	23	16
Bromley	4	162	3	92	8	187	5	91	14	181	34	23
Croydon	1	42	2	67	2	52	4	83	2	30	11	21
Greenwich	2	121	6	288	3	114	4	123	11	252	26	14
Havering	4	221	4	165	8	245	5	117	19	310	40	18
Hillingdon	4	227	2	87	3	101	7	184	6	114	22	16
Redbridge	7	382	5	216	4	136	5	134	4	77	25	16

Table 9: Mesothelioma Standardised Mortality Ratios (SMRs) for females in Great Britain by area and five year time periods 1981-2005

Area	1981 - 1985		1986 - 1990		1991 - 1995		1996 - 2000		2001 - 2005		Total	
	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	SMR	Deaths	Expected Deaths
SOUTH EAST	41	71	73	93	108	102	170	120	226	111	618	589
Medway UA	0	0	1	49	6	219	8	224	8	154	23	15
Portsmouth UA	5	320	3	149	1	39	5	157	14	325	28	14
Southampton UA	2	126	3	145	8	293	9	257	7	147	29	15
Buckinghamshire	5	167	4	98	8	142	6	80	7	63	30	31
East Sussex	1	20	3	45	5	57	10	85	16	95	35	49
Hampshire	4	51	12	108	16	102	21	98	30	94	83	88
Kent	11	106	12	86	17	91	34	137	43	120	117	104
Oxfordshire	3	81	3	59	4	57	17	181	10	72	37	39
Surrey	3	37	12	112	16	112	24	128	40	148	95	79
West Sussex	2	30	6	67	11	92	17	106	23	99	59	67
SOUTH WEST	17	44	35	66	57	79	69	71	127	90	305	401
Bristol, City Of UA	2	61	5	121	5	95	9	138	16	184	37	28
Cornwall And Isles Of Scilly	2	50	5	90	6	78	10	95	13	83	36	43
Devon	1	17	2	25	8	72	10	66	23	102	44	63
Dorset	1	30	4	84	7	106	4	44	8	59	24	37
Gloucestershire	1	25	4	71	5	64	7	67	12	78	29	43
Somerset	0	0	4	76	4	55	3	30	6	40	17	41
Wiltshire	0	0	3	75	3	54	8	107	12	107	26	31
WALES	10	44	10	32	37	88	29	53	36	46	122	230
Cardiff UA	1	45	0	0	3	77	0	0	7	102	11	21
SCOTLAND	29	73	54	103	94	135	96	106	105	81	378	381
Aberdeen City UA	1	60	3	138	5	176	6	166	7	139	22	15
Edinburgh, City Of UA	4	106	2	41	9	146	4	51	7	65	26	33
Fife UA	3	115	1	28	7	146	7	111	7	76	25	26
Glasgow City UA	10	171	9	124	19	215	22	207	19	136	79	47
North Lanarkshire UA	1	44	2	66	4	99	7	135	4	54	18	22
South Lanarkshire UA	0	0	3	104	10	252	6	115	6	79	25	22
West Dunbartonshire UA	0	0	8	779	8	586	6	347	7	293	29	7

Note: Only areas with 20 or more observed or expected mesothelioma deaths over the period 1981-2005 are included.

Table 10: Highest and lowest risk occupations for males 2002-2005

SOC2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
<i>Top 20 occupations with PMRs greater than 100</i>						
5315	Carpenters and joiners	358	93	385	346	427
5314	Plumbers; heating and ventilating engineers	181	54	336	289	388
5241	Electricians; electrical fitters	296	95	312	277	349
9129	Labourers in other construction trades n.e.c.	29	8	358	240	514
5214	Metal plate workers; shipwrights; riveters	39	12	314	223	430
5216	Pipe fitters	25	8	314	203	463
8149	Construction operatives n.e.c.	56	22	255	193	332
1122	Managers in construction	61	24	251	192	322
5319	Construction trades n.e.c.	171	85	202	173	235
8124	Energy plant operatives	26	10	263	172	385
3313	Fire service officers (leading fire officer and below)	21	8	256	158	391
5323	Painters and decorators	152	81	187	158	219
5213	Sheet metal workers	31	14	222	151	315
5223	Metal working production and maintenance fitters	181	106	171	147	198
1239	Managers and proprietors in other services n.e.c.	63	38	165	127	211
8125	Metal working machine operatives	146	103	142	120	167
9141	Stevedores; dockers and slingers	25	15	168	109	248
3122	Draughtspersons	26	16	159	104	233
5249	Electrical/electronics engineers n.e.c.	30	20	152	103	217
5215	Welding trades	46	35	131	96	175
<i>Bottom 20 occupations with PMRs less than 100</i>						
8122	Coal mine operatives	18	74	24	14	38
9111	Farm workers	5	25	20	6	46
8213	Bus and coach drivers	13	46	28	15	48
8111	Food; drink and tobacco process operatives	7	28	25	10	52
1224	Publicans and managers of licensed premises	11	37	29	15	53
5111	Farmers	14	44	32	17	53
5434	Chefs; cooks	8	29	28	12	55
5422	Printers	7	24	30	12	61
9241	Security guards and related occupations	27	64	42	28	62
8211	Heavy goods vehicle drivers	76	152	50	39	63
4122	Accounts and wages clerks; book-keepers; other financial clerks	18	43	42	25	66
4150	General office assistants/clerks	13	31	42	22	72
5231	Motor mechanics; auto engineers	22	45	49	31	75
1234	Shopkeepers and wholesale/retail dealers	34	64	54	37	75
9211	Postal workers; mail sorters; messengers; couriers	25	48	52	34	77
5221	Metal machining setters and setter-operators	10	23	44	21	81
9149	Other goods handling and storage occupations n.e.c.	54	86	62	47	81
1151	Financial institution managers	10	22	46	22	85
3542	Sales representatives	24	41	58	37	87
2121	Civil engineers	13	26	51	27	87

Note : Only occupations with 20 or more observed or expected deaths from 2002-2005 are included.

Table 11: Mesothelioma proportional mortality ratios (PMR's) for males aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
1111	Senior officials in national government	0	2	0	0	219
1112	Directors and chief executives of major organisations	0	1	0	0	440
1113	Senior officials in local government	2	2	89	11	323
1114	Senior officials of special interest organisations	0	1	0	0	297
1121	Production; works and maintenance managers	58	65	89	68	115
1122	Managers in construction	61	24	251	192	322
1123	Managers in mining and energy	2	4	48	6	175
1131	Financial managers and chartered secretaries	2	10	20	2	74
1132	Marketing and sales managers	40	33	122	87	166
1133	Purchasing managers	5	3	157	51	367
1134	Advertising and public relations managers	0	2	0	0	192
1135	Personnel; training and industrial relations managers	2	6	31	4	112
1136	Information and communication technology managers	5	10	50	16	117
1137	Research and development managers	0	1	0	0	314
1141	Quality assurance managers	7	3	209	84	430
1142	Customer care managers	4	1	389	106	996
1151	Financial institution managers	10	22	46	22	85
1152	Office managers	8	12	68	29	134
1161	Transport and distribution managers	11	22	49	25	88
1162	Storage and warehouse managers	5	15	34	11	80
1163	Retail and wholesale managers	13	23	56	30	96
1171	Officers in armed forces	9	9	104	48	198
1172	Police officers (inspectors and above)	2	4	55	7	199
1173	Senior officers in fire; ambulance; prison and related services	5	3	170	55	396
1174	Security managers	0	2	0	0	151
1181	Hospital and health service managers	0	2	0	0	226
1182	Pharmacy managers	0	0	0	0	3616
1183	Healthcare practice managers	0	0	0	0	1194
1184	Social services managers	0	1	0	0	404
1185	Residential and day care managers	4	3	118	32	301
1211	Farm managers	0	3	0	0	135
1212	Natural environment and conservation managers	0	0	0	0	1267
1219	Managers in animal husbandry; forestry and fishing n.e.c.	1	1	83	2	461
1221	Hotel and accommodation managers	6	11	55	20	120
1222	Conference and exhibition managers	2	0	439	53	1587
1223	Restaurant and catering managers	5	14	35	11	82
1224	Publicans and managers of licensed premises	11	37	29	15	53
1225	Leisure and sports managers	2	6	34	4	122
1226	Travel agency managers	0	1	0	0	667
1231	Property; housing and land managers	12	8	157	81	275
1232	Garage managers and proprietors	10	10	102	49	188
1233	Hairdressing and beauty salon managers and proprietors	0	0	0	0	1234

Table 11: Mesothelioma proportional mortality ratios (PMR's) for males aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
1234	Shopkeepers and wholesale/retail dealers	34	64	54	37	75
1235	Recycling and refuse disposal managers	5	7	76	25	178
1239	Managers and proprietors in other services n.e.c.	63	38	165	127	211
2111	Chemists	11	7	167	84	299
2112	Biological scientists and biochemists	4	4	90	24	230
2113	Physicists; geologists and meteorologists	2	3	73	9	264
2121	Civil engineers	13	26	51	27	87
2122	Mechanical engineers	14	11	132	72	222
2123	Electrical engineers	7	3	274	110	564
2124	Electronics engineers	0	1	0	0	386
2125	Chemical engineers	5	3	197	64	459
2126	Design and development engineers	18	8	215	127	340
2127	Production and process engineers	2	3	78	9	282
2128	Planning and quality control engineers	10	5	188	90	346
2129	Engineering professionals n.e.c.	10	8	120	58	221
2131	IT strategy and planning professionals	2	5	38	5	136
2132	Software professionals	4	9	47	13	120
2211	Medical practitioners	3	12	25	5	74
2212	Psychologists	0	0	0	0	757
2213	Pharmacists/pharmacologists	2	3	61	7	220
2214	Ophthalmic opticians	0	1	0	0	531
2215	Dental practitioners	0	3	0	0	135
2216	Veterinarians	0	1	0	0	427
2311	Higher education teaching professionals	4	10	40	11	102
2312	Further education teaching professionals	10	16	61	29	112
2313	Education officers; school inspectors	1	2	57	1	319
2314	Secondary education teaching professionals	32	39	83	57	117
2315	Primary and nursery education teaching professionals	5	7	72	23	169
2316	Special needs education teaching professionals	0	1	0	0	509
2317	Registrars and senior administrators of educational establishments	0	2	0	0	217
2319	Teaching professionals n.e.c.	1	4	28	1	157
2321	Scientific researchers	6	3	183	67	397
2322	Social science researchers	0	1	0	0	401
2329	Researchers n.e.c.	5	1	482	157	1125
2411	Solicitors and lawyers; judges and coroners	6	10	60	22	130
2419	Legal professionals n.e.c.	0	1	0	0	481
2421	Chartered and certified accountants	0	12	0	0	32
2422	Management accountants	0	0	0	0	12052
2423	Management consultants; actuaries; economists and statisticians	5	6	80	26	186
2431	Architects	6	8	73	27	160
2432	Town planners	0	1	0	0	447

Table 11: Mesothelioma proportional mortality ratios (PMR's) for males aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
2433	Quantity surveyors	10	6	168	81	310
2434	Chartered surveyors (not quantity surveyors)	18	11	160	95	252
2441	Public service administrative professionals	0	1	0	0	455
2442	Social workers	2	4	45	5	164
2443	Probation officers	0	1	0	0	308
2444	Clergy	7	10	69	28	142
2451	Librarians	1	2	50	1	281
2452	Archivists and curators	0	1	0	0	495
3111	Laboratory technicians	4	6	67	18	170
3112	Electrical/electronics technicians	6	3	230	84	501
3113	Engineering technicians	8	5	160	69	316
3114	Building and civil engineering technicians	4	1	456	124	1167
3115	Quality assurance technicians	1	0	351	9	1955
3119	Science and engineering technicians n.e.c.	19	12	157	94	245
3121	Architectural technologists and town planning technicians	1	1	83	2	461
3122	Draughtspersons	26	16	159	104	233
3123	Building inspectors	3	1	250	52	731
3131	IT operations technicians	2	3	65	8	235
3132	IT user support technicians	0	0	0	0	947
3211	Nurses	6	11	56	21	123
3212	Midwives	0	0	0	0	35194
3213	Paramedics	2	1	300	36	1084
3214	Medical radiographers	0	0	0	0	918
3215	Chiropodists	0	1	0	0	433
3216	Dispensing opticians	0	0	0	0	3359
3217	Pharmaceutical dispensers	0	0	0	0	1476
3218	Medical and dental technicians	3	3	93	19	272
3221	Physiotherapists	0	0	0	0	887
3222	Occupational therapists	0	0	0	0	1563
3223	Speech and language therapists	0	0	0	0	875284
3229	Therapists n.e.c.	1	1	85	2	474
3231	Youth and community workers	1	2	55	1	305
3232	Housing and welfare officers	7	5	143	58	295
3311	NCOs and other ranks	24	23	102	66	152
3312	Police officers (sergeant and below)	17	27	63	37	101
3313	Fire service officers (leading fire officer and below)	21	8	256	158	391
3314	Prison service officers (below principal officer)	12	7	160	83	280
3319	Protective service associate professionals n.e.c.	1	3	34	1	190
3411	Artists	6	5	115	42	250
3412	Authors; writers	2	6	36	4	129
3413	Actors; entertainers	3	5	57	12	166
3414	Dancers and choreographers	0	0	0	0	4590
3415	Musicians	3	7	43	9	127

Table 11: Mesothelioma proportional mortality ratios (PMR's) for males aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
3416	Arts officers; producers and directors	2	2	104	13	375
3421	Graphic designers	4	4	99	27	254
3422	Product; clothing and related designers	5	3	151	49	352
3431	Journalists; newspaper and periodical editors	1	7	15	0	82
3432	Broadcasting associate professionals	3	2	183	38	536
3433	Public relations officers	1	1	78	2	436
3434	Photographers and audio-visual equipment operators	6	8	75	27	163
3441	Sports players	2	2	116	14	420
3442	Sports coaches; instructors and officials	0	1	0	0	309
3443	Fitness instructors	0	0	0	0	1979
3449	Sports and fitness occupations n.e.c.	0	0	0	0	1588
3511	Air traffic controllers	1	1	108	3	604
3512	Aircraft pilots and flight engineers	1	3	38	1	211
3513	Ship and hovercraft officers	6	9	66	24	144
3514	Train drivers	9	8	107	49	204
3520	Legal associate professionals	0	2	0	0	181
3531	Estimators; valuers and assessors	8	7	110	48	218
3532	Brokers	6	8	77	28	168
3533	Insurance underwriters	0	2	0	0	200
3534	Finance and investment analysts/advisers	2	9	21	3	77
3535	Taxation experts	0	2	0	0	185
3536	Importers; exporters	1	2	50	1	279
3537	Financial and accounting technicians	0	1	0	0	566
3539	Business and related associate professionals n.e.c.	6	5	133	49	289
3541	Buyers and purchasing officers	7	8	86	35	177
3542	Sales representatives	24	41	58	37	87
3543	Marketing associate professionals	0	3	0	0	113
3544	Estate agents; auctioneers	0	3	0	0	129
3551	Conservation and environmental protection officers	2	1	194	24	701
3552	Countryside and park rangers	3	1	265	55	775
3561	Public service associate professionals	0	3	0	0	117
3562	Personnel and industrial relations officers	1	3	38	1	210
3563	Vocational and industrial trainers and instructors	5	7	67	22	157
3564	Careers advisers and vocational guidance specialists	1	0	209	5	1163
3565	Inspectors of factories; utilities and trading standards	2	2	105	13	379
3566	Statutory examiners	5	3	158	51	369
3567	Occupational hygienists and safety officers (health and safety)	11	4	260	130	464
3568	Environmental health officers	2	2	112	14	404
4111	Civil Service executive officers	0	3	0	0	118
4112	Civil Service administrative officers and assistants	24	26	93	60	139
4113	Local government clerical officers and assistants	9	15	60	28	115
4114	Officers of non-governmental organisations	3	2	154	32	451

Table 11: Mesothelioma proportional mortality ratios (PMR's) for males aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
4121	Credit controllers	0	1	0	0	251
4122	Accounts and wages clerks; book-keepers; other financial clerks	18	43	42	25	66
4123	Counter clerks	3	10	30	6	87
4131	Filing and other records assistants/clerks	5	5	96	31	224
4132	Pensions and insurance clerks	2	4	51	6	183
4133	Stock control clerks	6	10	59	22	129
4134	Transport and distribution clerks	2	6	33	4	118
4135	Library assistants/clerks	0	0	0	0	771
4136	Database assistants/clerks	2	1	244	30	882
4137	Market research interviewers	0	0	0	0	2885
4141	Telephonists	3	3	116	24	340
4142	Communication operators	3	4	74	15	217
4150	General office assistants/clerks	13	31	42	22	72
4211	Medical secretaries	0	0	0	0	6744
4212	Legal secretaries	0	0	0	0	1861
4213	School secretaries	0	0	0	0	2439
4214	Company secretaries	0	2	0	0	174
4215	Personal assistants and other secretaries	0	1	0	0	260
4216	Receptionists	1	1	105	3	587
4217	Typists	0	0	0	0	2006
5111	Farmers	14	44	32	17	53
5112	Horticultural trades	1	4	24	1	131
5113	Gardeners and groundsmen/groundswomen	28	45	63	42	90
5119	Agricultural and fishing trades n.e.c.	1	10	10	0	55
5211	Smiths and forge workers	0	5	0	0	79
5212	Moulders; core makers; die casters	1	5	20	1	111
5213	Sheet metal workers	31	14	222	151	315
5214	Metal plate workers; shipwrights; riveters	39	12	314	223	430
5215	Welding trades	46	35	131	96	175
5216	Pipe fitters	25	8	314	203	463
5221	Metal machining setters and setter-operators	10	23	44	21	81
5222	Tool makers; tool fitters and markers-out	16	17	94	54	153
5223	Metal working production and maintenance fitters	181	106	171	147	198
5224	Precision instrument makers and repairers	11	10	114	57	204
5231	Motor mechanics; auto engineers	22	45	49	31	75
5232	Vehicle body builders and repairers	17	9	199	116	319
5233	Auto electricians	1	2	56	1	314
5234	Vehicle spray painters	2	4	49	6	176
5241	Electricians; electrical fitters	296	95	312	277	349
5242	Telecommunications engineers	28	22	125	83	181
5243	Lines repairers and cable jointers	3	4	74	15	217
5244	TV; video and audio engineers	3	6	52	11	153

Table 11: Mesothelioma proportional mortality ratios (PMR's) for males aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
5245	Computer engineers; installation and maintenance	5	3	195	63	456
5249	Electrical/electronics engineers n.e.c.	30	20	152	103	217
5311	Steel erectors	12	9	139	72	243
5312	Bricklayers; masons	32	38	85	58	120
5313	Roofers; roof tilers and slaters	14	14	98	53	164
5314	Plumbers; heating and ventilating engineers	181	54	336	289	388
5315	Carpenters and joiners	358	93	385	346	427
5316	Glaziers; window fabricators and fitters	6	6	100	37	218
5319	Construction trades n.e.c.	171	85	202	173	235
5321	Plasterers	19	17	109	66	170
5322	Floorers and wall tilers	12	8	147	76	257
5323	Painters and decorators	152	81	187	158	219
5411	Weavers and knitters	2	4	49	6	178
5412	Upholsterers	6	6	108	40	235
5413	Leather and related trades	0	5	0	0	68
5414	Tailors and dressmakers	0	4	0	0	103
5419	Textiles; garments and related trades n.e.c.	0	1	0	0	297
5421	Originators; compositors and print preparers	3	5	64	13	186
5422	Printers	7	24	30	12	61
5423	Bookbinders and print finishers	1	3	35	1	196
5424	Screen printers	1	1	151	4	842
5431	Butchers; meat cutters	4	18	22	6	56
5432	Bakers; flour confectioners	0	9	0	0	40
5433	Fishmongers; poultry dressers	1	2	42	1	236
5434	Chefs; cooks	8	29	28	12	55
5491	Glass and ceramics makers; decorators and finishers	3	7	42	9	122
5492	Furniture makers; other craft woodworkers	18	10	182	108	288
5493	Pattern makers (moulds)	3	2	138	28	403
5494	Musical instrument makers and tuners	0	1	0	0	456
5495	Goldsmiths; silversmiths; precious stone workers	2	2	87	11	313
5496	Floral arrangers; florists	0	1	0	0	387
5499	Hand craft occupations n.e.c.	4	7	61	17	156
6111	Nursing auxiliaries and assistants	2	3	58	7	210
6112	Ambulance staff (excluding paramedics)	6	6	97	36	211
6113	Dental nurses	0	0	0	0	16404
6114	Houseparents and residential wardens	1	1	73	2	407
6115	Care assistants and home carers	10	14	73	35	134
6121	Nursery nurses	0	0	0	0	4394
6122	Childminders and related occupations	0	0	0	0	3124
6123	Playgroup leaders/assistants	0	0	0	0	5956
6124	Educational assistants	0	0	0	0	976
6131	Veterinary nurses and assistants	0	0	0	0	3536
6139	Animal care occupations n.e.c.	0	2	0	0	229

Table 11: Mesothelioma proportional mortality ratios (PMR's) for males aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
6211	Sports and leisure assistants	4	4	101	27	258
6212	Travel agents	1	2	47	1	260
6213	Travel and tour guides	1	1	138	4	771
6214	Air travel assistants	0	1	0	0	363
6215	Rail travel assistants	4	5	80	22	206
6219	Leisure and travel service occupations n.e.c.	1	5	22	1	121
6221	Hairdressers; barbers	3	5	58	12	171
6222	Beauticians and related occupations	0	0	0	0	1394
6231	Housekeepers and related occupations	0	1	0	0	454
6232	Caretakers	37	35	106	75	146
6291	Undertakers and mortuary assistants	0	4	0	0	90
6292	Pest control officers	1	1	106	3	592
7111	Sales and retail assistants	10	18	54	26	100
7112	Retail cashiers and check-out operators	2	4	56	7	202
7113	Telephone salespersons	1	0	244	6	1358
7121	Collector salespersons and credit agents	4	5	74	20	189
7122	Debt; rent and other cash collectors	2	4	49	6	178
7123	Roundsmen/women and van salespersons	9	11	84	38	159
7124	Market and street traders and assistants	3	7	46	10	135
7125	Merchandisers and window dressers	0	0	0	0	791
7129	Sales related occupations n.e.c.	1	4	23	1	128
7211	Call centre agents/operators	0	0	0	0	1026
7212	Customer care occupations	0	2	0	0	224
8111	Food; drink and tobacco process operatives	7	28	25	10	52
8112	Glass and ceramics process operatives	1	5	20	1	111
8113	Textile process operatives	1	8	13	0	73
8114	Chemical and related process operatives	15	24	63	36	105
8115	Rubber process operatives	0	5	0	0	68
8116	Plastics process operatives	4	7	56	15	144
8117	Metal making and treating process operatives	7	10	68	27	140
8118	Electroplaters	3	2	122	25	356
8119	Process operatives n.e.c.	4	3	147	40	376
8121	Paper and wood machine operatives	11	16	69	35	124
8122	Coal mine operatives	18	74	24	14	38
8123	Quarry workers and related operatives	4	7	60	16	154
8124	Energy plant operatives	26	10	263	172	385
8125	Metal working machine operatives	146	103	142	120	167
8126	Water and sewerage plant operatives	0	5	0	0	74
8129	Plant and machine operatives n.e.c.	38	30	126	89	172
8131	Assemblers (electrical products)	0	8	0	0	48
8132	Assemblers (vehicles and metal goods)	3	18	17	3	49
8133	Routine inspectors and testers	17	22	79	46	126
8134	Weighers; graders; sorters	0	2	0	0	157

Table 11: Mesothelioma proportional mortality ratios (PMR's) for males aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
8135	Tyre; exhaust and windscreen fitters	0	2	0	0	172
8136	Clothing cutters	2	1	156	19	562
8137	Sewing machinists	4	4	93	25	238
8138	Routine laboratory testers	0	1	0	0	395
8139	Assemblers and routine operatives n.e.c.	1	5	19	0	104
8141	Scaffolders; staggers; riggers	17	13	136	79	218
8142	Road construction operatives	5	14	37	12	86
8143	Rail construction and maintenance operatives	3	3	89	18	260
8149	Construction operatives n.e.c.	56	22	255	193	332
8211	Heavy goods vehicle drivers	76	152	50	39	63
8212	Van drivers	45	61	73	53	98
8213	Bus and coach drivers	13	46	28	15	48
8214	Taxi; cab drivers and chauffeurs	39	49	80	57	110
8215	Driving instructors	4	8	51	14	130
8216	Rail transport operatives	7	16	43	17	88
8217	Seafarers (merchant navy); barge; lighter and boat operatives	12	16	75	39	131
8218	Air transport operatives	0	3	0	0	138
8219	Transport operatives n.e.c.	5	5	98	32	230
8221	Crane drivers	9	14	62	28	118
8222	Fork-lift truck drivers	16	26	61	35	100
8223	Agricultural machinery drivers	0	1	0	0	309
8229	Mobile machine drivers and operatives n.e.c.	6	17	35	13	77
9111	Farm workers	5	25	20	6	46
9112	Forestry workers	2	4	49	6	179
9119	Fishing and agriculture related occupations n.e.c.	2	3	70	9	254
9121	Labourers in building and woodworking trades	97	134	72	59	88
9129	Labourers in other construction trades n.e.c.	29	8	358	240	514
9131	Labourers in foundries	5	9	54	17	125
9132	Industrial cleaning process occupations	4	3	133	36	340
9133	Printing machine minders and assistants	0	5	0	0	77
9134	Packers; bottlers; canners; fillers	5	8	64	21	148
9139	Labourers in process and plant operations n.e.c.	81	113	72	57	89
9141	Stevedores; dockers and slingers	25	15	168	109	248
9149	Other goods handling and storage occupations n.e.c.	54	86	62	47	81
9211	Postal workers; mail sorters; messengers; couriers	25	48	52	34	77
9219	Elementary office occupations n.e.c.	3	3	118	24	345
9221	Hospital porters	7	11	64	26	132
9222	Hotel porters	1	4	27	1	149
9223	Kitchen and catering assistants	1	8	12	0	67
9224	Waiters; waitresses	1	4	26	1	144
9225	Bar staff	2	7	29	3	104
9226	Leisure and theme park attendants	0	1	0	0	386

Table 11: Mesothelioma proportional mortality ratios (PMR's) for males aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
9229	Elementary personal services occupations n.e.c.	0	2	0	0	170
9231	Window cleaners	3	9	32	7	94
9232	Road sweepers	2	5	39	5	141
9233	Cleaners; domestics	17	26	66	38	105
9234	Launderers; dry cleaners; pressers	0	3	0	0	128
9235	Refuse and salvage occupations	7	17	42	17	87
9239	Elementary cleaning occupations n.e.c.	1	0	217	5	1209
9241	Security guards and related occupations	27	64	42	28	62
9242	Traffic wardens	1	1	84	2	468
9243	School crossing patrol attendants	0	1	0	0	465
9244	School mid-day assistants	0	0	0	0	8644
9245	Car park attendants	1	4	25	1	138
9249	Elementary security occupations n.e.c.	5	5	98	32	229
9251	Shelf fillers	1	1	106	3	590
9259	Elementary sales occupations n.e.c.	0	1	0	0	613

Table 12: Highest and lowest risk occupations for females 2002-2005

SOC2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
<i>Occupations with PMRs greater than 100</i>						
9139	Labourers in process and plant operations n.e.c.	21	9	230	142	351
4150	General office assistants/clerks	26	21	125	82	183
9233	Cleaners; domestics	45	42	106	77	142
7111	Sales and retail assistants	32	31	104	71	146
<i>Occupations with PMRs less than 100</i>						
6115	Care assistants and home carers	21	25	83	51	127
3211	Nurses	19	23	83	50	129
4215	Personal assistants and other secretaries	25	26	96	62	141

Note : Only occupations with 20 or more observed or expected deaths from 2002-2005 are included.

Table 13: Mesothelioma proportional mortality ratios (PMR's) for females aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
1111	Senior officials in national government	0	0	0	0	4524
1112	Directors and chief executives of major organisations	0	0	0	0	28150
1113	Senior officials in local government	0	0	0	0	1370
1114	Senior officials of special interest organisations	0	0	0	0	1197
1121	Production; works and maintenance managers	2	2	113	14	409
1122	Managers in construction	0	0	0	0	1281
1123	Managers in mining and energy	0	0	0	0	7167
1131	Financial managers and chartered secretaries	0	1	0	0	590
1132	Marketing and sales managers	1	1	119	3	663
1133	Purchasing managers	0	0	0	0	3753
1134	Advertising and public relations managers	0	0	0	0	3591
1135	Personnel; training and industrial relations managers	1	1	137	3	764
1136	Information and communication technology managers	2	0	499	60	1801
1137	Research and development managers	0	0	0	0	5977
1141	Quality assurance managers	0	0	0	0	4796
1142	Customer care managers	0	0	0	0	2242
1151	Financial institution managers	1	1	71	2	394
1152	Office managers	6	3	188	69	408
1161	Transport and distribution managers	0	0	0	0	959
1162	Storage and warehouse managers	0	0	0	0	1796
1163	Retail and wholesale managers	3	5	60	12	174
1171	Officers in armed forces	0	0	0	0	6384
1172	Police officers (inspectors and above)	0	0	0	0	18767
1173	Senior officers in fire; ambulance; prison and related services	0	0	0	0	9959
1174	Security managers	0	0	0	0	7862
1181	Hospital and health service managers	0	1	0	0	625
1182	Pharmacy managers	0	0	0	0	13271
1183	Healthcare practice managers	1	0	242	6	1348
1184	Social services managers	1	0	300	8	1673
1185	Residential and day care managers	1	2	64	2	355
1211	Farm managers	1	0	955	24	5322
1212	Natural environment and conservation managers	0	0	0	0	40996
1219	Managers in animal husbandry; forestry and fishing n.e.c.	1	0	412	10	2297
1221	Hotel and accommodation managers	2	2	84	10	304
1222	Conference and exhibition managers	0	0	0	0	6236
1223	Restaurant and catering managers	3	3	91	19	266
1224	Publicans and managers of licensed premises	1	5	21	1	119
1225	Leisure and sports managers	0	1	0	0	637
1226	Travel agency managers	0	0	0	0	4763
1231	Property; housing and land managers	3	1	445	92	1299
1232	Garage managers and proprietors	0	0	0	0	1483

Table 13: Mesothelioma proportional mortality ratios (PMR's) for females aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
1233	Hairdressing and beauty salon managers and proprietors	0	0	0	0	1796
1234	Shopkeepers and wholesale/retail dealers	3	7	41	8	120
1235	Recycling and refuse disposal managers	1	0	1507	38	8395
1239	Managers and proprietors in other services n.e.c.	3	3	105	22	306
2111	Chemists	0	0	0	0	2861
2112	Biological scientists and biochemists	1	0	232	6	1290
2113	Physicists; geologists and meteorologists	0	0	0	0	4696
2121	Civil engineers	0	0	0	0	11730
2122	Mechanical engineers	0	0	0	0	15660
2123	Electrical engineers	0	0	0	0	61350
2124	Electronics engineers	0	0	0	0	0
2125	Chemical engineers	0	0	0	0	262043
2126	Design and development engineers	0	0	0	0	25272
2127	Production and process engineers	0	0	0	0	42364
2128	Planning and quality control engineers	1	0	1994	50	11111
2129	Engineering professionals n.e.c.	2	0	3931	476	14201
2131	IT strategy and planning professionals	0	0	0	0	2233
2132	Software professionals	0	0	0	0	902
2211	Medical practitioners	1	1	115	3	642
2212	Psychologists	1	0	655	17	3647
2213	Pharmacists/pharmacologists	0	0	0	0	875
2214	Ophthalmic opticians	0	0	0	0	5358
2215	Dental practitioners	0	0	0	0	2488
2216	Veterinarians	0	0	0	0	16219
2311	Higher education teaching professionals	1	1	163	4	908
2312	Further education teaching professionals	3	2	164	34	480
2313	Education officers; school inspectors	0	0	0	0	1452
2314	Secondary education teaching professionals	2	4	50	6	181
2315	Primary and nursery education teaching professionals	14	18	79	43	133
2316	Special needs education teaching professionals	1	1	140	4	782
2317	Registrars and senior administrators of educational establishments	0	1	0	0	541
2319	Teaching professionals n.e.c.	2	1	140	17	506
2321	Scientific researchers	0	0	0	0	2083
2322	Social science researchers	0	0	0	0	3722
2329	Researchers n.e.c.	1	0	629	16	3505
2411	Solicitors and lawyers; judges and coroners	1	1	186	5	1038
2419	Legal professionals n.e.c.	0	0	0	0	6041
2421	Chartered and certified accountants	1	0	472	12	2630
2422	Management accountants	0	0	0	0	0
2423	Management consultants; actuaries; economists and statisticians	0	0	0	0	1532
2431	Architects	0	0	0	0	3647

Table 13: Mesothelioma proportional mortality ratios (PMR's) for females aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
2432	Town planners	0	0	0	0	8141
2433	Quantity surveyors	0	0	0	0	21419
2434	Chartered surveyors (not quantity surveyors)	0	0	0	0	6746
2441	Public service administrative professionals	0	0	0	0	1895
2442	Social workers	3	2	133	27	389
2443	Probation officers	0	0	0	0	1652
2444	Clergy	1	1	153	4	852
2451	Librarians	3	2	187	39	546
2452	Archivists and curators	0	0	0	0	2715
3111	Laboratory technicians	3	1	276	57	807
3112	Electrical/electronics technicians	0	0	0	0	5604
3113	Engineering technicians	0	0	0	0	28492
3114	Building and civil engineering technicians	0	0	0	0	52076
3115	Quality assurance technicians	0	0	0	0	6934
3119	Science and engineering technicians n.e.c.	0	1	0	0	615
3121	Architectural technologists and town planning technicians	0	0	0	0	17311
3122	Draughtspersons	2	1	332	40	1201
3123	Building inspectors	0	0	0	0	120255
3131	IT operations technicians	1	1	141	4	788
3132	IT user support technicians	0	0	0	0	11244
3211	Nurses	19	23	83	50	129
3212	Midwives	1	1	85	2	474
3213	Paramedics	0	0	0	0	26194
3214	Medical radiographers	0	0	0	0	833
3215	Chiropodists	0	0	0	0	1373
3216	Dispensing opticians	0	0	0	0	17576
3217	Pharmaceutical dispensers	1	0	358	9	1993
3218	Medical and dental technicians	0	0	0	0	1456
3221	Physiotherapists	1	1	162	4	905
3222	Occupational therapists	0	0	0	0	863
3223	Speech and language therapists	0	0	0	0	3150
3229	Therapists n.e.c.	3	1	390	80	1139
3231	Youth and community workers	0	0	0	0	785
3232	Housing and welfare officers	1	3	39	1	219
3311	NCOs and other ranks	0	0	0	0	1579
3312	Police officers (sergeant and below)	0	0	0	0	1337
3313	Fire service officers (leading fire officer and below)	0	0	0	0	21984
3314	Prison service officers (below principal officer)	1	0	654	17	3643
3319	Protective service associate professionals n.e.c.	0	0	0	0	2669
3411	Artists	0	1	0	0	419
3412	Authors; writers	1	1	131	3	728
3413	Actors; entertainers	1	1	134	3	744

Table 13: Mesothelioma proportional mortality ratios (PMR's) for females aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
3414	Dancers and choreographers	0	0	0	0	2174
3415	Musicians	0	0	0	0	1255
3416	Arts officers; producers and directors	0	0	0	0	3361
3421	Graphic designers	1	0	448	11	2494
3422	Product; clothing and related designers	0	1	0	0	585
3431	Journalists; newspaper and periodical editors	0	1	0	0	633
3432	Broadcasting associate professionals	1	0	522	13	2910
3433	Public relations officers	0	0	0	0	1610
3434	Photographers and audio-visual equipment operators	1	0	359	9	1998
3441	Sports players	0	0	0	0	33886
3442	Sports coaches; instructors and officials	0	0	0	0	1192
3443	Fitness instructors	0	0	0	0	3119
3449	Sports and fitness occupations n.e.c.	0	0	0	0	43178
3511	Air traffic controllers	0	0	0	0	26560
3512	Aircraft pilots and flight engineers	0	0	0	0	0
3513	Ship and hovercraft officers	0	0	0	0	36181
3514	Train drivers	0	0	0	0	76903
3520	Legal associate professionals	0	0	0	0	1116
3531	Estimators; valuers and assessors	0	0	0	0	1655
3532	Brokers	0	0	0	0	1953
3533	Insurance underwriters	0	0	0	0	4711
3534	Finance and investment analysts/advisers	3	0	674	139	1971
3535	Taxation experts	0	0	0	0	1907
3536	Importers; exporters	0	0	0	0	10082
3537	Financial and accounting technicians	0	0	0	0	2589
3539	Business and related associate professionals n.e.c.	0	0	0	0	1198
3541	Buyers and purchasing officers	1	1	135	3	753
3542	Sales representatives	1	1	82	2	459
3543	Marketing associate professionals	0	1	0	0	680
3544	Estate agents; auctioneers	0	0	0	0	1088
3551	Conservation and environmental protection officers	0	0	0	0	9500
3552	Countryside and park rangers	0	0	0	0	19355
3561	Public service associate professionals	1	1	170	4	950
3562	Personnel and industrial relations officers	0	1	0	0	382
3563	Vocational and industrial trainers and instructors	1	1	142	4	793
3564	Careers advisers and vocational guidance specialists	0	0	0	0	1909
3565	Inspectors of factories; utilities and trading standards	0	0	0	0	6964
3566	Statutory examiners	0	0	0	0	6589
3567	Occupational hygienists and safety officers (health and safety)	0	0	0	0	4547
3568	Environmental health officers	0	0	0	0	6540
4111	Civil Service executive officers	1	1	116	3	648
4112	Civil Service administrative officers and assistants	9	7	125	57	236

Table 13: Mesothelioma proportional mortality ratios (PMR's) for females aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
4113	Local government clerical officers and assistants	3	5	60	12	175
4114	Officers of non-governmental organisations	1	0	321	8	1786
4121	Credit controllers	1	1	127	3	709
4122	Accounts and wages clerks; book-keepers; other financial clerks	8	14	58	25	114
4123	Counter clerks	7	5	134	54	277
4131	Filing and other records assistants/clerks	2	2	86	10	311
4132	Pensions and insurance clerks	0	1	0	0	255
4133	Stock control clerks	0	1	0	0	375
4134	Transport and distribution clerks	1	0	208	5	1158
4135	Library assistants/clerks	3	1	443	91	1294
4136	Database assistants/clerks	1	1	77	2	430
4137	Market research interviewers	0	0	0	0	2815
4141	Telephonists	1	4	26	1	143
4142	Communication operators	0	1	0	0	610
4150	General office assistants/clerks	26	21	125	82	183
4211	Medical secretaries	3	2	151	31	440
4212	Legal secretaries	0	3	0	0	134
4213	School secretaries	5	2	231	75	540
4214	Company secretaries	0	2	0	0	193
4215	Personal assistants and other secretaries	25	26	96	62	141
4216	Receptionists	11	7	158	79	282
4217	Typists	2	3	59	7	212
5111	Farmers	1	1	71	2	396
5112	Horticultural trades	0	0	0	0	1409
5113	Gardeners and groundsman/groundswomen	0	0	0	0	1169
5119	Agricultural and fishing trades n.e.c.	1	0	656	17	3656
5211	Smiths and forge workers	0	0	0	0	23900
5212	Moulders; core makers; die casters	0	0	0	0	5151
5213	Sheet metal workers	0	0	0	0	11050
5214	Metal plate workers; shipwrights; riveters	1	0	3591	91	20008
5215	Welding trades	1	0	552	14	3076
5216	Pipe fitters	0	0	0	0	0
5221	Metal machining setters and setter-operators	0	0	0	0	3031
5222	Tool makers; tool fitters and markers-out	0	0	0	0	13840
5223	Metal working production and maintenance fitters	1	0	722	18	4023
5224	Precision instrument makers and repairers	0	0	0	0	3188
5231	Motor mechanics; auto engineers	0	0	0	0	5462
5232	Vehicle body builders and repairers	0	0	0	0	44269
5233	Auto electricians	0	0	0	0	120255
5234	Vehicle spray painters	0	0	0	0	93214
5241	Electricians; electrical fitters	0	0	0	0	2068
5242	Telecommunications engineers	1	0	688	17	3832

Table 13: Mesothelioma proportional mortality ratios (PMR's) for females aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
5243	Lines repairers and cable jointers	0	0	0	0	16207
5244	TV; video and audio engineers	0	0	0	0	24416
5245	Computer engineers; installation and maintenance	0	0	0	0	95120
5249	Electrical/electronics engineers n.e.c.	0	0	0	0	3540
5311	Steel erectors	0	0	0	0	58054
5312	Bricklayers; masons	1	0	9184	232	51168
5313	Roofers; roof tilers and slaters	0	0	0	0	73101
5314	Plumbers; heating and ventilating engineers	0	0	0	0	7504
5315	Carpenters and joiners	1	0	1644	42	9160
5316	Glaziers; window fabricators and fitters	0	0	0	0	7224
5319	Construction trades n.e.c.	1	0	1207	31	6724
5321	Plasterers	0	0	0	0	373931
5322	Floorers and wall tilers	0	0	0	0	19098
5323	Painters and decorators	2	0	1208	146	4362
5411	Weavers and knitters	1	1	90	2	500
5412	Upholsterers	0	0	0	0	929
5413	Leather and related trades	0	1	0	0	633
5414	Tailors and dressmakers	4	2	167	45	427
5419	Textiles; garments and related trades n.e.c.	1	0	258	7	1435
5421	Originators; compositors and print preparers	0	0	0	0	3658
5422	Printers	1	1	173	4	966
5423	Bookbinders and print finishers	3	1	250	52	731
5424	Screen printers	0	0	0	0	4921
5431	Butchers; meat cutters	0	0	0	0	1612
5432	Bakers; flour confectioners	1	1	145	4	808
5433	Fishmongers; poultry dressers	0	0	0	0	1502
5434	Chefs; cooks	9	12	75	34	143
5491	Glass and ceramics makers; decorators and finishers	3	1	224	46	654
5492	Furniture makers; other craft woodworkers	0	0	0	0	2460
5493	Pattern makers (moulds)	0	0	0	0	186429
5494	Musical instrument makers and tuners	0	0	0	0	19418
5495	Goldsmiths; silversmiths; precious stone workers	0	0	0	0	3271
5496	Floral arrangers; florists	3	1	259	53	758
5499	Hand craft occupations n.e.c.	0	0	0	0	1318
6111	Nursing auxiliaries and assistants	4	10	40	11	103
6112	Ambulance staff (excluding paramedics)	0	0	0	0	2093
6113	Dental nurses	0	0	0	0	761
6114	Houseparents and residential wardens	5	3	155	50	362
6115	Care assistants and home carers	21	25	83	51	127
6121	Nursery nurses	4	2	192	52	491
6122	Childminders and related occupations	1	2	57	1	318
6123	Playgroup leaders/assistants	0	0	0	0	799
6124	Educational assistants	2	3	66	8	238

Table 13: Mesothelioma proportional mortality ratios (PMR's) for females aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
6131	Veterinary nurses and assistants	0	0	0	0	3957
6139	Animal care occupations n.e.c.	0	0	0	0	1829
6211	Sports and leisure assistants	1	0	243	6	1355
6212	Travel agents	0	0	0	0	796
6213	Travel and tour guides	1	1	99	2	549
6214	Air travel assistants	1	0	423	11	2358
6215	Rail travel assistants	0	0	0	0	6116
6219	Leisure and travel service occupations n.e.c.	1	1	120	3	667
6221	Hairdressers; barbers	4	5	87	24	224
6222	Beauticians and related occupations	0	0	0	0	751
6231	Housekeepers and related occupations	5	3	149	48	347
6232	Caretakers	1	2	53	1	293
6291	Undertakers and mortuary assistants	0	0	0	0	2817
6292	Pest control officers	0	0	0	0	84307
7111	Sales and retail assistants	32	31	104	71	146
7112	Retail cashiers and check-out operators	5	5	96	31	224
7113	Telephone salespersons	0	0	0	0	1137
7121	Collector salespersons and credit agents	0	0	0	0	1346
7122	Debt; rent and other cash collectors	0	0	0	0	923
7123	Roundsmen/women and van salespersons	0	0	0	0	2553
7124	Market and street traders and assistants	0	1	0	0	557
7125	Merchandisers and window dressers	0	0	0	0	1046
7129	Sales related occupations n.e.c.	0	1	0	0	734
7211	Call centre agents/operators	0	0	0	0	1379
7212	Customer care occupations	0	1	0	0	356
8111	Food; drink and tobacco process operatives	2	6	33	4	120
8112	Glass and ceramics process operatives	0	0	0	0	2154
8113	Textile process operatives	3	3	110	23	322
8114	Chemical and related process operatives	2	1	229	28	828
8115	Rubber process operatives	0	0	0	0	2146
8116	Plastics process operatives	0	0	0	0	819
8117	Metal making and treating process operatives	1	0	1291	33	7191
8118	Electroplaters	0	0	0	0	9909
8119	Process operatives n.e.c.	0	0	0	0	4227
8121	Paper and wood machine operatives	0	1	0	0	533
8122	Coal mine operatives	0	0	0	0	14483
8123	Quarry workers and related operatives	0	0	0	0	26736
8124	Energy plant operatives	0	0	0	0	34019
8125	Metal working machine operatives	2	2	94	11	340
8126	Water and sewerage plant operatives	0	0	0	0	25929
8129	Plant and machine operatives n.e.c.	3	2	168	35	492
8131	Assemblers (electrical products)	0	3	0	0	111
8132	Assemblers (vehicles and metal goods)	1	1	104	3	581

Table 13: Mesothelioma proportional mortality ratios (PMR's) for females aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
8133	Routine inspectors and testers	1	3	39	1	215
8134	Weighers; graders; sorters	0	0	0	0	1528
8135	Tyre; exhaust and windscreen fitters	0	0	0	0	45000
8136	Clothing cutters	0	0	0	0	1865
8137	Sewing machinists	19	14	139	83	217
8138	Routine laboratory testers	2	1	361	44	1305
8139	Assemblers and routine operatives n.e.c.	0	2	0	0	151
8141	Scaffolders; staggers; riggers	0	0	0	0	0
8142	Road construction operatives	0	0	0	0	186429
8143	Rail construction and maintenance operatives	0	0	0	0	49561
8149	Construction operatives n.e.c.	0	0	0	0	14055
8211	Heavy goods vehicle drivers	1	0	847	21	4719
8212	Van drivers	0	1	0	0	641
8213	Bus and coach drivers	0	0	0	0	1281
8214	Taxi; cab drivers and chauffeurs	1	0	233	6	1298
8215	Driving instructors	0	0	0	0	2258
8216	Rail transport operatives	0	0	0	0	4001
8217	Seafarers (merchant navy); barge; lighter and boat operatives	0	0	0	0	11577
8218	Air transport operatives	0	0	0	0	14201
8219	Transport operatives n.e.c.	0	0	0	0	4757
8221	Crane drivers	0	0	0	0	8805
8222	Fork-lift truck drivers	0	0	0	0	5078
8223	Agricultural machinery drivers	0	0	0	0	120255
8229	Mobile machine drivers and operatives n.e.c.	0	0	0	0	35097
9111	Farm workers	2	1	164	20	591
9112	Forestry workers	0	0	0	0	17926
9119	Fishing and agriculture related occupations n.e.c.	0	0	0	0	1468
9121	Labourers in building and woodworking trades	1	0	1206	31	6720
9129	Labourers in other construction trades n.e.c.	1	0	5565	141	31004
9131	Labourers in foundries	0	0	0	0	4874
9132	Industrial cleaning process occupations	0	0	0	0	2372
9133	Printing machine minders and assistants	1	1	173	4	965
9134	Packers; bottlers; canners; fillers	7	4	187	75	384
9139	Labourers in process and plant operations n.e.c.	21	9	230	142	351
9141	Stevedores; dockers and slingers	0	0	0	0	49829
9149	Other goods handling and storage occupations n.e.c.	2	2	97	12	351
9211	Postal workers; mail sorters; messengers; couriers	4	2	210	57	538
9219	Elementary office occupations n.e.c.	4	1	326	89	835
9221	Hospital porters	0	0	0	0	14131
9222	Hotel porters	0	0	0	0	40971
9223	Kitchen and catering assistants	11	14	79	39	141
9224	Waiters; waitresses	0	3	0	0	136

Table 13: Mesothelioma proportional mortality ratios (PMR's) for females aged 16-74 in Great Britain by SOC 2000 occupation group 2002-2005

SOC 2000	Occupation description	Deaths	Expected Deaths	PMR	95% Confidence Interval	
					Lower	Upper
9225	Bar staff	1	3	31	1	171
9226	Leisure and theme park attendants	0	0	0	0	1213
9229	Elementary personal services occupations n.e.c.	1	0	278	7	1547
9231	Window cleaners	0	0	0	0	20848
9232	Road sweepers	0	0	0	0	10118
9233	Cleaners; domestics	45	42	106	77	142
9234	Launderers; dry cleaners; pressers	2	2	82	10	298
9235	Refuse and salvage occupations	0	0	0	0	6751
9239	Elementary cleaning occupations n.e.c.	0	0	0	0	3951
9241	Security guards and related occupations	0	1	0	0	666
9242	Traffic wardens	0	0	0	0	1719
9243	School crossing patrol attendants	0	1	0	0	390
9244	School mid-day assistants	2	4	46	6	165
9245	Car park attendants	0	0	0	0	9931
9249	Elementary security occupations n.e.c.	0	0	0	0	1175
9251	Shelf fillers	0	0	0	0	2152
9259	Elementary sales occupations n.e.c.	0	0	0	0	4860

Appendix

Calculation of SMRs

24. The Standardised Mortality Ratio (SMR) is a measure of relative mortality in a study population compared to that in some standard population, which takes into account the age structure of the study population. The method of age standardisation used in the production of SMRs is commonly referred to as the indirect method. Age-specific death rates in a standard population are applied to the age structure of the study population (i.e. the particular geographical area being considered) to calculate an expected number of deaths for the study population (in this analysis Great Britain death rates for males or females for a given sex or year over the period 1981-2005 were used as the standard). The ratio of the observed number of deaths to the expected number of deaths in the area is calculated and multiplied by 100 to give the SMR. The SMR of the standard population is 100. An SMR greater or less than 100 indicates a respectively higher or lower than expected mortality rate in a specific area.
25. [Table A](#) illustrates the calculation of an SMR for men in area A. The total population of Great Britain is used as the standard population, (column 1). The mesothelioma death rate per 1,000 in the population for each age group (column 3) is the total number of male mesothelioma deaths (column 2) divided by the total number of men in Great Britain (column 1) to give age-specific death rates in the standard population. These rates are applied to the total population in area A, given in column 4, to give the expected numbers of deaths in this area, in column 6. The total observed number of deaths, shown in column 5, (1,196) divided by the expected number of deaths (2,024), multiplied by 100 gives an SMR of 59.

Table A: Example of an SMR calculation

Age group	All men			Men in area A		
	Population, (thousands)	Mesothelioma deaths	Death rate Per 1,000	Population, (thousands)	Mesothelioma deaths	Expected deaths
	(1)	(2)	(3) = (2) / (1)	(4)	(5)	(6)=(3)*(4)
0-4	28 554	0	0.000	6 926	0	0.0
5-9	29 683	0	0.000	8 514	0	0.0
10-14	32 324	0	0.000	9 286	0	0.0
15-19	35 061	1	0.000	8 729	0	0.2
20-24	34 931	1	0.000	7 833	0	0.2
25-29	32 949	5	0.000	7 907	2	1.2
30-34	31 188	16	0.001	7 770	7	3.9
35-39	29 220	76	0.003	6 443	17	16.7
40-44	27 454	199	0.007	6 222	32	45.1
45-49	24 983	402	0.016	6 243	76	100.4
50-54	24 398	705	0.029	6 391	136	184.7
55-59	24 001	1 145	0.048	6 269	179	299.1
60-64	22 155	1 436	0.065	5 367	183	347.9
65-69	19 554	1 499	0.077	4 997	222	383.1
70-74	15 232	1 315	0.086	3 729	177	321.9
75-79	10 232	930	0.091	2 176	112	197.8
80-84	5 176	472	0.091	1 007	40	91.8
85+	2 503	145	0.058	525	13	30.4
All ages	429 600	8 347		106 334	1 196	2024.5

Calculation of PMRs

26. To calculate the PMR for a given time period, the total number of deaths from all causes and the total number from mesothelioma in Great Britain for that period are required, broken down by age and occupation group. For each occupation the number of deaths from all causes, is divided by the total number of deaths from all causes for all occupations to give the proportion of all deaths that were amongst workers with that occupation. This proportion is multiplied by the total number of mesothelioma deaths to give the number of deaths from mesothelioma that would be expected in that occupation, under the assumption that occupation is not related to mesothelioma risk. The PMR is then the ratio of the actual number of mesothelioma cases that occurred, to this expected number, in a given occupation, expressed as a percentage. If the observed number of deaths is greater or less than the expected, then the PMR will be respectively, greater or less than 100 indicating that the observed number of mesotheliomas is greater or less than the average for all occupations.
27. [Table B](#) illustrates the calculation of a PMR for men in “occupation A”. Column 3 gives the proportion of all mesothelioma deaths by age; column 2 divided by column 1. This proportion is applied to the number of deaths from all causes by age in occupation A, given in column 4, to give expected number of deaths from mesothelioma in this occupation in column 5. The total observed number of deaths (500 - not shown in table), divided by the total expected number of deaths (230 - shown in column 5) expressed as a percentage gives a PMR of 217.

Table B: Example of a PMR calculation

Age group	Deaths				
	All men			Men in occupation A	
	All causes	Mesothelioma deaths	Proportion from mesothelioma	All cause deaths	Expected deaths
	(1)	(2)	(3) = (2) / (1)	(4)	(6) = (3) * (4)
16-24	16500	1	0.000061	6400	0.388
20-24	21,732	1	0.000046	7,833	0.360
25-29	18,072	5	0.000277	7,907	2.188
30-34	20,544	16	0.000779	7,770	6.051
35-39	27,300	76	0.002784	6,443	17.937
40-44	42,576	199	0.004674	6,222	29.082
45-49	61,236	402	0.006565	6,243	40.984
50-54	102,900	705	0.006851	6,391	43.787
55-59	187,416	1,145	0.006109	6,269	38.300
60-64	308,988	1,436	0.004647	5,367	24.943
65-69	433,956	1,499	0.003454	4,997	17.261
70-74	550,296	1,315	0.002390	3,729	8.911
All ages 16-74	1,775,016	8,347		106,334	230

Confidence intervals and statistical significance

28. An SMR / PMR calculated for a geographical area / occupational group may be greater or less than 100 by chance. Confidence intervals are used to give an indication of the uncertainty associated with each SMR / PMR due to this random variation. A 95% confidence interval is such that, if the calculation could be repeated many times with different samples of the events, then 95% of the time, the confidence interval will contain the true value of the SMR / PMR. If the lower confidence limit for a SMR / PMR is greater than 100 then the SMR / PMR is said to be statistically significantly elevated at the 2.5% level. Likewise, if the upper confidence interval that is presented is lower than 100 then the SMR / PMR is said to be statistically significantly lower at the 2.5% level.
29. Ranking according to the value of the lower confidence interval takes into account both the degree to which the SMR / PMR is greater than 100 and the statistical uncertainty associated with it. Thus a high SMR / PMR based on few cases would have a lower rank than a similar SMR based on a larger number of cases.

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