WORK-RELATED LUNG DISEASE SURVEILLANCE REPORT 1996

Division of Respiratory Disease Studies
National Institute for Occupational Safety and Health

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Preface

This 1996 *Work-Related Lung Disease (WoRLD) Surveillance Report* is the fourth in a series of occupational respiratory disease surveillance reports produced by the National Institute for Occupational Safety and Health (NIOSH). The purpose of this 1996 report is to provide national and state-specific summaries of occupational respiratory disease surveillance data focusing on pneumoconiosis mortality. Selected occupational respiratory hazard sampling data relevant to pneumoconiosis are also presented.

The 1996 *WoRLD Surveillance Report* has three sections: 1) a highlights and limitations section that provides data highlights and data usage limitations; 2) a United States section that serves to update and expand overall national data provided in the 1994 *WoRLD Surveillance Report;* and 3) a state section that provides detailed profiles of pneumoconiosis data for each state in the U.S..

The United States section updates pneumoconiosis mortality surveillance data published previously in the 1994 *WoRLD Surveillance Report*, by including data available for 1991 and 1992. For each condition, this section presents national data such as counts, crude and age-adjusted mortality rates, and years of potential life lost to age 65 to and life expectancy. Proportionate mortality ratios by industry and occupation, are based on data from a subset of states (see state list, Appendix C) for which usual industry and occupation have been coded for decedents. Also presented are U.S. county level maps showing the geographic distribution of mortality for each pneumoconiosis condition. In addition, this section presents selected occupational exposure sampling data for asbestos, coal and coal mine dust, silica dust, cotton dust, etc. (see agent categories, Appendix D).

The State section provides more detailed pneumoconiosis mortality surveillance data for each state and for the District of Columbia. The State section is organized so that tables and graphs of data for each state are grouped together. Selected graphs, tables, and maps present pneumoconiosis mortality from 1968 to 1992 for each state, as well as for counties within each state. Surveillance data include counts, crude and age-adjusted mortality rates, and years of potential life lost to life expectancy.

Pneumoconiosis conditions highlighted in the report include asbestosis, coal workers' pneumoconiosis, silicosis, byssinosis, and pneumoconioses classified as either "unspecified" or "other," as well as all pneumoconioses aggregated. Although some experts do not consider byssinosis a typical pneumoconiosis, it is included because the International Classification of Disease (ICD) system places byssinosis (code 504) within the series of codes for the pneumoconioses (500-505) and because byssinosis is included with other pneumoconioses in a new occupational safety and health objective for the nation (#10.17 in *Healthy People 2000: Midcourse Review and 1995 Revisions*).

Data contained in the report originate from publications, reports, and data provided by the National Center for Health Statistics (NCHS), the Occupational Safety and Health Administration (OSHA), the Mine Safety and Health Administration (MSHA), and the Bureau of Mines (BoM). Details on the major data sources and on the methods used to compute specific statistics can be found in Appendices A and B, respectively. Interpreted with appropriate care, information contained in this report can help to establish priorities for investigation and intervention, as well as to track progress toward the elimination of an important subset of preventable occupational respiratory diseases.

A description of previous editions of the *WoRLD Surveillance Report*, along with revisions and errata can be found in Appendix E. Comments and suggestions from users of earlier editions have influenced the content and format of this 1996 edition. To increase the utility of future editions, comments on the current report and descriptions of how the information is used are invited.

Send comments, suggestions, tear-out reader response card and other correspondence to:

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Acknowledgments

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Dennis W. Groce and Janet M. Hale, of the Environmental Investigations Branch, DRDS, contributed information relating to occupational respiratory exposure sampling data.

Draft segments of this report were provided for review and comment to many individuals affiliated with academic institutions and public health organizations, as well as to others within NIOSH. Their thoughtful comments have resulted in a number of improvements in this final report.

Abbreviations

Avg. Sev.	average severity level
BoM	Bureau of Mines
CDC	Centers for Disease Control and Prevention
CFR	Code of Federal Regulations
CIC	Census Industry Code
COC	Census Occupation Code
CWP	coal workers' pneumoconiosis
DHHS	Department of Health and Human Services
DRDS	Division of Respiratory Disease Studies
ICD	International Classification of Disease
IMIS	Integrated Management Information System
LCL	lower confidence limit
MIDAS	Mine Inspection Data Analysis System
MMWR	Morbidity and Mortality Weekly Report
MRE	Mining Research Establishment
MSHA	Mine Safety and Health Administration
NCHS	National Center for Health Statistics
NEC	not elsewhere classifiable
n.e.c.	not elsewhere classified
NIOSH	National Institute for Occupational Safety and Health
NOS	not otherwise specified
OSHA	Occupational Safety and Health Administration
PEL	permissible exposure limit
PHS	Public Health Service
PMR	proportionate mortality ratio
SENSOR	Sentinel Event Notification Systems for Occupational Risks
TWA	time-weighted average
UCL	upper confidence limit
U.S.	United States
WONDER	Wide-ranging Online Data for Epidemiologic Research
WoRLD	Work-Related Lung Disease
YPLL	years of potential life lost

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HIGHLIGHTS and LIMITATIONS

Selected Highlights

The following paragraphs highlight data presented in the United States Section of this report. Many other highlights could have been mentioned, both from the United States Section and from the State Section.

Pneumoconiosis Mortality

During the 25-year period from 1968 to 1992 there were a total of **100,890 deaths with pneumoconiosis** among U.S. residents, age 15 and over.

Overall pneumoconiosis mortality in the U.S. has been gradually declining over the past two decades, from a peak of more than 5,000 deaths in 1972 to 3,230 in 1992. Mining industries have the two highest (and three of the five highest) proportionate mortality ratios for all pneumoconioses by industry. Ship building and repair, various manufacturing industries, and construction also have significantly elevated PMRs.

Asbestosis deaths represent 10 percent of pneumoconiosis deaths during the 25-year period from 1968 to 1992, and have increased from fewer than 100 to nearly 1,000 annually. Over the most recent three-year period, 1990 to 1992, however, asbestosis mortality appears to have leveled off. The geographic distribution of asbestos mortality tends to be coastal, and nearly 25 percent of asbestosis decedents during the 1968-1992 period were residents of California and New Jersey. Based on a large subset of the national data, various construction occupations account for many of these deaths.

Coal workers' pneumoconiosis (CWP) deaths clearly outnumber other types of pneumoconiosis, amounting to nearly 60 percent of pneumoconiosis deaths over the 25-year period from 1968 to 1992. Over the past decade, CWP mortality has declined each year and CWP deaths number fewer than 2,000 annually for 1990, 1991, and 1992. CWP mortality has been concentrated largely in coal producing states, and about two-thirds of all CWP decedents from 1968-1992 were accounted for by residents of Pennsylvania, alone. Nearly all CWP deaths were associated with employment in the coal mining industry, for which the CWP proportionate mortality ratio of 100 (95% CI = 97-104) was calculated based on a large subset of the national data from 1985 to 1992.

Silicosis deaths represent nearly 15 percent of all pneumoconiosis deaths in the U.S. from 1968 to 1992. Over these 25 years, mortality associated with silicosis has declined more than that associated with other types of pneumoconiosis, from well over 1,000 deaths annually before 1971 to less than 300 in 1992. Compared to asbestosis, CWP, and byssinosis, silicosis mortality is much less concentrated by geographic region or by industry.

In comparison with other pneumoconioses, **byssinosis** deaths (as enumerated from death certificate data) remain very few in number--less than 20 annually. Byssinosis mortality is concentrated in the textile producing areas of North and South Carolina, and only one industry ("yarn, thread, and fabric mills") was associated with high byssinosis mortality in the proportionate mortality ratio analysis (PMR=33; 95% CI=23-45).

The pattern of deaths from **unspecified/other pneumoconioses**, which account for 18 percent of all pneumoconiosis deaths during the 25-year period from 1968 to 1992, resembles CWP mortality with respect to: geographic distribution; a clear peak in 1972; and associated occupations and industries.

Occupational Respiratory Hazard Sampling

During a recent 2-year period (1993-1994), non-mining industries accounted for about 9 percent of all reported federal inspector samples for airborne pneumoconiotic agents. Within the non-mining industries, the **construction** industry was the most frequently sampled, but fewer than 1,000 samples were reported in this industry over these same two years. The average severity level for samples collected in the construction industry was 1.51. This indicates that, on average, measured exposure levels in the construction industry were about one and one-half times the applicable PEL.

Approximately one-half of all federal inspector samples for airborne pneumoconiotic agents (45,132 of 83,475 samples) reported for a recent 2–year period (1993-1994) were collected in the **coal mining** industry. The average severity level for respirable coal mine dust samples was less than 0.5, indicating that, on average, exposure concentrations measured by these inspectors were less than 1.0 mg/m^3. For comparison, the respirable coal mine dust permissible exposure limit (PEL), unadjusted for silica content, is 2.0 mg/m^3 MRE.

The data presented in this report indicate that, in recent years, OSHA and MSHA inspectors have found overexposures to **silica** more frequently and in more states than overexposures to other pneumoconiotic agents. For the years 1985-1994, approximately 15 percent of the 147,000 OSHA and MSHA inspector samples for silica were in excess of the PEL. By comparison, for the same time period, approximately 7 percent of the 268,000 OSHA and MSHA inspector samples for all other pneumoconiotic agents were in excess of the PEL. The OSHA inspectors in 42 states reported at least 10 percent of their silica samples in excess of the PEL for the years 1985-1994. MSHA inspectors in 29 states reported at least 10 percent of their silica samples in excess of the PEL in the same time period.

OSHA inspectors found overexposures to **cotton dust** for 31 percent of the 543 samples obtained during 1985-1994; the data were reported from six states.

Selected Limitations

Mortality Data

The focus of this report is on pneumoconiosis. Readers are therefore cautioned not to erroneously infer that the data presented are comprehensive for occupational lung diseases in general. Other types of lung disease (e.g., asthma and other obstructive airways disease) are also caused by exposure to respiratory hazards in the workplace. However, for most other work-related lung diseases, in contrast with pneumoconiosis, an assumption of an occupational etiology on the basis of death certificate information alone cannot be made without significant misclassification.

The assumption of work-relatedness of pneumoconiosis is reasonable for this surveillance report. Readers are cautioned, however, to realize that a very small proportion of those who die with pneumoconiosis may have developed disease as a result of non-occupational (e.g., avocational) exposure to pneumoconiotic agents.

The focus of this report is on pneumoconiosis mortality, since national pneumoconiosis morbidity data are not readily available. Readers are therefore cautioned not to erroneously infer that data presented are comprehensive for pneumoconiosis in general. Pneumoconiosis is typically (though not always) a chronic disease and, as reflected in median age at death data presented in this report, many affected individuals live to or past life expectancy. The fact that many individuals with pneumoconiosis do not die as a direct result of the pneumoconiosis has led to the decision to consider underlying and all contributing causes of death for each decedent in the data presented in this report. Readers are therefore cautioned to understand that for many pneumoconiosis decedents for which data are presented in this report, pneumoconiosis is a contributing cause of death, not necessarily the underlying cause.

Categorization of types of pneumoconiosis are limited by the ICD coding systems in use over the 25-year period covered by data presented in this report. ICD-8 to ICD-9 disease rubrics differ somewhat for all types of pneumoconiosis except for asbestosis (see table in Appendix B.) This fact alone may have had an effect on the classification of cause of death, although the effect is not considered substantial (e.g., there is no indication in the yearly trend in national silicosis mortality, despite a change in the ICD disease category related to silicosis).

As with any analysis based on death certificate data, there is undoubtedly some misclassification of cause of death. A treating physician may not correctly diagnose pneumoconiosis during a patient's life or, upon death, a certifying physician may fail to list an existing diagnosis of pneumoconiosis on the death certificate, particularly if other diseases were directly responsible for the decedent's death.

As mentioned in the *Preface*, some occupational lung disease experts do not consider byssinosis as a pneumoconiosis. One feature that clearly distinguishes byssinosis from the more typical pneumoconioses is the absence of characteristic lung opacities on radiographic examination of the chest. In advanced stages of the disease, byssinosis is therefore clinically indistinguishable from other chronic obstructive pulmonary diseases. This may lead to more substantial underdiagnosis of byssinosis compared with that of the pneumoconioses associated with radiographic abnormalities.

Physician diagnostic practices are influenced by many factors—not only advances in medical knowledge, including awareness of jobs and industries associated with particular hazardous occupational exposures, but also changing occupational disease compensation programs (e.g., a Federal "Black Lung" compensation program was established for coal miners following the passage of the Federal Mine Heath and Safety Act of 1969) and pressure associated with private litigation (e.g., many third party torts based on injury resulting from adverse health outcomes associated with asbestos have appeared in the courts over the past 20 years). These and other factors are undoubtedly reflected in data presented in this report (e.g., the obvious peak in CWP deaths in 1972).

County and state of residence at death may not represent the geographic location of the decedent's occupational exposure to pneumoconiotic agents. The geographic pattern of CWP mortality is illustrative in this regard, in that it highlights not only coal producing areas associated with risk of disease, but also areas in Florida and California to which many affected miners have retired.

Usual occupation and industry codes are often, but not always, those which were associated with the exposure responsible for the pneumoconiosis. Readers are therefore cautioned with regard to assuming causative inferences about all occupations and industries associated with pneumoconiosis in various tables in this report. Moreover, readers are reminded that usual occupation and industry data analyzed in this report represent only a subset of the mortality data (i.e., for selected states from 1985 to 1992, see Appendix C).

Denominators used to calculate rates presented in this report are based on general population estimates for the location (e.g., nation, state, or county) and for the years in which the deaths occurred. The resulting rates have clear public health significance, but readers are cautioned not to fail to realize, as suggested by the proportionate mortality ratios presented in this report by occupation and by industry, that rates are much higher in certain occupational groups. Apparent changes in mortality rates may reflect, in part or in whole, changes in employment patterns affecting the number of people at risk.

Over the 25-year period covered by data presented in this report, median ages at death have been generally increasing for all types of pneumoconiosis. The reader is cautioned to realize that this increase is the result of many factors, only one of which may be a general lessening of pneumoconiosis severity (e.g., due to enhanced diagnostic sensitivity in addition to fewer severe cases). Other contributing factors undoubtedly include less mortality pressure from other causes of death, in general.

Many tables and figures presented in this report contain small numbers. Those responsible for preparing this report decided to err on the side of providing all the data (i.e., not censoring on the basis of small numbers), recognizing that by doing so opportunities are being provided for over-interpretation of the data. The small-numbers issue applies especially in the State Section, where data are presented by county, but also applies in the United States Section of the report. Moreover, rates have been calculated on the basis of these small numbers and are shown, along with rankings of these rates. The reader is cautioned that **rates based on small numbers can be quite unstable**, so any inferences should be drawn with care. By keeping both rates and counts in mind while considering the tabled data, and/or by logically aggregating cells (e.g., county-specific data) on the basis of the location of particular industries within a particular state, knowledgeable individuals can use the data in this report to identify potential opportunities for enhancement of efforts to prevent pneumoconiosis.

Exposure Data

Industrial hygiene inspection records maintained by OSHA, MSHA, and the former Bureau of Mines were used in this report as a gauge of the range of exposures to pneumoconiotic agents in U.S. industry. These data are considered provisional and subject to revision as additional information becomes available. The inspector samples were gathered for regulatory compliance purposes, rather than for the surveillance of worker exposures. Nonetheless, the inspector data reported herein are the best available information for assessing the range of exposures encountered by U.S. workers on a national scale.

MSHA and OSHA inspection data for similar exposure agents are presented in this report in a parallel format. The reader is cautioned that MSHA and OSHA are separate agencies with separate regulatory jurisdictions. Thus, the number of samples gathered by one agency versus the other, or by one agency from year to year, is not necessarily a valid basis for comparison. A variety of factors

(e.g., Congressional actions, regulatory policies, and changes in analytical methods) can affect the number of samples and the exposure levels being reported by the inspectors.

The list of pneumoconiotic agents used to select inspection sample records from available OSHA and MSHA data files was defined based on the agents which MSHA and OSHA have included in their computerized data systems, and is not a comprehensive list of all agents associated with pneumoconiosis. Nevertheless, the listed agents are associated with what are widely recognized as the most prevalent types of pneumoconiosis. Some agents for which an association with pneumoconiosis is less clear-cut (e.g., OSHA data for "particulates not otherwise regulated") were not included in the analyzed data.

The exposure data analyzed in this report include 69,427 MSHA inspector samples for respirable particulates not otherwise regulated, from non-coal mines. MSHA inspector sampling policies indicate that these samples were, in fact, originally obtained due to the potential for silica exposures. For that reason, the report includes those 69,427 samples as a part of the silica exposure dataset. The reader is cautioned that this inclusion marks a departure from the analytical approach used in previous WoRLD Surveillance Reports.

The severity levels for pneumoconiotic agents were generally derived by dividing the exposure concentrations by the permissible exposure limit (PEL), and can therefore generally be considered related to actual enforceable PELs. However, there are important exceptions to this general rule. Specifically, due to complexities related to determination of enforceable PELs associated with respirable coal mine dust and with respirable coal mine quartz samples, denominators used to calculate the average severity levels for respirable coal mine dust and for respirable coal mine quartz were 2.0 mg/m^3 MRE and 0.1 mg/m^3 MRE, respectively (see Appendix B.)

Although available exposure data for agents associated with each type of pneumoconiosis are presented in this report following the presentation of mortality data for that same condition, the reader is reminded that the time period over which the exposure data were collected is not expected to correspond to the time period during which most of the decedents represented in the mortality data acquired their disease. For most pneumoconiosis deaths, there is a typical latency period of at least several years between first occupational exposure and onset of disease, and subsequent death typically occurs many years after disease onset.

For the time period covered by this report (through 1994), MSHA's respirable coal mine dust inspector samples with less than 0.45 mg net weight gain were not analyzed for quartz.

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*All tables and figures are analogous to those listed under **Asbestosis Mortality**.*

Coal and Coal Mine Dust Exposure

*All tables and figures are analogous to those listed under **Asbestos Exposure.***

Silicosis Mortality

*All tables and figures are analogous to those listed under **Asbestosis Mortality.***

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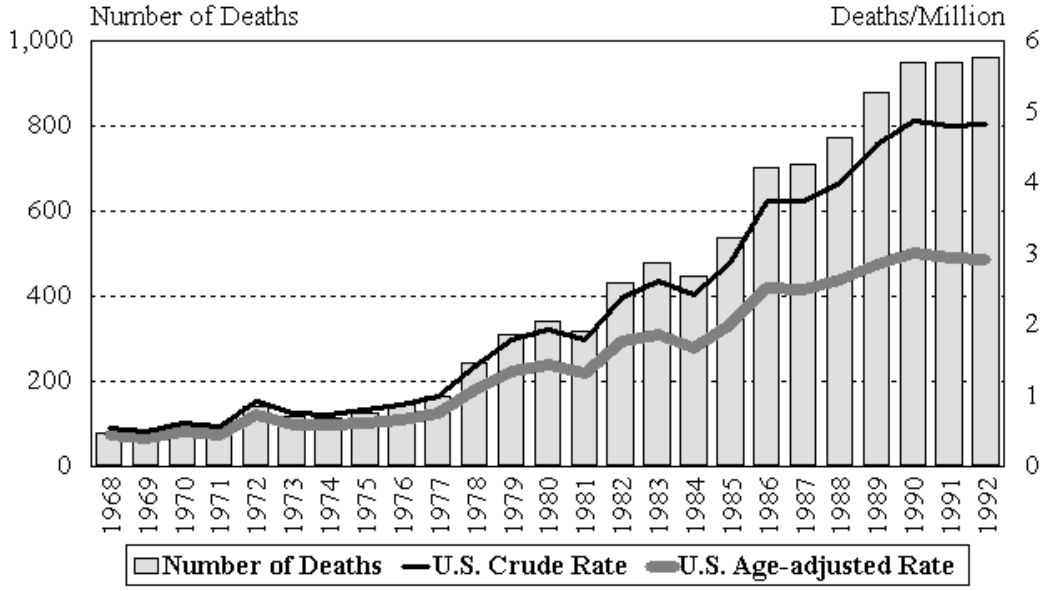
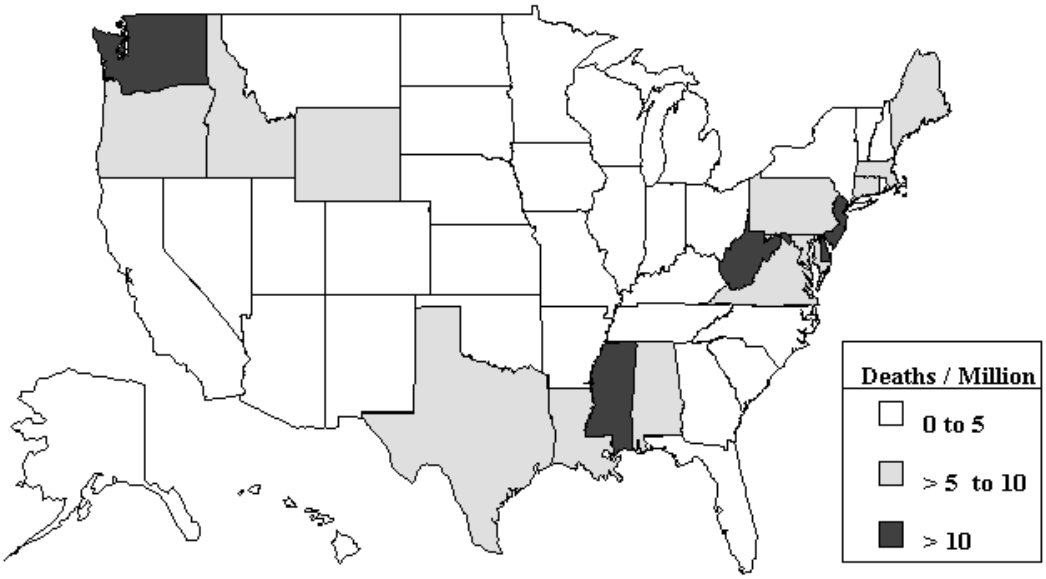
Figure 6-16. Pneumoconiotic agents: Number of OSHA inspector samples collected by county, 1993-1994

Figure 1-1. Asbestosis: Number of deaths, crude and age-adjusted mortality rates, U.S. residents age 15 and over, 1968-1992



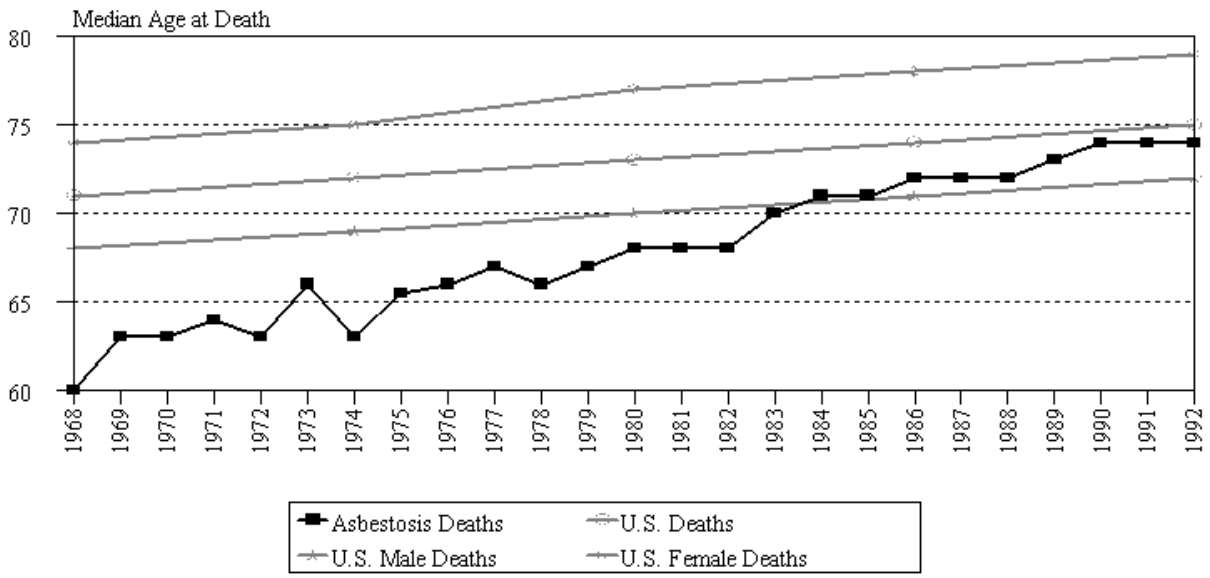
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure 1-2. Asbestosis: Crude mortality rates by state, U.S. residents age 15 and over, 1991-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure 1-3. Asbestosis: Median age at death, U.S. residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 1-1. Asbestosis: Number of deaths by sex, race, and age, U.S. residents age 15 and over, 1991-1992

		1991		1992	
		Number	Percent	Number	Percent
Total deaths		946	100.0	959	100.0
Sex	Male	908	96.0	923	96.2
	Female	38	4.0	36	3.8
Race	White	877	92.7	898	93.6
	Black	63	6.7	57	5.9
	Other	6	0.6	4	0.4
Age	15-24	1	0.1	0	0.0
	25-34	0	0.0	0	0.0
	35-44	1	0.1	3	0.3
	45-54	25	2.6	13	1.4
	55-64	114	12.1	124	12.9
	65-74	370	39.1	371	38.7
	75-84	358	37.8	355	37.0
	85 and over	77	8.1	93	9.7
	Mean age	73.1		73.5	
	Range for age	19-96		38-100	

NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1968-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 1-2. Asbestosis: Number of deaths by state, U.S. residents age 15 and over, 1968-1992

State	1968-1978	1979-1990	1991	1992	TOTAL
Alabama	6	92	23	18	139
Alaska	3	4	1	1	9
Arizona	20	64	6	8	98
Arkansas	1	35	6	5	47
California	157	954	94	95	1,300
Colorado	5	38	5	4	52
Connecticut	22	94	14	17	147
Delaware	4	37	14	8	63
District of Columbia	2	6	1	-	9
Florida	37	348	54	52	491
Georgia	16	78	10	18	122
Hawaii	1	31	4	4	40
Idaho	3	33	6	3	45
Illinois	40	147	20	21	228
Indiana	9	49	4	4	66
Iowa	5	25	3	7	40
Kansas	1	23	3	7	34
Kentucky	2	31	5	5	43
Louisiana	13	113	20	14	160
Maine	9	98	8	8	123
Maryland	19	172	27	33	251
Massachusetts	104	340	27	48	519
Michigan	19	85	15	16	135
Minnesota	11	68	6	17	102
Mississippi	2	97	25	25	149
Missouri	23	84	11	14	132
Montana	3	30	2	4	39
Nebraska	2	20	3	2	27
Nevada	3	19	3	1	26
New Hampshire	5	48	1	4	58
New Jersey	232	800	93	80	1,205
New Mexico	4	19	3	1	27
New York	91	272	37	30	430
North Carolina	24	140	21	25	210
North Dakota	-	6	3	-	9
Ohio	32	167	24	32	255
Oklahoma	3	39	6	5	53
Oregon	25	144	22	22	213
Pennsylvania	165	640	83	100	988
Rhode Island	5	48	1	5	59
South Carolina	37	100	8	13	158
South Dakota	1	2	-	-	3
Tennessee	12	73	8	4	97
Texas	34	354	95	54	537
Utah	1	16	-	4	21
Vermont	2	11	-	3	16
Virginia	39	271	36	43	389
Washington	81	342	50	40	513
West Virginia	6	88	20	28	142
Wisconsin	16	56	11	6	89
Wyoming	2	5	4	1	12
TOTAL	**1,359**	**6,856**	**946**	**959**	**10,120**

- indicates no deaths listed.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 1-3. Asbestosis: Mortality rates (per 1,000,000 population) by race and sex, U.S. residents age 15 and over, 1991-1992

Year	Overall rate	White		Black	
		Males	Females	Males	Females
	Crude mortality rate				
1991	4.80	10.42	0.42	5.86	0.16
1992	4.82	10.63	0.37	5.00	0.32
	Age-adjusted mortality rate				
1991	2.94	6.91	0.20	5.79	0.14
1992	2.90	6.93	0.17	4.99	0.28

NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1968-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.
See Appendix E for revised rates for 1968-1990.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table 1-4. Asbestosis: Years of potential life lost by race and sex, U.S. residents age 15 and over, 1991-1992

Year	Overall	White		Black	
		Males	Females	Males	Females
	Years of potential life lost to age 65				
1991	1,015	845	30	130	0
1992	890	780	15	50	30
	Years of potential life lost to life expectancy				
1991	11,883	9,294	466	664	28
1992	11,850	9,441	389	540	80

NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1968-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 1-5. Asbestosis: Total number of deaths, crude and age-adjusted mortality rates (per 1,000,000 population), and total years of potential life lost (YPLL) to life expectancy, by state, U.S. residents age 15 and over, 1988-1992

State	Total deaths	Rank	Crude mortality		Age-adjusted mortality		YPLL to life expectancy			
			Rate	Rank	Rate	Rank	Years	Rank	Years/death	Rank
Alabama	94	15	5.94	14	3.79	15	1,254	14	13.3	17
Alaska	5	47	2.49	29	3.96	13	84	48	16.8	2
Arizona	30	29	2.11	37	1.39	35	414	29	13.8	13
Arkansas	20	36	2.18	34	1.34	37	283	35	14.2	8
California	459	2	3.96	23	2.75	23	5,503	2	12.0	40
Colorado	22	33	1.71	43	1.27	40	309	33	14.0	9
Connecticut	66	19	4.98	19	2.87	22	797	21	12.1	39
Delaware	49	25	18.55	1	13.08	1	727	23	14.8	4
District of Columbia	1	50	0.39	50	0.29	50	14	50	14.0	12
Florida	264	5	5.00	18	2.35	26	3,287	5	12.5	32
Georgia	55	22	2.18	34	1.79	28	806	20	14.7	5
Hawaii	20	36	4.58	22	2.91	21	227	39	11.4	43
Idaho	22	33	5.88	15	3.72	17	279	36	12.7	29
Illinois	96	14	2.15	36	1.40	34	1,288	13	13.4	16
Indiana	26	32	1.20	49	0.73	49	316	32	12.2	37
Iowa	18	40	1.66	45	0.91	47	232	38	12.9	20
Kansas	20	36	2.09	38	1.05	45	226	40	11.3	44
Kentucky	19	39	1.31	48	0.87	48	260	37	13.7	14
Louisiana	86	17	5.41	16	3.59	18	1,102	16	12.8	23
Maine	53	23	10.94	4	5.96	6	610	25	11.5	42
Maryland	136	10	7.16	12	5.30	8	1,825	10	13.4	15
Massachusetts	184	8	7.56	10	4.05	12	2,054	9	11.2	47
Michigan	66	19	1.83	41	1.32	38	987	19	15.0	3
Minnesota	47	26	2.78	26	1.78	29	585	26	12.4	33
Mississippi	98	13	10.05	6	6.22	4	1,247	15	12.7	27
Missouri	52	24	2.59	28	1.44	31	635	24	12.2	36
Montana	22	33	7.20	11	4.57	10	309	33	14.0	9
Nebraska	12	43	1.98	39	0.94	46	127	43	10.6	49
Nevada	7	46	1.46	47	1.06	44	93	45	13.3	18
New Hampshire	17	41	3.90	24	2.74	24	214	41	12.6	30
New Jersey	473	1	15.21	2	8.88	2	5,821	1	12.3	34
New Mexico	13	42	2.29	32	1.57	30	167	42	12.8	21
New York	172	9	2.39	31	1.42	33	2,196	7	12.8	25
North Carolina	100	12	3.77	25	2.51	25	1,320	12	13.2	19
North Dakota	4	49	1.63	46	1.36	36	87	47	21.8	1
Ohio	118	11	2.78	26	1.88	27	1,715	11	14.5	6
Oklahoma	30	29	2.46	30	1.43	32	376	30	12.5	31
Oregon	94	15	8.41	8	4.32	11	1,060	18	11.3	45
Pennsylvania	430	3	9.02	7	4.85	9	5,493	3	12.8	24
Rhode Island	29	31	7.14	13	3.86	14	351	31	12.1	38
South Carolina	64	21	4.70	21	3.11	19	784	22	12.3	35
South Dakota	-	-	-	-	-	-	-	-	-	-
Tennessee	35	28	1.81	42	1.26	41	500	28	14.3	7
Texas	335	4	5.18	17	3.79	15	4,269	4	12.7	26
Utah	10	44	1.68	44	1.26	41	119	44	11.9	41
Vermont	5	47	2.26	33	1.22	43	50	49	10.0	50
Virginia	196	6	7.95	9	5.79	7	2,516	6	12.8	22
Washington	195	7	10.25	5	6.10	5	2,191	8	11.2	46
West Virginia	86	17	12.03	3	6.53	3	1,091	17	12.7	28
Wisconsin	37	27	1.95	40	1.28	39	519	27	14.0	11
Wyoming	8	45	4.72	20	2.94	20	88	46	11.0	48

- indicates no deaths listed.

NOTE: Ranks are based on unrounded values. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table 1-6. Asbestosis: Most frequently recorded occupations on death certificate, selected states, U.S. residents age 15 and over, 1991-1992

COC	Occupation	Number	Percent
585	Plumbers, pipefitters, and steamfitters	46	8.0
575	Electricians	31	5.4
593	Insulation workers	29	5.0
567	Carpenters	25	4.3
889	Laborers, except construction	24	4.2
633	Supervisors, precision production occupations	18	3.1
643	Boilermakers	18	3.1
019	Managers and administrators, n.e.c.	17	2.9
783	Welders and cutters	17	2.9
453	Janitors and cleaners	15	2.6
	All other occupations	322	55.7
	Occupation not reported	16	2.8
	TOTAL	578	100.0

COC - 1980 Census Occupation Code n.e.c. - not elsewhere classified

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual occupation and years reporting. Data for 1985-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 1-7. Asbestosis: Most frequently recorded industries on death certificate, selected states, U.S. residents age 15 and over, 1991-1992

CIC	Industry	Number	Percent
060	Construction	149	25.8
360	Ship and boat building and repairing	50	8.7
192	Industrial and miscellaneous chemicals	23	4.0
262	Miscellaneous nonmetallic mineral stone products	23	4.0
400	Railroads	17	2.9
901	General government, n.e.c.	17	2.9
142	Yarn, thread, and fabric mills	11	1.9
211	Other rubber products, and plastic footwear and belting	9	1.6
392	Not specified manufacturing industries	9	1.6
410	Trucking service	9	1.6
	All other industries	244	42.2
	Industry not reported	17	2.9
	TOTAL	578	100.0

CIC - 1980 Census Industry Code n.e.c. - not elsewhere classified

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual industry and years reporting. Data for 1985-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 1-8. Asbestosis: Proportionate mortality ratio (PMR) by usual occupation, selected states and years, U.S. residents age 15 and over, 1985-1992

COC	Occupation	Number of deaths	PMR	95% confidence interval LCL	UCL
593	Insulation workers	110	261.01	212.20	317.53
643	Boilermakers	48	50.47	36.84	67.56
646	Lay-out workers	9	30.60	14.04	58.06
585	Plumbers, pipefitters, and steamfitters	153	19.06	16.03	22.50
653	Sheet metal workers	39	14.03	9.74	19.51
534	Heating, air conditioning, and refrigeration mechanics	11	11.20	5.60	20.04
584	Plasterers	6	10.61	3.89	23.12
575	Electricians	74	8.14	6.36	10.29
759	Painting, paint spray machine operators	11	7.06	3.53	12.63
829	Sailors and deckhands	6	6.41	2.35	13.97
757	Separate, filter, clarify machine operators	8	6.01	2.59	11.83
547	Specified mechanics and repairers, n.e.c.	13	5.29	2.81	9.04
783	Welders and cutters	40	4.91	3.51	6.69
363	Production coordinators	5	4.68	1.51	10.93
518	Industrial machinery repairers	19	4.41	2.66	6.89
563	Brickmasons and stonemasons	19	4.36	2.63	6.81
544	Millwrights	11	4.21	2.10	7.53
516	Heavy equipment mechanics	9	4.20	1.93	7.97
056	Industrial engineer	6	3.89	1.42	8.47
756	Mixing, blending machine operators	5	3.64	1.18	8.50
558	Supervisors, construction, n.e.c.	26	3.30	2.16	4.84
696	Stationary engineers	14	3.13	1.71	5.25
549	Not specified mechanics and repairers	12	2.99	1.54	5.22
579	Painters, construction and maintenance	22	2.85	1.78	4.32
856	Industrial truck, tractor equipment operators	8	2.76	1.19	5.43
637	Machinists	47	2.65	1.93	3.55
777	Miscellaneous machine operators, n.e.c.	27	2.61	1.72	3.80
779	Machine operators, not specified	37	2.47	1.72	3.44
633	Supervisors, production occupations	47	2.35	1.72	3.15
567	Carpenters	51	2.33	1.73	3.07
869	Construction laborers	32	1.79	1.21	2.56
453	Janitors and cleaners	43	1.46	1.04	1.99

COC - 1980 Census Occupation Code n.e.c. - not elsewhere classified LCL - lower confidence limit UCL - upper confidence limit

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual occupation and years reporting.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 1-9. Asbestosis: Proportionate mortality ratio (PMR) by usual industry, selected states and years, U.S. residents age 15 and over, 1985-1992

CIC	Industry	Number of deaths	PMR	95% confidence interval LCL	UCL
360	Ship and boat building and repairing	164	43.01	36.60	50.19
262	Miscellaneous nonmetallic mineral and stone products	54	29.17	21.61	38.48
192	Industrial and miscellaneous chemicals	54	7.02	5.20	9.26
502	Lumber and construction materials	7	6.64	2.67	13.69
282	Fabricated structural metal products	29	6.22	4.17	8.94
462	Electric and gas, and other combinations	9	6.13	2.81	11.63
200	Petroleum refining	19	5.82	3.51	9.09
521	Hardware, plumbing and heating supplies	8	4.74	2.04	9.33
420	Water transportation	16	4.61	2.63	7.48
211	Other rubber products, and plastics footwear and belting	19	4.49	2.70	7.02
060	Construction	435	4.42	4.00	4.87
181	Drugs	8	4.38	1.89	8.62
881	Membership organizations	12	3.96	2.04	6.91
180	Plastics, synthetics, and resins	6	3.31	1.21	7.21
460	Electric light and power	25	3.29	2.12	4.85
210	Tires and inner tubes	10	2.95	1.42	5.42
272	Primary aluminum industries	7	2.88	1.16	5.94
400	Railroads	46	2.15	1.57	2.88
160	Pulp, paper, and paperboard mills	15	2.02	1.13	3.33
392	Not specified manufacturing industries	43	1.66	1.19	2.26

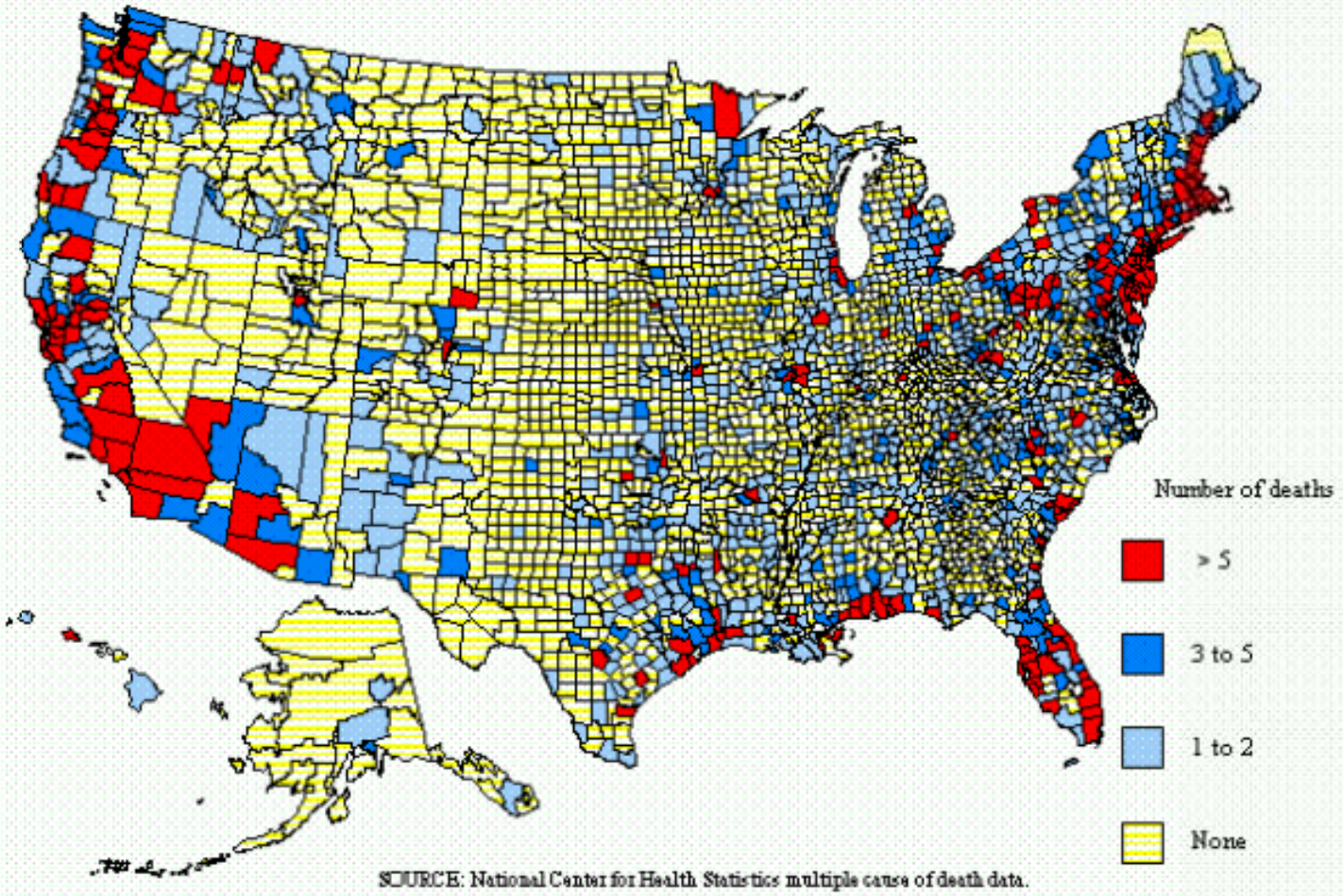
CIC - 1980 Census Industry Code LCL - lower confidence limit UCL - upper confidence limit

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual industry and years reporting.

SOURCE: National Center for Health Statistics multiple cause of death data.

Figure 1-4. Asbestosis: Total number of deaths by county,

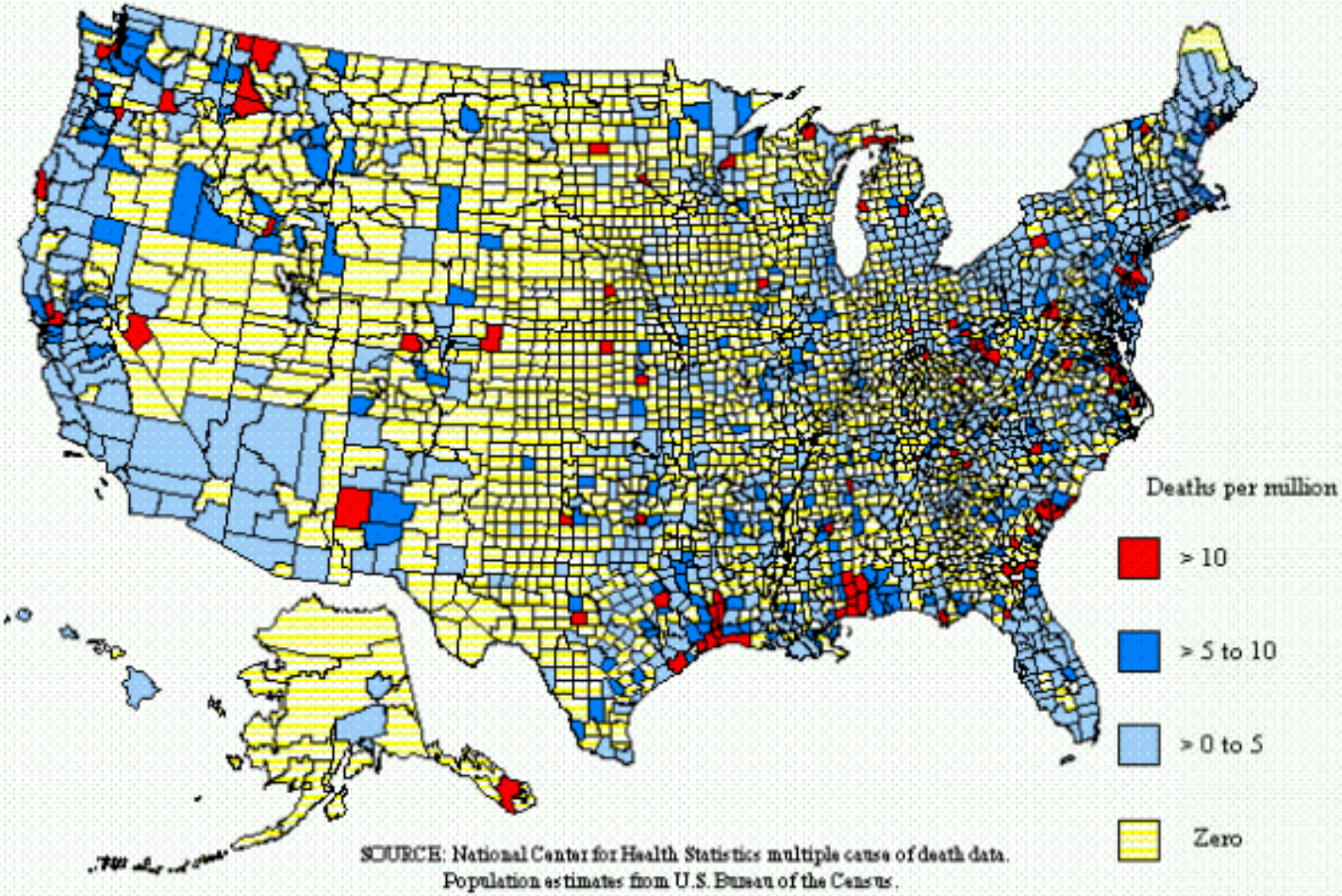
U.S. residents age 15 and over, 1983-1992



SOURCE: National Center for Health Statistics multiple cause of death data.

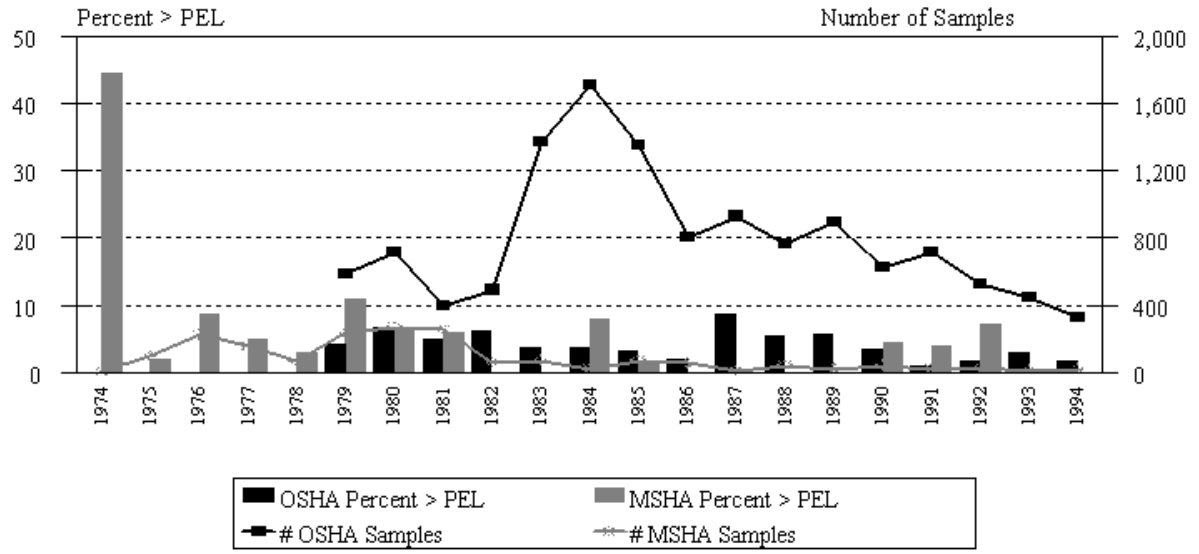
Figure 1-5. Asbestosis: Age-adjusted mortality rates by county,

U.S. residents age 15 and over, 1983-1992



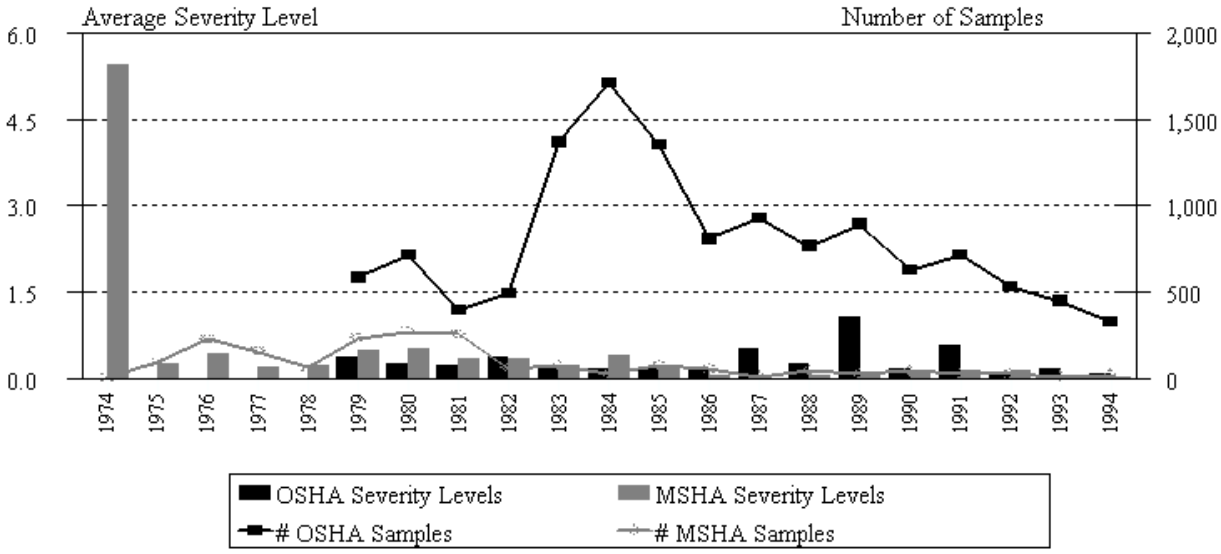
SOURCE: National Center for Health Statistics multiple cause of death data.
Population estimates from U.S. Bureau of the Census.

Figure 1-6. Asbestos: Number of MSHA and OSHA inspector samples and percent exceeding the permissible exposure limit (PEL), 1974-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Bureau of Mines: Mine Inspection Data Analysis System. Occupational Safety and Health Administration: Integrated Management Information System.

Figure 1-7. Asbestos: Number of MSHA and OSHA inspector samples and average severity levels, 1974-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Bureau of Mines: Mine Inspection Data Analysis System. Occupational Safety and Health Administration: Integrated Management Information System.

Table 1-10. Asbestos: Number of MSHA and OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity level, by industry, 1993-1994

CIC	Industries most frequently recorded on 1991-1992 death certificates with asbestosis	Number of samples	% > PEL	Average severity
060	Construction	221	4.1	0.17
360	Ship and boat building and repairing	3	0.0	0.00
192	Industrial and miscellaneous chemicals	2	0.0	0.00
262	Miscellaneous nonmetallic mineral and stone products	65	10.8	0.43
400	Railroads	0	-	-
901	General government, n.e.c.	20	0.0	0.05
142	Yarn, thread, and fabric mills	1	0.0	0.00
211	Other rubber products, and plastics footwear and belts	6	0.0	0.03
392	Not specified manufacturing industries	0	-	-
410	Trucking service	1	0.0	0.00
	All other industries	483	0.8	0.08
	Industry not reported	3	0.0	0.00
	TOTAL	805	2.5	0.13

CIC - 1980 Census Industry Code n.e.c. - not elsewhere classified - indicates incalculable field
NOTE: See Appendix A for source description, Appendix B for methods, Appendix C for list of 25 states reporting usual industry and years reporting, and Appendix D for agents.
SOURCE: Bureau of Mines: Mine Inspection Data Analysis System. Occupational Safety and Health Administration: Integrated Management Information System. National Center for Health Statistics: multiple cause of death data.

Table 1-11. Asbestos: Number of MSHA and OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity level, by industry, 1993-1994

CIC	Industries most frequently sampled in 1993-1994	Number of samples	% > PEL	Average severity
060	Construction	221	4.1	0.17
262	Miscellaneous nonmetallic mineral and stone products	65	10.8	0.43
910	Justice, public order, and safety	43	0.0	0.02
831	Hospitals	22	0.0	0.00
050	Nonmetallic mining	21	0.0	0.04
901	General government, n.e.c.	20	0.0	0.05
842	Elementary and secondary schools	19	0.0	0.06
751	Automotive repair shops	18	0.0	0.03
591	Department stores	16	0.0	0.00
351	Motor vehicles and motor vehicle equipment	15	0.0	0.04
	All other industries	342	1.2	0.11
	Industry not reported	3	0.0	0.00
	TOTAL	805	2.5	0.13

CIC - 1980 Census Industry Code n.e.c. - not elsewhere classified
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Bureau of Mines: Mine Inspection Data Analysis System. Occupational Safety and Health Administration: Integrated Management Information System.

Table 1-12 (page 1 of 2). Asbestos: Number of MSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1974-1994

	1974-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Alabama	0	-	-	-	0	-	-	-	0	-	-	-
Alaska	0	-	-	-	0	-	-	-	0	-	-	-
Arizona	86	0.94	14.0	4.78	0	-	-	-	0	-	-	-
Arkansas	0	-	-	-	0	-	-	-	0	-	-	-
California	156	0.73	21.8	2.33	64	0.20	0.0	-	9	0.09	0.0	-
Colorado	25	0.19	0.0	-	20	0.03	0.0	-	0	-	-	-
Connecticut	0	-	-	-	0	-	-	-	0	-	-	-
Delaware	0	-	-	-	0	-	-	-	0	-	-	-
District of Columbia	0	-	-	-	0	-	-	-	0	-	-	-
Florida	4	0.03	0.0	-	0	-	-	-	0	-	-	-
Georgia	16	1.79	25.0	5.45	4	0.00	0.0	-	0	-	-	-
Hawaii	0	-	-	-	1	0.00	0.0	-	1	0.00	0.0	-
Idaho	0	-	-	-	5	0.01	0.0	-	0	-	-	-
Illinois	55	0.05	0.0	-	2	0.00	0.0	-	1	0.00	0.0	-
Indiana	6	0.07	0.0	-	1	0.01	0.0	-	0	-	-	-
Iowa	0	-	-	-	0	-	-	-	0	-	-	-
Kansas	0	-	-	-	0	-	-	-	0	-	-	-
Kentucky	0	-	-	-	0	-	-	-	0	-	-	-
Louisiana	4	0.00	0.0	-	32	0.00	0.0	-	5	0.00	0.0	-
Maine	0	-	-	-	0	-	-	-	0	-	-	-
Maryland	91	0.27	3.3	1.58	12	0.00	0.0	-	0	-	-	-
Massachusetts	0	-	-	-	1	0.00	0.0	-	0	-	-	-
Michigan	2	0.00	0.0	-	5	0.01	0.0	-	5	0.01	0.0	-
Minnesota	208	0.10	0.5	1.20	31	0.02	0.0	-	2	0.05	0.0	-
Mississippi	0	-	-	-	0	-	-	-	0	-	-	-
Missouri	0	-	-	-	4	0.00	0.0	-	0	-	-	-
Montana	180	0.28	2.8	1.42	17	0.17	0.0	-	0	-	-	-

See footnotes at end of table.

Table 1-12 (page 2 of 2). Asbestos: Number of MSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1974-1994

	1974-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Nebraska	0	-	-	-	0	-	-	-	0	-	-	-
Nevada	0	-	-	-	4	0.00	0.0	-	0	-	-	-
New Hampshire	0	-	-	-	0	-	-	-	0	-	-	-
New Jersey	14	0.13	0.0	-	0	-	-	-	0	-	-	-
New Mexico	96	0.18	2.1	3.30	2	0.44	0.0	-	0	-	-	-
New York	63	0.35	1.6	2.60	2	0.00	0.0	-	2	0.00	0.0	-
North Carolina	13	0.39	0.0	-	3	0.00	0.0	-	0	-	-	-
North Dakota	0	-	-	-	0	-	-	-	0	-	-	-
Ohio	1	0.01	0.0	-	0	-	-	-	0	-	-	-
Oklahoma	21	0.17	0.0	-	0	-	-	-	0	-	-	-
Oregon	0	-	-	-	0	-	-	-	0	-	-	-
Pennsylvania	12	0.10	0.0	-	11	0.00	0.0	-	1	0.00	0.0	-
Rhode Island	0	-	-	-	0	-	-	-	0	-	-	-
South Carolina	62	0.06	0.0	-	11	0.00	0.0	-	0	-	-	-
South Dakota	27	0.27	0.0	-	43	0.09	0.0	-	0	-	-	-
Tennessee	0	-	-	-	0	-	-	-	0	-	-	-
Texas	72	1.12	1.4	75.63	5	0.00	0.0	-	4	0.00	0.0	-
Utah	0	-	-	-	2	0.00	0.0	-	0	-	-	-
Vermont	221	0.62	14.9	2.07	34	0.55	17.6	1.96	0	-	-	-
Virginia	12	0.16	0.0	-	8	0.00	0.0	-	2	0.00	0.0	-
Washington	1	0.02	0.0	-	10	0.00	0.0	-	0	-	-	-
West Virginia	0	-	-	-	2	0.00	0.0	-	2	0.00	0.0	-
Wisconsin	35	0.13	0.0	-	1	0.00	0.0	-	0	-	-	-
Wyoming	0	-	-	-	7	0.00	0.0	-	0	-	-	-
TOTAL	1,483	0.41	6.5	3.38	344	0.12	1.7	1.96	34	0.03	0.0	-

- indicates incalculable field.
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Bureau of Mines: Mine Inspection Data Analysis System.

Figure 1-8. Asbestos: Number of MSHA inspector samples collected by state, 1993-1994

NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Bureau of Mines: Mine Inspection Data Analysis System.

Figure 1-9. Asbestos: Percent of MSHA inspector samples that exceeded the permissible exposure limit (PEL), by state, 1993-1994

NOTE: No samples collected were above the PEL. See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Bureau of Mines: Mine Inspection Data Analysis System.

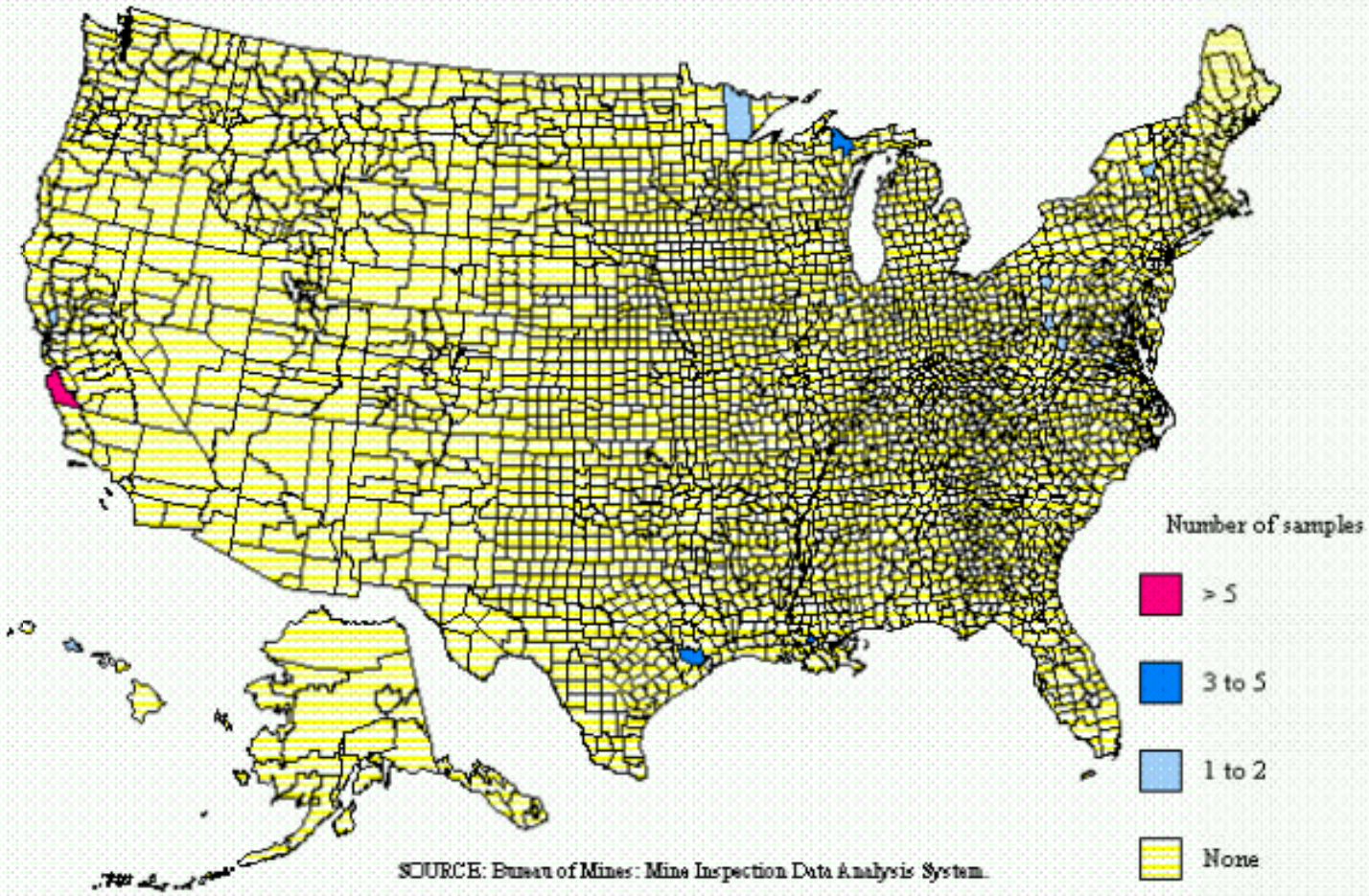
Figure 1-10. Asbestos: Average severity level by state for MSHA inspector samples, 1993-1994

NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Bureau of Mines: Mine Inspection Data Analysis System.

Figure 1-11. Asbestos: Average severity level by state for MSHA inspector samples that exceeded the permissible exposure limit (PEL), 1993-1994

NOTE: No samples collected were above the PEL. See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Bureau of Mines: Mine Inspection Data Analysis System.

Figure 1-12. Asbestos: Number of MSHA inspector samples collected by county, 1993-1994



SOURCE: Bureau of Mines: Mine Inspection Data Analysis System.

Table 1-13 (page 1 of 2). Asbestos: Number of OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1979-1994

	1979-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Alabama	91	0.73	9.9	6.53	82	0.06	2.4	1.71	1	0.00	0.0	-
Alaska	76	0.01	0.0	-	110	0.14	2.7	4.52	4	0.00	0.0	-
Arizona	24	0.03	0.0	-	47	0.10	2.1	1.90	0	-	-	-
Arkansas	44	0.07	0.0	-	212	0.66	7.5	7.62	67	0.40	10.4	1.90
California	23	0.14	4.3	1.27	153	0.55	6.5	7.13	6	0.01	0.0	-
Colorado	212	0.08	0.9	3.57	123	0.14	3.3	3.23	6	1.41	33.3	3.98
Connecticut	164	0.39	4.9	6.12	223	0.04	0.0	-	26	0.05	0.0	-
Delaware	20	0.13	0.0	-	4	0.01	0.0	-	0	-	-	-
District of Columbia	50	0.10	2.0	2.04	10	0.06	0.0	-	2	0.00	0.0	-
Florida	82	1.74	7.3	23.09	177	0.13	2.3	4.73	30	0.25	10.0	1.67
Georgia	197	0.45	12.2	3.01	147	0.09	2.7	1.91	5	0.00	0.0	-
Hawaii	9	0.01	0.0	-	14	0.00	0.0	-	3	0.00	0.0	-
Idaho	14	0.05	0.0	-	81	0.02	0.0	-	3	0.00	0.0	-
Illinois	222	0.06	1.8	1.73	434	0.03	0.2	1.20	65	0.02	0.0	-
Indiana	170	0.28	6.5	1.44	216	0.04	0.0	-	17	0.00	0.0	-
Iowa	87	0.24	6.9	2.72	209	0.03	0.5	1.15	3	0.00	0.0	-
Kansas	44	0.21	9.1	1.74	33	0.04	0.0	-	3	0.00	0.0	-
Kentucky	79	0.05	1.3	1.94	132	0.08	0.0	-	13	0.03	0.0	-
Louisiana	57	0.07	1.8	1.58	82	0.07	2.4	1.63	0	-	-	-
Maine	63	0.06	0.0	-	17	0.05	0.0	-	0	-	-	-
Maryland	20	0.03	0.0	-	51	0.31	9.8	2.64	4	0.08	0.0	-
Massachusetts	291	0.40	15.5	1.59	241	0.39	8.7	3.71	20	0.55	20.0	2.43
Michigan	0	-	-	-	342	0.10	2.0	3.36	61	0.04	0.0	-
Minnesota	8	0.31	25.0	1.15	23	0.00	0.0	-	0	-	-	-
Mississippi	17	0.08	0.0	-	105	0.06	1.0	1.05	16	0.09	0.0	-
Missouri	372	0.18	2.4	6.86	155	0.04	1.3	1.66	11	0.00	0.0	-
Montana	120	0.09	0.8	1.95	63	0.12	3.2	1.13	0	-	-	-

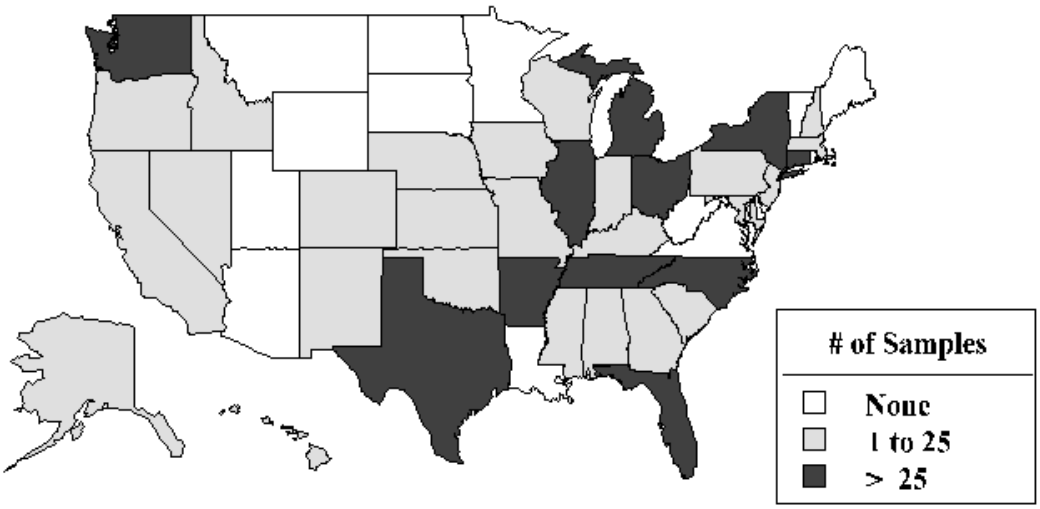
See footnotes at end of table.

Table 1-13 (page 2 of 2). Asbestos: Number of OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1979-1994

	1979-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Nebraska	36	0.04	0.0	-	109	0.01	0.0	-	3	0.14	0.0	-
Nevada	16	0.03	0.0	-	50	0.28	6.0	3.90	6	0.12	0.0	-
New Hampshire	100	0.82	12.0	5.84	70	0.05	1.4	1.50	5	0.00	0.0	-
New Jersey	268	0.23	3.4	3.39	307	0.81	14.7	5.13	13	0.02	0.0	-
New Mexico	2	0.00	0.0	-	22	0.02	0.0	-	6	0.02	0.0	-
New York	613	0.08	1.8	1.25	952	0.22	1.7	10.74	126	0.27	2.4	10.10
North Carolina	87	0.26	4.6	2.09	231	0.20	4.3	3.34	46	0.08	2.2	1.15
North Dakota	7	0.00	0.0	-	1	0.00	0.0	-	0	-	-	-
Ohio	282	0.46	4.3	9.27	545	0.87	5.3	15.45	42	0.00	0.0	-
Oklahoma	91	0.12	2.2	4.35	78	0.14	6.4	1.83	3	0.00	0.0	-
Oregon	78	0.13	5.1	1.37	76	0.09	0.0	-	15	0.08	0.0	-
Pennsylvania	365	0.30	4.7	4.14	393	0.62	6.6	8.33	11	0.00	0.0	-
Rhode Island	46	0.38	13.0	2.43	56	1.01	16.1	6.17	0	-	-	-
South Carolina	24	0.08	0.0	-	44	0.28	9.1	2.70	8	0.00	0.0	-
South Dakota	4	0.00	0.0	-	29	0.00	0.0	-	0	-	-	-
Tennessee	12	0.00	0.0	-	111	4.59	0.9	500.00	29	0.07	0.0	-
Texas	317	0.05	0.6	1.30	434	0.30	4.6	5.42	41	0.01	0.0	-
Utah	2	0.02	0.0	-	2	0.00	0.0	-	0	-	-	-
Vermont	0	-	-	-	1	0.00	0.0	-	0	-	-	-
Virginia	106	0.38	11.3	2.41	125	0.57	16.8	2.43	0	-	-	-
Washington	5	1.42	80.0	1.68	67	0.05	0.0	-	39	0.01	0.0	-
West Virginia	73	0.04	0.0	-	29	1.76	27.6	5.81	0	-	-	-
Wisconsin	161	0.16	5.6	1.87	160	0.73	6.3	10.65	12	0.03	0.0	-
Wyoming	15	0.00	0.0	-	0	-	-	-	0	-	-	-
TOTAL	5,266	0.24	4.5	3.78	7,378	0.37	4.0	8.10	771	0.14	2.6	3.37

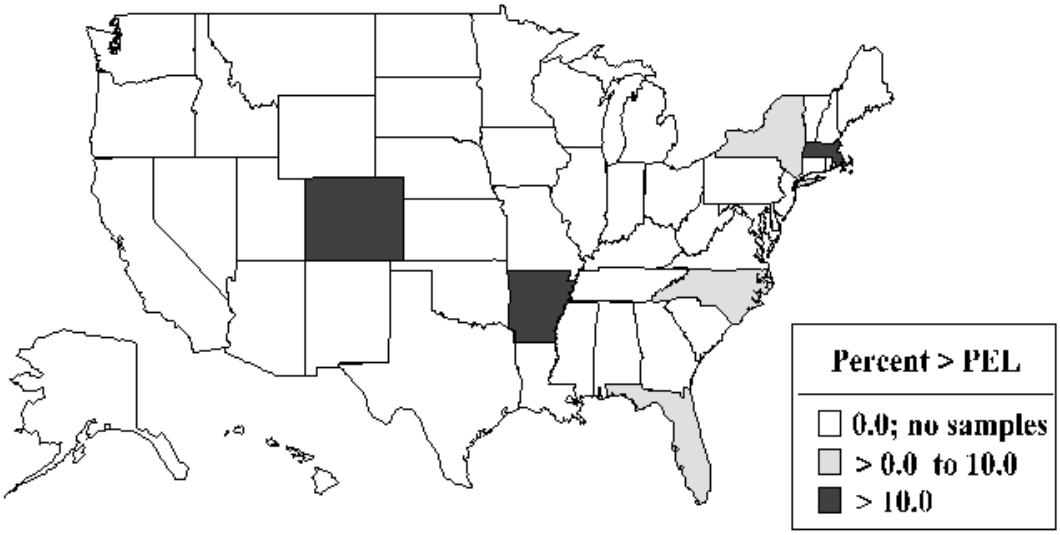
- indicates incalculable field.
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 1-13. Asbestos: Number of OSHA inspector samples collected by state, 1993-1994



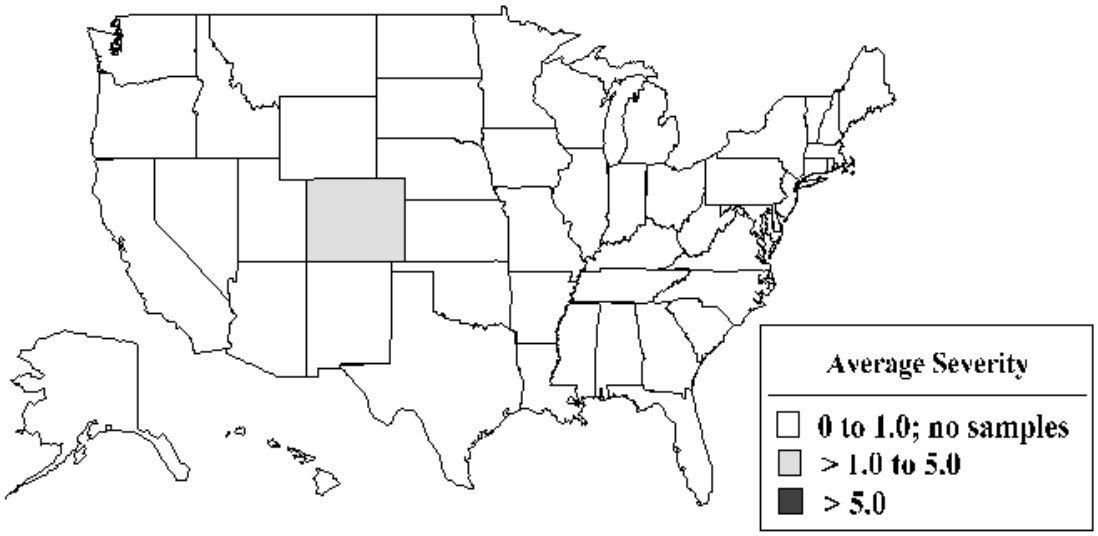
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System .

Figure 1-14. Asbestos: Percent of OSHA inspector samples that exceeded the permissible exposure limit (PEL), by state, 1993-1994



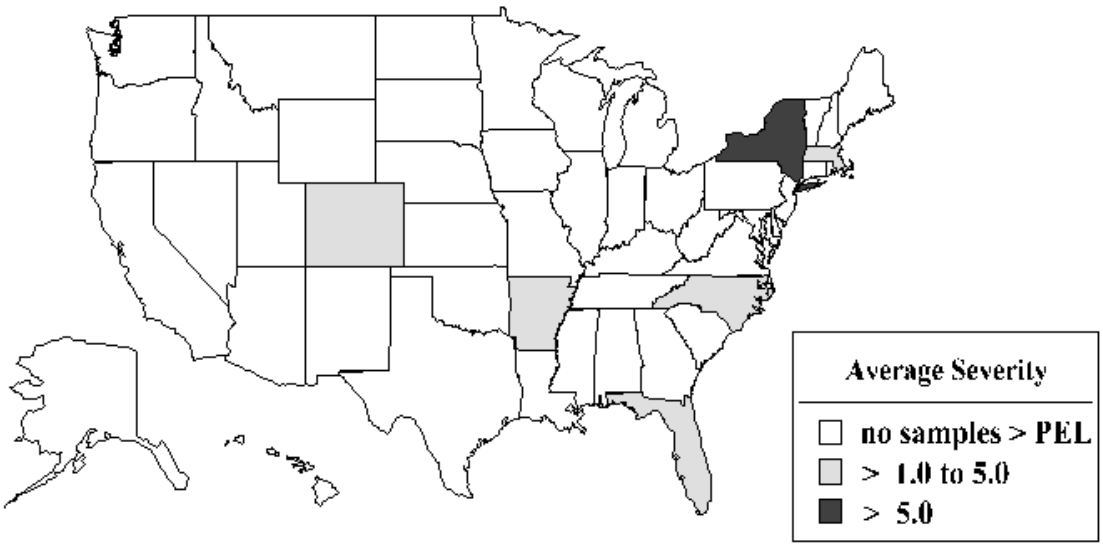
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 1-15. Asbestos: Average severity level by state for OSHA inspector samples, 1993-1994



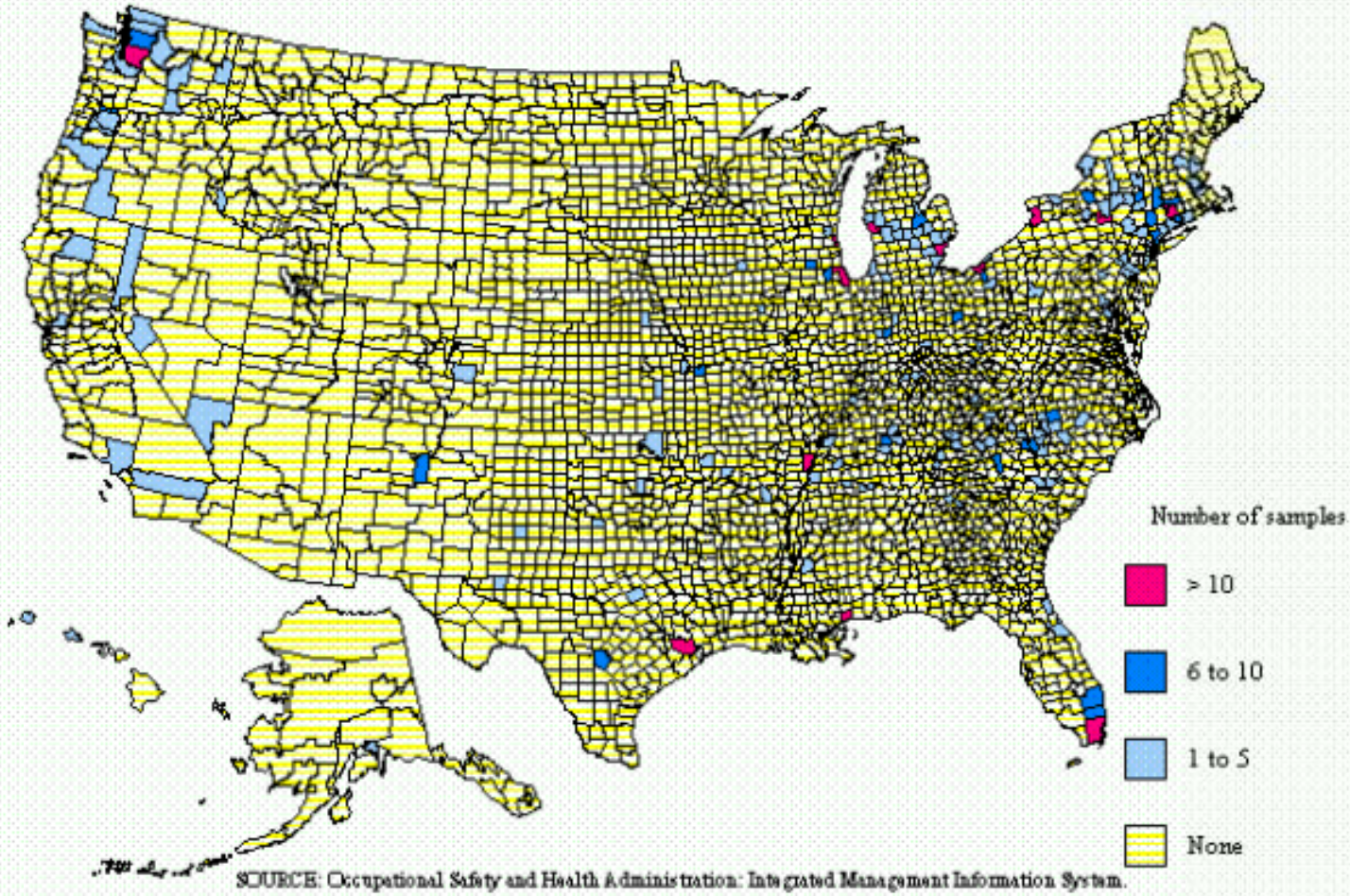
NOTE: See Appendix A for source descriptions, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 1-16. Asbestos: Average severity level by state for OSHA inspector samples that exceeded the permissible exposure limit (PEL), 1993-1994



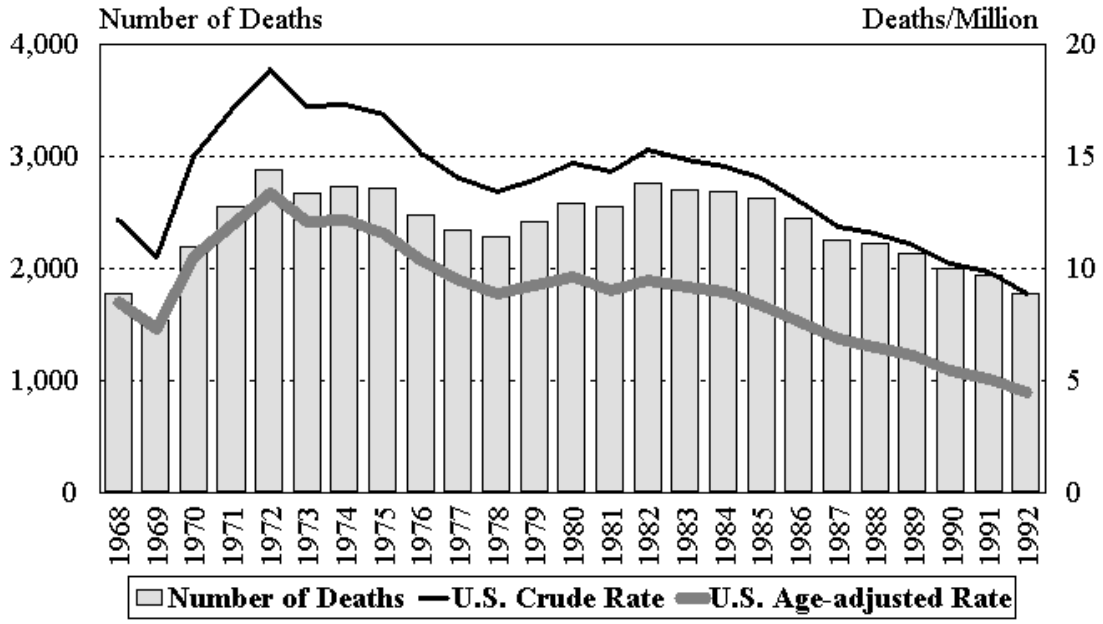
NOTE: See Appendix A for source descriptions, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 1-17. Asbestos: Number of OSHA inspector samples collected by county, 1993-1994



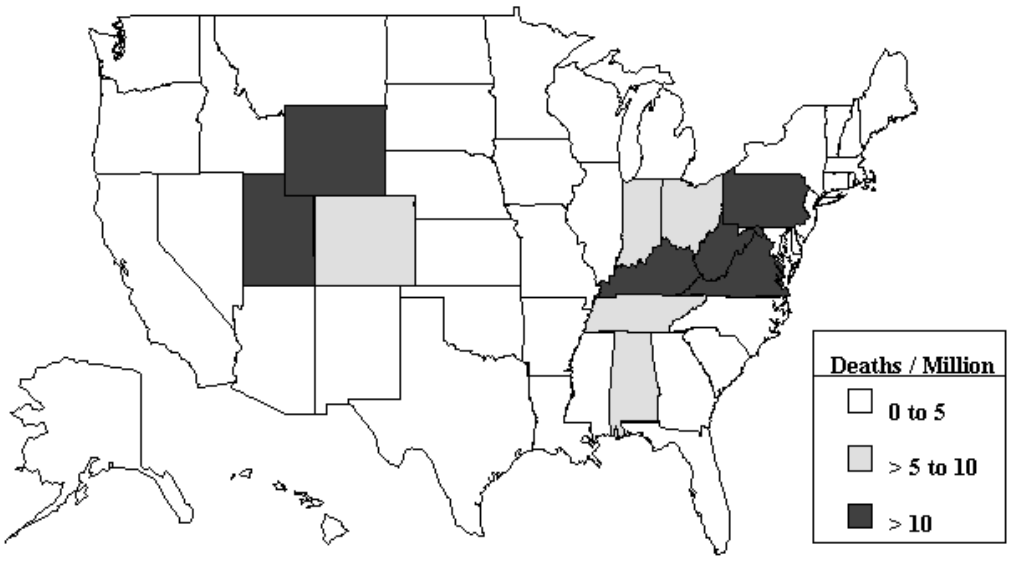
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 2-1. Coal workers' pneumoconiosis: Number of deaths, crude and age-adjusted mortality rates, U.S. residents age 15 and over, 1968-1992



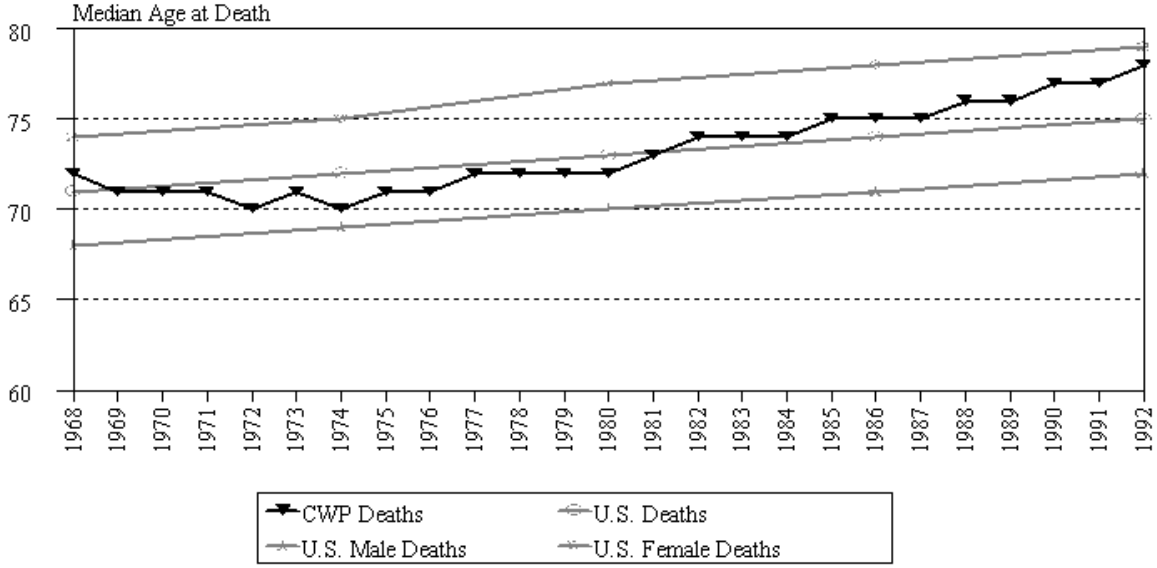
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure 2-2. Coal workers' pneumoconiosis: Crude mortality rates by state, U.S. residents age 15 and over, 1991-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure 2-3. Coal workers' pneumoconiosis(CWP): Median age at death, U.S. residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 2-1. Coal workers' pneumoconiosis: Number of deaths by sex, race, and age, U.S. residents age 15 and over, 1991-1992

		1991		1992	
		Number	Percent	Number	Percent
Total deaths		1,938	100.0	1,766	100.0
Sex	Male	1,920	99.1	1,761	99.7
	Female	18	0.9	5	0.3
Race	White	1,877	96.8	1,707	96.7
	Black	60	3.1	55	3.1
	Other	1	0.1	4	0.2
Age	15-24	1	0.1	0	0.0
	25-34	2	0.1	2	0.1
	35-44	14	0.7	6	0.3
	45-54	23	1.2	14	0.8
	55-64	110	5.7	90	5.1
	65-74	536	27.7	457	25.9
	75-84	884	45.6	858	48.6
	85 and over	368	19.0	339	19.2
	Mean age	76.8		77.5	
	Range for age	19-107		34-102	

NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1968-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 2-2. Coal workers' pneumoconiosis: Number of deaths by state, U.S. residents age 15 and over, 1968-1992

State	1968-1978	1979-1990	1991	1992	TOTAL
Alabama	126	328	28	23	505
Alaska	1	2	-	1	4
Arizona	32	88	4	2	126
Arkansas	17	72	7	6	102
California	206	254	41	22	523
Colorado	94	189	15	19	317
Connecticut	46	55	1	3	105
Delaware	17	26	4	1	48
District of Columbia	8	6	-	-	14
Florida	198	399	33	23	653
Georgia	12	43	3	2	60
Hawaii	1	3	-	-	4
Idaho	1	3	-	1	5
Illinois	305	727	43	46	1,121
Indiana	104	263	33	19	419
Iowa	35	85	6	6	132
Kansas	28	36	2	2	68
Kentucky	737	1,971	112	116	2,936
Louisiana	5	14	3	-	22
Maine	1	2	-	-	3
Maryland	65	115	5	13	198
Massachusetts	26	14	2	2	44
Michigan	135	216	15	10	376
Minnesota	9	8	-	-	17
Mississippi	7	12	3	1	23
Missouri	25	75	6	11	117
Montana	12	11	-	-	23
Nebraska	4	1	-	-	5
Nevada	4	12	1	1	18
New Hampshire	7	1	-	-	8
New Jersey	229	214	8	14	465
New Mexico	23	44	3	4	74
New York	167	167	4	2	340
North Carolina	30	108	13	10	161
North Dakota	1	4	-	-	5
Ohio	417	1,108	83	74	1,682
Oklahoma	19	57	4	1	81
Oregon	11	28	1	1	41
Pennsylvania	20,965	16,994	961	836	39,756
Rhode Island	5	2	-	-	7
South Carolina	11	19	-	5	35
South Dakota	3	10	-	-	13
Tennessee	140	420	23	30	613
Texas	31	78	7	9	125
Utah	24	135	12	13	184
Vermont	1	6	1	-	8
Virginia	398	1,460	134	147	2,139
Washington	19	55	1	1	76
West Virginia	1,305	3,339	308	283	5,235
Wisconsin	19	21	1	-	41
Wyoming	37	44	7	6	94
TOTAL	**26,123**	**29,344**	**1,938**	**1,766**	**59,171**

- indicates no deaths listed.

NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 2-3. Coal workers' pneumoconiosis: Mortality rates (per 1,000,000 population) by race and sex, U.S. residents age 15 and over, 1991-1992

Year	Overall rate	White		Black	
		Males	Females	Males	Females
	Crude mortality rate				
1991	9.84	23.03	0.21	5.76	-
1992	8.87	20.89	0.06	5.19	-
	Age-adjusted mortality rate				
1991	5.09	13.58	0.12	4.79	-
1992	4.44	11.94	0.04	4.42	-

- indicates no deaths listed.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1968-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.
See Appendix E for revised rates for 1968-1990.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table 2-4. Coal workers' pneumoconiosis: Years of potential life lost by race and sex, U.S. residents age 15 and over, 1991-1992

Year	Overall	White		Black	
		Males	Females	Males	Females
	Years of potential life lost to age 65				
1991	1,360	1,205	115	35	-
1992	880	810	20	50	-
	Years of potential life lost to life expectancy				
1991	20,878	17,780	336	472	-
1992	18,329	15,688	88	458	-

- indicates no deaths listed.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1968-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 2-5. Coal workers' pneumoconiosis: Total number of deaths, crude and age-adjusted mortality rates (per 1,000,000 population), and total years of potential life lost (YPLL) to life expectancy, by state, U.S. residents age 15 and over, 1988-1992

State	Total deaths	Rank	Crude mortality		Age-adjusted mortality		YPLL to life expectancy			
			Rate	Rank	Rate	Rank	Years	Rank	Years/death	Rank
Alabama	146	9	9.23	8	3.97	9	1,362	10	9.3	33
Alaska	1	42	0.50	39	0.82	22	8	46	8.0	44
Arizona	20	25	1.41	24	0.71	26	214	25	10.7	22
Arkansas	29	22	3.16	14	1.13	19	255	22	8.8	41
California	114	11	0.98	29	0.72	25	1,783	8	15.6	4
Colorado	87	12	6.77	10	3.59	10	762	14	8.8	42
Connecticut	13	29	0.98	29	0.41	32	116	32	8.9	40
Delaware	12	30	4.54	13	2.42	13	114	33	9.5	29
District of Columbia	1	42	0.39	41	0.29	37	14	43	14.0	5
Florida	151	8	2.86	16	1.17	17	1,660	9	11.0	17
Georgia	22	24	0.87	31	0.60	28	245	23	11.1	16
Hawaii	-	-	-	-	-	-	-	-	-	-
Idaho	1	42	0.27	44	0.11	47	8	46	8.0	44
Illinois	229	6	5.12	12	2.67	12	2,461	6	10.7	20
Indiana	123	10	5.68	11	3.01	11	1,342	11	10.9	19
Iowa	33	20	3.04	15	1.11	21	303	21	9.2	37
Kansas	10	32	1.05	28	0.68	27	178	26	17.8	2
Kentucky	648	4	44.80	3	25.43	3	7,669	4	11.8	12
Louisiana	7	36	0.44	40	0.27	40	124	31	17.7	3
Maine	1	42	0.21	47	0.14	46	14	43	14.0	5
Maryland	41	17	2.16	20	1.37	16	457	17	11.1	15
Massachusetts	9	34	0.37	42	0.21	44	113	34	12.6	9
Michigan	80	13	2.21	19	1.17	17	810	13	10.1	27
Minnesota	-	-	-	-	-	-	-	-	-	-
Mississippi	8	35	0.82	33	0.38	35	75	37	9.4	31
Missouri	36	19	1.80	23	0.80	23	372	19	10.3	25
Montana	-	-	-	-	-	-	-	-	-	-
Nebraska	-	-	-	-	-	-	-	-	-	-
Nevada	4	38	0.84	32	0.53	31	42	38	10.5	24
New Hampshire	1	42	0.23	46	0.24	42	21	41	21.0	1
New Jersey	79	14	2.54	18	1.38	15	933	12	11.8	13
New Mexico	16	27	2.81	17	1.50	14	150	28	9.4	31
New York	41	17	0.57	37	0.25	41	381	18	9.3	34
North Carolina	52	16	1.96	21	1.12	20	570	16	11.0	18
North Dakota	2	41	0.82	33	0.28	38	16	42	8.0	44
Ohio	428	5	10.07	7	5.15	7	4,540	5	10.6	23
Oklahoma	17	26	1.39	25	0.56	29	157	27	9.2	35
Oregon	12	30	1.07	27	0.54	30	148	29	12.3	11
Pennsylvania	5,062	1	106.16	2	45.77	2	51,640	1	10.2	26
Rhode Island	1	42	0.25	45	0.15	45	14	43	14.0	5
South Carolina	10	32	0.73	36	0.40	33	92	36	9.2	36
South Dakota	3	40	1.14	26	0.40	33	24	40	8.0	44
Tennessee	168	7	8.68	9	4.56	8	1,804	7	10.7	21
Texas	33	20	0.51	38	0.28	38	313	20	9.5	30
Utah	73	15	12.28	6	7.59	6	699	15	9.6	28
Vermont	4	38	1.81	22	0.76	24	34	39	8.5	43
Virginia	715	3	29.01	4	20.31	4	8,916	3	12.5	10
Washington	15	28	0.79	35	0.38	35	134	30	8.9	39
West Virginia	1,458	2	203.87	1	102.05	1	17,178	2	11.8	14
Wisconsin	7	36	0.37	42	0.23	43	93	35	13.3	8
Wyoming	26	23	15.33	5	7.81	5	237	24	9.1	38

- indicates no deaths listed.

NOTE: Ranks are based on unrounded values. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table 2-6. Coal workers' pneumoconiosis: Most frequently recorded occupations on death certificate, selected states, U.S. residents age 15 and over, 1991-1992

COC	Occupation	Number	Percent
616	Mining machine operators	820	70.4
889	Laborers, except construction	39	3.3
019	Managers and administrators, n.e.c.	15	1.3
804	Truck drivers, heavy	15	1.3
453	Janitors and cleaners	13	1.1
633	Supervisors, precision production occupations	13	1.1
575	Electricians	11	0.9
844	Operating engineers	10	0.9
243	Supervisors and proprietors, sales occupations	9	0.8
567	Carpenters	8	0.7
	All other occupations	168	14.4
	Occupation not reported	44	3.8
	TOTAL	1,165	100.0

COC - 1980 Census Occupation Code n.e.c. - not elsewhere classified

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual occupation and years reporting. Data for 1985-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 2-7. Coal workers' pneumoconiosis: Most frequently recorded industries on death certificate, selected states, U.S. residents age 15 and over, 1991-1992

CIC	Industry	Number	Percent
041	Coal mining	887	76.1
060	Construction	44	3.8
270	Blast furnaces, steelworks, rolling and finishing mills	21	1.8
400	Railroads	13	1.1
392	Not specified manufacturing industries	12	1.0
351	Motor vehicles and motor vehicle equipment	9	0.8
010	Agricultural production, crops	7	0.6
192	Industrial and miscellaneous chemicals	7	0.6
842	Elementary and secondary schools	6	0.5
961	Homemaker, student, unemployed, volunteer	5	0.4
	All other industries	114	9.8
	Industry not reported	40	3.4
	TOTAL	1,165	100.0

CIC - 1980 Census Industry Code

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual industry and years reporting. Data for 1985-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 2-8. Coal workers' pneumoconiosis: Proportionate mortality ratio (PMR) by usual occupation, selected states and years, U.S. residents age 15 and over, 1985-1992

COC	Occupation	Number of deaths	PMR	95% confidence interval LCL	UCL
616	Mining machine operators	2959	98.10	94.33	101.98
853	Excavate, loading machine operators	7	7.74	3.11	15.96
613	Supervisors, extractive occupations	6	5.35	1.96	11.66
617	Mining occupations, n.e.c.	9	3.82	1.75	7.25
859	Miscellaneous material moving equipment operators	9	2.79	1.28	5.29
824	Locomotive operating occupations	14	2.62	1.43	4.40
719	Molding and casting machine operators	9	2.25	1.03	4.27
844	Operating engineers	27	1.83	1.20	2.66
575	Electricians	36	1.67	1.16	2.32

COC - 1980 Census Occupation Code n.e.c. - not elsewhere classified LCL - lower confidence limit UCL - upper confidence limit

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual occupation and years reporting.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 2-9. Coal workers' pneumoconiosis: Proportionate mortality ratio (PMR) by usual industry, selected states and years, U.S. residents age 15 and over, 1985-1992

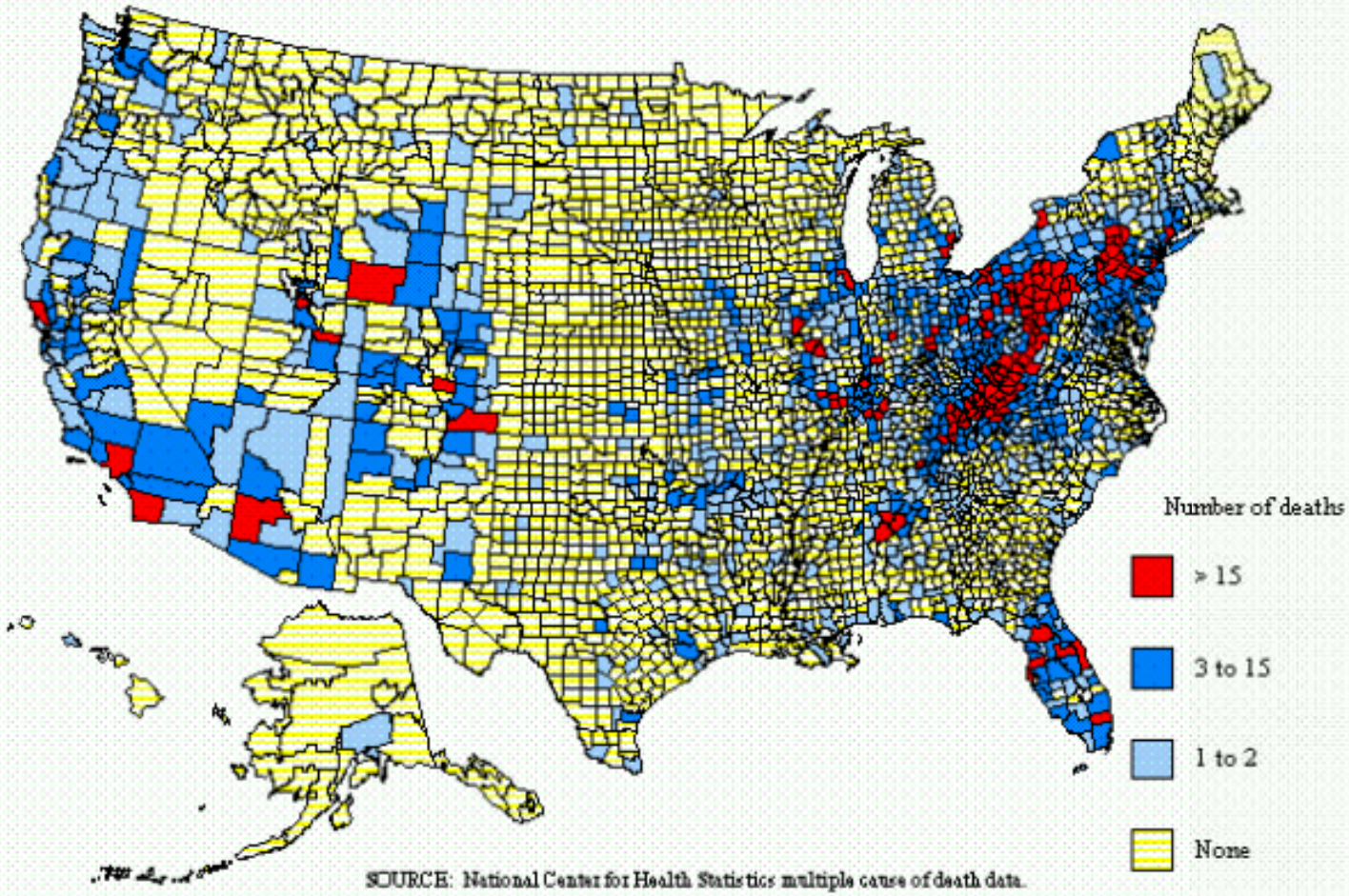
CIC	Industry	Number of deaths	PMR	95% confidence interval LCL	UCL
041	Coal mining	3,158	100.22	96.64	103.85
040	Metal mining	24	4.86	3.12	7.23

CIC - 1980 Census Industry Code LCL - lower confidence limit UCL - upper confidence limit

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual industry and years reporting.

SOURCE: National Center for Health Statistics multiple cause of death data.

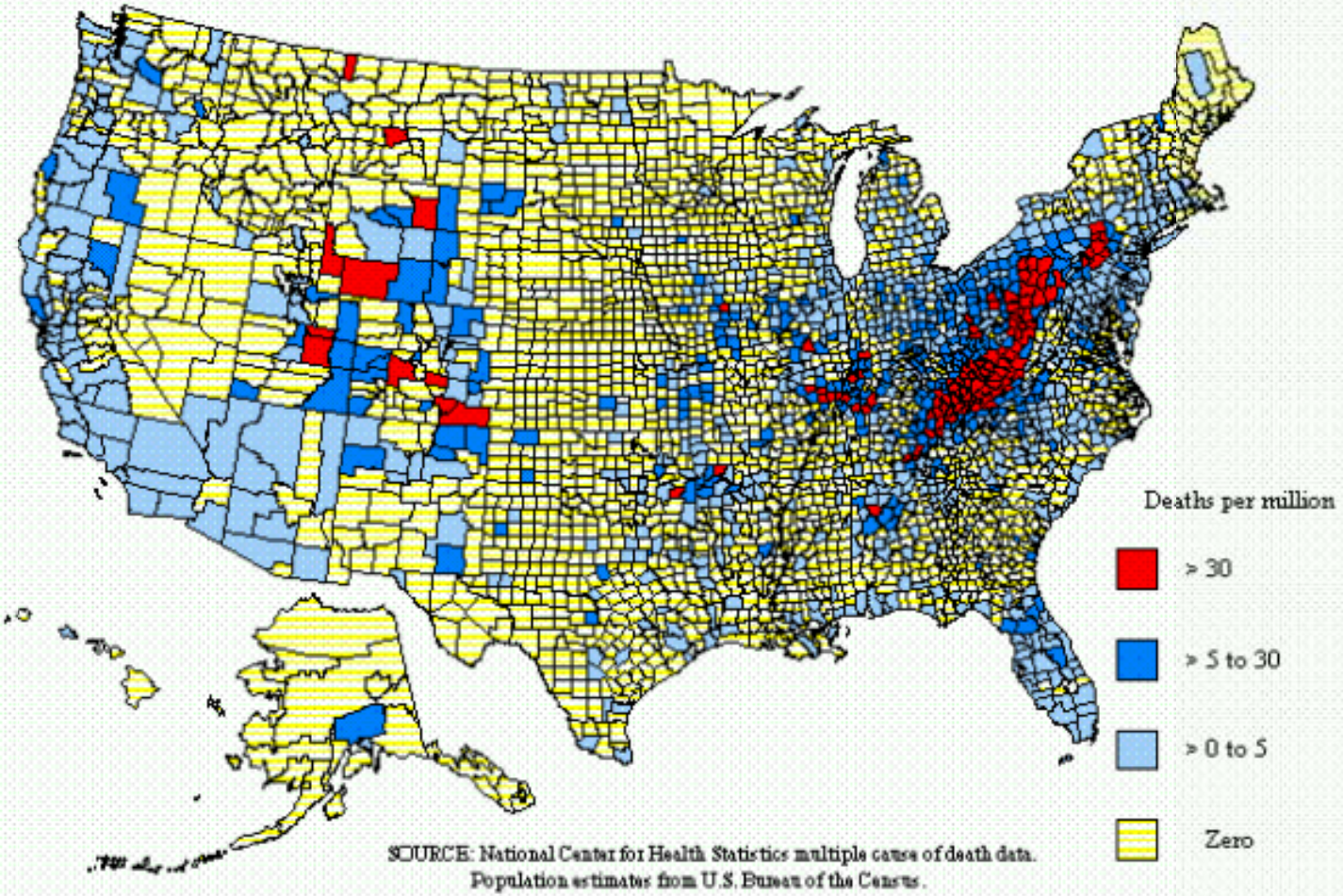
Figure 2-4. Coal workers' pneumoconiosis: Total number of deaths by county, U.S. residents age 15 and over, 1983-1992



SOURCE: National Center for Health Statistics multiple cause of death data.

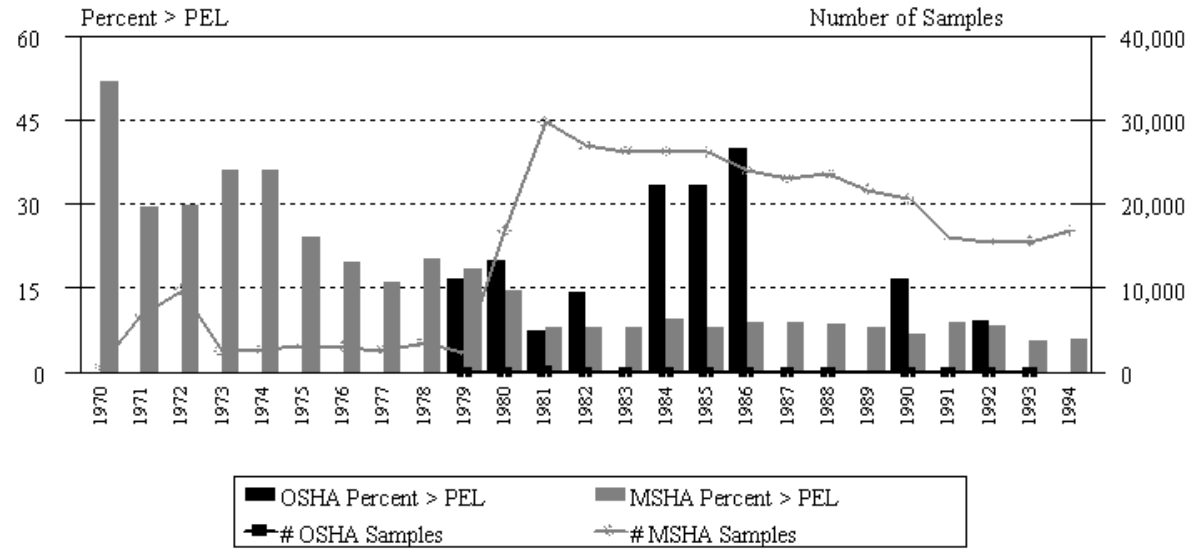
Figure 2-5. Coal workers' pneumoconiosis: Age-adjusted mortality rates

by county, U.S. residents age 15 and over, 1983-1992



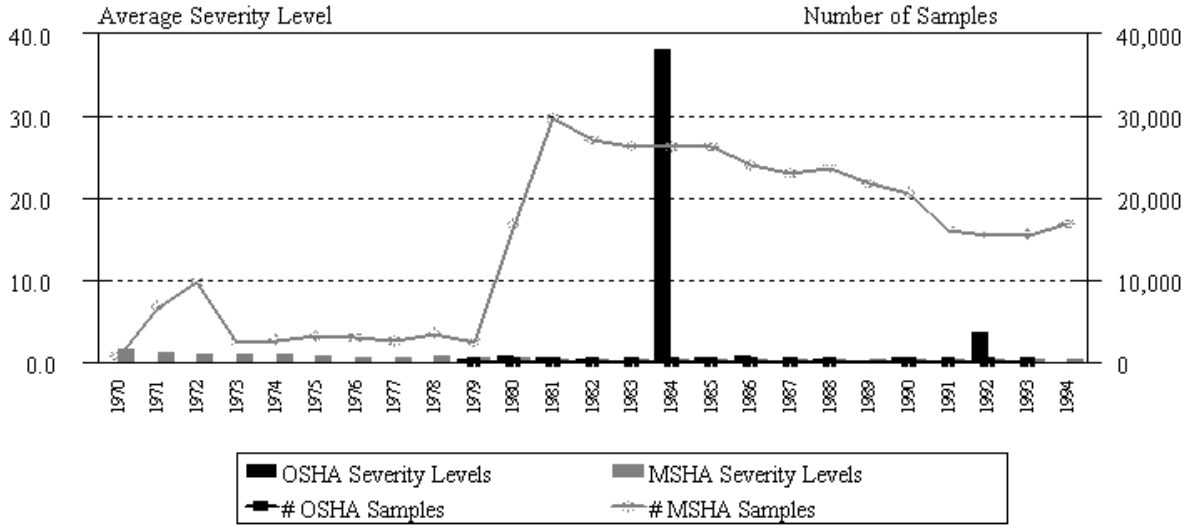
SOURCE: National Center for Health Statistics multiple cause of death data.
Population estimates from U.S. Bureau of the Census.

Figure 2-6. Coal and coal mine dust: Number of MSHA and OSHA inspector samples and percent exceeding the permissible exposure limit (PEL), 1970-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data. Occupational Safety and Health Administration: Integrated Management Information System.

Figure 2-7. Coal and coal mine dust: Number of MSHA and OSHA inspector samples and average severity levels, 1970-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data. Occupational Safety and Health Administration: Integrated Management Information System.

Table 2-10. Coal and coal mine dust: Number of MSHA and OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity level, by industry, 1993-1994

CIC	Industries most frequently recorded on 1991-1992 death certificates with coal workers' pneumoconiosis	Number of samples	% > PEL	Average severity
041	Coal mining	32,362	5.8	0.38
060	Construction	0	-	-
270	Blast furnaces, steelworks, rolling and finishing mills	0	-	-
400	Railroads	0	-	-
392	Not specified manufacturing industries	0	-	-
351	Motor vehicles and motor vehicle equipment	0	-	-
010	Agricultural productions, crops	0	-	-
192	Industrial and miscellaneous chemicals	0	-	-
842	Elementary and secondary schools	0	-	-
961	Homemaker, student, unemployed, volunteer	0	-	-
	All other industries	7	0.0	0.19
	Industry not reported	0	-	-
	TOTAL	32,369	5.8	0.38

CIC - 1980 Census Industry Code - indicates incalculable field
NOTE: See Appendix A for source description, Appendix B for methods, Appendix C for list of 25 states reporting usual industry and years reporting, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data. Occupational Safety and Health Administration: Integrated Management Information System. National Center for Health Statistics: multiple cause of death data.

Table 2-11. Coal and coal mine dust: Number of MSHA and OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity level, by industry, 1993-1994

CIC	Industries most frequently sampled in 1993-1994	Number of samples	% > PEL	Average severity
041	Coal mining	32,362	5.8	0.38
160	Pulp, paper, and paperboard mills	4	0.0	0.22
891	Noncommercial educational and scientific research	3	0.0	0.14
	All other industries	0	-	-
	Industry not reported	0	-	-
	TOTAL	32,369	5.8	0.38

CIC - 1980 Census Industry Code - indicates incalculable field
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data. Occupational Safety and Health Administration: Integrated Management Information System.

Table 2-12 (page 1 of 2). Coal and coal mine dust: Number of MSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1970-1994

	1970-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Alabama	3,738	0.56	13.0	1.85	6,902	0.48	9.2	1.74	1,539	0.41	4.8	2.12
Alaska	23	0.20	0.0	-	25	0.40	4.0	4.30	1	0.10	0.0	-
Arizona	46	0.37	6.5	1.47	158	0.22	2.5	1.26	11	0.15	0.0	-
Arkansas	96	0.18	5.2	1.16	123	0.19	4.1	1.86	17	0.09	0.0	-
California	0	-	-	-	1	0.20	0.0	-	1	0.20	0.0	-
Colorado	2,250	1.04	30.1	2.43	2,796	0.67	15.7	1.91	381	0.50	10.0	1.40
Connecticut	0	-	-	-	0	-	-	-	0	-	-	-
Delaware	0	-	-	-	0	-	-	-	0	-	-	-
District of Columbia	0	-	-	-	0	-	-	-	0	-	-	-
Florida	0	-	-	-	0	-	-	-	0	-	-	-
Georgia	29	0.20	0.0	-	0	-	-	-	0	-	-	-
Hawaii	0	-	-	-	0	-	-	-	0	-	-	-
Idaho	0	-	-	-	1	0.40	0.0	-	0	-	-	-
Illinois	6,279	0.83	21.5	2.09	8,249	0.54	9.0	1.54	1,354	0.46	4.8	1.42
Indiana	2,282	0.34	6.7	2.46	2,559	0.34	4.8	2.50	424	0.37	7.5	1.65
Iowa	113	0.33	3.5	2.96	153	0.56	16.3	1.81	13	0.28	0.0	-
Kansas	91	0.18	3.3	2.00	116	0.19	1.7	2.00	5	0.12	0.0	-
Kentucky	32,882	0.59	13.4	2.28	53,871	0.46	9.0	2.14	9,960	0.39	6.6	1.73
Louisiana	0	-	-	-	56	0.16	0.0	-	23	0.22	0.0	-
Maine	0	-	-	-	0	-	-	-	0	-	-	-
Maryland	602	0.42	5.0	2.17	945	0.43	6.5	2.35	298	0.28	3.4	1.54
Massachusetts	0	-	-	-	0	-	-	-	0	-	-	-
Michigan	0	-	-	-	1	0.24	0.0	-	0	-	-	-
Minnesota	0	-	-	-	3	0.15	0.0	-	0	-	-	-
Mississippi	0	-	-	-	0	-	-	-	0	-	-	-
Missouri	184	0.24	1.6	4.27	371	0.20	1.9	1.77	74	0.21	2.7	1.53
Montana	116	0.31	5.2	2.35	300	0.27	3.0	3.92	52	0.15	3.8	1.70

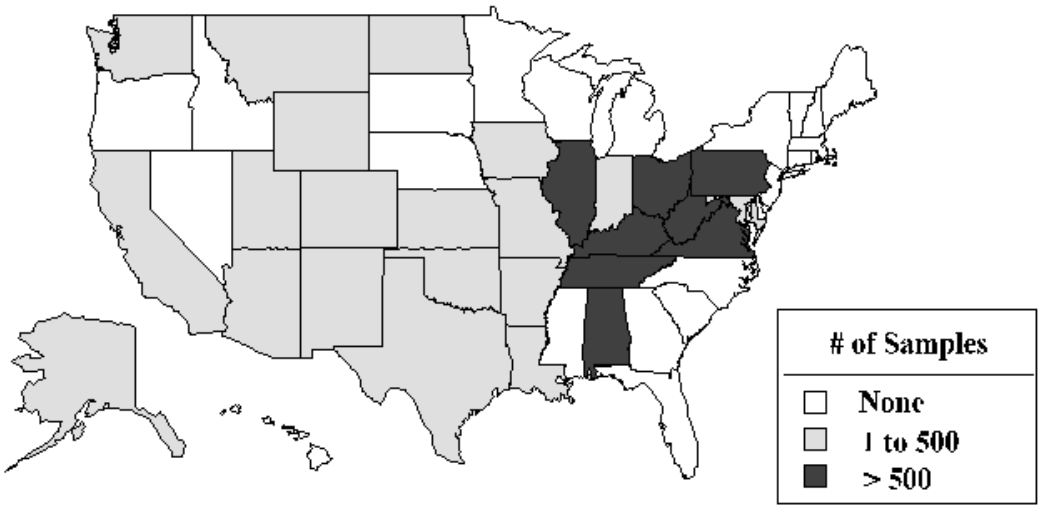
See footnotes at end of table.

Table 2-12 (page 2 of 2). Coal and coal mine dust: Number of MSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1970-1994

	1970-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Nebraska	0	-	-	-	0	-	-	-	0	-	-	-
Nevada	0	-	-	-	0	-	-	-	0	-	-	-
New Hampshire	0	-	-	-	0	-	-	-	0	-	-	-
New Jersey	0	-	-	-	0	-	-	-	0	-	-	-
New Mexico	369	1.15	28.2	2.97	558	0.40	8.4	1.68	96	0.44	13.5	1.42
New York	0	-	-	-	0	-	-	-	0	-	-	-
North Carolina	0	-	-	-	9	0.10	0.0	-	0	-	-	-
North Dakota	258	0.19	1.9	1.56	442	0.17	1.1	3.79	34	0.11	0.0	-
Ohio	8,574	0.69	20.6	1.76	10,524	0.33	4.6	1.83	1,566	0.23	1.6	1.54
Oklahoma	690	0.29	5.5	2.57	1,167	0.33	5.0	2.57	181	0.30	3.3	2.38
Oregon	0	-	-	-	0	-	-	-	0	-	-	-
Pennsylvania	32,528	0.45	8.4	2.20	22,387	0.37	6.2	1.72	4,442	0.29	4.1	1.89
Rhode Island	0	-	-	-	0	-	-	-	0	-	-	-
South Carolina	0	-	-	-	0	-	-	-	0	-	-	-
South Dakota	0	-	-	-	0	-	-	-	0	-	-	-
Tennessee	4,106	0.52	9.1	2.27	4,112	0.38	5.5	2.13	503	0.28	3.6	1.63
Texas	540	0.18	3.0	2.04	1,210	0.14	1.5	2.07	215	0.12	1.4	1.50
Utah	1,601	0.89	24.7	2.05	3,388	0.76	19.2	1.91	415	0.67	14.5	1.54
Vermont	0	-	-	-	0	-	-	-	0	-	-	-
Virginia	23,490	0.52	11.7	1.98	24,565	0.44	8.8	1.80	3,296	0.40	6.2	1.80
Washington	34	0.20	0.0	-	72	0.22	2.8	2.45	28	0.17	0.0	-
West Virginia	41,525	0.63	15.1	2.08	56,576	0.43	7.1	1.82	7,105	0.42	6.9	1.68
Wisconsin	0	-	-	-	0	-	-	-	0	-	-	-
Wyoming	548	0.55	13.7	2.00	1,209	0.34	8.1	1.54	328	0.29	6.1	1.59
TOTAL	162,994	0.58	13.3	2.12	202,849	0.44	7.9	1.91	32,362	0.38	5.8	1.73

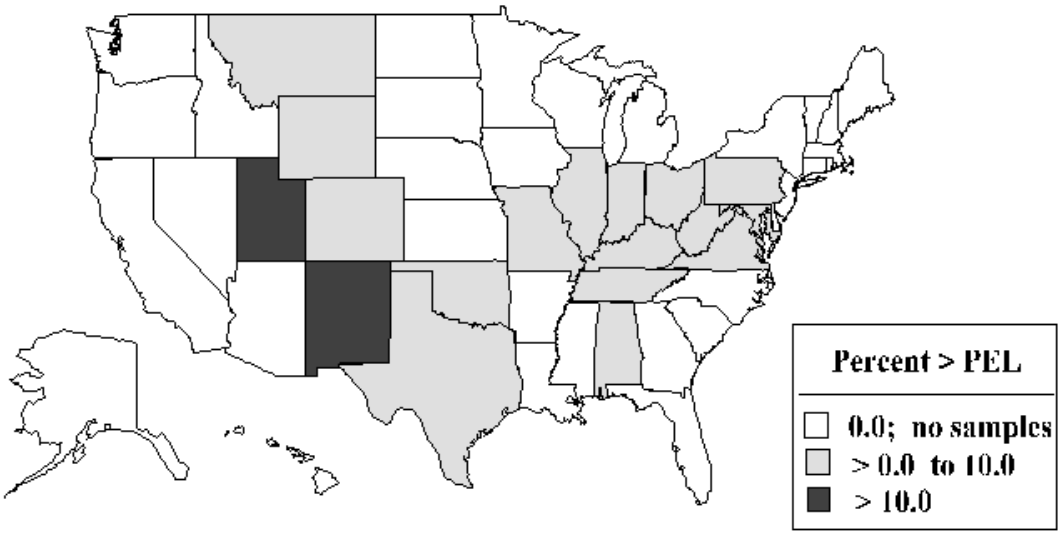
- indicates incalculable field.
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data.

Figure 2-8. Coal and coal mine dust: Number of MSHA inspector samples collected by state, 1993-1994



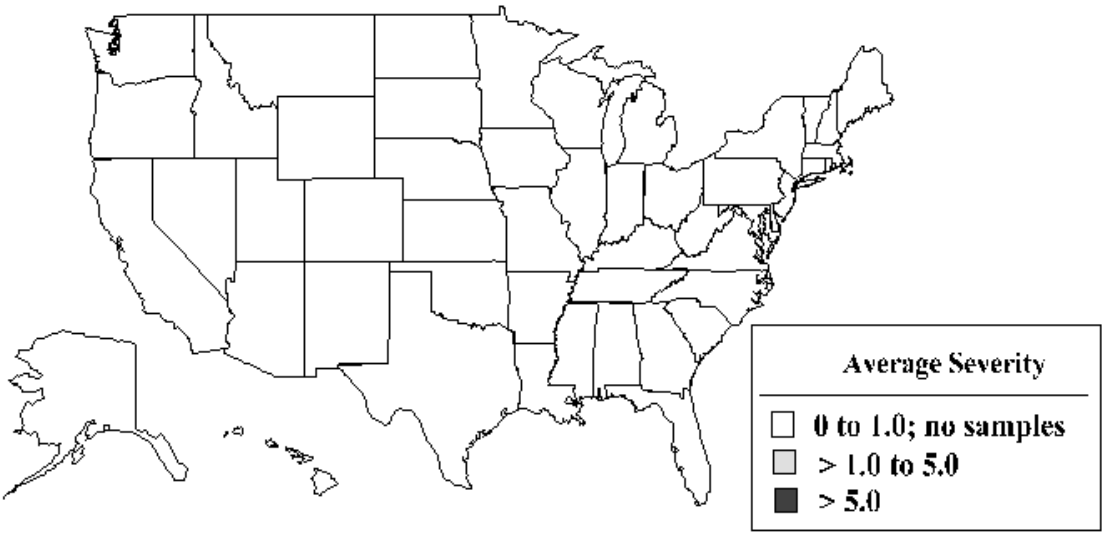
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data.

Figure 2-9. Coal and coal mine dust: Percent of MSHA inspector samples that exceeded the permissible exposure limit (PEL), by state, 1993-1994



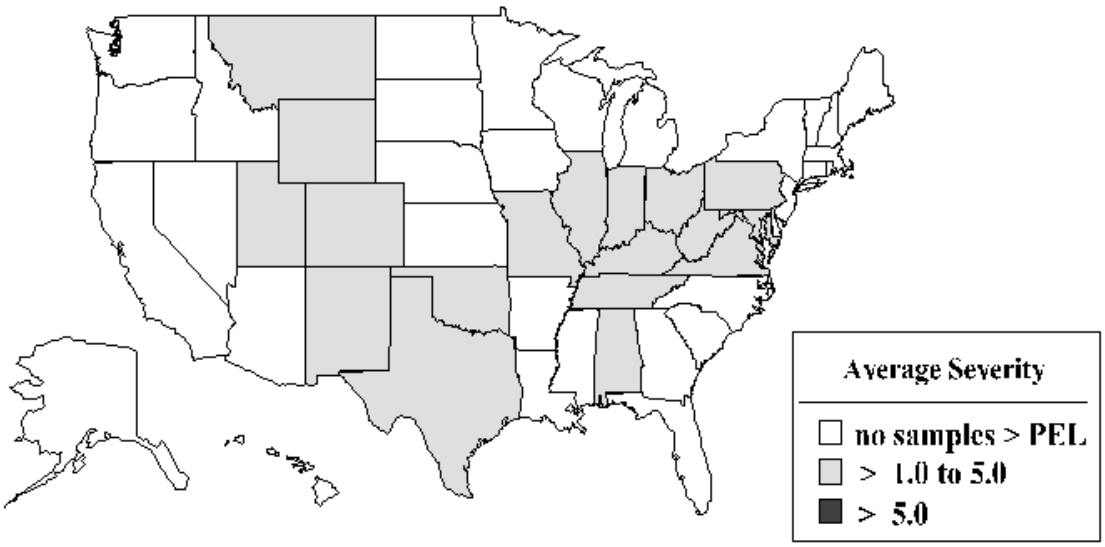
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data.

Figure 2-10. Coal and coal mine dust: Average severity level by state for MSHA inspector samples, 1993-1994



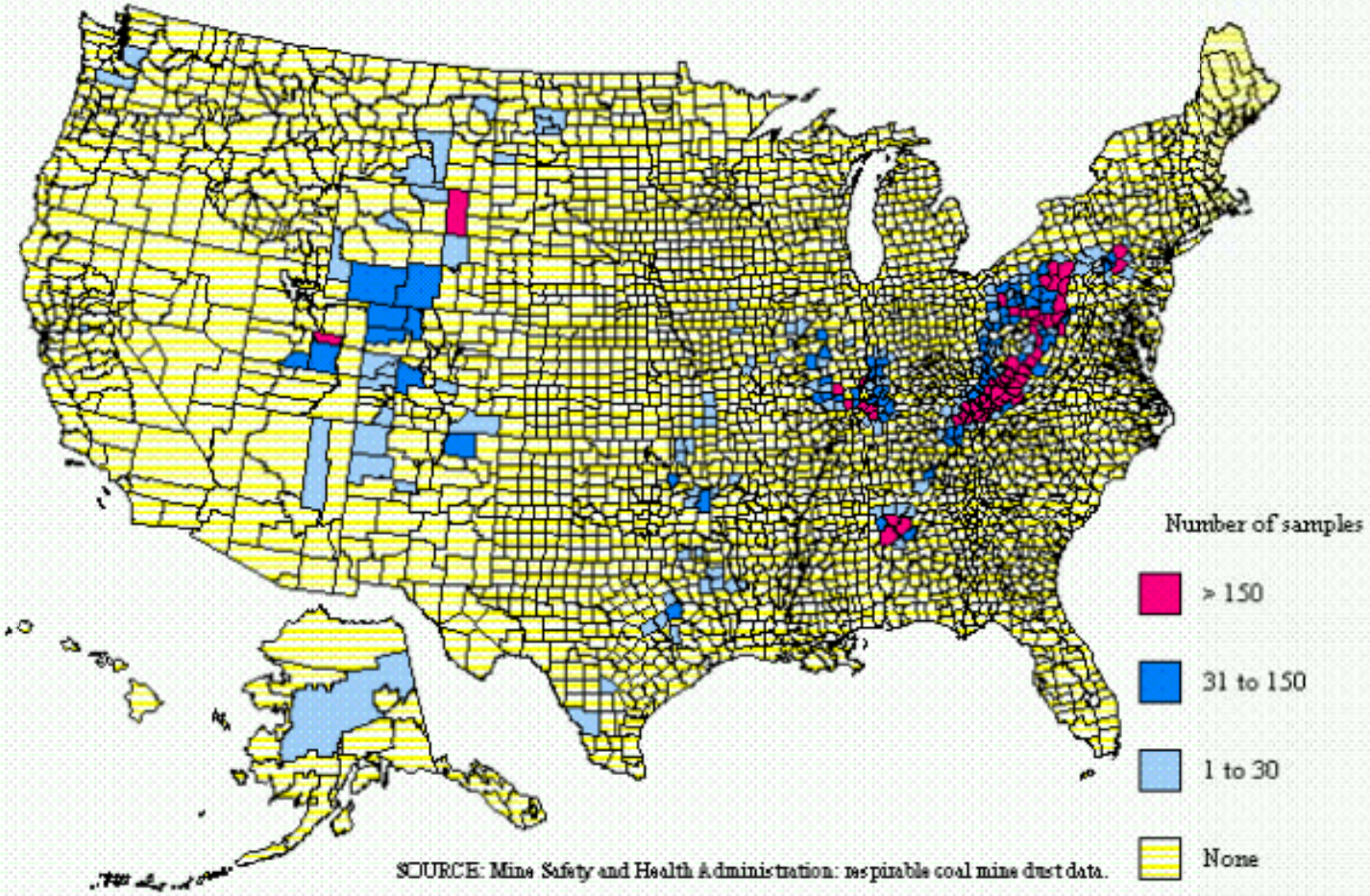
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data.

Figure 2-11. Coal and coal mine dust: Average severity level by state for MSHA inspector samples that exceeded the permissible exposure limit (PEL), 1993-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data.

Figure 2-12. Coal and coal mine dust: Number of MSHA inspector samples collected by county, 1993-1994



SOURCE: Mine Safety and Health Administration: respirable coal mine dust data.

Table 2-13 (page 1 of 2). Coal and coal mine dust: Number of OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1979-1994

	1979-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Alabama	7	0.43	14.3	1.15	0	-	-	-	0	-	-	-
Alaska	0	-	-	-	0	-	-	-	0	-	-	-
Arizona	0	-	-	-	0	-	-	-	0	-	-	-
Arkansas	0	-	-	-	0	-	-	-	0	-	-	-
California	0	-	-	-	0	-	-	-	0	-	-	-
Colorado	0	-	-	-	6	0.47	0.0	-	0	-	-	-
Connecticut	0	-	-	-	0	-	-	-	0	-	-	-
Delaware	0	-	-	-	0	-	-	-	0	-	-	-
District of Columbia	0	-	-	-	0	-	-	-	0	-	-	-
Florida	2	0.11	0.0	-	0	-	-	-	0	-	-	-
Georgia	0	-	-	-	0	-	-	-	0	-	-	-
Hawaii	0	-	-	-	0	-	-	-	0	-	-	-
Idaho	0	-	-	-	0	-	-	-	0	-	-	-
Illinois	10	34.37	40.0	85.29	0	-	-	-	0	-	-	-
Indiana	2	0.21	0.0	-	2	0.00	0.0	-	0	-	-	-
Iowa	3	0.08	0.0	-	8	0.49	12.5	2.62	0	-	-	-
Kansas	0	-	-	-	0	-	-	-	0	-	-	-
Kentucky	0	-	-	-	6	0.18	0.0	-	3	0.14	0.0	-
Louisiana	2	0.21	0.0	-	0	-	-	-	0	-	-	-
Maine	0	-	-	-	0	-	-	-	0	-	-	-
Maryland	0	-	-	-	12	0.25	0.0	-	2	0.45	0.0	-
Massachusetts	0	-	-	-	0	-	-	-	0	-	-	-
Michigan	0	-	-	-	3	13.09	33.3	38.50	0	-	-	-
Minnesota	0	-	-	-	0	-	-	-	0	-	-	-
Mississippi	0	-	-	-	0	-	-	-	0	-	-	-
Missouri	3	0.14	0.0	-	0	-	-	-	0	-	-	-
Montana	0	-	-	-	2	0.10	0.0	-	0	-	-	-

See footnotes at end of table.

Table 2-13 (page 2 of 2). Coal and coal mine dust: Number of OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1979-1994

	1979-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Nebraska	0	-	-	-	0	-	-	-	0	-	-	-
Nevada	0	-	-	-	0	-	-	-	0	-	-	-
New Hampshire	0	-	-	-	0	-	-	-	0	-	-	-
New Jersey	0	-	-	-	0	-	-	-	0	-	-	-
New Mexico	0	-	-	-	0	-	-	-	0	-	-	-
New York	1	0.18	0.0	-	1	1.11	100.0	1.11	0	-	-	-
North Carolina	0	-	-	-	0	-	-	-	0	-	-	-
North Dakota	2	4.54	100.0	4.54	0	-	-	-	0	-	-	-
Ohio	16	0.34	6.3	1.75	7	0.68	28.6	1.43	0	-	-	-
Oklahoma	0	-	-	-	1	0.45	0.0	-	0	-	-	-
Oregon	0	-	-	-	0	-	-	-	0	-	-	-
Pennsylvania	5	0.06	0.0	-	0	-	-	-	0	-	-	-
Rhode Island	0	-	-	-	0	-	-	-	0	-	-	-
South Carolina	0	-	-	-	0	-	-	-	0	-	-	-
South Dakota	0	-	-	-	0	-	-	-	0	-	-	-
Tennessee	0	-	-	-	4	0.11	0.0	-	2	0.00	0.0	-
Texas	14	0.18	0.0	-	0	-	-	-	0	-	-	-
Utah	0	-	-	-	0	-	-	-	0	-	-	-
Vermont	0	-	-	-	0	-	-	-	0	-	-	-
Virginia	0	-	-	-	4	0.00	0.0	-	0	-	-	-
Washington	0	-	-	-	0	-	-	-	0	-	-	-
West Virginia	4	2.09	50.0	4.00	0	-	-	-	0	-	-	-
Wisconsin	8	0.49	25.0	1.21	1	0.23	0.0	-	0	-	-	-
Wyoming	2	0.71	0.0	-	0	-	-	-	0	-	-	-
TOTAL	81	4.69	14.8	30.30	57	1.00	8.8	9.02	7	0.19	0.0	-

- indicates incalculable field.
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 2-13. Coal and coal mine dust: Number of OSHA inspector samples collected by state, 1993-1994

NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 2-14. Coal and coal mine dust: Percent of OSHA inspector samples that exceeded the permissible exposure limit (PEL), by state, 1993-1994

NOTE: No samples collected were above the PEL. See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

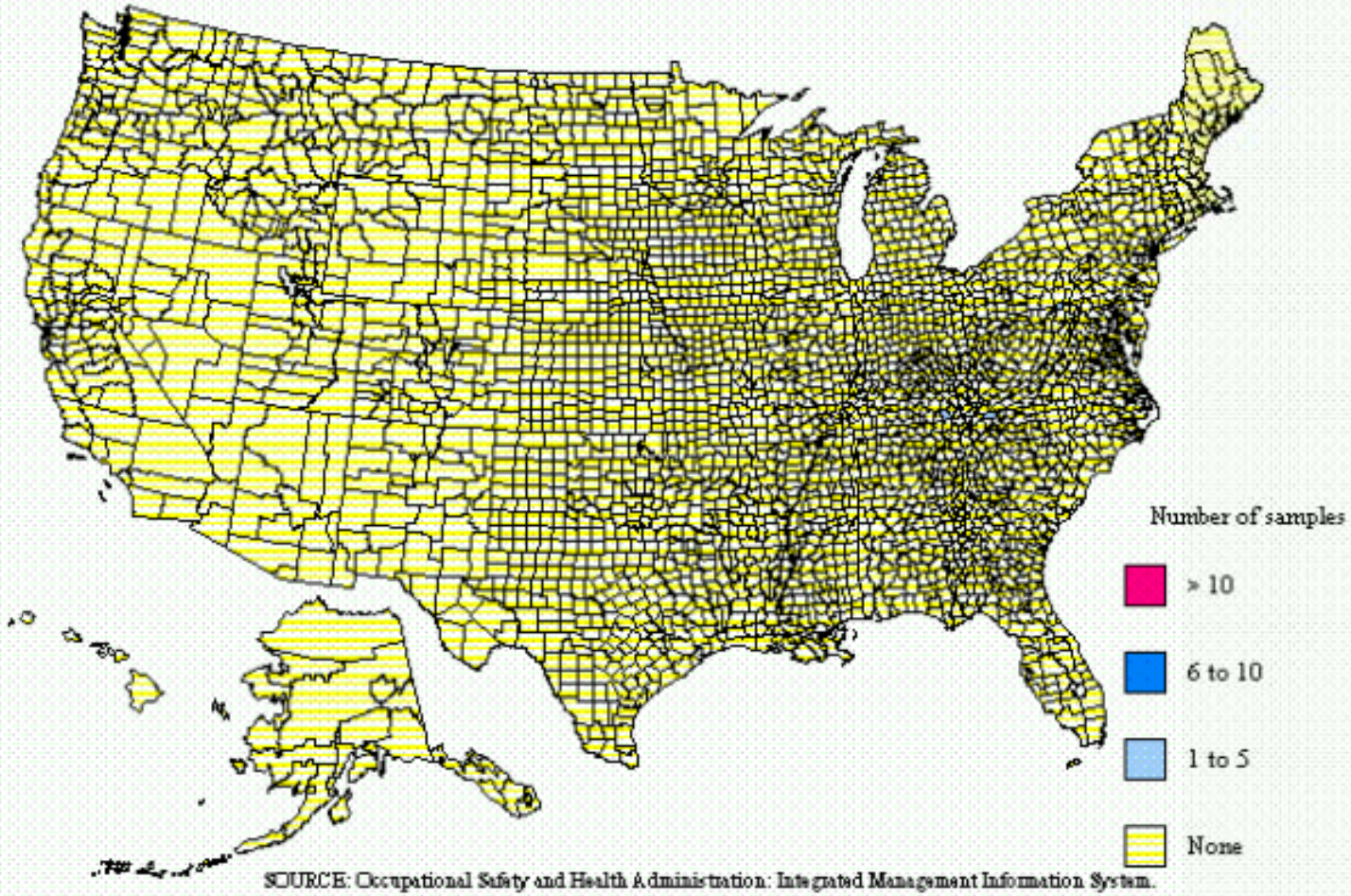
Figure 2-15. Coal and coal mine dust: Average severity level by state for OSHA inspector samples, 1993-1994

NOTE: No samples collected were above the PEL. See Appendix A for source descriptions, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 2-16. Coal and coal mine dust: Average severity level by state for OSHA inspector samples that exceeded the permissible exposure limit (PEL), 1993-1994

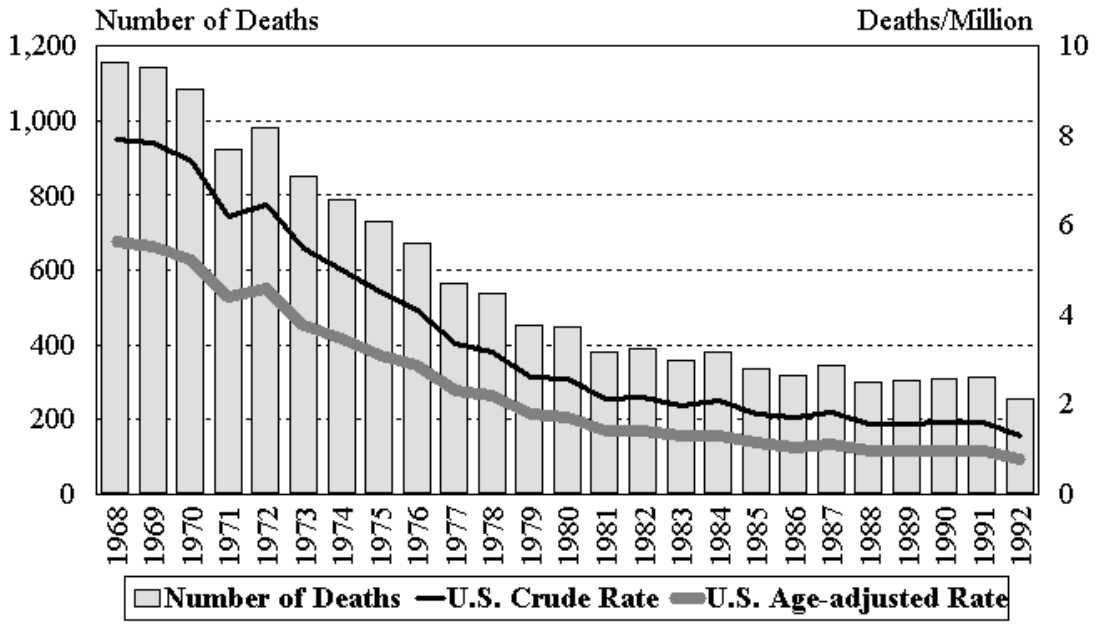
NOTE: No samples collected were above the PEL. See Appendix A for source descriptions, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 2-17. Coal and coal mine dust: Number of OSHA inspector samples collected by county, 1993-1994



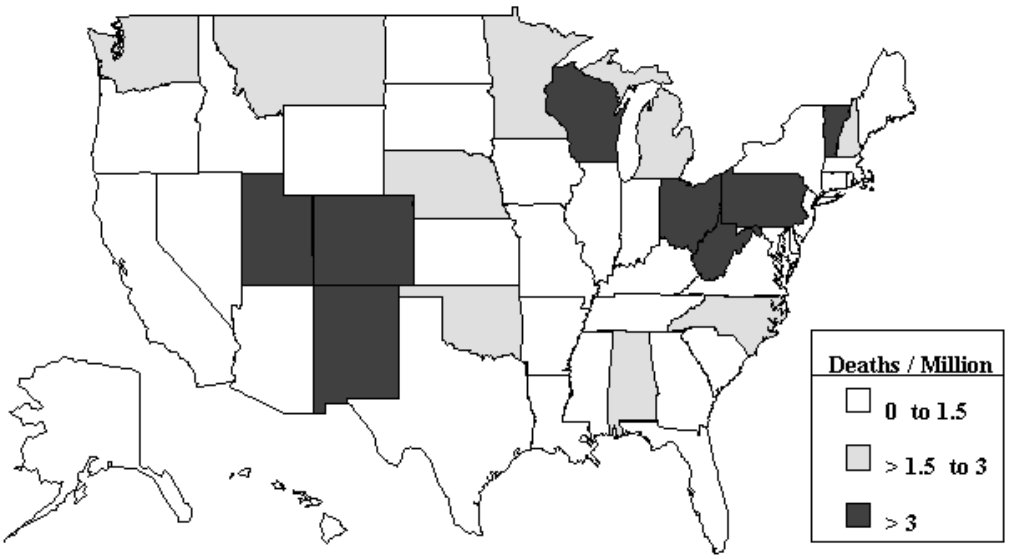
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 3-1. Silicosis: Number of deaths, crude and age-adjusted mortality rates, U.S. residents age 15 and over, 1968-1992



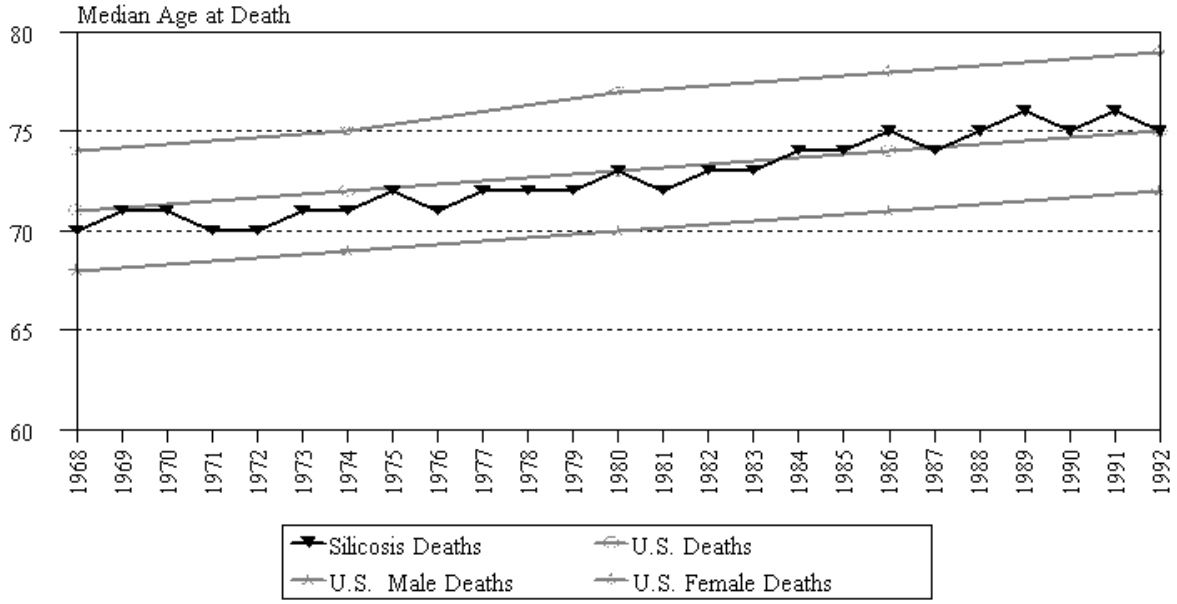
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure 3-2. Silicosis: Crude mortality rates by state, U.S. residents age 15 and over, 1991-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure 3-3. Silicosis: Median age at death, U.S. residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 3-1. Silicosis: Number of deaths by sex, race, and age, U.S. residents age 15 and over, 1991-1992

		1991		1992	
		Number	Percent	Number	Percent
Total deaths		314	100.0	255	100.0
Sex	Male	305	97.1	240	94.1
	Female	9	2.9	15	5.9
Race	White	257	81.9	212	83.1
	Black	56	17.8	39	15.3
	Other	1	0.3	4	1.6
Age	15-24	1	0.3	0	0.0
	25-34	1	0.3	1	0.4
	35-44	4	1.3	3	1.2
	45-54	12	3.8	8	3.1
	55-64	40	12.7	36	14.1
	65-74	78	24.8	79	31.0
	75-84	135	43.0	96	37.6
	85 and over	43	13.7	32	12.5
	Mean age	74.2		73.4	
	Range for age	22-97		30-96	

NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1968-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 3-2. Silicosis: Number of deaths by state, U.S. residents age 15 and over, 1968-1992

State	1968-1978	1979-1990	1991	1992	TOTAL
Alabama	172	57	9	3	241
Alaska	7	6	-	-	13
Arizona	177	81	2	1	261
Arkansas	43	19	2	1	65
California	455	242	16	12	725
Colorado	251	129	15	9	404
Connecticut	100	54	2	3	159
Delaware	7	5	-	1	13
District of Columbia	14	10	-	1	25
Florida	162	142	7	4	315
Georgia	82	69	3	3	157
Hawaii	6	3	-	-	9
Idaho	83	27	-	2	112
Illinois	191	160	8	11	370
Indiana	143	85	4	4	236
Iowa	30	25	2	2	59
Kansas	70	20	1	1	92
Kentucky	209	76	2	6	293
Louisiana	34	45	5	2	86
Maine	24	15	2	-	41
Maryland	87	41	4	1	133
Massachusetts	106	55	3	1	165
Michigan	378	193	9	14	594
Minnesota	97	90	3	9	199
Mississippi	14	16	1	1	32
Missouri	112	68	7	4	191
Montana	120	49	-	3	172
Nebraska	9	-	3	1	13
Nevada	61	29	-	-	90
New Hampshire	17	12	2	1	32
New Jersey	262	134	11	5	412
New Mexico	57	40	4	5	106
New York	447	205	18	6	676
North Carolina	164	108	14	8	294
North Dakota	5	3	-	-	8
Ohio	1,036	456	35	24	1,551
Oklahoma	51	20	4	5	80
Oregon	54	33	3	3	93
Pennsylvania	2,483	755	53	53	3,344
Rhode Island	10	15	-	2	27
South Carolina	30	37	3	1	71
South Dakota	23	16	-	-	39
Tennessee	124	77	3	2	206
Texas	105	104	11	11	231
Utah	102	54	5	4	165
Vermont	88	38	1	4	131
Virginia	249	79	2	3	333
Washington	125	73	7	5	210
West Virginia	542	77	12	4	635
Wisconsin	199	157	16	9	381
Wyoming	14	9	-	-	23
TOTAL	**9,431**	**4,313**	**314**	**255**	**14,313**

- indicates no deaths listed.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 3-3. Silicosis: Mortality rates (per 1,000,000 population) by race and sex, U.S. residents age 15 and over, 1991-1992

Year	Overall rate	White		Black	
		Males	Females	Males	Females
	Crude mortality rate				
1991	1.59	3.08	0.09	5.28	0.08
1992	1.28	2.46	0.14	3.49	0.16
	Age-adjusted mortality rate				
1991	0.94	1.96	0.05	5.21	0.02
1992	0.77	1.62	0.09	3.15	0.12

NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1968-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.
See Appendix E for revised rates for 1968-1990.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table 3-4. Silicosis: Years of potential life lost by race and sex, U.S. residents age 15 and over, 1991-1992

Year	Overall	White		Black	
		Males	Females	Males	Females
	Years of potential life lost to age 65				
1991	560	415	50	90	0
1992	410	325	15	45	25
	Years of potential life lost to life expectancy				
1991	3,940	2,732	135	570	6
1992	3,262	2,288	187	345	45

NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1968-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table 3-5. Silicosis: Total number of deaths, crude and age-adjusted mortality rates (per 1,000,000 population), and total years of potential life lost (YPLL) to life expectancy, by state, U.S. residents age 15 and over, 1988-1992

State	Total deaths	Rank	Crude mortality		Age-adjusted mortality		YPLL to life expectancy			
			Rate	Rank	Rate	Rank	Years	Rank	Years/death	Rank
Alabama	25	18	1.58	18	0.96	18	368	16	14.7	10
Alaska	1	48	0.50	48	0.82	22	8	49	8.0	49
Arizona	15	28	1.06	28	0.65	28	190	26	12.7	22
Arkansas	5	40	0.55	46	0.42	42	102	38	20.4	2
California	78	3	0.67	41	0.40	44	802	4	10.3	40
Colorado	58	6	4.52	4	3.10	2	661	10	11.4	33
Connecticut	13	33	0.98	31	0.54	36	144	30	11.1	34
Delaware	4	42	1.51	19	1.04	13	53	42	13.3	17
District of Columbia	2	47	0.79	37	0.47	38	22	48	11.0	35
Florida	50	8	0.95	33	0.53	37	755	7	15.1	9
Georgia	23	19	0.91	35	0.65	28	276	21	12.0	27
Hawaii	-	-	-	-	-	-	-	-	-	-
Idaho	13	33	3.47	8	1.60	10	120	35	9.2	46
Illinois	50	8	1.12	27	0.74	24	689	9	13.8	13
Indiana	28	14	1.29	22	0.85	20	428	14	15.3	8
Iowa	9	37	0.83	36	0.46	39	116	36	12.9	20
Kansas	3	44	0.31	50	0.15	50	30	47	10.0	43
Kentucky	28	14	1.94	12	1.35	12	465	13	16.6	6
Louisiana	18	23	1.13	26	0.98	16	322	19	17.9	4
Maine	5	40	1.03	29	0.55	34	58	41	11.6	31
Maryland	10	35	0.53	47	0.36	46	123	34	12.3	24
Massachusetts	17	25	0.70	39	0.35	47	182	27	10.7	38
Michigan	64	5	1.77	13	1.03	14	758	6	11.8	30
Minnesota	28	14	1.66	14	0.97	17	352	17	12.6	23
Mississippi	6	39	0.62	43	0.43	41	86	39	14.3	11
Missouri	26	17	1.30	21	0.74	24	350	18	13.5	16
Montana	14	29	4.58	3	2.15	5	140	32	10.0	43
Nebraska	4	42	0.66	42	0.31	48	43	43	10.8	37
Nevada	10	35	2.09	11	1.43	11	115	37	11.5	32
New Hampshire	7	38	1.61	16	0.88	19	71	40	10.1	42
New Jersey	50	8	1.61	16	0.81	23	513	12	10.3	41
New Mexico	21	21	3.69	6	1.93	8	202	24	9.6	45
New York	67	4	0.93	34	0.56	33	863	3	12.9	21
North Carolina	43	12	1.62	15	1.02	15	562	11	13.1	18
North Dakota	1	48	0.41	49	0.41	43	38	45	38.0	1
Ohio	153	2	3.60	7	2.07	6	1,973	2	12.9	19
Oklahoma	14	29	1.15	24	0.55	34	146	29	10.4	39
Oregon	16	26	1.43	20	0.57	32	138	33	8.6	48
Pennsylvania	259	1	5.43	2	2.71	3	3,117	1	12.0	26
Rhode Island	3	44	0.74	38	0.44	40	41	44	13.7	14
South Carolina	14	29	1.03	29	0.84	21	257	23	18.4	3
South Dakota	3	44	1.14	25	0.61	30	36	46	12.0	27
Tennessee	19	22	0.98	31	0.69	26	306	20	16.1	7
Texas	45	11	0.70	39	0.59	31	749	8	16.6	5
Utah	18	23	3.03	10	1.97	7	194	25	10.8	36
Vermont	16	26	7.24	1	3.57	1	141	31	8.8	47
Virginia	14	29	0.57	45	0.37	45	168	28	12.0	27
Washington	22	20	1.16	23	0.66	27	268	22	12.2	25
West Virginia	29	13	4.06	5	2.41	4	405	15	14.0	12
Wisconsin	58	6	3.05	9	1.88	9	784	5	13.5	15
Wyoming	1	48	0.59	44	0.31	48	8	49	8.0	49

- indicates no deaths listed.

NOTE: Ranks are based on unrounded values. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table 3-6. Silicosis: Most frequently recorded occupations on death certificate, U.S. residents age 15 and over, selected states, 1991-1992

COC	Occupation	Number	Percent
616	Mining machine operators	39	16.0
889	Laborers, except construction	29	11.9
019	Managers and administrators, n.e.c.	11	4.5
633	Supervisors, precision production occupations	11	4.5
453	Janitors and cleaners	8	3.3
719	Molding, casting machine operators	8	3.3
243	Supervisors and proprietors, sales occupations	6	2.5
844	Operating engineers	6	2.5
637	Machinists	5	2.1
787	Hand molding, casting, and forming occupations	5	2.1
	All other occupations	109	44.9
	Occupation not reported	6	2.5
	TOTAL	243	100.0

COC - 1980 Census Occupation Code n.e.c. - not elsewhere classified

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual occupation and years reporting. Data for 1985-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 3-7. Silicosis: Most frequently recorded industries on death certificate, U.S. residents age 15 and over, selected states, 1991-1992

CIC	Industry	Number	Percent
041	Coal mining	23	9.5
060	Construction	23	9.5
040	Metal mining	21	8.6
270	Blast furnaces, steelworks, rolling and finishing mills	20	8.2
050	Nonmetallic mining and quarrying, except fuel	12	4.9
262	Miscellaneous nonmetallic mineral and stone products	12	4.9
392	Not specified manufacturing industries	12	4.9
271	Iron and steel foundries	9	3.7
331	Machinery, except electrical, n.e.c.	8	3.3
252	Structural clay products	6	2.5
	All other industries	91	37.4
	Industry not reported	6	2.5
	TOTAL	243	100.0

CIC - 1980 Census Industry Code n.e.c. - not elsewhere classified

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual industry and years reporting. Data for 1985-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 3-8. Silicosis: Proportionate mortality ratio (PMR) by usual occupation, selected states and years, U.S. residents age 15 and over, 1985-1992

COC	Occupation	Number of deaths	PMR	95% confidence interval LCL	UCL
725	Miscellaneous metal and plastic machine operators	11	168.44	84.22	301.32
675	Hand molders and shapers, except jewelers	17	64.12	37.28	102.59
768	Crushing and grinding machine operators	20	50.97	31.08	78.78
787	Hand molding, casting, and forming occupations	10	35.70	17.16	65.62
719	Molding and casting machine operators	27	30.60	20.13	44.54
616	Mining machine operators	128	19.61	16.26	23.46
617	Mining occupations, n.e.c.	8	15.33	6.61	30.18
599	Construction trades, n.e.c.	12	14.77	7.61	25.78
709	Grinding, abrading, buffing, and polishing machine operators	9	8.47	3.89	16.07
516	Heavy equipment mechanics	9	7.72	3.54	14.65
859	Miscellaneous material moving equipment operators	5	6.92	2.24	16.17
544	Millwrights	9	6.56	3.01	12.45
849	Crane and tower operators	8	6.02	2.59	11.85
563	Brickmasons and stonemasons	11	4.71	2.35	8.43
579	Painters, construction and maintenance	19	4.50	2.71	7.03
766	Furnace, kiln, oven operators, except food	6	4.10	1.50	8.93
889	Laborers, except construction	113	3.79	3.08	4.61
844	Operating engineers	12	3.56	1.84	6.21
783	Welders and cutters	13	3.01	1.60	5.15
779	Machine operators, not specified	23	2.86	1.81	4.29
549	Not specified mechanics and repairers	6	2.84	1.04	6.19
633	Supervisors, production occupations	29	2.73	1.83	3.92
869	Construction laborers	21	2.14	1.32	3.27
637	Machinists	17	1.79	1.04	2.86
453	Janitors and cleaners	28	1.78	1.19	2.57

COC - 1980 Census Occupation Code n.e.c. - not elsewhere classified LCL - lower confidence limit UCL - upper confidence limit

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual occupation and years reporting.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 3-9. Silicosis: Proportionate mortality ratio (PMR) by usual industry, selected states and years, U.S. residents age 15 and over, 1985-1992

CIC	Industry	Number of deaths	PMR	95% confidence interval LCL	UCL
040	Metal mining	75	69.51	54.30	87.88
262	Miscellaneous nonmetallic mineral and stone products	54	55.31	40.97	72.97
050	Nonmetallic mining and quarrying, except fuel	47	49.77	36.33	66.63
271	Iron and steel foundries	46	31.15	22.74	41.70
261	Pottery and related products	21	30.73	18.97	46.99
252	Structural clay products	20	27.82	16.96	43.00
041	Coal mining	63	9.26	7.07	11.92
270	Blast furnaces, steelworks, rolling and finishing mills	67	6.49	4.95	8.35
300	Miscellaneous fabricated metal products	15	5.87	3.28	9.69
682	Miscellaneous retail stores	10	4.63	2.23	8.51
331	Machinery, except electrical, n.e.c.	23	3.96	2.51	5.95
280	Other primary metal industries	6	3.63	1.33	7.91
192	Industrial and miscellaneous chemicals	11	2.72	1.36	4.87
392	Not specified manufacturing industries	37	2.67	1.85	3.71
060	Construction	97	1.82	1.47	2.24

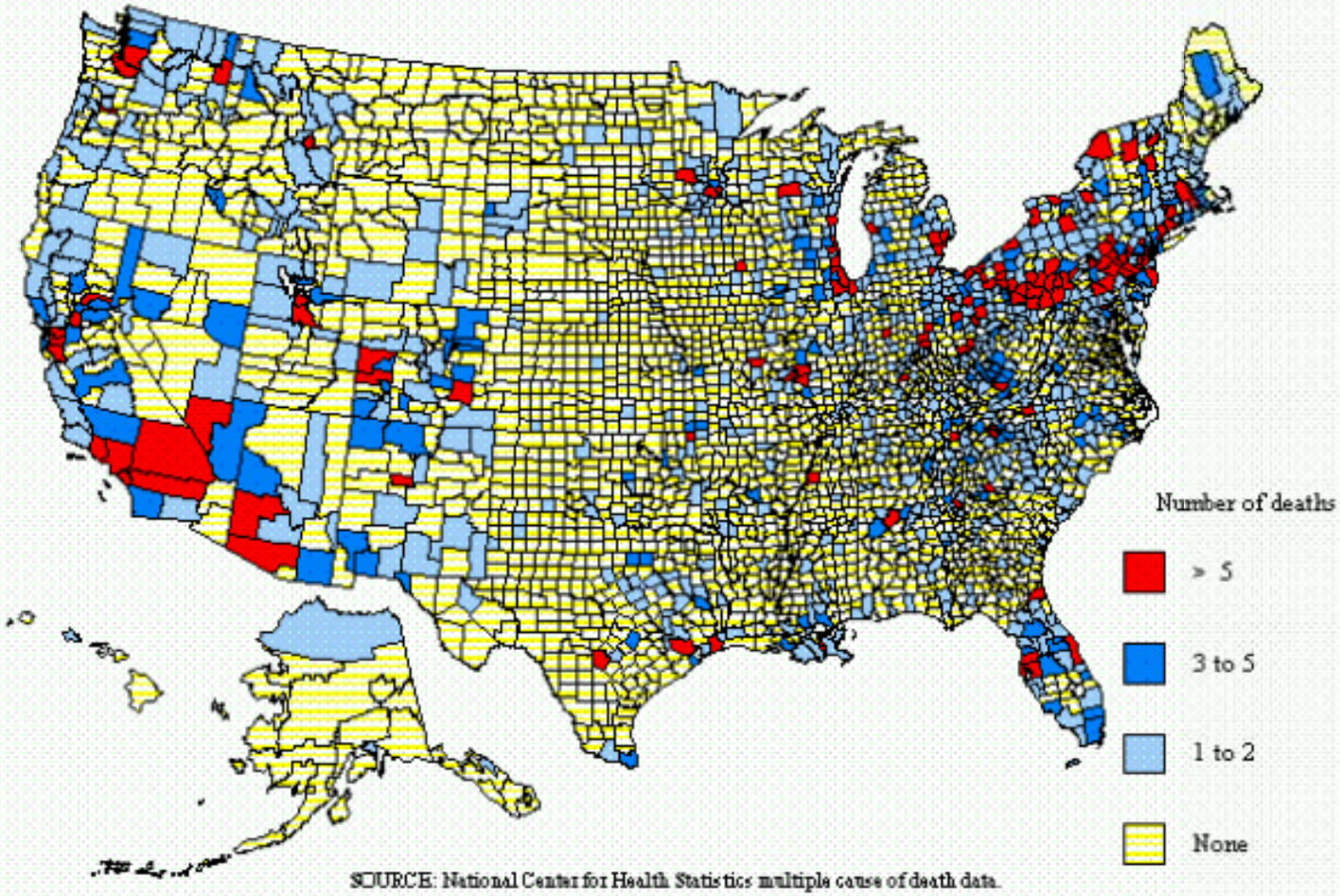
CIC - 1980 Census Industry Code n.e.c. - not elsewhere classified LCL - lower confidence limit UCL - upper confidence limit

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual industry and years reporting.

SOURCE: National Center for Health Statistics multiple cause of death data.

Figure 3-4. Silicosis: Total number of deaths by county,

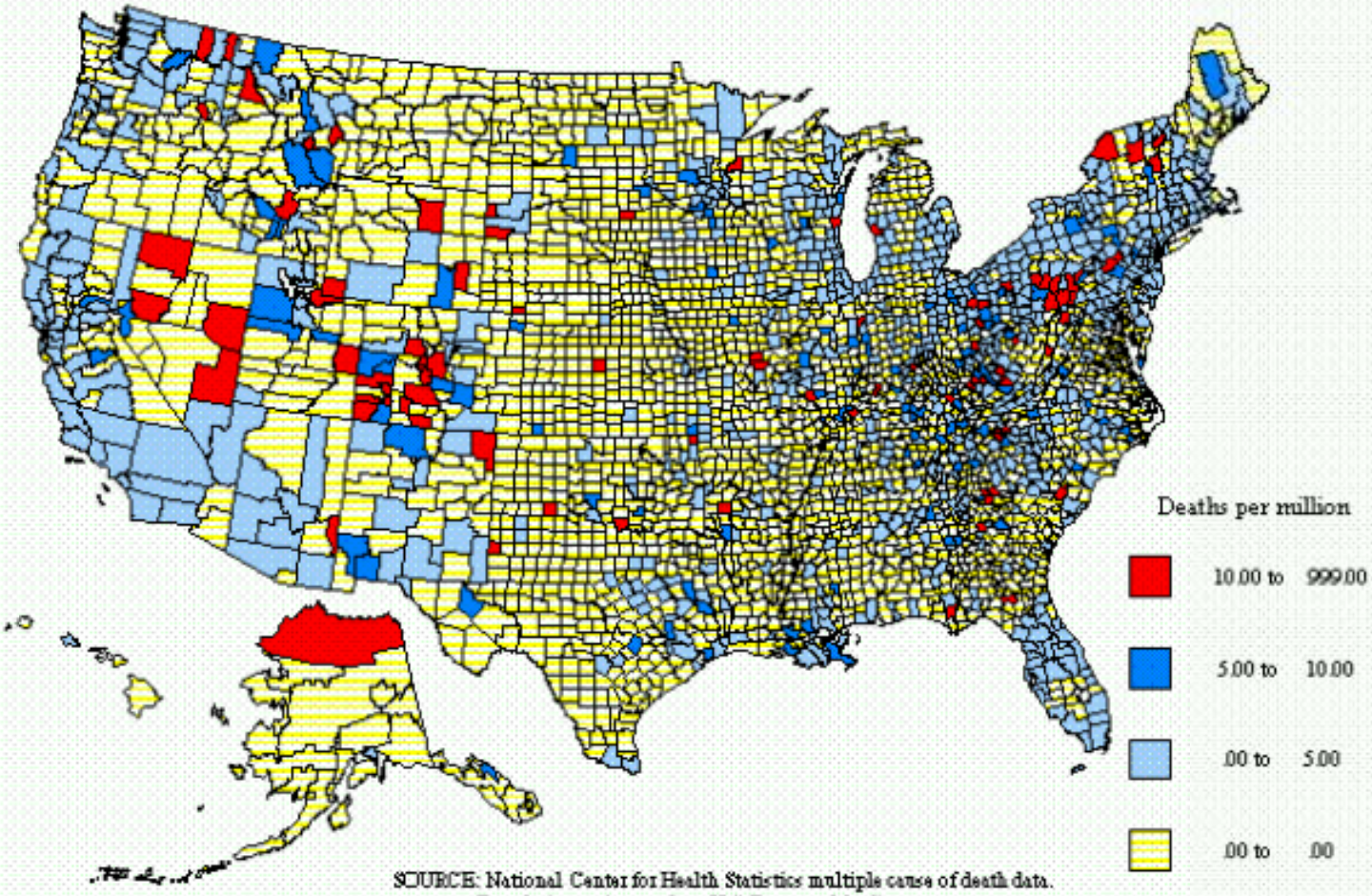
U.S. residents age 15 and over, 1983-1992



SOURCE: National Center for Health Statistics multiple cause of death data.

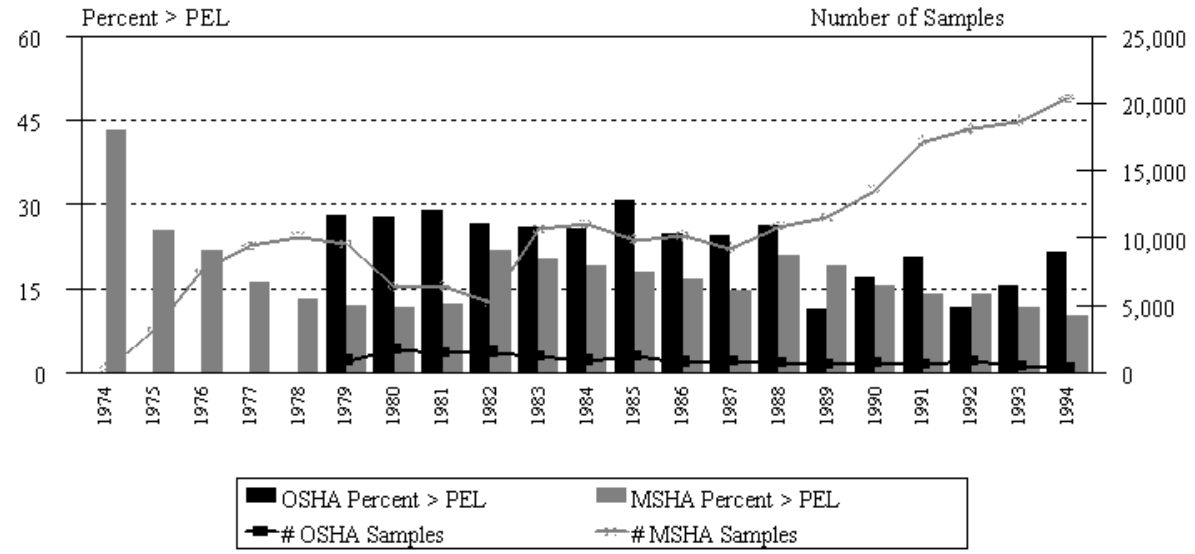
Figure 3-5. Silicosis: Age-adjusted mortality rates by county,

U.S. residents age 15 and over, 1983-1992



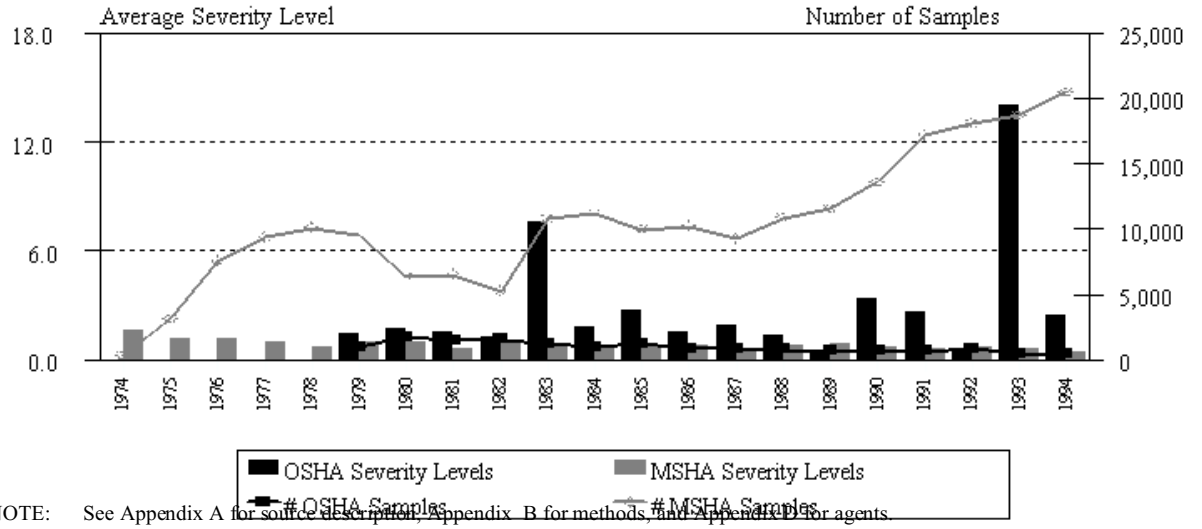
SOURCE: National Center for Health Statistics multiple cause of death data.
Population estimates from U.S. Bureau of the Census.

Figure 3-6. Silica: Number of MSHA and OSHA inspector samples and percent exceeding the permissible exposure limit (PEL), 1974-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System. Occupational Safety and Health Administration: Integrated Management Information System.

Figure 3-7. Silica: Number of MSHA and OSHA inspector samples and average severity levels, 1974-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System. Occupational Safety and Health Administration: Integrated Management Information System.

Table 3-10. Silica: Number of MSHA and OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity level, by industry, 1993-1994

CIC	Industries most frequently recorded on 1991-1992 death certificates with silicosis	Number of samples	% > PEL	Average severity
041	Coal mining	12,770	19.1	0.71
060	Construction	58	25.9	2.85
040	Metal mining	1,857	10.4	0.43
270	Blast furnaces, steelworks, rolling and finishing mills	7	0.0	0.00
050	Nonmetallic mining	24,301	6.5	0.43
262	Miscellaneous nonmetallic mineral and stone products	75	10.7	0.44
392	Not specified manufacturing industries	0	-	-
271	Iron and steel foundries	254	19.7	0.85
331	Machinery, except electrical, n.e.c.	16	31.3	1.05
252	Structural clay products	28	21.4	0.87
	All other industries	416	17.3	16.79
	Industry not reported	36	5.6	0.28
	TOTAL	39,818	10.9	0.70

CIC - 1980 Census Industry Code n.e.c. - not elsewhere classified - indicates incalculable field

NOTE: See Appendix A for source description, Appendix B for methods, Appendix C for list of 25 states reporting usual industry and years reporting, and Appendix D for agents.

SOURCE: Mine Safety and Health Administration: respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System. Occupational Safety and Health Administration: Integrated Management Information System. National Center for Health Statistics: multiple cause of death data.

Table 3-11. Silica: Number of MSHA and OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity level, by industry, 1993-1994

CIC	Industries most frequently sampled in 1993-1994	Number of samples	% > PEL	Average severity
050	Nonmetallic mining	24,301	6.5	0.43
041	Coal mining	12,770	19.1	0.71
040	Metal mining	1,857	10.4	0.43
271	Iron and steel foundries	254	19.7	0.85
262	Miscellaneous nonmetallic mineral and stone products	75	10.7	0.44
060	Construction	58	25.9	2.85
300	Miscellaneous fabricated metal products	52	46.2	17.96
261	Pottery and related products	46	17.4	0.86
251	Cement, concrete, gypsum, and plaster products	39	12.8	0.67
280	Other primary metals industries	30	6.7	0.28
	All other industries	300	14.7	20.06
	Industry not reported	36	5.6	0.28
	TOTAL	39,818	10.9	0.70

CIC - 1980 Census Industry Code

NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.

SOURCE: Mine Safety and Health Administration: respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System. Occupational Safety and Health Administration: Integrated Management Information System.

Table 3-12 (page 1 of 2). Silica: Number of MSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1974-1994

	1974-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Alabama	1,659	0.58	11.5	3.42	3,411	0.56	15.1	2.32	1,408	0.49	13.2	2.00
Alaska	79	0.67	12.7	3.40	151	1.34	14.6	7.88	80	0.43	5.0	5.25
Arizona	3,548	1.14	16.4	5.43	2,169	0.83	16.4	3.72	704	0.48	10.7	2.56
Arkansas	784	1.67	39.9	3.65	1,276	0.74	17.8	3.07	461	0.42	11.1	2.26
California	1,834	1.73	14.5	10.16	4,239	0.63	12.2	3.34	862	0.39	5.6	3.62
Colorado	3,069	0.87	19.8	3.13	4,479	0.60	14.5	2.51	877	0.54	12.4	2.32
Connecticut	330	1.25	25.2	3.96	329	0.64	16.4	2.66	63	0.21	3.2	2.27
Delaware	9	0.22	0.0	-	42	0.24	0.0	-	3	0.02	0.0	-
District of Columbia	0	-	-	-	0	-	-	-	0	-	-	-
Florida	640	0.37	5.2	3.64	1,704	0.17	2.5	2.55	433	0.09	1.6	1.33
Georgia	2,254	0.59	13.4	2.59	3,342	0.46	9.5	3.08	774	0.41	6.8	4.01
Hawaii	6	0.18	0.0	-	93	0.29	3.2	5.85	35	0.47	2.9	13.99
Idaho	1,653	1.29	19.2	5.11	1,235	1.01	13.9	5.67	425	0.34	7.1	2.11
Illinois	4,906	0.94	19.7	3.66	5,667	0.50	12.1	2.11	1,809	0.34	5.9	2.03
Indiana	2,479	0.40	6.9	2.92	2,261	0.36	7.6	2.34	762	0.27	4.2	1.96
Iowa	1,103	0.53	11.1	2.62	1,148	0.20	3.6	1.74	351	0.16	1.1	1.95
Kansas	1,497	0.55	14.2	1.97	1,285	0.47	9.3	2.69	381	0.29	5.8	1.85
Kentucky	3,545	1.03	26.0	3.08	13,364	0.96	26.1	2.72	4,357	0.74	20.4	2.29
Louisiana	247	0.99	17.8	4.35	1,424	0.21	4.1	2.36	590	0.19	3.7	1.89
Maine	424	0.61	16.0	2.03	282	0.31	6.0	1.95	79	0.23	3.8	1.42
Maryland	597	0.54	11.4	2.86	839	0.43	8.6	2.98	173	0.67	13.3	3.53
Massachusetts	559	1.49	19.3	6.20	517	0.45	10.6	2.41	153	0.32	7.2	2.01
Michigan	1,742	0.66	15.3	2.49	2,787	0.53	11.5	3.01	852	0.37	9.4	2.09
Minnesota	3,898	0.54	9.6	3.51	3,051	0.37	8.3	2.46	782	0.29	5.8	2.28
Mississippi	400	0.57	8.3	4.64	916	0.32	6.6	2.88	371	0.46	8.1	3.60
Missouri	2,935	1.25	15.3	6.51	4,599	1.02	10.8	7.41	1,458	0.35	6.1	2.76
Montana	1,184	0.56	12.9	2.61	1,673	0.78	15.1	3.71	363	0.51	11.0	2.56

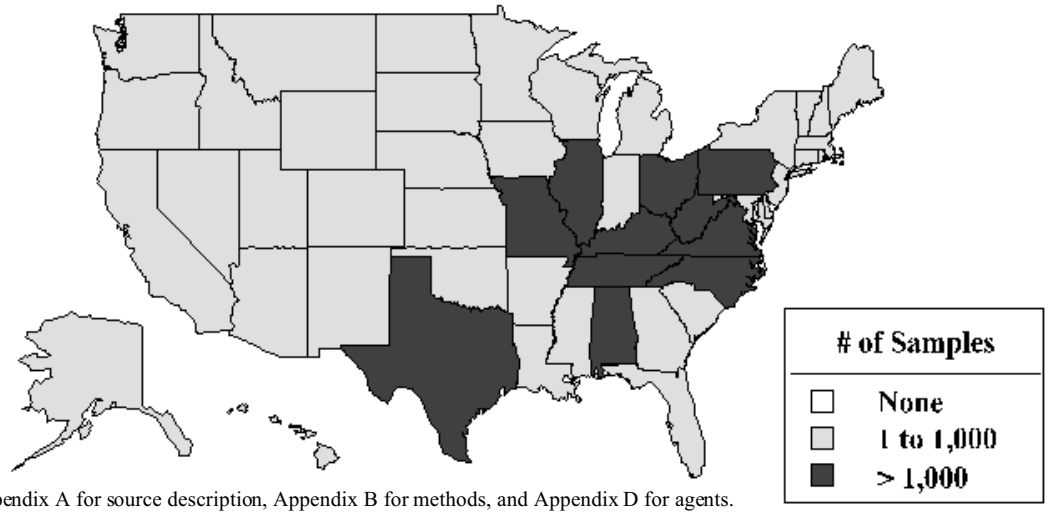
See footnotes at end of table.

Table 3-12 (page 2 of 2). Silica: Number of MSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1974-1994

	1974-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Nebraska	82	0.76	15.9	2.90	443	0.18	2.5	2.28	164	0.14	1.8	2.75
Nevada	984	2.53	24.7	9.23	1,984	0.96	22.3	3.19	358	0.63	15.4	2.46
New Hampshire	214	1.04	23.8	3.20	226	0.37	8.8	1.70	58	0.41	12.1	1.74
New Jersey	930	0.86	23.9	2.57	1,214	0.61	13.5	2.89	188	0.31	7.4	1.67
New Mexico	1,023	0.62	9.1	4.72	2,232	0.75	15.3	3.36	684	0.69	13.0	3.57
New York	1,348	0.96	13.7	5.23	3,446	0.45	7.7	3.37	853	0.35	6.1	3.04
North Carolina	2,743	0.86	10.7	5.82	4,491	0.40	5.8	4.50	1,130	0.25	4.6	2.78
North Dakota	310	0.54	11.0	2.52	280	0.23	3.6	1.62	94	0.12	0.0	-
Ohio	3,549	0.77	14.8	3.75	5,193	0.55	12.6	2.69	1,431	0.37	8.7	2.12
Oklahoma	1,410	0.72	15.4	3.44	2,711	0.68	10.7	4.68	764	0.53	5.4	7.20
Oregon	340	0.48	5.9	4.86	1,575	1.37	5.1	23.90	584	2.94	2.9	96.11
Pennsylvania	5,170	0.80	18.1	3.09	8,337	0.68	15.9	2.73	2,115	0.61	13.1	2.83
Rhode Island	71	0.82	18.3	2.69	69	0.62	13.0	3.02	24	0.49	16.7	2.04
South Carolina	874	1.57	23.1	5.64	2,382	0.37	8.2	2.62	784	0.35	2.9	7.39
South Dakota	1,293	0.89	17.4	3.50	1,159	0.38	9.1	2.05	234	0.26	6.0	2.05
Tennessee	2,594	0.48	10.4	2.62	4,901	0.49	11.9	2.41	1,082	0.48	10.4	2.58
Texas	1,363	1.20	17.2	5.69	6,172	0.66	6.7	7.76	1,876	0.35	5.0	4.79
Utah	978	0.65	15.0	2.44	3,779	0.78	14.3	3.91	729	0.50	10.8	2.47
Vermont	494	0.61	18.6	1.78	726	0.62	18.3	2.37	222	0.55	14.9	2.26
Virginia	3,121	1.08	28.2	3.08	7,533	0.94	26.9	2.61	1,752	0.72	22.3	2.06
Washington	909	0.74	16.3	3.24	1,764	0.54	10.4	3.51	749	0.37	8.1	2.51
West Virginia	4,434	0.98	26.3	2.86	12,625	0.85	23.9	2.45	3,241	0.71	18.0	2.44
Wisconsin	2,083	0.49	9.8	2.82	2,259	0.55	11.1	3.40	780	0.55	6.9	5.72
Wyoming	1,917	1.14	17.9	4.85	1,639	0.86	14.4	4.30	458	0.50	12.4	2.53
TOTAL	79,615	0.89	16.9	3.87	139,423	0.67	14.7	3.14	38,960	0.52	10.8	2.97

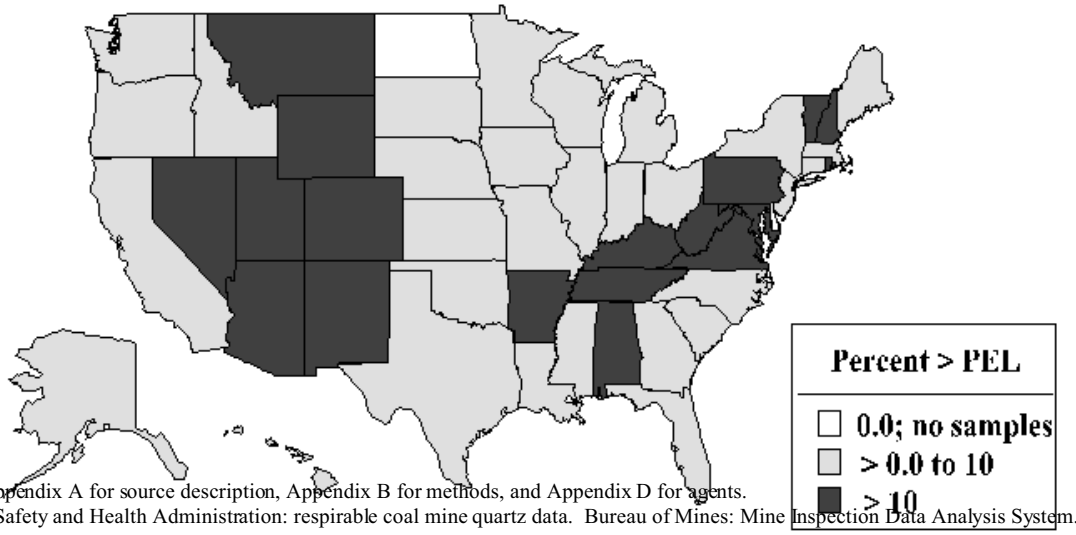
- indicates incalculable field.
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System.

Figure 3-8. Silica: Number of MSHA inspector samples collected by state, 1993-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System.

Figure 3-9. Silica: Percent of MSHA inspector samples that exceeded the permissible exposure limit (PEL), by state, 1993-1994

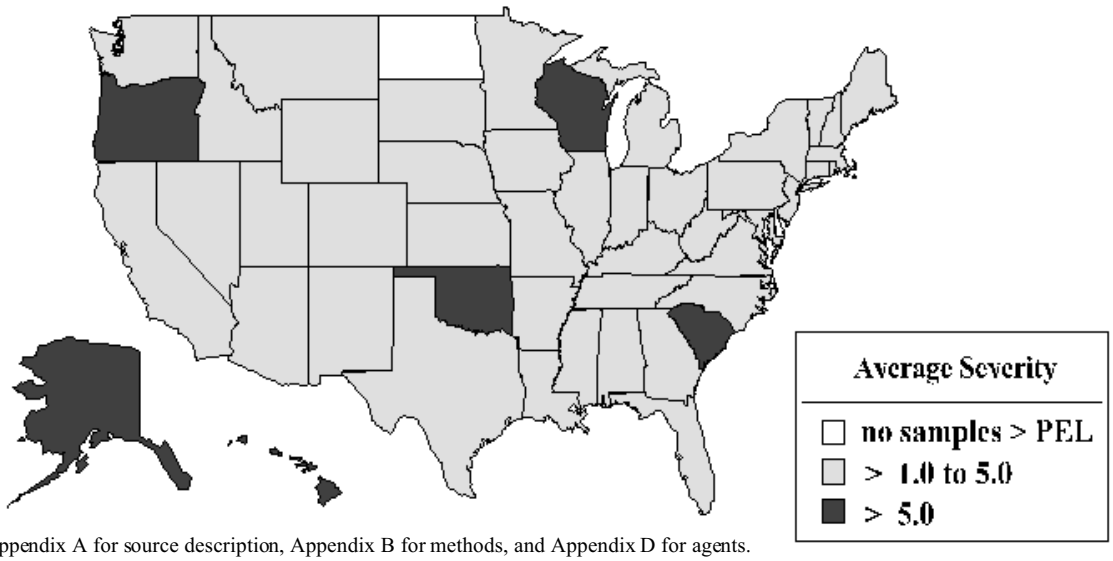


NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System.

Figure 3-10. Silica: Average severity level by state for MSHA inspector samples, 1993-1994

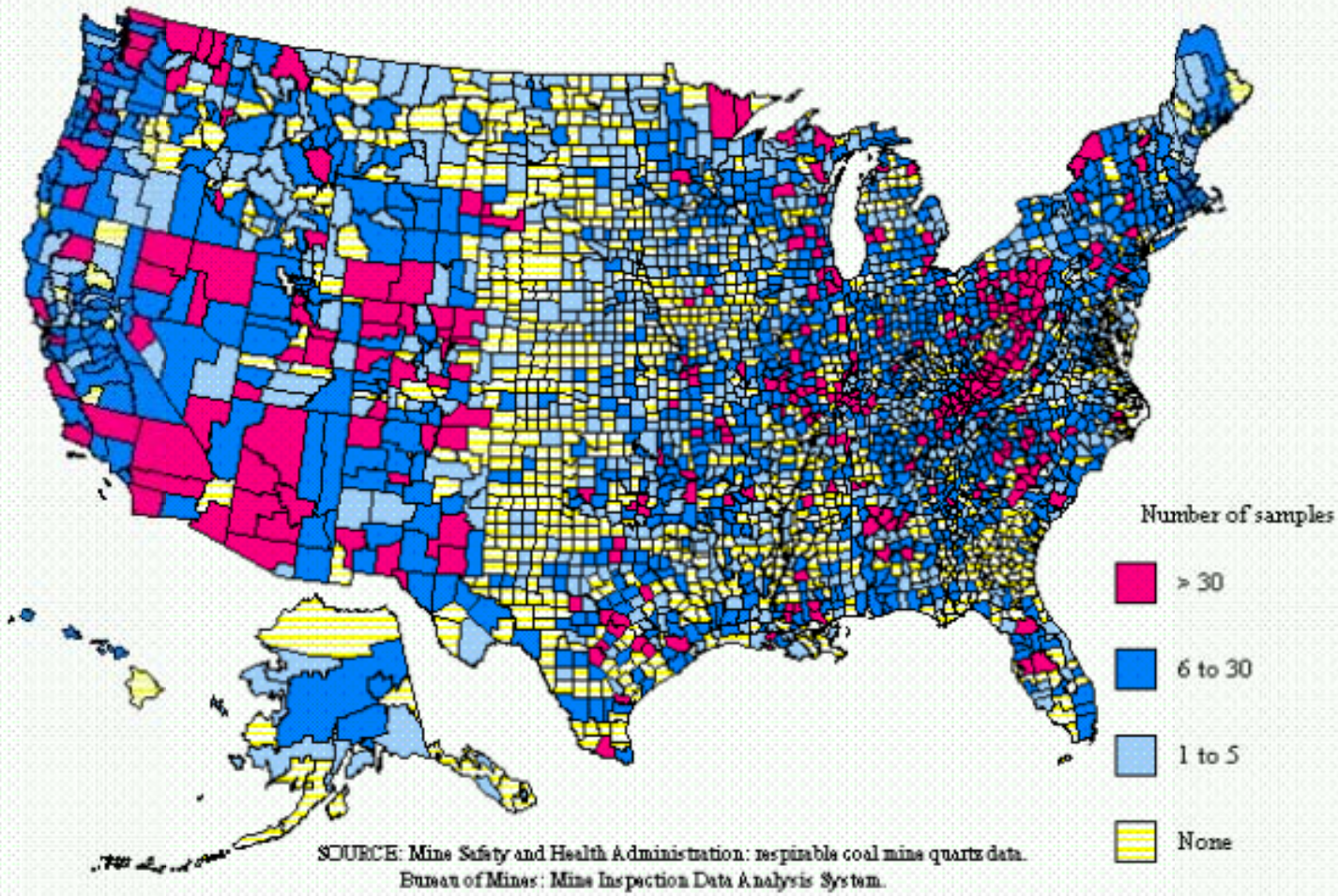
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System.

Figure 3-11. Silica: Average severity level by state for MSHA inspector samples that exceeded the permissible exposure limit (PEL), 1993-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System.

Figure 3-12. Silica: Number of MSHA inspector samples collected by county, 1993-1994



SOURCE: Mine Safety and Health Administration: respirable coal mine quartz data.
Bureau of Mines: Mine Inspection Data Analysis System.

Table 3-13 (page 1 of 2). Silica: Number of OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1979-1994

	1979-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Alabama	258	1.10	31.0	2.84	172	1.89	16.9	10.48	12	8.96	41.7	21.30
Alaska	1	34.59	100.0	34.59	10	0.72	30.0	2.11	0	-	-	-
Arizona	22	1.14	36.4	2.68	25	1.55	12.0	11.75	2	8.68	50.0	17.36
Arkansas	56	0.50	17.9	1.99	44	2.55	25.0	9.91	3	1.70	33.3	5.09
California	7	6.61	42.9	15.11	143	0.97	17.5	4.98	10	0.46	20.0	1.85
Colorado	233	1.58	18.0	7.54	237	3.01	19.8	14.55	32	0.62	18.8	2.24
Connecticut	348	0.70	16.7	2.93	138	0.61	9.4	5.21	18	0.70	11.1	4.46
Delaware	17	0.32	5.9	1.90	0	-	-	-	0	-	-	-
District of Columbia	0	-	-	-	0	-	-	-	0	-	-	-
Florida	60	2.05	30.0	6.30	33	1.81	24.2	7.16	0	-	-	-
Georgia	390	1.55	29.7	4.46	267	0.82	18.7	3.42	32	0.47	6.3	1.74
Hawaii	3	0.07	0.0	-	1	0.00	0.0	-	0	-	-	-
Idaho	23	3.99	43.5	8.98	23	1.80	13.0	11.67	1	0.00	0.0	-
Illinois	435	1.81	28.5	5.49	341	4.48	20.8	20.56	24	0.86	16.7	4.63
Indiana	106	1.15	41.5	2.25	294	0.81	15.6	3.84	10	0.03	0.0	-
Iowa	259	1.09	20.1	4.14	246	0.89	17.5	3.92	33	1.27	51.5	2.17
Kansas	47	1.34	25.5	4.27	29	0.87	17.2	3.85	0	-	-	-
Kentucky	78	3.38	39.7	7.93	180	6.52	23.3	27.50	40	1.18	17.5	6.73
Louisiana	59	1.68	39.0	3.69	38	1.12	26.3	3.58	7	0.28	0.0	-
Maine	9	0.62	33.3	1.86	10	5.60	40.0	13.83	0	-	-	-
Maryland	37	2.64	21.6	11.46	164	2.35	25.6	8.80	10	0.13	0.0	-
Massachusetts	282	1.11	25.2	3.56	143	0.78	21.0	2.81	12	0.70	16.7	2.63
Michigan	0	-	-	-	570	9.06	5.1	176.08	225	22.64	8.0	281.65
Minnesota	30	1.94	63.3	2.74	0	-	-	-	0	-	-	-
Mississippi	36	2.49	25.0	9.06	53	6.83	30.2	22.03	0	-	-	-
Missouri	144	1.39	30.6	3.41	184	0.57	16.8	2.25	0	-	-	-
Montana	53	1.52	20.8	5.47	47	3.82	31.9	11.67	0	-	-	-

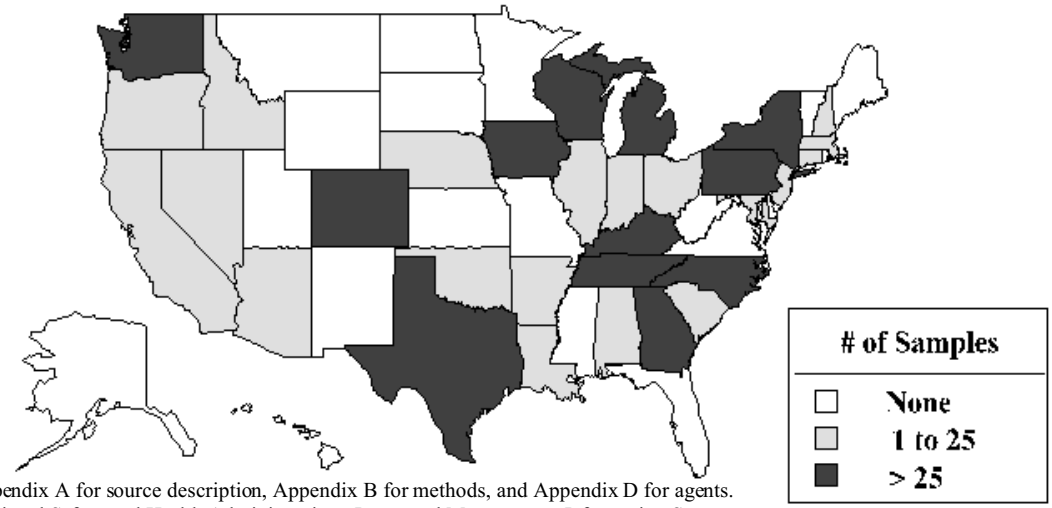
See footnotes at end of table.

Table 3-13 (page 2 of 2). Silica: Number of OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1979-1994

	1979-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Nebraska	29	1.14	24.1	3.59	49	0.44	14.3	1.98	4	0.60	25.0	1.36
Nevada	10	3.03	50.0	5.84	114	8.51	62.3	13.49	3	0.14	0.0	-
New Hampshire	99	0.87	21.2	2.85	114	0.93	14.9	5.05	5	0.43	0.0	-
New Jersey	194	1.32	27.8	3.91	216	0.81	22.7	2.65	19	0.18	5.3	1.69
New Mexico	8	1.93	75.0	2.58	4	0.00	0.0	-	0	-	-	-
New York	639	1.61	28.8	4.79	233	1.01	20.6	4.06	48	0.66	16.7	2.68
North Carolina	132	61.28	12.9	473.62	122	2.70	12.3	20.69	58	3.71	10.3	34.34
North Dakota	38	1.27	18.4	5.60	43	0.61	18.6	1.91	0	-	-	-
Ohio	958	1.16	28.7	3.15	693	1.93	21.6	7.96	18	10.63	38.9	26.92
Oklahoma	105	1.75	17.1	8.80	70	1.03	21.4	3.26	4	0.71	25.0	1.73
Oregon	86	0.61	11.6	2.53	46	3.48	28.3	11.79	10	0.04	0.0	-
Pennsylvania	1,052	1.33	26.4	3.82	754	1.76	24.4	6.24	43	1.87	46.5	3.65
Rhode Island	163	1.02	24.5	3.51	86	2.81	17.4	15.21	0	-	-	-
South Carolina	16	0.33	12.5	2.36	66	1.03	15.2	6.03	3	9.20	33.3	27.59
South Dakota	21	0.27	9.5	2.26	15	1.39	60.0	2.03	0	-	-	-
Tennessee	21	0.93	19.0	2.86	200	0.77	20.0	2.89	47	0.34	8.5	1.58
Texas	477	3.06	23.1	12.63	363	5.29	34.2	15.13	53	26.39	45.3	58.14
Utah	4	1.13	25.0	4.52	43	0.31	4.7	3.60	0	-	-	-
Vermont	0	-	-	-	0	-	-	-	0	-	-	-
Virginia	62	0.87	14.5	3.72	191	1.42	29.3	4.05	0	-	-	-
Washington	3	0.00	0.0	-	104	2.38	22.1	10.11	43	1.32	30.2	3.68
West Virginia	181	2.66	35.9	6.79	77	2.86	36.4	7.50	0	-	-	-
Wisconsin	615	1.41	39.0	2.90	397	1.17	27.2	3.24	29	0.44	10.3	2.15
Wyoming	5	0.87	20.0	2.57	0	-	-	-	0	-	-	-
TOTAL	7,911	2.49	27.2	8.25	7,392	2.67	21.2	11.73	858	8.67	18.2	46.88

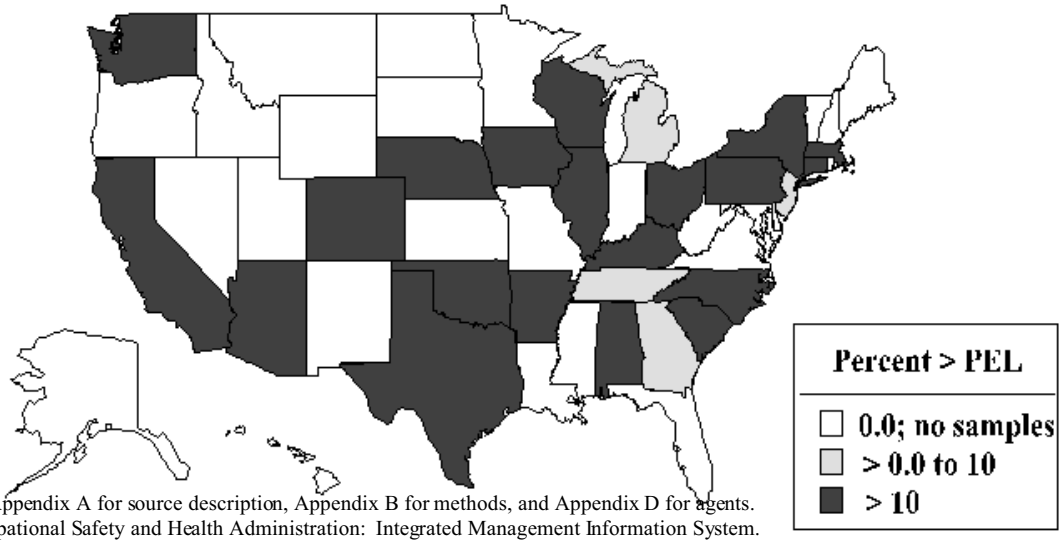
- indicates incalculable field.
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 3-13. Silica: Number of OSHA inspector samples collected by state, 1993-1994



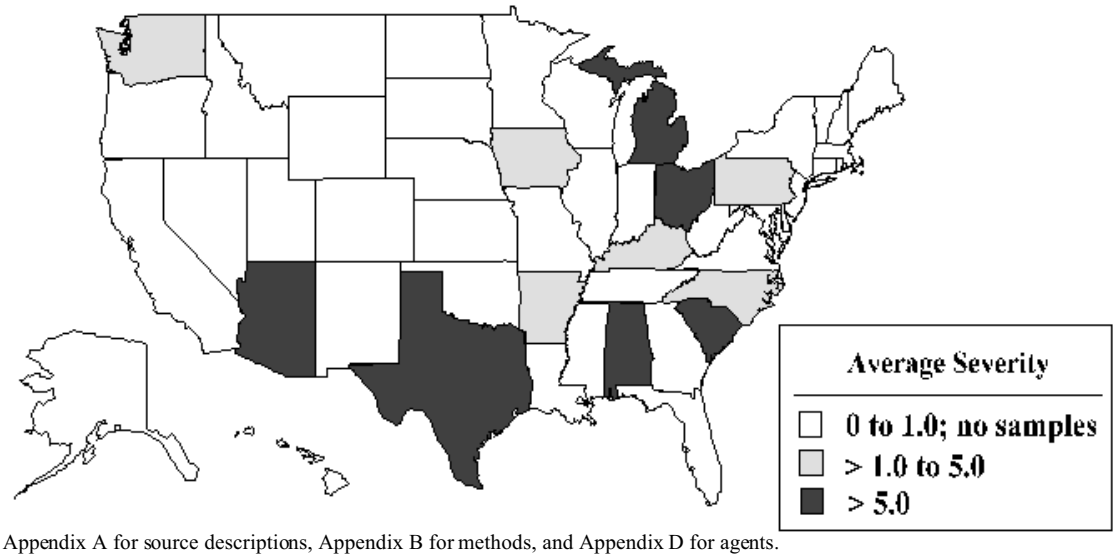
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 3-14. Silica: Percent of OSHA inspector samples that exceeded the permissible exposure limit (PEL), by state, 1993-1994



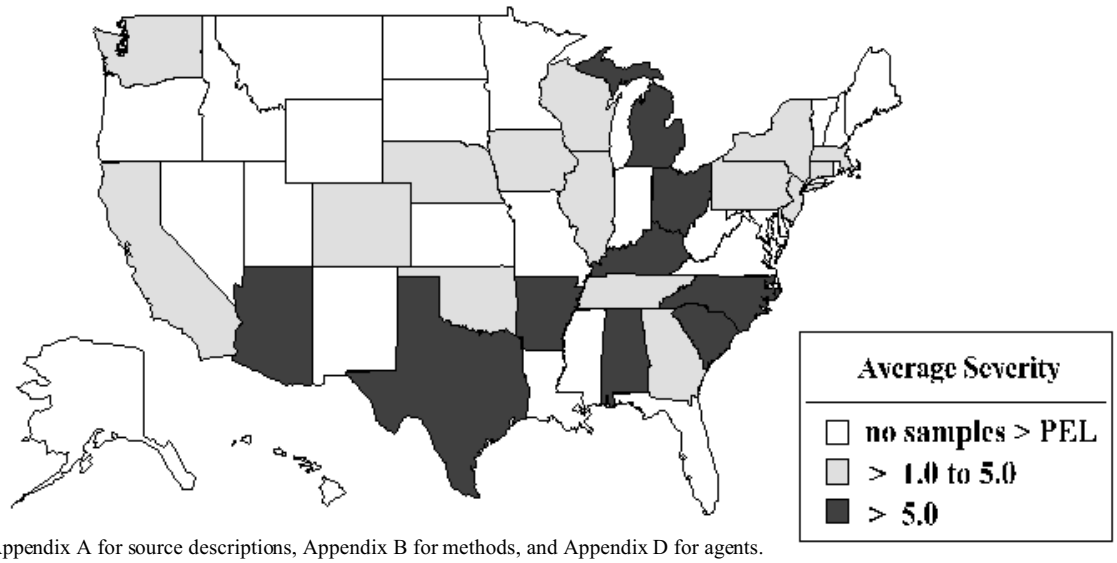
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 3-15. Silica: Average severity level by state for OSHA inspector samples, 1993-1994



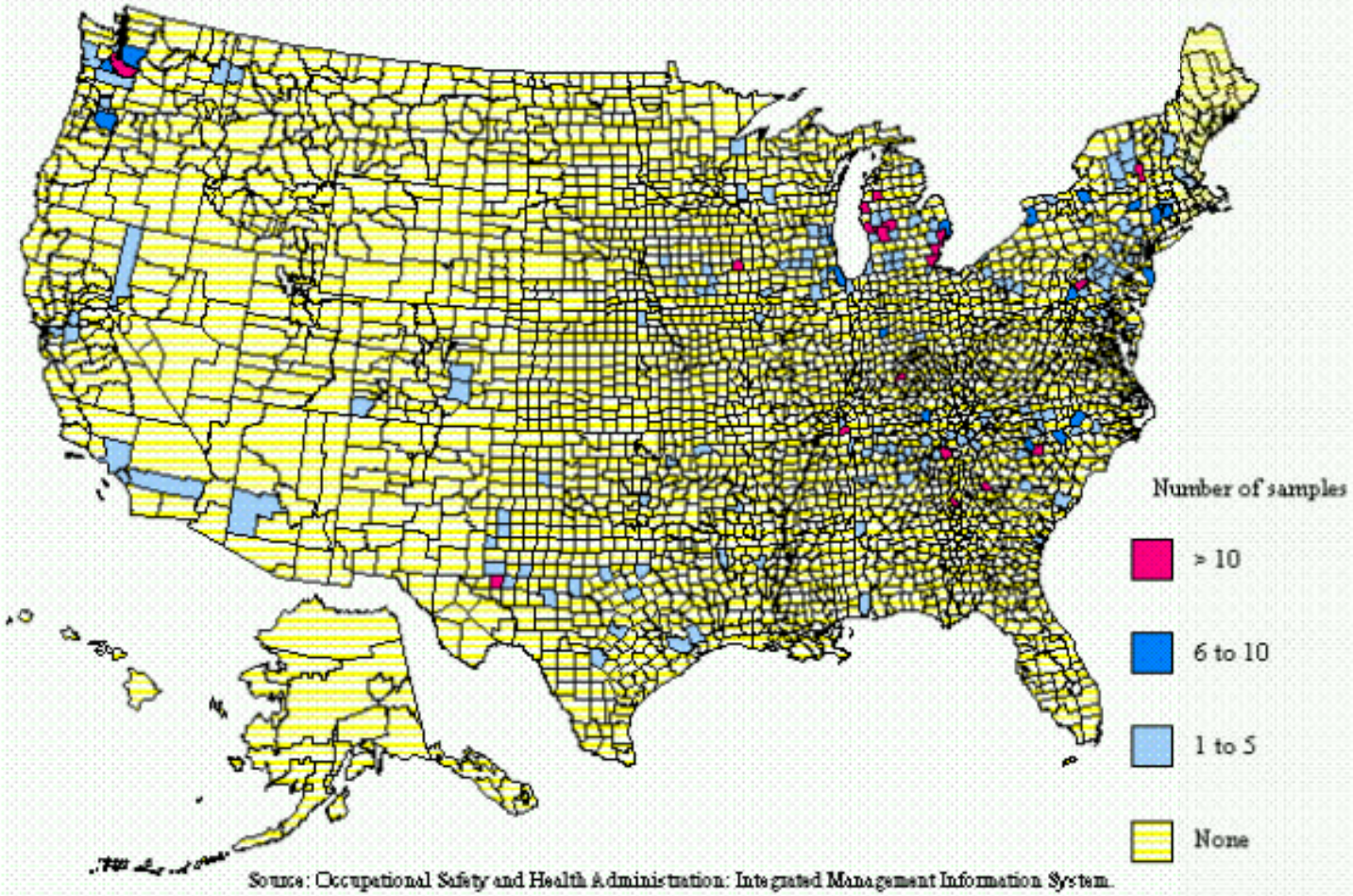
NOTE: See Appendix A for source descriptions, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 3-16. Silica: Average severity level by state for OSHA inspector samples that exceeded the permissible exposure limit (PEL), 1993-1994



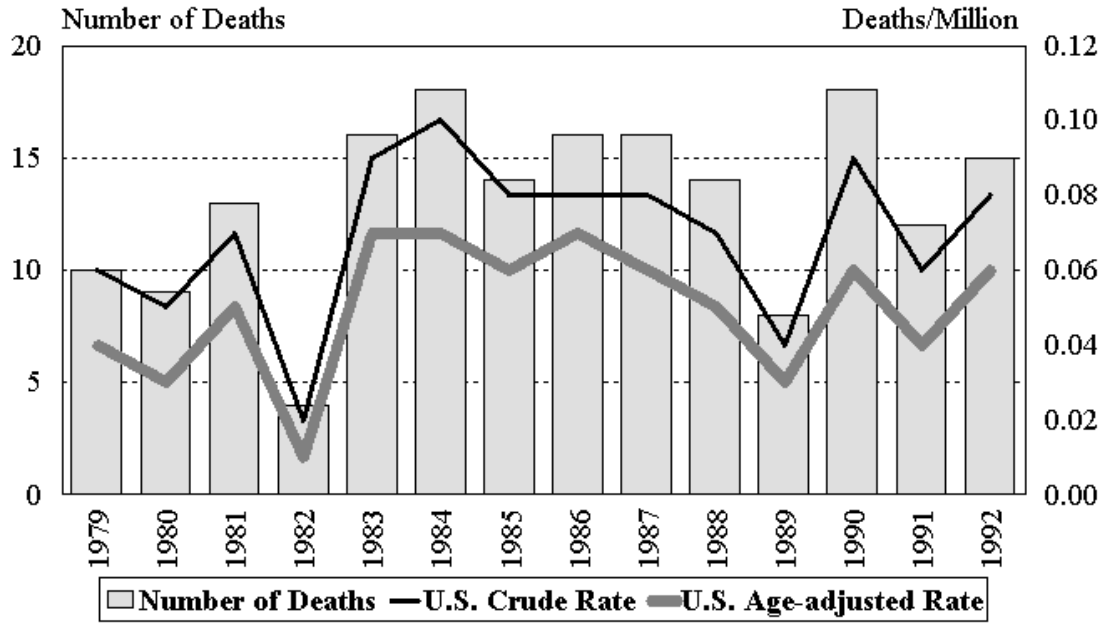
NOTE: See Appendix A for source descriptions, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 3-17. Silica: Number of OSHA inspector samples collected by county, 1993-1994



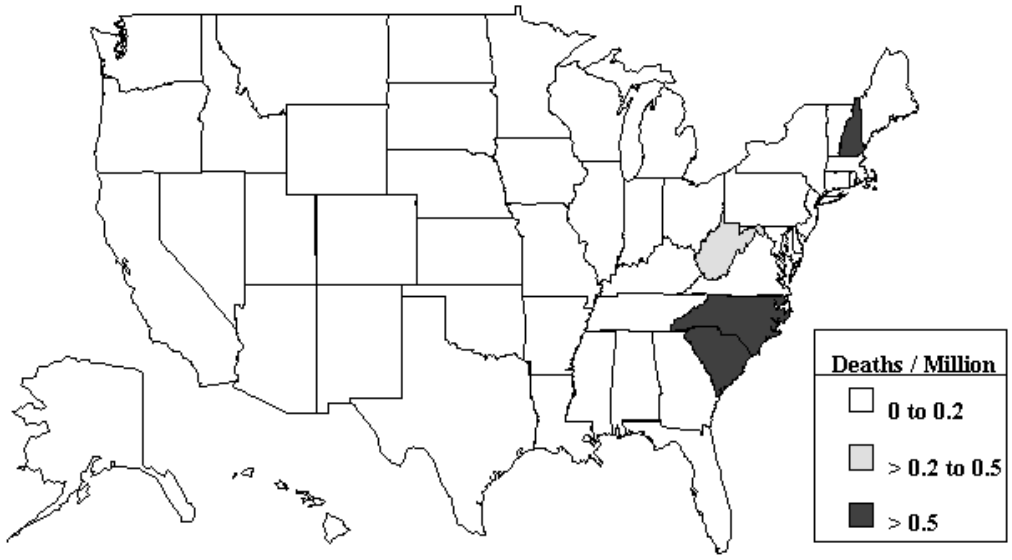
Source: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 4-1. Byssinosis: Number of deaths, crude and age-adjusted mortality rates, U.S. residents age 15 and over, 1979-1992



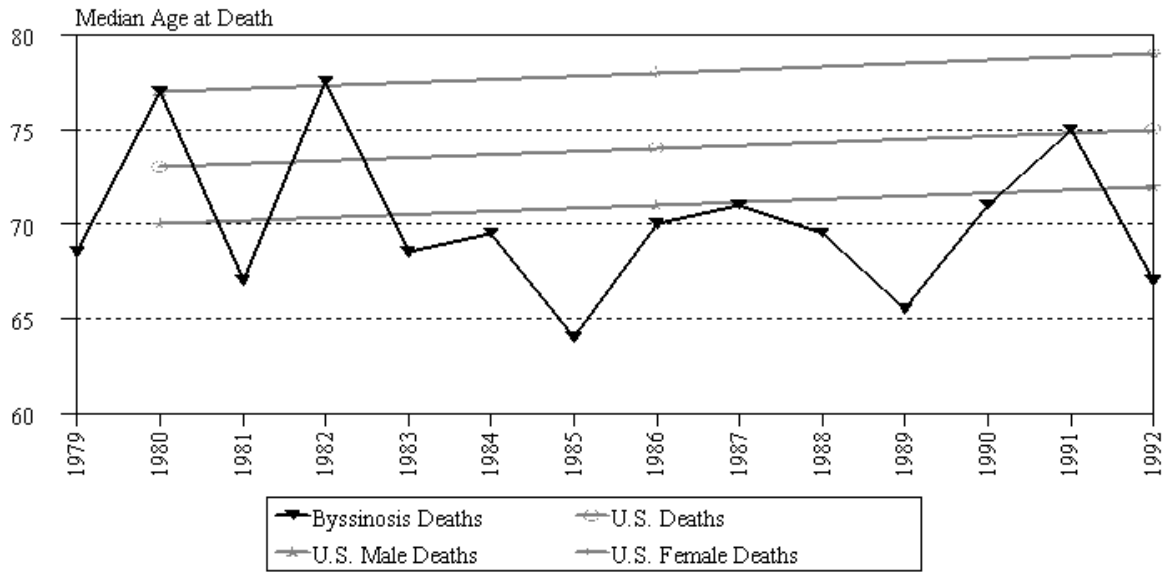
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure 4-2. Byssinosis: Crude mortality rates by state, U.S. residents age 15 and over, 1991-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure 4-3. Byssinosis: Median age at death, U.S. residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 4-1. Byssinosis: Number of deaths by sex, race, and age, U.S. residents age 15 and over, 1991-1992

		1991		1992	
		Number	Percent	Number	Percent
Total deaths		12	100.0	15	100.0
Sex	Male	8	66.7	9	60.0
	Female	4	33.3	6	40.0
Race	White	11	91.7	10	66.7
	Black	1	8.3	5	33.3
	Other	0	0.0	0	0.0
Age	15-24	0	0.0	3	20.0
	25-34	0	0.0	1	6.7
	35-44	0	0.0	0	0.0
	45-54	1	8.3	0	0.0
	55-64	1	8.3	1	6.7
	65-74	4	33.3	8	53.3
	75-84	4	33.3	2	13.3
	85 and over	2	16.7	0	0.0
	Mean age	73.7		57.9	
	Range for age	53-87		18-84	

NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1979-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 4-2. Byssinosis: Number of deaths by state, U.S. residents age 15 and over, 1979-1992

State	1979-1990	1991	1992	TOTAL
Alabama	5	1	-	6
Alaska	-	-	-	-
Arizona	3	-	-	3
Arkansas	-	-	-	-
California	6	-	1	7
Colorado	-	-	-	-
Connecticut	1	-	-	1
Delaware	-	-	-	-
District of Columbia	-	-	-	-
Florida	1	-	1	2
Georgia	18	1	-	19
Hawaii	-	-	-	-
Idaho	-	-	-	-
Illinois	3	-	1	4
Indiana	-	1	-	1
Iowa	-	-	-	-
Kansas	1	-	-	1
Kentucky	-	-	-	-
Louisiana	1	-	1	2
Maine	-	-	-	-
Maryland	2	-	-	2
Massachusetts	6	-	1	7
Michigan	1	-	-	1
Minnesota	1	-	-	1
Mississippi	-	-	-	-
Missouri	-	-	-	-
Montana	-	-	-	-
Nebraska	-	-	-	-
Nevada	-	-	-	-
New Hampshire	1	1	-	2
New Jersey	2	-	-	2
New Mexico	-	-	-	-
New York	1	-	-	1
North Carolina	66	2	8	76
North Dakota	-	-	-	-
Ohio	4	-	-	4
Oklahoma	-	1	-	1
Oregon	-	-	-	-
Pennsylvania	8	1	-	9
Rhode Island	2	-	-	2
South Carolina	10	3	2	15
South Dakota	-	-	-	-
Tennessee	1	-	-	1
Texas	3	-	-	3
Utah	-	-	-	-
Vermont	2	-	-	2
Virginia	4	-	-	4
Washington	1	-	-	1
West Virginia	1	1	-	2
Wisconsin	1	-	-	1
Wyoming	-	-	-	-
TOTAL	**156**	**12**	**15**	**183**

- indicates no deaths listed.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 4-3. Byssinosis: Mortality rates (per 1,000,000 population) by race and sex, U.S. residents age 15 and over, 1991-1992

Year	Overall rate	White		Black	
		Males	Females	Males	Females
	Crude mortality rate				
1991	0.06	0.09	0.05	0.10	-
1992	0.08	0.06	0.06	0.38	0.08
	Age-adjusted mortality rate				
1991	0.04	0.05	0.04	0.08	-
1992	0.06	0.06	0.04	0.36	0.04

- indicates no deaths listed.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1979-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.
See Appendix E for revised rates for 1979-1990.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table 4-4. Byssinosis: Years of potential life lost by race and sex, U.S. residents age 15 and over, 1991-1992

Year	Overall	White		Black	
		Males	Females	Males	Females
	Years of potential life lost to age 65				
1991	20	0	20	0	-
1992	175	50	35	90	0
	Years of potential life lost to life expectancy				
1991	152	64	79	7	-
1992	368	110	113	111	9

- indicates no deaths listed.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1979-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table 4-5. Byssinosis: Total number of deaths, crude and age-adjusted mortality rates (per 1,000,000 population), and total years of potential life lost (YPLL) to life expectancy, by state, U.S. residents age 15 and over, 1988-1992

State	Total deaths	Rank	Crude mortality		Age-adjusted mortality		YPLL to life expectancy			
			Rate	Rank	Rate	Rank	Years	Rank	Years/death	Rank
Alabama	2	5	0.13	5	0.05	10	16.00	16	8.0	17
Alaska	-	-	-	-	-	-	-	-	-	-
Arizona	1	12	0.07	11	0.07	5	21.00	12	21.0	8
Arkansas	-	-	-	-	-	-	-	-	-	-
California	4	3	0.03	20	0.03	17	105.00	3	26.3	5
Colorado	-	-	-	-	-	-	-	-	-	-
Connecticut	-	-	-	-	-	-	-	-	-	-
Delaware	-	-	-	-	-	-	-	-	-	-
District of Columbia	-	-	-	-	-	-	-	-	-	-
Florida	2	5	0.04	17	0.04	15	71.00	5	35.5	3
Georgia	2	5	0.08	7	0.06	6	46.00	7	23.0	6
Hawaii	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-
Illinois	2	5	0.04	17	0.05	10	104.00	4	52.0	1
Indiana	1	12	0.05	15	0.03	17	14.00	17	14.0	13
Iowa	-	-	-	-	-	-	-	-	-	-
Kansas	1	12	0.10	6	0.04	15	8.00	19	8.0	17
Kentucky	-	-	-	-	-	-	-	-	-	-
Louisiana	1	12	0.06	13	0.06	6	47.00	6	47.0	2
Maine	-	-	-	-	-	-	-	-	-	-
Maryland	-	-	-	-	-	-	-	-	-	-
Massachusetts	2	5	0.08	7	0.06	6	28.00	10	14.0	13
Michigan	1	12	0.03	20	0.01	20	6.00	22	6.0	22
Minnesota	1	12	0.06	13	0.06	6	21.00	12	21.0	8
Mississippi	-	-	-	-	-	-	-	-	-	-
Missouri	-	-	-	-	-	-	-	-	-	-
Montana	-	-	-	-	-	-	-	-	-	-
Nebraska	-	-	-	-	-	-	-	-	-	-
Nevada	-	-	-	-	-	-	-	-	-	-
New Hampshire	1	12	0.23	3	0.28	3	29.00	9	29.0	4
New Jersey	-	-	-	-	-	-	-	-	-	-
New Mexico	-	-	-	-	-	-	-	-	-	-
New York	-	-	-	-	-	-	-	-	-	-
North Carolina	29	1	1.09	1	0.73	1	382.00	1	13.2	15
North Dakota	-	-	-	-	-	-	-	-	-	-
Ohio	3	4	0.07	11	0.05	10	43.00	8	14.3	12
Oklahoma	1	12	0.08	7	0.03	17	8.00	19	8.0	17
Oregon	-	-	-	-	-	-	-	-	-	-
Pennsylvania	2	5	0.04	17	0.01	20	14.00	17	7.0	21
Rhode Island	-	-	-	-	-	-	-	-	-	-
South Carolina	6	2	0.44	2	0.36	2	128.00	2	21.3	7
South Dakota	-	-	-	-	-	-	-	-	-	-
Tennessee	-	-	-	-	-	-	-	-	-	-
Texas	1	12	0.02	22	0.01	20	8.00	19	8.0	17
Utah	-	-	-	-	-	-	-	-	-	-
Vermont	-	-	-	-	-	-	-	-	-	-
Virginia	2	5	0.08	7	0.05	10	22.00	11	11.0	16
Washington	-	-	-	-	-	-	-	-	-	-
West Virginia	1	12	0.14	4	0.12	4	21.00	12	21.0	8
Wisconsin	1	12	0.05	15	0.05	10	21.00	12	21.0	8
Wyoming	-	-	-	-	-	-	-	-	-	-

- indicates no deaths listed.

NOTE: Ranks are based on unrounded values. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table 4-6. Byssinosis: Most frequently recorded occupations on death certificate, selected states, U.S. residents age 15 and over, 1991-1992

COC	Occupation	Number	Percent
749	Miscellaneous textile machine operators	3	15.0
914	Homemaker	3	15.0
637	Machinists	2	10.0
739	Knitting, looping, taping, and weaving machine operators	2	10.0
889	Laborers, except construction	2	10.0
203	Clinical laboratory technologists and technicians	1	5.0
423	Sheriffs, bailiffs, and other law enforcement officers	1	5.0
479	Farm workers	1	5.0
518	Industrial machinery repairers	1	5.0
616	Mining machine operators	1	5.0
	All other occupations	3	15.0
	Occupation not reported	0	0.0
	TOTAL	20	100.0

COC - 1980 Census Occupation Code
NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual occupation and years reporting. Data for 1979-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 4-7. Byssinosis: Most frequently recorded industries on death certificate, U.S. residents age 15 and over, selected states, 1991-1992

CIC	Industry	Number	Percent
142	Yarn, thread, and fabric mills	10	50.0
961	Homemaker, student, unemployed, volunteer	3	15.0
021	Horticultural services	1	5.0
041	Coal mining	1	5.0
331	Machinery, except electrical, n.e.c.	1	5.0
392	Not specified manufacturing industries	1	5.0
790	Dressmaking shops	1	5.0
831	Hospitals	1	5.0
910	Justice, public order, and safety	1	5.0
	All other industries	0	0.0
	Industry not reported	0	0.0
	TOTAL	20	100.0

n.e.c. - not elsewhere classified
CIC - 1980 Census Industry Code
NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual industry and years reporting. Data for 1979-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 4-8. Byssinosis: Proportionate mortality ratio (PMR) by usual occupation, selected states and years, U.S. residents age 15 and over, 1985-1992

COC	Occupation	Number of deaths	PMR	95% confidence interval LCL	UCL
749	Miscellaneous textile machine operators	16	60.63	34.65	98.43
738	Winding, twisting machine operators	7	29.07	11.67	59.94

COC - 1980 Census Occupation Code LCL - lower confidence limit UCL - upper confidence limit

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual occupation and years reporting.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 4-9. Byssinosis: Proportionate mortality ratio (PMR) by usual industry, selected states and years, U.S. residents age 15 and over, 1985-1992

CIC	Industry	Number of deaths	PMR	95% confidence interval LCL	UCL
142	Yarn, thread, and fabric mills	43	32.67	23.34	44.51

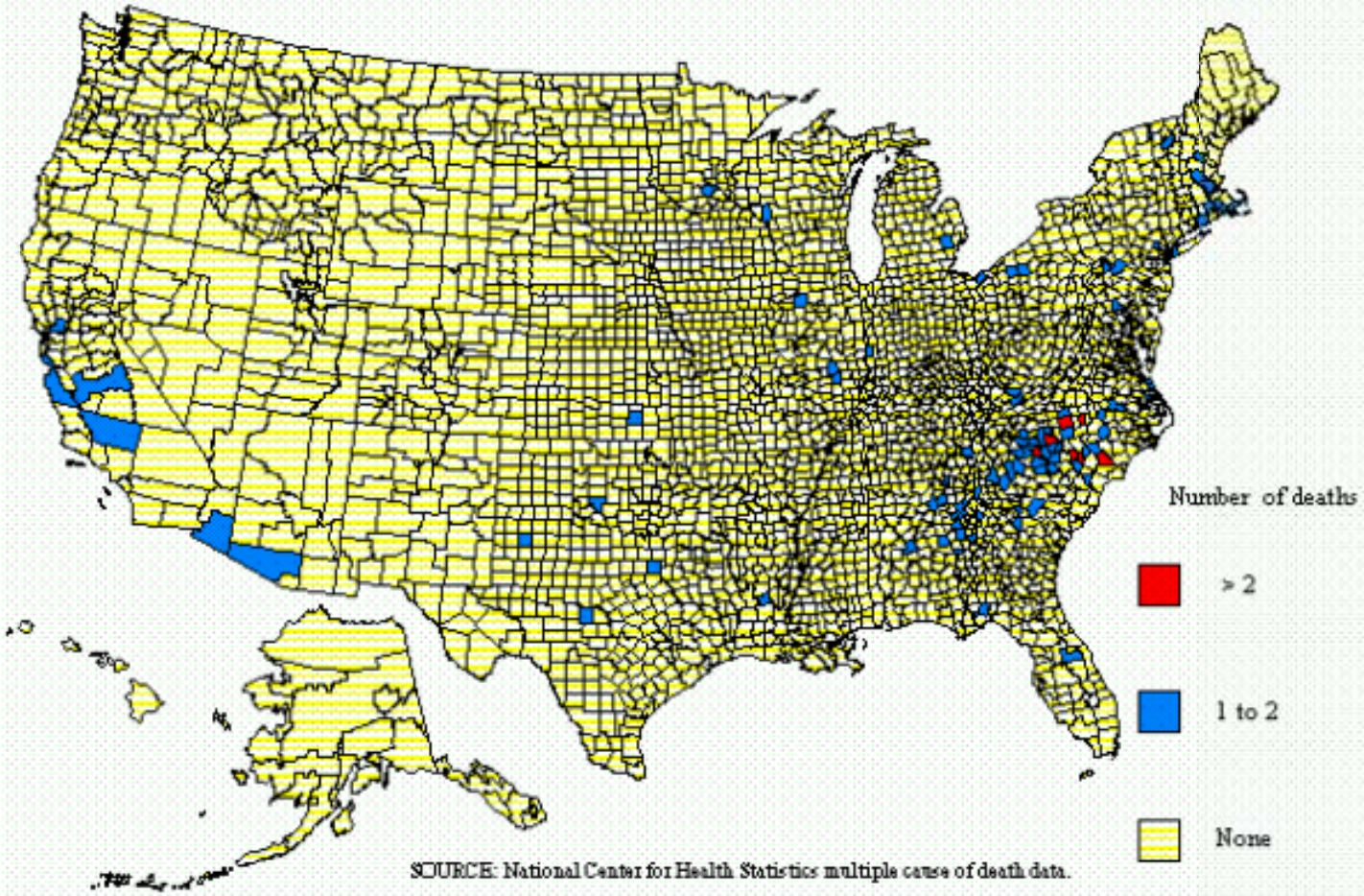
CIC - 1980 Census Industry Code LCL - lower confidence limit UCL - upper confidence limit

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual industry and years reporting.

SOURCE: National Center for Health Statistics multiple cause of death data.

Figure 4-4. Byssinosis: Total number of deaths by county,

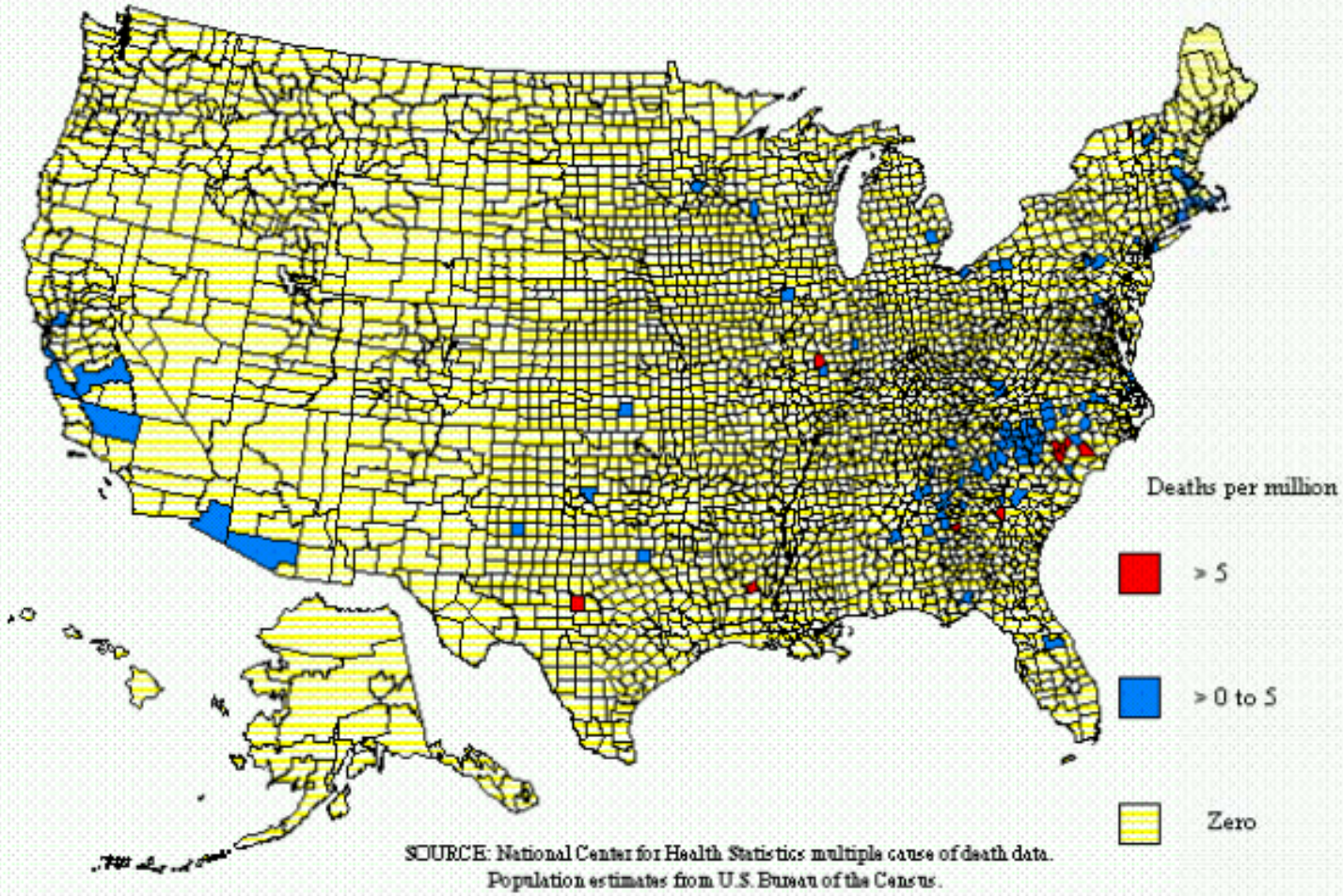
U.S. residents age 15 and over, 1983-1992



SOURCE: National Center for Health Statistics multiple cause of death data.

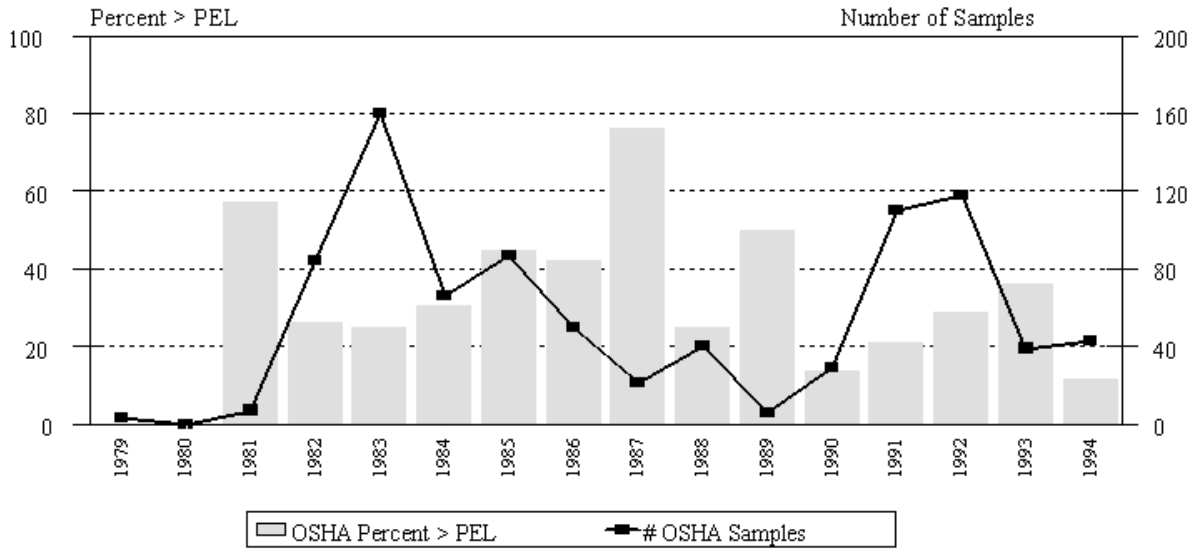
Figure 4-5. Byssinosis: Age-adjusted mortality rates by county,

U.S. residents age 15 and over, 1983-1992



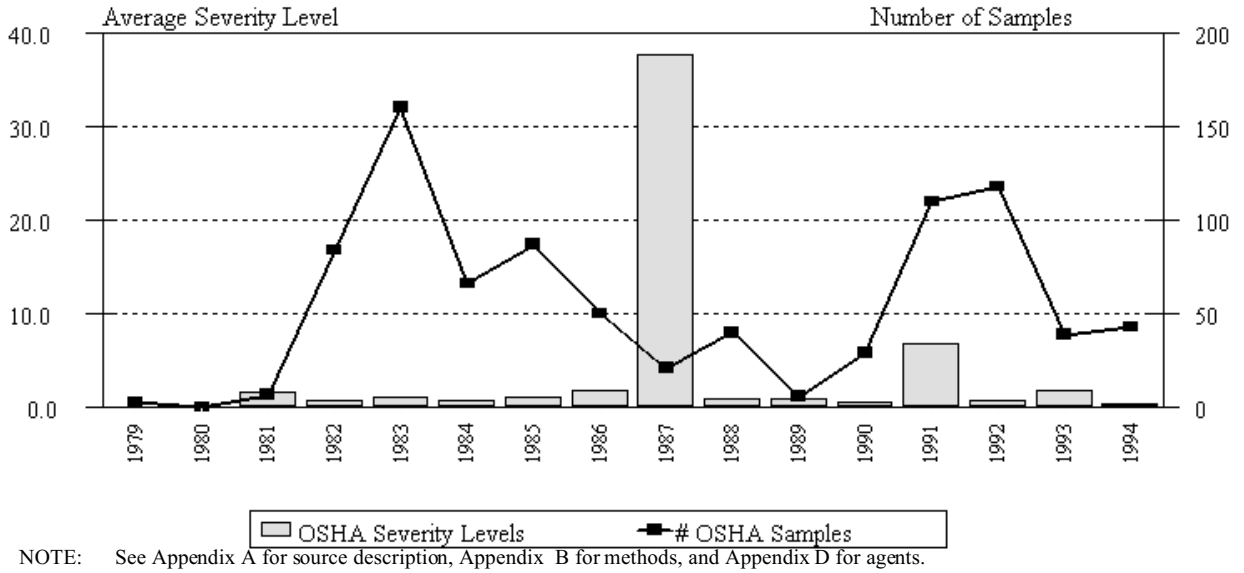
SOURCE: National Center for Health Statistics multiple cause of death data.
Population estimates from U.S. Bureau of the Census.

Figure 4-6. Cotton dust: Number of OSHA inspector samples and percent exceeding the permissible exposure limit (PEL), 1979-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 4-7. Cotton dust: Number of OSHA inspector samples and average severity levels, 1979-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Table 4-10. Cotton dust: Number of OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity level, by industry, 1993-1994

CIC	Industries most frequently recorded on 1991-1992 death certificates with byssinosis	Number of samples	% > PEL	Average severity
142	Yarn, thread, and fabric mills	76	18.4	0.70
961	Homemaker, student, unemployed, volunteer	0	-	-
021	Horticultural services	0	-	-
041	Coal mining	0	-	-
331	Machinery, except electrical, n.e.c.	0	-	-
392	Not specified manufacturing industries	0	-	-
790	Dressmaking shops	0	-	-
831	Hospitals	0	-	-
910	Justice, public order, and safety	0	-	-
	All other industries	6	83.3	6.49
	Industry not reported	0	-	-
	TOTAL	82	23.2	1.13

CIC - 1980 Census Industry Code n.e.c. - not elsewhere classified - indicates incalculable field
NOTE: See Appendix A for source description, Appendix B for methods, Appendix C for list of 25 states reporting usual industry and years reporting, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System. National Center for Health Statistics: multiple cause of death data.

Table 4-11. Cotton dust: Number of OSHA inspector samples, percent exceeding the permissible exposure level (PEL) and average severity level, by industry, 1993-1994

CIC	Industries most frequently sampled in 1993-1994	Number of samples	% > PEL	Average severity
142	Yarn, thread, and fabric mills	76	18.4	0.70
150	Miscellaneous textile mill products	5	100.0	7.79
152	Miscellaneous fabricated textile products	1	0.0	0.00
	All other industries	0	-	-
	Industry not reported	0	-	-
	TOTAL	82	23.2	1.13

CIC - 1980 Census Industry Code - indicates incalculable field
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Table 4-12 (page 1 of 2). Cotton dust: Number of OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1979-1994

	1979-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Alabama	22	0.99	36.4	1.52	41	1.15	39.0	1.94	2	0.95	50.0	1.45
Alaska	0	-	-	-	0	-	-	-	0	-	-	-
Arizona	0	-	-	-	0	-	-	-	0	-	-	-
Arkansas	0	-	-	-	0	-	-	-	0	-	-	-
California	0	-	-	-	0	-	-	-	0	-	-	-
Colorado	0	-	-	-	0	-	-	-	0	-	-	-
Connecticut	0	-	-	-	0	-	-	-	0	-	-	-
Delaware	0	-	-	-	0	-	-	-	0	-	-	-
District of Columbia	0	-	-	-	0	-	-	-	0	-	-	-
Florida	0	-	-	-	0	-	-	-	0	-	-	-
Georgia	27	0.79	25.9	1.81	155	5.25	40.6	12.16	19	0.99	31.6	1.94
Hawaii	0	-	-	-	0	-	-	-	0	-	-	-
Idaho	0	-	-	-	0	-	-	-	0	-	-	-
Illinois	2	15.68	100.0	15.68	0	-	-	-	0	-	-	-
Indiana	0	-	-	-	0	-	-	-	0	-	-	-
Iowa	0	-	-	-	0	-	-	-	0	-	-	-
Kansas	0	-	-	-	0	-	-	-	0	-	-	-
Kentucky	0	-	-	-	0	-	-	-	0	-	-	-
Louisiana	0	-	-	-	0	-	-	-	0	-	-	-
Maine	0	-	-	-	0	-	-	-	0	-	-	-
Maryland	0	-	-	-	0	-	-	-	0	-	-	-
Massachusetts	0	-	-	-	0	-	-	-	0	-	-	-
Michigan	0	-	-	-	0	-	-	-	0	-	-	-
Minnesota	0	-	-	-	0	-	-	-	0	-	-	-
Mississippi	1	0.25	0.0	-	0	-	-	-	0	-	-	-
Missouri	0	-	-	-	0	-	-	-	0	-	-	-
Montana	0	-	-	-	0	-	-	-	0	-	-	-

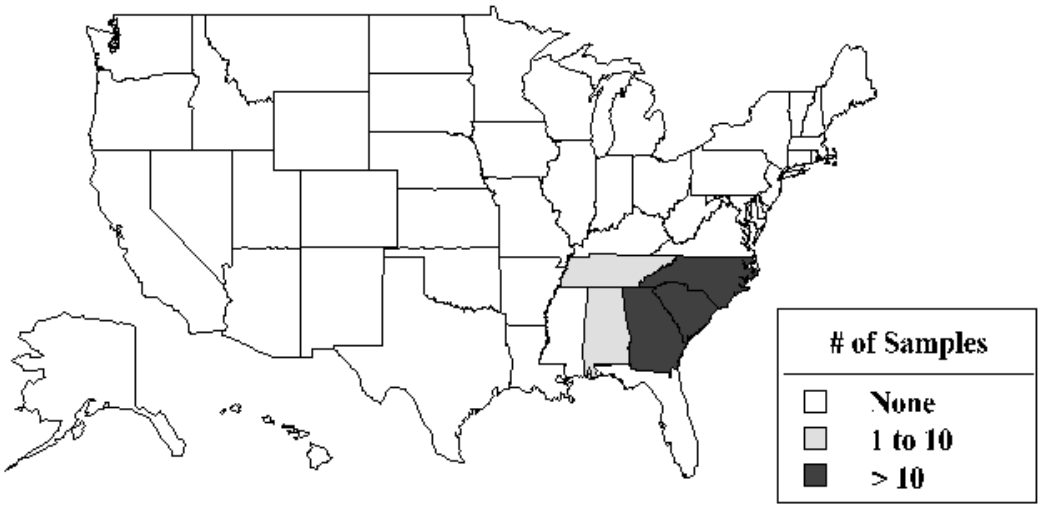
See footnotes at end of table.

Table 4-12 (page 2 of 2). Cotton dust: Number of OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1979-1994

	1979-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Nebraska	0	-	-	-	0	-	-	-	0	-	-	-
Nevada	0	-	-	-	0	-	-	-	0	-	-	-
New Hampshire	0	-	-	-	0	-	-	-	0	-	-	-
New Jersey	0	-	-	-	1	1.93	100.0	1.93	0	-	-	-
New Mexico	0	-	-	-	0	-	-	-	0	-	-	-
New York	0	-	-	-	0	-	-	-	0	-	-	-
North Carolina	240	0.84	21.3	2.09	200	0.73	22.5	1.40	24	0.78	20.8	1.11
North Dakota	0	-	-	-	0	-	-	-	0	-	-	-
Ohio	0	-	-	-	0	-	-	-	0	-	-	-
Oklahoma	1	0.00	0.0	-	0	-	-	-	0	-	-	-
Oregon	0	-	-	-	0	-	-	-	0	-	-	-
Pennsylvania	0	-	-	-	1	0.00	0.0	-	0	-	-	-
Rhode Island	0	-	-	-	0	-	-	-	0	-	-	-
South Carolina	5	0.52	20.0	1.73	88	1.18	25.0	3.33	36	1.47	19.4	6.37
South Dakota	0	-	-	-	0	-	-	-	0	-	-	-
Tennessee	0	-	-	-	10	3.70	10.0	37.00	1	0.00	0.0	-
Texas	22	1.99	77.3	2.42	47	17.56	44.7	38.57	0	-	-	-
Utah	0	-	-	-	0	-	-	-	0	-	-	-
Vermont	0	-	-	-	0	-	-	-	0	-	-	-
Virginia	0	-	-	-	0	-	-	-	0	-	-	-
Washington	0	-	-	-	0	-	-	-	0	-	-	-
West Virginia	0	-	-	-	0	-	-	-	0	-	-	-
Wisconsin	0	-	-	-	0	-	-	-	0	-	-	-
Wyoming	0	-	-	-	0	-	-	-	0	-	-	-
TOTAL	320	1.01	26.9	2.39	543	3.63	31.1	10.55	82	1.13	23.2	3.33

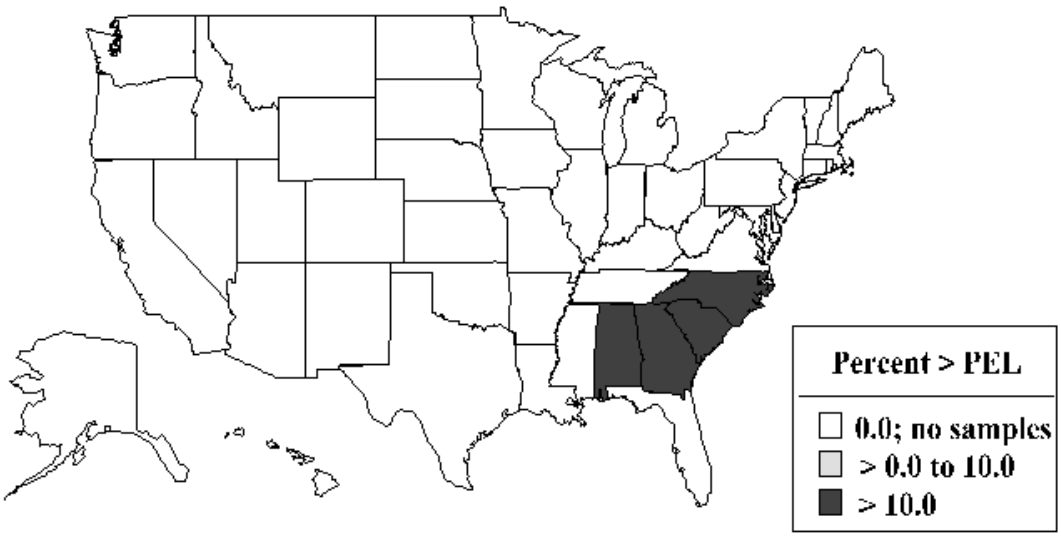
- indicates incalculable field.
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 4-8. Cotton dust: Number of OSHA inspector samples collected by state, 1993-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 4-9. Cotton dust: Percent of OSHA inspector samples that exceeded the permissible exposure limit (PEL), by state, 1993-1994

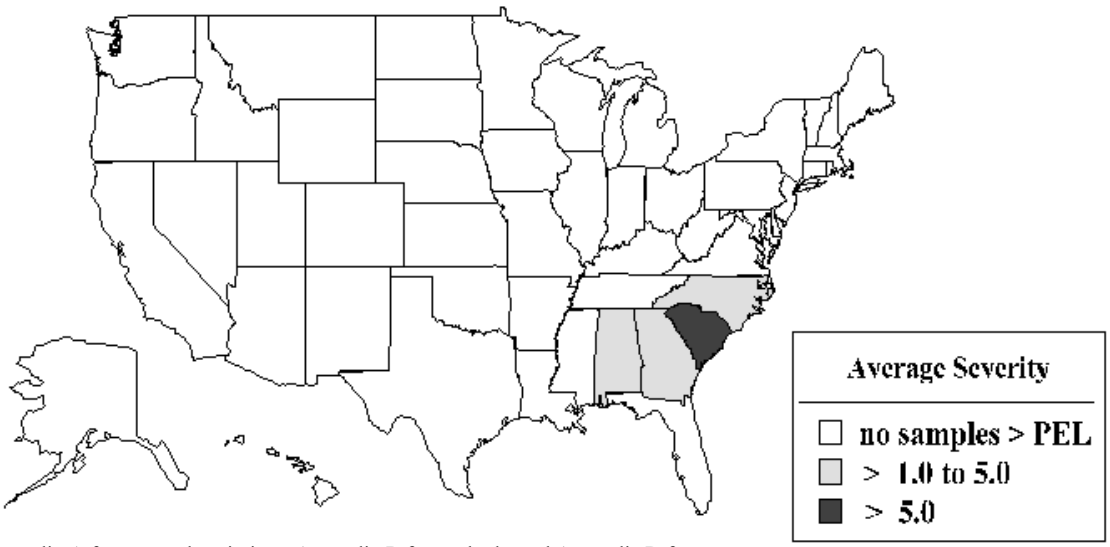


NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 4-10. Cotton dust: Average severity level by state for OSHA inspector samples, 1993-1994

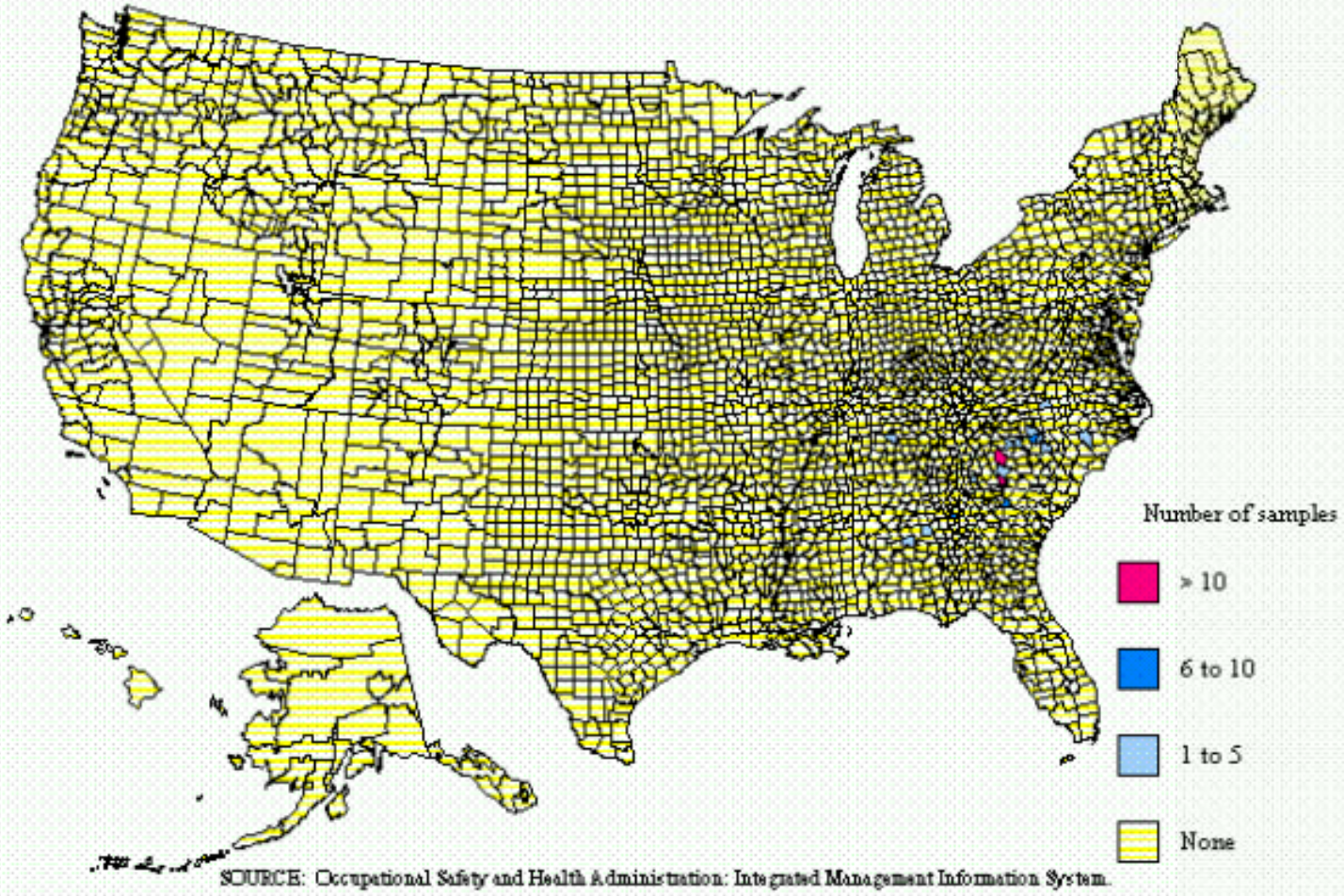
NOTE: See Appendix A for source descriptions, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 4-11. Cotton dust: Average severity level by state for OSHA inspector samples that exceeded the permissible exposure limit (PEL), 1993-1994



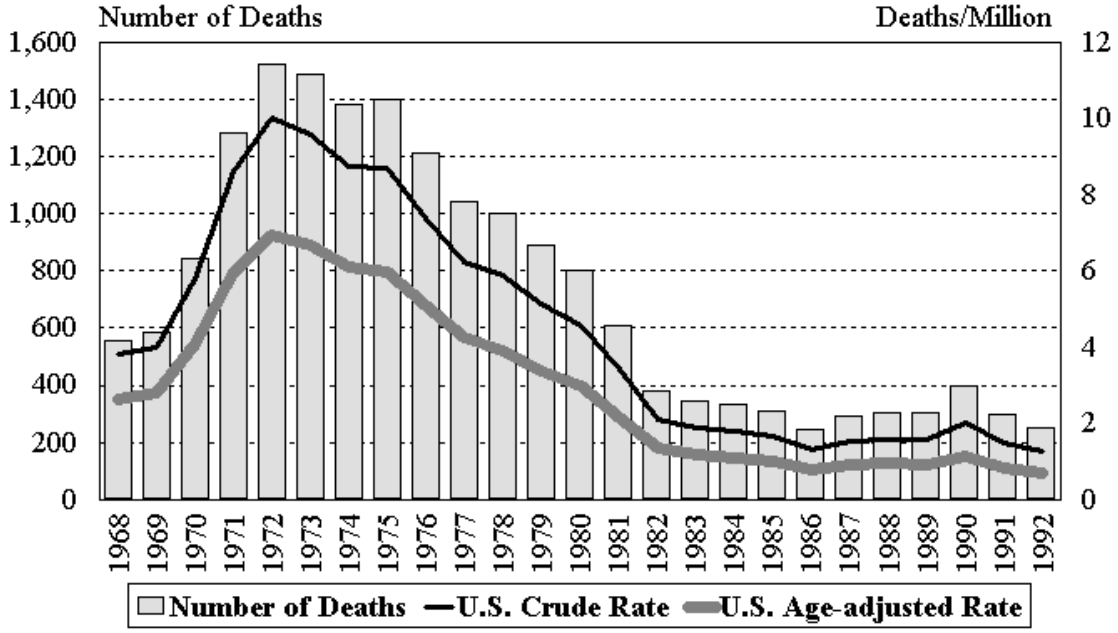
NOTE: See Appendix A for source descriptions, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 4-12. Cotton dust: Number of OSHA inspector samples collected by county, 1993-1994



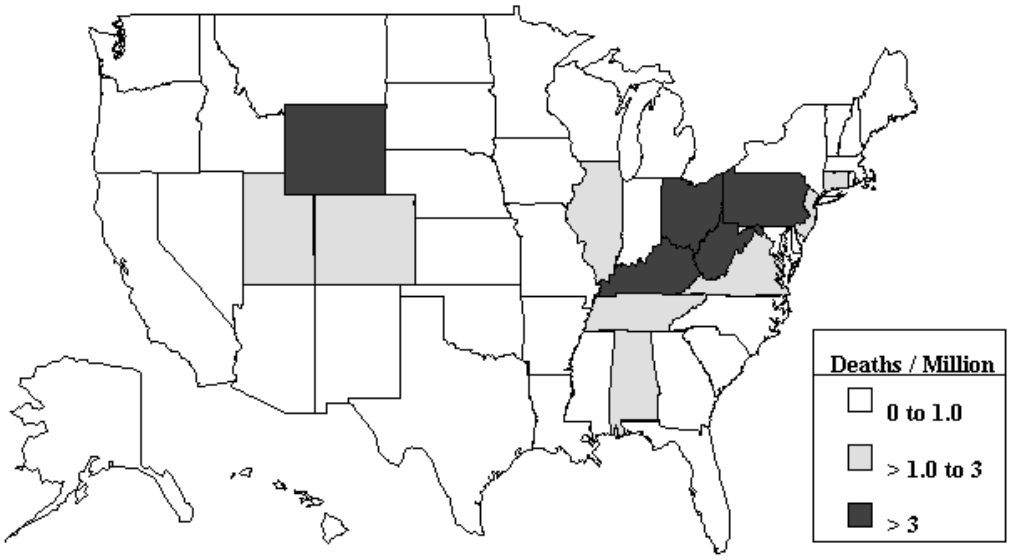
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 5-1. Unspecified/Other pneumoconioses: Number of deaths, crude and age-adjusted mortality rates, U.S. residents age 15 and over, 1968-1992



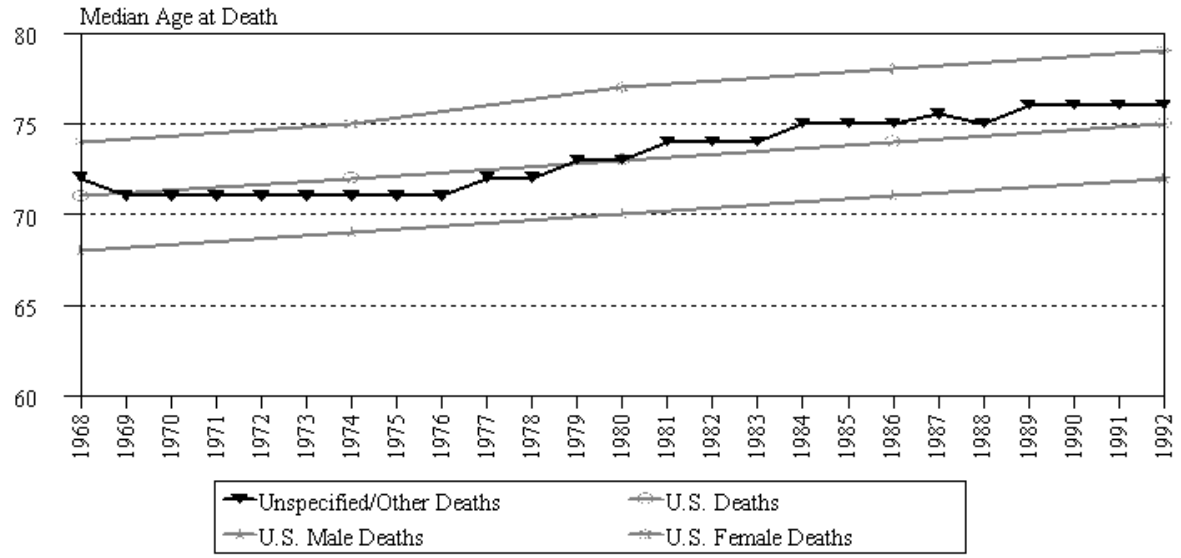
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure 5-2. Unspecified/Other pneumoconioses: Crude mortality rates by state, U.S. residents age 15 and over, 1991-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
0SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure 5-3. Unspecified/Other pneumoconioses: Median age at death, U.S. residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 5-1. Unspecified/Other pneumoconioses: Number of deaths by sex, race, and age, U.S. residents age 15 and over, 1991-1992

		1991		1992	
		Number	Percent	Number	Percent
Total deaths		296	100.0	249	100.0
Sex	Male	282	95.3	234	94.0
	Female	14	4.7	15	6.0
Race	White	271	91.6	231	92.8
	Black	24	8.1	18	7.2
	Other	1	0.3	0	0.0
Age	15-24	0	0.0	1	0.4
	25-34	1	0.3	0	0.0
	35-44	6	2.0	0	0.0
	45-54	3	1.0	8	3.2
	55-64	22	7.4	19	7.6
	65-74	103	34.8	76	30.5
	75-84	110	37.2	104	41.8
	85 and over	51	17.2	41	16.5
	Mean age	75.0		75.3	
	Range for age	32-94		21-95	

NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1968-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 5-2. Unspecified/Other pneumoconioses: Number of deaths by state, U.S. residents age 15 and over, 1968-1992

State	1968-1978	1979-1990	1991	1992	TOTAL
Alabama	342	133	10	5	490
Alaska	3	1	-	-	4
Arizona	74	38	1	2	115
Arkansas	58	17	2	1	78
California	355	154	4	4	517
Colorado	118	48	3	3	172
Connecticut	81	49	2	4	136
Delaware	10	9	-	-	19
District of Columbia	14	2	1	-	17
Florida	157	99	10	11	277
Georgia	52	37	1	2	92
Hawaii	7	1	-	-	8
Idaho	10	5	-	-	15
Illinois	732	275	19	13	1,039
Indiana	174	96	4	4	278
Iowa	41	8	-	4	53
Kansas	43	15	3	-	61
Kentucky	1,046	512	32	34	1,624
Louisiana	27	25	4	-	56
Maine	18	11	-	-	29
Maryland	71	56	4	1	132
Massachusetts	88	45	2	3	138
Michigan	252	126	3	7	388
Minnesota	54	18	1	1	74
Mississippi	8	3	-	-	11
Missouri	64	32	3	1	100
Montana	11	9	-	-	20
Nebraska	9	4	1	1	15
Nevada	11	4	-	-	15
New Hampshire	11	7	-	1	19
New Jersey	252	159	7	7	425
New Mexico	49	34	-	1	84
New York	327	139	3	9	478
North Carolina	71	41	2	4	118
North Dakota	7	1	-	-	8
Ohio	672	394	42	27	1,135
Oklahoma	38	18	1	2	59
Oregon	23	12	1	-	36
Pennsylvania	3,696	1,190	49	33	4,968
Rhode Island	14	7	-	-	21
South Carolina	17	8	3	-	28
South Dakota	10	5	-	-	15
Tennessee	267	109	8	3	387
Texas	94	42	1	3	140
Utah	70	42	1	2	115
Vermont	28	8	-	-	36
Virginia	582	391	7	4	984
Washington	50	19	3	3	75
West Virginia	1,960	699	58	44	2,761
Wisconsin	91	28	-	2	121
Wyoming	63	17	-	3	83
TOTAL	**12,322**	**5,202**	**296**	**249**	**18,069**

- indicates no deaths listed.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table 5-3. Unspecified/Other pneumoconioses: Mortality rates (per 1,000,000 population) by race and sex, U.S. residents age 15 and over, 1991-1992

Year	Overall rate	White		Black	
		Males	Females	Males	Females
	Crude mortality rate				
1991	1.50	3.20	0.15	2.21	0.08
1992	1.25	2.66	0.16	1.60	0.08
	Age-adjusted mortality rate				
1991	0.83	1.96	0.07	2.05	0.07
1992	0.69	1.64	0.07	1.47	0.07

NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1968-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.
See Appendix E for revised rates for 1968-1990.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table 5-4. Unspecified/Other pneumoconioses: Years of potential life lost by race and sex, U.S. residents age 15 and over, 1991-1992

Year	Overall	White		Black	
		Males	Females	Males	Females
	Years of potential life lost to age 65				
1991	340	220	30	90	0
1992	260	235	15	10	0
	Years of potential life lost to life expectancy				
1991	3,508	2,652	182	268	14
1992	2,881	2,250	174	146	14

NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes. Data for 1968-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 5-5. Unspecified/Other pneumoconioses: Total number of deaths, crude and age-adjusted mortality rates (per 1,000,000 population), and total years of potential life lost (YPLL) to life expectancy, by state, U.S. residents age 15 and over, 1988-1992

State	Total deaths	Rank	Crude mortality		Age-adjusted mortality		YPLL to life expectancy			
			Rate	Rank	Rate	Rank	Years	Rank	Years/death	Rank
Alabama	36	11	2.28	7	1.12	12	387	13	10.8	33
Alaska	-	-	-	-	-	-	-	-	-	-
Arizona	9	27	0.63	29	0.32	31	94	28	10.4	37
Arkansas	5	33	0.55	32	0.28	35	58	34	11.6	28
California	36	11	0.31	43	0.22	40	442	12	12.3	22
Colorado	8	28	0.62	30	0.42	24	83	30	10.4	38
Connecticut	15	18	1.13	15	0.53	20	145	25	9.7	41
Delaware	2	40	0.76	23	0.38	27	16	42	8.0	42
District of Columbia	2	40	0.79	22	0.78	14	76	31	38.0	1
Florida	46	7	0.87	19	0.34	29	492	10	10.7	34
Georgia	10	26	0.40	38	0.28	35	118	26	11.8	26
Hawaii	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-
Illinois	102	5	2.28	7	1.14	11	1,045	5	10.2	39
Indiana	26	14	1.20	14	0.61	16	273	16	10.5	36
Iowa	4	35	0.37	40	0.20	42	50	36	12.5	18
Kansas	7	30	0.73	25	0.32	31	70	32	10.0	40
Kentucky	178	3	12.31	2	6.69	2	2,020	3	11.3	30
Louisiana	12	22	0.75	24	0.55	19	166	20	13.8	11
Maine	4	35	0.83	20	0.45	21	44	39	11.0	31
Maryland	19	16	1.00	16	0.62	15	236	17	12.4	19
Massachusetts	12	22	0.49	33	0.30	34	151	23	12.6	17
Michigan	35	13	0.97	17	0.61	16	482	11	13.8	13
Minnesota	6	31	0.35	41	0.24	39	86	29	14.3	7
Mississippi	1	43	0.10	48	0.07	46	14	43	14.0	8
Missouri	13	20	0.65	28	0.39	26	205	18	15.8	5
Montana	1	43	0.33	42	0.07	46	6	47	6.0	47
Nebraska	4	35	0.66	27	0.44	22	55	35	13.8	15
Nevada	1	43	0.21	47	0.13	43	8	45	8.0	42
New Hampshire	1	43	0.23	45	0.06	48	6	47	6.0	47
New Jersey	46	7	1.48	12	0.89	13	587	7	12.8	16
New Mexico	14	19	2.46	6	1.53	6	159	21	11.4	29
New York	43	10	0.60	31	0.35	28	517	9	12.0	24
North Carolina	22	15	0.83	20	0.59	18	307	14	14.0	10
North Dakota	1	43	0.41	37	0.27	37	14	43	14.0	8
Ohio	145	4	3.41	5	1.91	3	1,700	4	11.7	27
Oklahoma	11	24	0.90	18	0.42	24	152	22	13.8	12
Oregon	5	33	0.45	35	0.26	38	62	33	12.4	20
Pennsylvania	195	2	4.09	3	1.88	4	2,132	2	10.9	32
Rhode Island	2	40	0.49	33	0.34	29	29	40	14.5	6
South Carolina	3	38	0.22	46	0.10	45	23	41	7.7	46
South Dakota	1	43	0.38	39	0.13	43	8	45	8.0	42
Tennessee	44	9	2.27	9	1.28	8	526	8	12.0	25
Texas	18	17	0.28	44	0.21	41	285	15	15.8	4
Utah	11	24	1.85	11	1.16	10	116	27	10.5	35
Vermont	3	38	1.36	13	1.17	9	48	37	16.0	3
Virginia	54	6	2.19	10	1.49	7	669	6	12.4	21
Washington	13	20	0.68	26	0.44	22	179	19	13.8	14
West Virginia	309	1	43.21	1	22.06	1	3,753	1	12.1	23
Wisconsin	8	28	0.42	36	0.32	31	147	24	18.4	2
Wyoming	6	31	3.54	4	1.71	5	48	37	8.0	42

- indicates no deaths listed.

NOTE: Ranks are based on unrounded values. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table 5-6. Unspecified/Other pneumoconioses: Most frequently recorded occupations on death certificate, selected states, U.S. residents age 15 and over, 1991-1992

COC	Occupation	Number	Percent
616	Mining machine operators	134	45.3
889	Laborers, except construction	18	6.1
019	Managers and administrators, n.e.c.	8	2.7
453	Janitors and cleaners	8	2.7
575	Electricians	8	2.7
633	Supervisors, precision production occupations	7	2.4
567	Carpenters	6	2.0
637	Machinists	4	1.4
783	Welders and cutters	4	1.4
156	Teachers, elementary school	3	1.0
	All other occupations	89	30.1
	Occupation not reported	7	2.4
	TOTAL	296	100.0

COC - 1980 Census Occupation Code n.e.c. - not elsewhere classified

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual occupation and years reporting. Data for 1985-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 5-7. Unspecified/Other pneumoconioses: Most frequently recorded industries on death certificate, selected states, U.S. residents age 15 and over, 1991-1992

CIC	Industry	Number	Percent
041	Coal mining	150	50.7
060	Construction	19	6.4
270	Blast furnace, steelworks, rolling and finishing mills	9	3.0
351	Motor vehicles and motor vehicle equipment	8	2.7
392	Not specified manufacturing industries	6	2.0
842	Elementary and secondary schools	5	1.7
192	Industrial and miscellaneous chemicals	4	1.4
271	Iron and steel foundries	4	1.4
280	Other primary metal industries	4	1.4
250	Glass and glass products	3	1.0
	All other industries	78	26.4
	Industry not reported	6	2.0
	TOTAL	296	100.0

CIC - 1980 Census Industry Code

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual industry and years reporting. Data for 1985-1990 can be found in the Work-Related Lung Disease Surveillance Report, 1994, see Appendix E.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 5-8. Unspecified/Other pneumoconioses: Proportionate mortality ratio (PMR) by usual occupation, selected states and years, U.S. residents age 15 and over, 1985-1992

COC	Occupation	Number of deaths	PMR	95% confidence interval LCL	UCL
615	Explosives workers	5	77.07	24.94	180.07
616	Mining machine operators	423	53.96	48.79	59.49
719	Molding and casting machine operators	14	13.22	7.22	22.18
768	Crushing and grinding machine operators	6	12.82	4.70	27.93
617	Mining occupations, n.e.c.	5	8.12	2.63	18.97
859	Miscellaneous material moving equipment operators	5	5.87	1.90	13.71
766	Furnace, kiln, oven operators, except food	10	5.70	2.74	10.48
516	Heavy equipment mechanics	7	5.05	2.03	10.41
824	Locomotive operating occupations	7	5.05	2.03	10.41
849	Crane and tower operators	7	4.37	1.76	9.01
575	Electricians	22	3.83	2.39	5.80
563	Brickmasons and stonemasons	8	2.93	1.26	5.77
783	Welders and cutters	13	2.57	1.37	4.39
869	Construction laborers	24	2.15	1.38	3.20
913	Retired, with no other occupations reported	19	1.88	1.13	2.94
889	Laborers, except construction	63	1.81	1.38	2.33
567	Carpenters	23	1.62	1.03	2.43

COC - 1980 Census Occupation Code n.e.c. - not elsewhere classified LCL - lower confidence limit UCL - upper confidence limit

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual occupation and years reporting.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 5-9. Unspecified/Other pneumoconioses: Proportionate mortality ratio (PMR) by usual industry, selected states and years, U.S. residents age 15 and over, 1985-1992

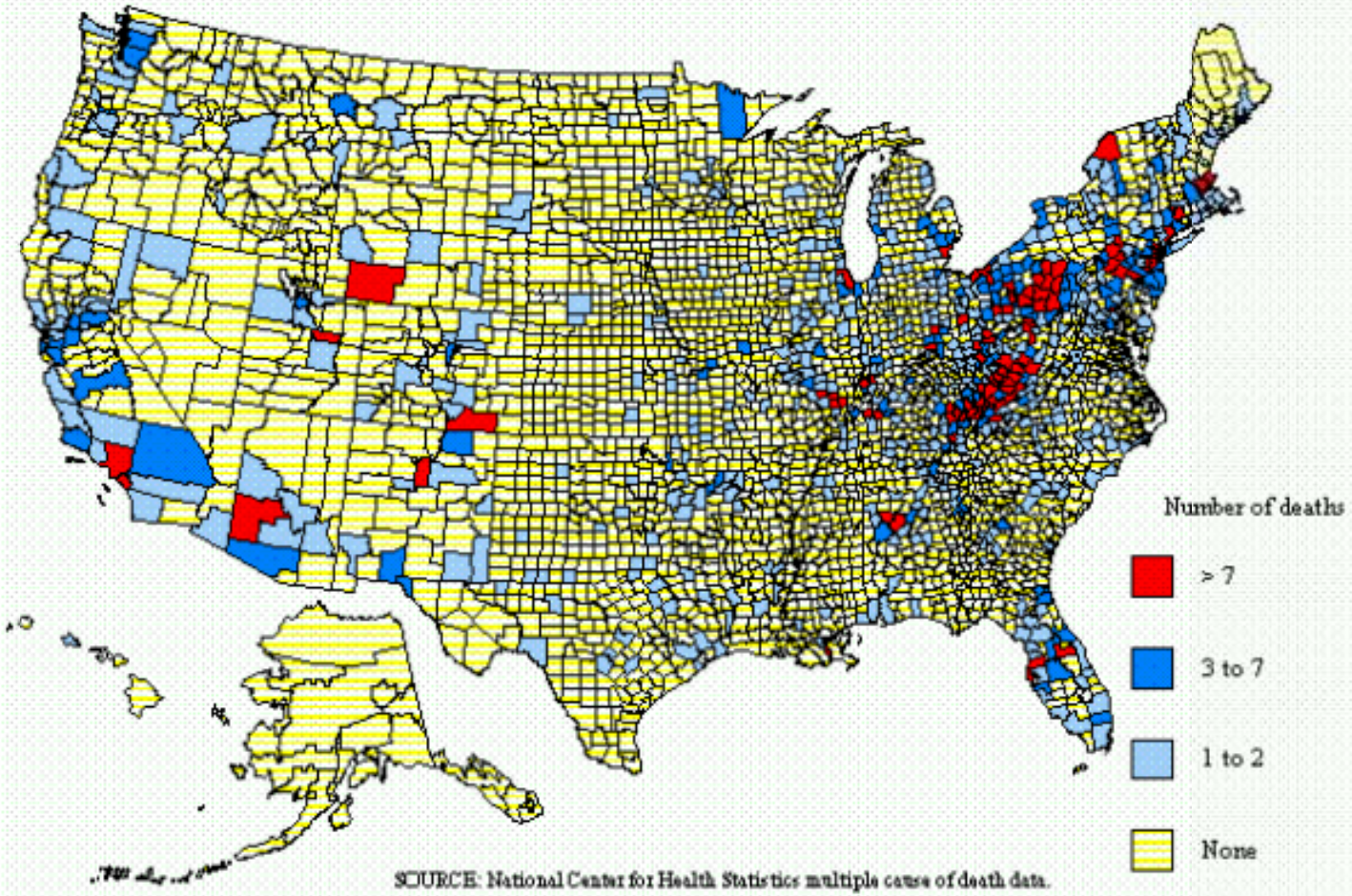
CIC	Industry	Number of deaths	PMR	95% confidence interval LCL	UCL
041	Coal mining	478	58.65	53.37	64.31
262	Miscellaneous nonmetallic mineral and stone products	15	12.87	7.19	21.24
271	Iron and steel foundries	15	8.43	4.71	13.91
050	Nonmetallic mining and quarrying, except fuel	8	7.08	3.05	13.94
252	Structural clay products	6	6.98	2.56	15.21
040	Metal mining	7	5.42	2.18	11.18
280	Other primary metal industries	8	4.04	1.74	7.95
192	Industrial and miscellaneous chemicals	14	2.89	1.58	4.85
270	Blast furnaces, steelworks, rolling and finishing mills	36	2.88	2.00	4.01
351	Motor vehicles and motor vehicle equipment	24	1.92	1.23	2.86
060	Construction	85	1.37	1.09	1.71

CIC - 1980 Census Industry Code LCL - lower confidence limit UCL - upper confidence limit

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual industry and years reporting.

SOURCE: National Center for Health Statistics multiple cause of death data.

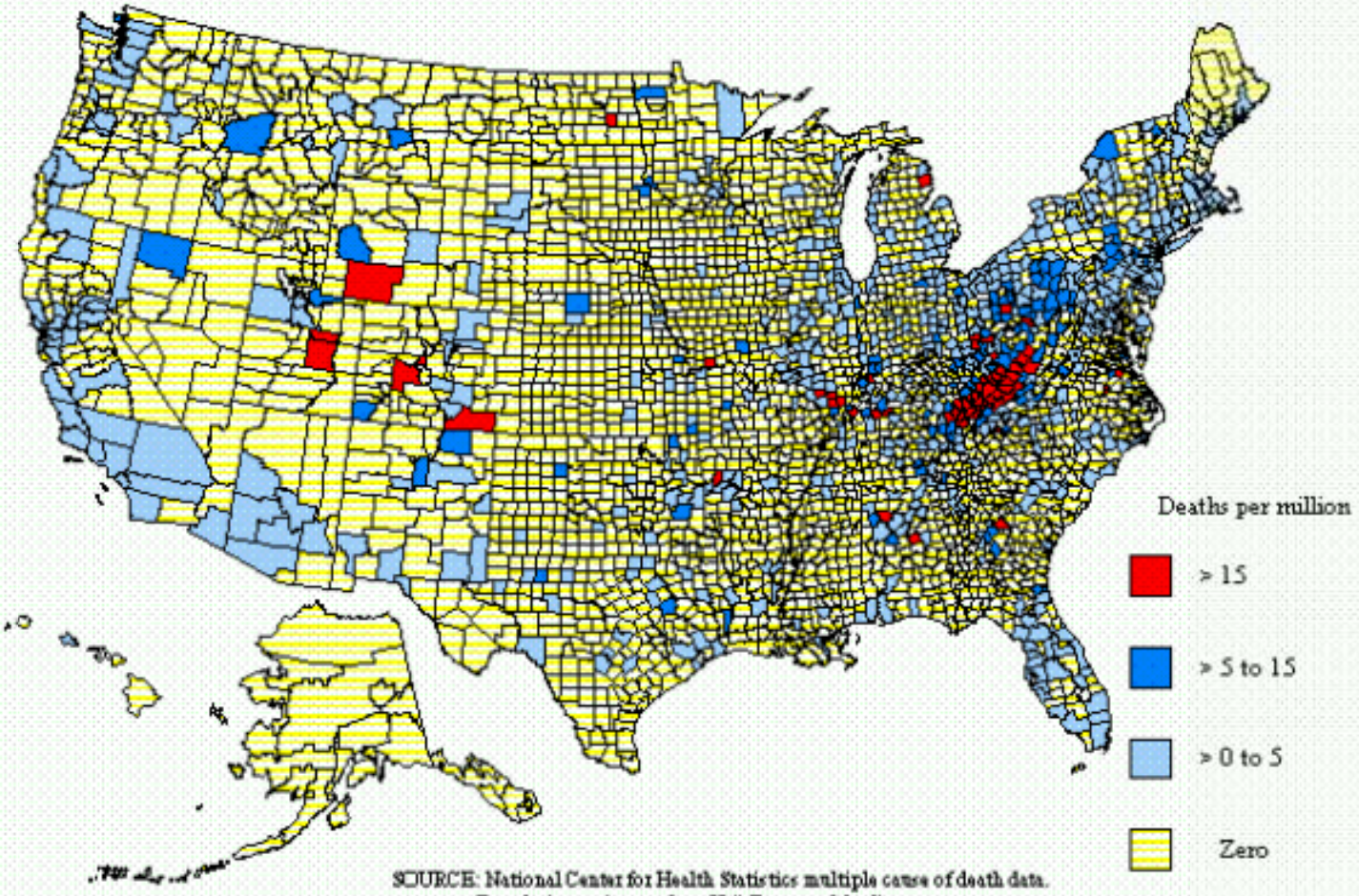
Figure 5-4. Unspecified/Other pneumoconioses: Total number of deaths by county, U.S. residents age 15 and over, 1983-1992



SOURCE: National Center for Health Statistics multiple cause of death data.

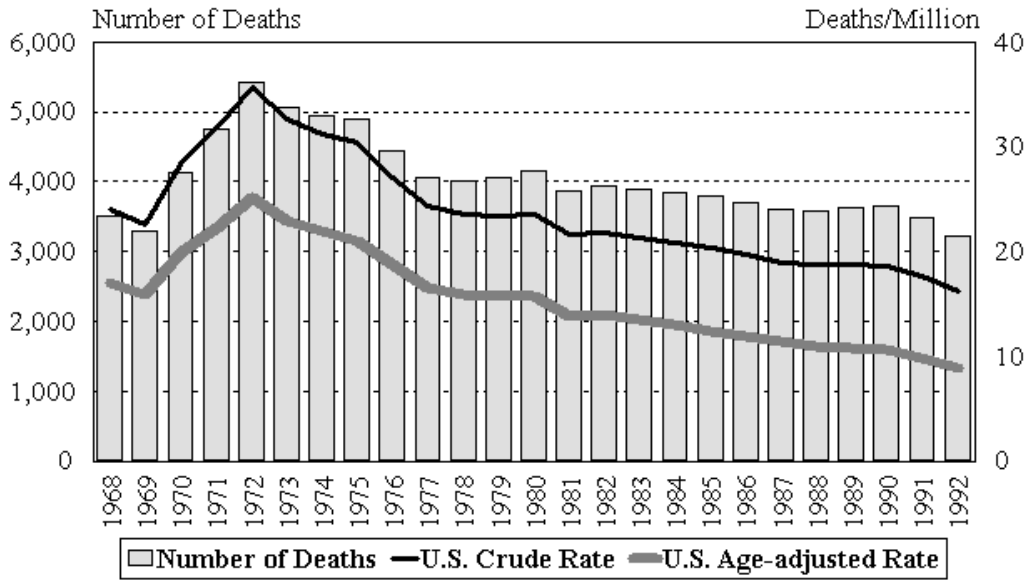
Figure 5-5. Unspecified/Other pneumoconioses: Age-adjusted mortality rates

by county, U.S. residents age 15 and over, 1983-1992



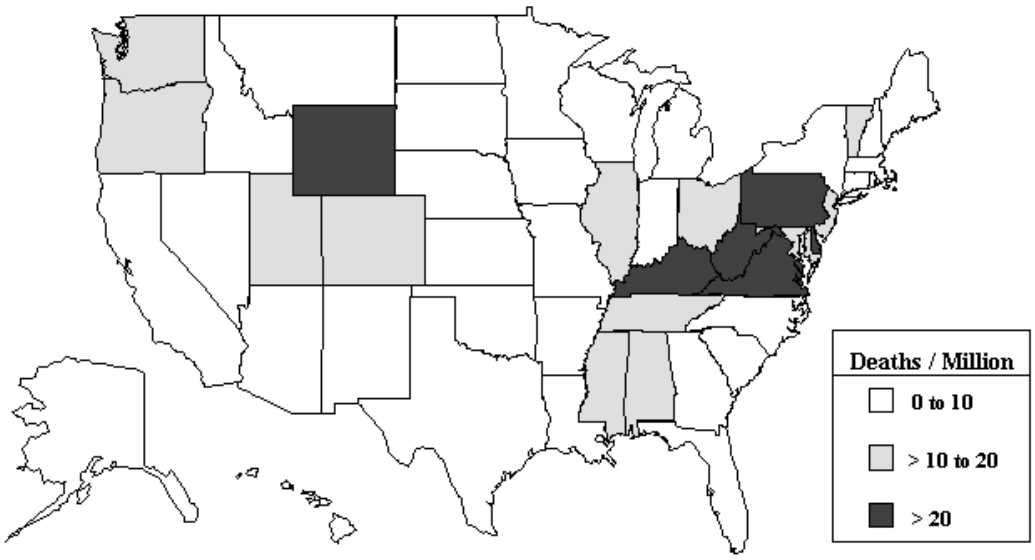
SOURCE: National Center for Health Statistics multiple cause of death data.
Population estimates from U.S. Bureau of the Census.

Figure 6-1. All pneumoconioses: Number of deaths, crude and age-adjusted mortality rates, U.S. residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure 6-2. All pneumoconioses: Crude mortality rates by state, U.S. residents age 15 and over, 1991-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table 6-1. All pneumoconioses: Number of deaths by state, U.S. residents age 15 and over, 1968-1992

State	1968-1978	1979-1990	1991	1992	TOTAL
Alabama	640	608	71	49	1,368
Alaska	14	13	1	2	30
Arizona	293	271	13	13	590
Arkansas	118	142	17	13	290
California	1,138	1,587	155	134	3,014
Colorado	456	402	38	35	931
Connecticut	245	251	19	27	542
Delaware	37	75	18	10	140
District of Columbia	37	24	2	1	64
Florida	540	984	102	91	1,717
Georgia	161	244	18	25	448
Hawaii	14	37	4	4	59
Idaho	96	68	6	6	176
Illinois	1,250	1,301	90	91	2,732
Indiana	422	490	46	31	989
Iowa	110	143	11	19	283
Kansas	141	95	9	10	255
Kentucky	1,956	2,586	150	161	4,853
Louisiana	79	193	31	17	320
Maine	51	126	10	8	195
Maryland	232	380	40	48	700
Massachusetts	317	456	34	55	862
Michigan	769	615	42	47	1,473
Minnesota	167	181	10	26	384
Mississippi	31	128	29	27	215
Missouri	223	259	27	30	539
Montana	145	97	2	7	251
Nebraska	23	25	7	4	59
Nevada	78	64	4	2	148
New Hampshire	40	69	3	6	118
New Jersey	948	1,301	118	105	2,472
New Mexico	132	136	10	11	289
New York	1,007	778	61	46	1,892
North Carolina	285	460	52	54	851
North Dakota	12	14	3	-	29
Ohio	2,124	2,109	183	156	4,572
Oklahoma	106	134	16	13	269
Oregon	111	216	27	26	380
Pennsylvania	27,017	19,524	1,143	1,018	48,702
Rhode Island	31	72	1	7	111
South Carolina	92	173	17	21	303
South Dakota	37	33	-	-	70
Tennessee	533	675	42	39	1,289
Texas	258	575	112	76	1,021
Utah	193	246	18	22	479
Vermont	116	65	2	7	190
Virginia	1,246	2,199	179	196	3,820
Washington	272	487	60	48	867
West Virginia	3,759	4,196	395	359	8,709
Wisconsin	316	260	27	17	620
Wyoming	115	74	11	10	210
TOTAL	**48,533**	**45,641**	**3,486**	**3,230**	**100,890**

- indicates no deaths listed.

NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 6-2. All pneumoconioses: Percent of deaths by condition and state, U.S. residents age 15 and over, 1968-1992

State	Asbestosis	Silicosis	Coal workers' pneumoconiosis	Byssinosis	Unspecified/Other pneumoconioses
Alabama	10.2	17.6	36.9	0.4	35.8
Alaska	30.0	43.3	13.3	-	13.3
Arizona	16.6	44.2	21.4	0.5	19.5
Arkansas	16.2	22.4	35.2	-	26.9
California	43.1	24.1	17.4	0.2	17.2
Colorado	5.6	43.4	34.0	-	18.5
Connecticut	27.1	29.3	19.4	0.2	25.1
Delaware	45.0	9.3	34.3	-	13.6
District of Columbia	14.1	39.1	21.9	-	26.6
Florida	28.6	18.3	38.0	0.1	16.1
Georgia	27.2	35.0	13.4	4.2	20.5
Hawaii	67.8	15.3	6.8	-	13.6
Idaho	25.6	63.6	2.8	-	8.5
Illinois	8.3	13.5	41.0	0.1	38.0
Indiana	6.7	23.9	42.4	0.1	28.1
Iowa	14.1	20.8	46.6	-	18.7
Kansas	13.3	36.1	26.7	0.4	23.9
Kentucky	0.9	6.0	60.5	-	33.5
Louisiana	50.0	26.9	6.9	0.6	17.5
Maine	63.1	21.0	1.5	-	14.9
Maryland	35.9	19.0	28.3	0.3	18.9
Massachusetts	60.2	19.1	5.1	0.8	16.0
Michigan	9.2	40.3	25.5	0.1	26.3
Minnesota	26.6	51.8	4.4	0.3	19.3
Mississippi	69.3	14.9	10.7	-	5.1
Missouri	24.5	35.4	21.7	-	18.6
Montana	15.5	68.5	9.2	-	8.0
Nebraska	45.8	22.0	8.5	-	25.4
Nevada	17.6	60.8	12.2	-	10.1
New Hampshire	49.2	27.1	6.8	1.7	16.1
New Jersey	48.7	16.7	18.8	0.1	17.2
New Mexico	9.3	36.7	25.6	-	29.1
New York	22.7	35.7	18.0	0.1	25.3
North Carolina	24.7	34.5	18.9	8.9	13.9
North Dakota	31.0	27.6	17.2	-	27.6
Ohio	5.6	33.9	36.8	0.1	24.8
Oklahoma	19.7	29.7	30.1	0.4	21.9
Oregon	56.1	24.5	10.8	-	9.5
Pennsylvania	2.0	6.9	81.6	-	10.2
Rhode Island	53.2	24.3	6.3	1.8	18.9
South Carolina	52.1	23.4	11.6	5.0	9.2
South Dakota	4.3	55.7	18.6	-	21.4
Tennessee	7.5	16.0	47.6	0.1	30.0
Texas	52.6	22.6	12.2	0.3	13.7
Utah	4.4	34.4	38.4	-	24.0
Vermont	8.4	68.9	4.2	1.1	18.9
Virginia	10.2	8.7	56.0	0.1	25.8
Washington	59.2	24.2	8.8	0.1	8.7
West Virginia	1.6	7.3	60.1	-	31.7
Wisconsin	14.4	61.5	6.6	0.2	19.5
Wyoming	5.7	11.0	44.8	-	39.5
TOTAL	**10.0**	**14.2**	**58.6**	**0.2**	**17.9**

- indicates no deaths listed.

NOTE: Percentages may total more than 100% due to deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 6-3. All pneumoconioses: Total number of deaths, crude and age-adjusted mortality rates (per 1,000,000 population), and total years of potential life lost (YPLL) to life expectancy, by state, U.S. residents age 15 and over, 1988-1992

State	Total deaths	Rank	Crude mortality		Age-adjusted mortality		YPLL to life expectancy			
			Rate	Rank	Rate	Rank	Years	Rank	Years/death	Rank
Alabama	303	12	19.16	9	9.89	10	3,388	12	11.2	42
Alaska	7	49	3.48	47	5.61	23	100	50	14.3	3
Arizona	75	31	5.28	40	3.15	40	933	31	12.4	17
Arkansas	59	37	6.43	33	3.16	39	699	36	11.8	28
California	688	6	5.93	37	4.12	33	8,612	6	12.5	15
Colorado	175	20	13.63	12	8.39	11	1,818	20	10.4	47
Connecticut	107	28	8.07	28	4.34	32	1,204	28	11.3	40
Delaware	65	33	24.60	5	16.54	5	895	32	13.8	6
District of Columbia	6	51	2.37	51	1.84	49	126	49	21.0	1
Florida	510	8	9.66	22	4.41	31	6,229	8	12.2	24
Georgia	112	25	4.44	45	3.37	37	1,492	24	13.3	7
Hawaii	20	46	4.58	43	2.91	44	227	46	11.4	36
Idaho	36	41	9.62	23	5.43	24	408	41	11.3	38
Illinois	476	9	10.64	21	5.95	20	5,544	9	11.6	32
Indiana	203	19	9.38	24	5.20	26	2,350	19	11.6	33
Iowa	64	34	5.90	38	2.67	45	701	35	11.0	44
Kansas	41	38	4.28	46	2.25	48	513	38	12.5	16
Kentucky	871	4	60.22	3	34.22	3	10,380	4	11.9	26
Louisiana	123	23	7.73	29	5.41	25	1,751	21	14.2	4
Maine	63	36	13.00	13	7.11	15	725	34	11.5	34
Maryland	206	18	10.84	20	7.65	13	2,642	17	12.8	10
Massachusetts	223	17	9.16	26	4.94	27	2,514	18	11.3	39
Michigan	245	14	6.78	31	4.12	33	3,029	15	12.4	19
Minnesota	81	30	4.79	41	2.98	43	1,023	30	12.6	12
Mississippi	113	24	11.59	17	7.10	16	1,423	25	12.6	13
Missouri	127	21	6.34	34	3.36	38	1,560	22	12.3	21
Montana	37	40	12.10	16	6.79	17	454	39	12.3	22
Nebraska	20	46	3.29	48	1.68	50	225	47	11.3	41
Nevada	22	45	4.59	42	3.15	40	259	45	11.8	30
New Hampshire	26	44	5.96	36	3.96	35	321	43	12.3	20
New Jersey	643	7	20.68	7	11.88	7	7,801	7	12.1	25
New Mexico	64	34	11.25	19	6.52	19	678	37	10.6	45
New York	320	11	4.45	44	2.56	46	3,913	11	12.2	23
North Carolina	244	15	9.21	25	5.92	21	3,113	14	12.8	11
North Dakota	8	48	3.27	49	2.33	47	155	48	19.4	2
Ohio	840	5	19.77	8	10.96	9	9,882	5	11.8	31
Oklahoma	73	32	5.98	35	3.00	42	839	33	11.5	35
Oregon	126	22	11.27	18	5.65	22	1,400	26	11.1	43
Pennsylvania	5,926	1	124.28	2	54.98	2	62,129	1	10.5	46
Rhode Island	35	42	8.61	27	4.78	30	435	40	12.4	18
South Carolina	97	29	7.12	30	4.81	28	1,285	27	13.2	8
South Dakota	7	49	2.66	50	1.14	51	69	51	9.9	49
Tennessee	265	13	13.69	11	7.76	12	3,129	13	11.8	29
Texas	426	10	6.59	32	4.81	28	5,537	10	13.0	9
Utah	111	26	18.67	10	11.88	7	1,119	29	10.1	48
Vermont	28	43	12.67	15	6.73	18	274	44	9.8	50
Virginia	980	3	39.76	4	28.00	4	12,282	3	12.5	14
Washington	243	16	12.77	14	7.54	14	2,755	16	11.3	37
West Virginia	1,878	2	262.60	1	132.76	1	22,378	2	11.9	27
Wisconsin	109	27	5.73	39	3.64	36	1,513	23	13.9	5
Wyoming	41	38	24.17	6	12.77	6	382	42	9.3	51

NOTE: Ranks are based on unrounded values. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table 6-4. All pneumoconioses: Proportionate mortality ratio (PMR) by usual occupation, selected states and years, U.S. residents age 15 and over, 1985-1992

COC	Occupation	Number of deaths	PMR	95% confidence interval LCL	UCL
616	Mining machine operators	3,506	62.26	60.21	64.38
593	Insulation workers	111	61.57	50.06	74.90
725	Miscellaneous metal and plastic machine operators	13	23.96	12.74	40.96
615	Explosives workers	8	17.15	7.39	33.76
643	Boilermakers	56	12.64	9.36	16.68
768	Crushing and grinding machine operators	31	9.19	6.21	13.13
675	Hand molders and shapers, except jewelers	20	8.75	5.34	13.52
046	Mining engineer	6	7.61	2.79	16.58
853	Excavating and loading machine operators	13	7.40	3.94	12.65
719	Molding and casting machine operators	52	6.83	5.06	9.01
646	Lay-out workers	9	6.65	3.05	12.62
613	Supervisors, extractive occupations	13	6.13	3.26	10.48
787	Hand molding, casting, and forming occupations	14	5.87	3.21	9.85
617	Mining occupations, n.e.c.	22	4.98	3.11	7.55
585	Plumbers, pipefitters, and steamfitters	174	4.76	4.05	5.55
653	Sheet metal workers	44	3.52	2.51	4.80
859	Miscellaneous material moving equipment operators	21	3.42	2.11	5.23
575	Electricians	137	3.31	2.74	3.96
516	Heavy equipment mechanics	32	3.21	2.17	4.59
824	Locomotive operating occupations	27	2.70	1.78	3.93
584	Plasterers	7	2.68	1.08	5.53
783	Welders and cutters	95	2.62	2.11	3.22
534	Heating, air conditioning, and refrigeration mechanics	11	2.52	1.26	4.51
599	Construction trades, n.e.c.	17	2.49	1.45	3.98
849	Crane and tower operators	28	2.43	1.62	3.51
544	Millwrights	28	2.35	1.57	3.40
563	Brickmasons and stonemasons	45	2.29	1.67	3.07
759	Painting, paint spray machine operators	16	2.25	1.29	3.65
766	Furnace, kiln, oven operators, except food	28	2.22	1.48	3.21
518	Industrial machinery repairers	39	2.00	1.39	2.78
709	Grinding, abrading, buffing, and polishing machine operators	18	1.96	1.16	3.10
547	Specified mechanics and repairers, n.e.c.	21	1.86	1.15	2.84
844	Operating engineers	53	1.85	1.37	2.44
779	Machine operators, not specified	117	1.70	1.38	2.07
549	Not specified mechanics and repairers	29	1.62	1.09	2.33
889	Laborers, except construction	365	1.45	1.30	1.61
869	Construction laborers	110	1.37	1.11	1.67
633	Supervisors, production occupations	122	1.33	1.10	1.59
637	Machinists	106	1.29	1.05	1.57

COC - 1980 Census Occupation Code n.e.c. - not elsewhere classified LCL - lower confidence limit UCL - upper confidence limit

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual occupation and years reporting.

SOURCE: National Center for Health Statistics multiple cause of death data.

Table 6-5. All pneumoconioses: Proportionate mortality ratio (PMR) by usual industry, selected states and years, U.S. residents age 15 and over, 1985-1992

CIC	Industry	Number of deaths	PMR	95% confidence interval LCL	UCL
041	Coal mining	3,694	62.50	60.44	64.63
262	Miscellaneous nonmetallic mineral and stone products	128	15.16	12.57	18.13
040	Metal mining	107	11.43	9.29	13.91
360	Ship and boat building and repairing	170	9.58	8.15	11.18
050	Nonmetallic mining and quarrying, except fuel	66	8.06	6.15	10.37
271	Iron and steel foundries	72	5.58	4.36	7.05
252	Structural clay products	33	5.29	3.57	7.56
261	Pottery and related products	27	4.56	3.00	6.64
192	Industrial and miscellaneous chemicals	95	2.70	2.18	3.32
282	Fabricated structural metal products	44	2.08	1.49	2.83
270	Blast furnaces, steelworks, rolling and finishing mills	179	1.98	1.69	2.31
300	Miscellaneous fabricated metal products	40	1.81	1.29	2.47
060	Construction	754	1.68	1.56	1.81
211	Other rubber products, and plastics footwear and belting	33	1.65	1.11	2.36
250	Glass and glass products	31	1.54	1.04	2.20
392	Not specified manufacturing industries	148	1.24	1.04	1.46

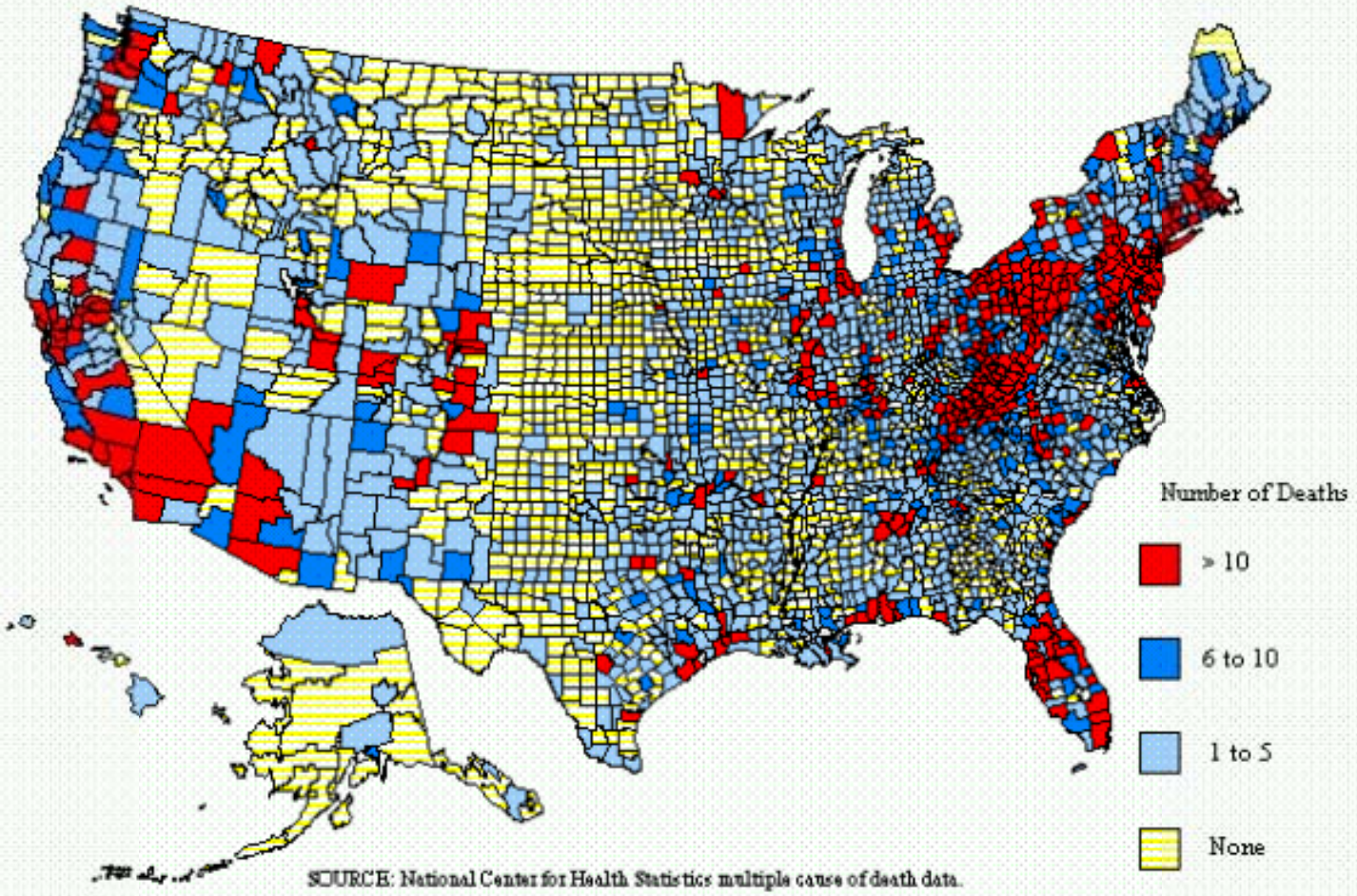
CIC - 1980 Census Industry Code LCL - lower confidence limit UCL - upper confidence limit

NOTE: See Appendix A for source description, Appendix B for methods and ICD-8 and ICD-9 codes, and Appendix C for list of 25 states reporting usual industry and years reporting.

SOURCE: National Center for Health Statistics multiple cause of death data.

Figure 6-3. All pneumoconioses: Total number of deaths by county,

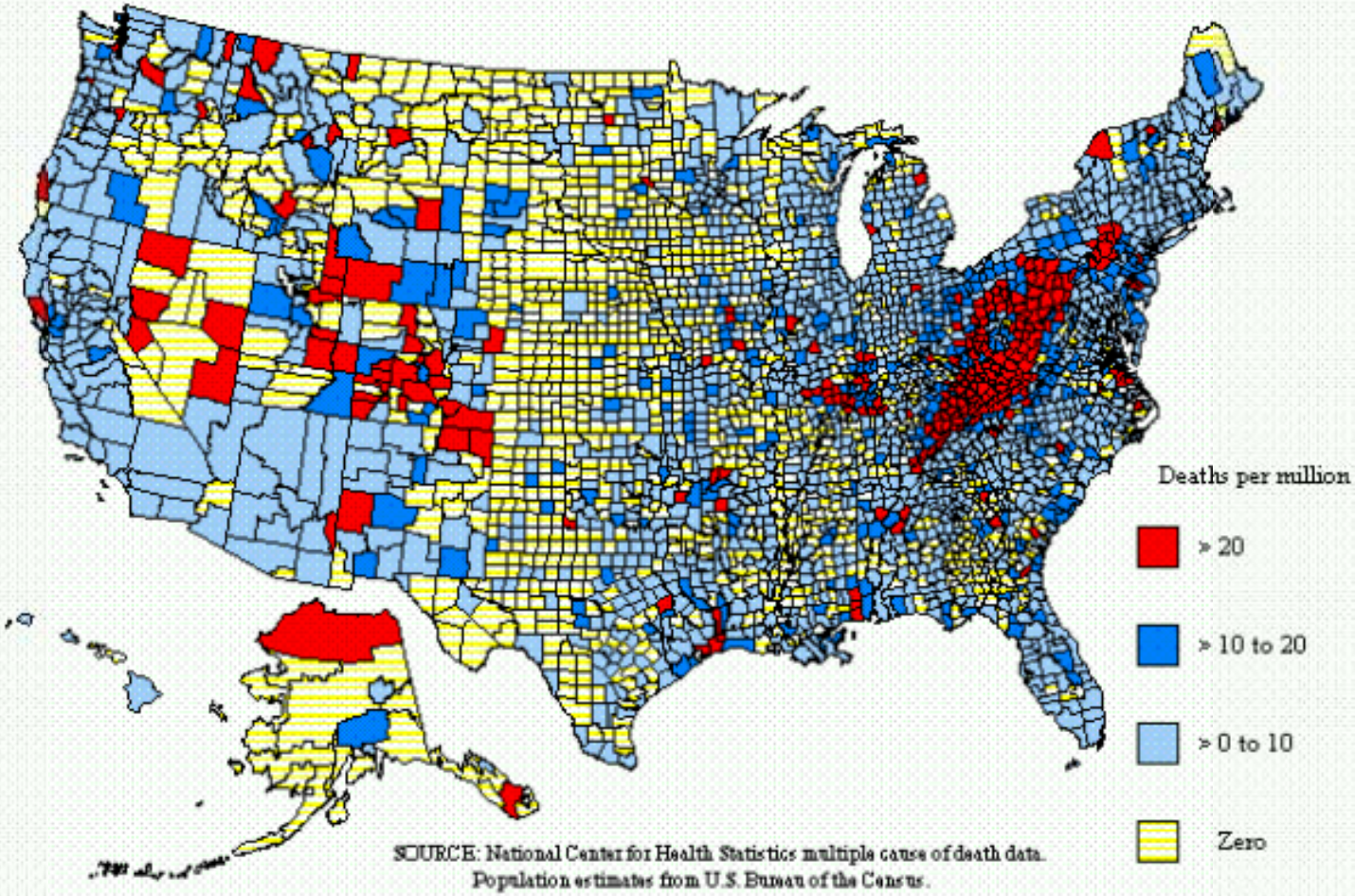
U.S. residents age 15 and over, 1983-1992



SOURCE: National Center for Health Statistics multiple cause of death data.

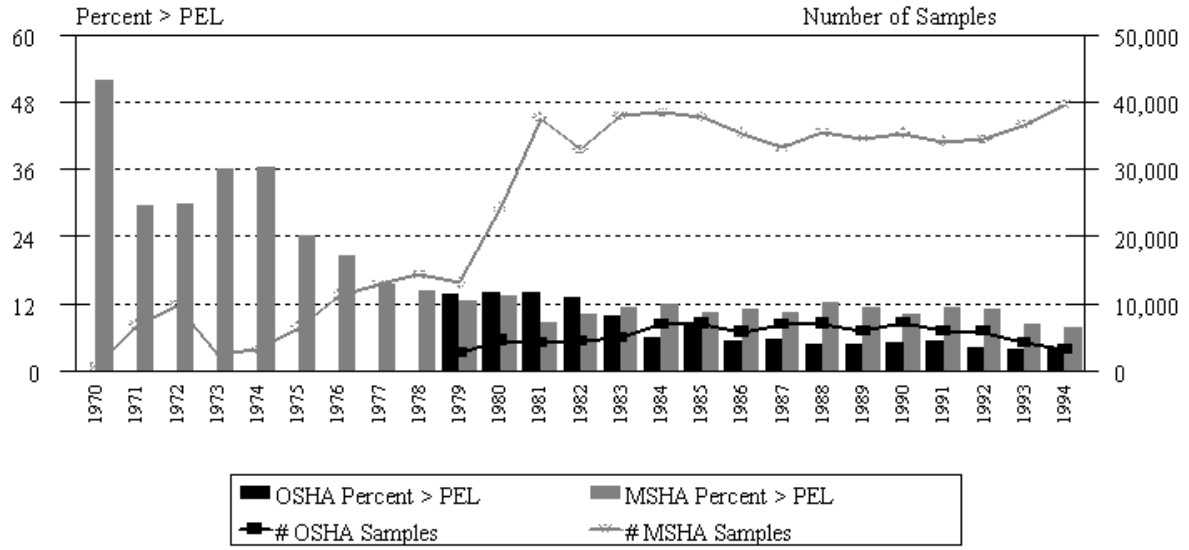
Figure 6-4. All pneumoconioses: Age-adjusted mortality rates by county,

U.S. residents age 15 and over, 1983-1992



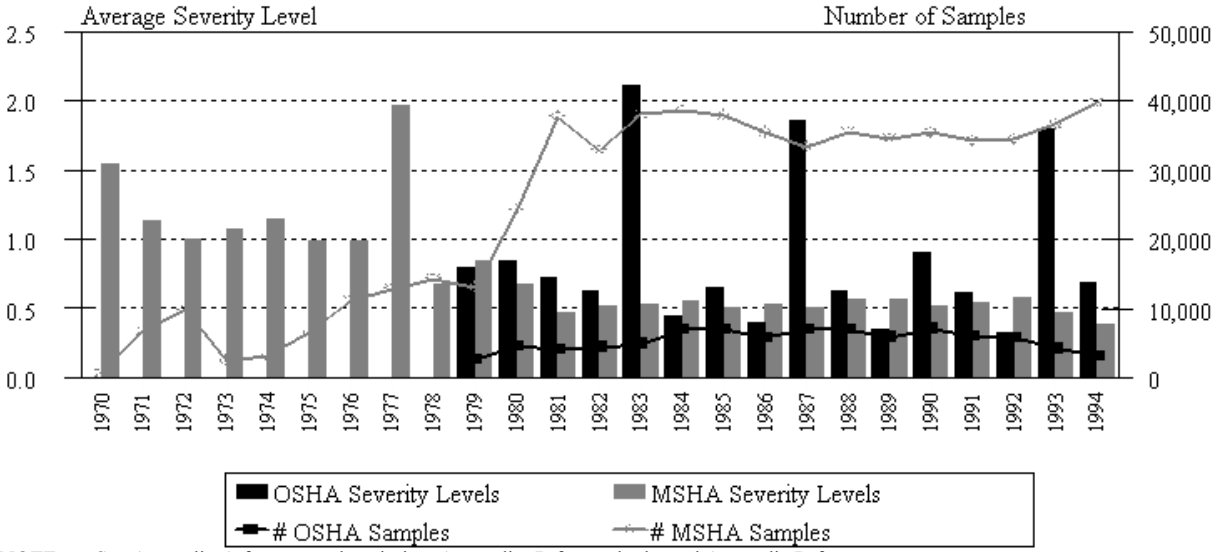
SOURCE: National Center for Health Statistics multiple cause of death data.
Population estimates from U.S. Bureau of the Census.

Figure 6-5. Pneumoconiotic agents: Number of MSHA and OSHA inspector samples and percent exceeding the permissible exposure limit (PEL), 1970-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data and respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System. Occupational Safety and Health Administration: Integrated Management Information System.

Figure 6-6. Pneumoconiotic agents: Number of MSHA and OSHA inspector samples and average severity levels, 1970-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data and respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System. Occupational Safety and Health Administration: Integrated Management Information System.

Table 6-6. Pneumoconiotic agents: Number of MSHA and OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity level, by industry, 1993-1994

CIC	Industries most frequently recorded on 1991-1992 death certificates with any pneumoconiosis	Number of samples	% > PEL	Average severity
041	Coal Mining	45,132	9.6	0.47
060	Construction	844	5.6	1.51
270	Blast furnaces, steelworks, rolling and finishing mills	139	0.0	0.02
360	Ship and boat building and repairing	101	7.9	1.00
392	Not specified manufacturing industries	0	-	-
262	Miscellaneous nonmetallic mineral and stone products	181	8.3	0.34
192	Industrial and miscellaneous chemicals	43	4.7	4.19
400	Railroads	2	0.0	0.03
901	General government, n.e.c.	20	0.0	0.05
142	Yarn, thread, and fabric mills	77	18.2	0.69
	All other industries	36,857	5.4	0.53
	Industry not reported	79	2.5	0.13
	TOTAL	83,475	7.7	0.51

CIC - 1980 Census Industry Code n.e.c. - not elsewhere classified - indicates incalculable field
NOTE: See Appendix A for source description, Appendix B for methods, Appendix C for list of 25 states reporting usual industry and years reporting,and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data and respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System. Occupational Safety and Health Administration: Integrated Management Information System. National Center for Health Statistics: multiple cause of death data.

Table 6-7. Pneumoconiotic agents: Number of MSHA and OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity level, by industry, 1993-1994

CIC	Industries most frequently sampled in 1993-1994	Number of samples	% > PEL	Average severity
041	Coal mining	45,132	9.6	0.47
050	Nonmetallic mining	27,900	5.7	0.38
040	Metal mining	3,069	6.6	0.28
060	Construction	844	5.6	1.51
300	Miscellaneous fabricated metal products	602	4.3	1.59
280	Other primary metal industries	587	3.6	0.18
271	Iron and steel foundries	570	9.5	1.24
282	Fabricated structural metal products	496	2.6	10.29
351	Motor vehicles and motor vehicle equipment	458	1.3	0.26
331	Machinery, except electrical, n.e.c.	294	3.1	0.15
	All other industries	3,444	3.3	0.41
	Industry not reported	79	2.5	0.13
	TOTAL	83,475	7.7	0.51

CIC - 1980 Census Industry Code n.e.c. - not elsewhere classified
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data and respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System. Occupational Safety and Health Administration: Integrated Management Information System.

Table 6-8 (page 1 of 2). Pneumoconiotic agents: Number of MSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1970-1994

	1970-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Alabama	5,472	0.56	12.4	2.29	10,394	0.50	11.1	2.00	2,990	0.44	8.7	2.03
Alaska	107	0.54	9.3	3.40	303	0.71	7.6	7.72	141	0.25	2.8	5.25
Arizona	3,997	1.06	15.3	5.35	2,546	0.75	14.3	3.78	800	0.44	9.6	2.62
Arkansas	954	1.40	33.4	3.60	1,545	0.64	15.5	3.02	563	0.35	9.1	2.26
California	2,068	1.59	14.7	9.20	4,912	0.55	10.7	3.34	1,238	0.28	4.0	3.56
Colorado	5,711	0.89	22.7	2.76	7,635	0.60	14.3	2.27	1,292	0.51	11.4	2.08
Connecticut	410	1.11	22.2	4.01	439	0.48	12.3	2.66	76	0.18	2.6	2.27
Delaware	10	0.19	0.0	-	46	0.23	0.0	-	3	0.02	0.0	-
District of Columbia	0	-	-	-	0	-	-	-	0	-	-	-
Florida	1,153	4.30	5.2	80.01	1,855	0.16	2.4	2.51	511	0.09	1.8	1.42
Georgia	2,426	0.57	12.7	2.63	3,494	0.44	9.1	3.08	832	0.38	6.4	4.01
Hawaii	6	0.18	0.0	-	146	0.18	2.1	5.85	88	0.19	1.1	13.99
Idaho	1,999	1.08	15.9	5.11	1,900	0.68	9.3	5.66	663	0.22	4.5	2.11
Illinois	11,544	0.85	20.1	2.75	14,338	0.51	10.0	1.82	3,320	0.38	5.3	1.83
Indiana	4,796	0.37	6.7	2.70	4,939	0.34	6.0	2.41	1,221	0.30	5.2	1.80
Iowa	1,231	0.51	10.2	2.63	1,343	0.24	5.1	1.76	370	0.16	1.1	1.95
Kansas	1,640	0.51	13.2	1.97	1,516	0.42	8.0	2.68	428	0.26	5.1	1.85
Kentucky	36,519	0.63	14.6	2.42	67,710	0.56	12.3	2.38	14,468	0.49	10.7	2.06
Louisiana	372	0.68	12.4	4.23	1,922	0.16	3.1	2.36	834	0.14	2.6	1.89
Maine	441	0.59	15.4	2.03	282	0.31	6.0	1.95	79	0.23	3.8	1.42
Maryland	1,290	0.46	7.8	2.62	1,917	0.40	6.9	2.69	478	0.42	6.9	2.93
Massachusetts	574	1.46	19.0	6.16	621	0.38	9.0	2.39	168	0.29	6.5	2.01
Michigan	2,662	3.49	11.0	29.65	3,328	0.46	9.9	3.03	1,078	0.32	7.8	2.20
Minnesota	4,947	0.47	8.1	3.54	3,723	0.32	7.0	2.45	863	0.27	5.2	2.28
Mississippi	433	0.53	7.6	4.64	932	0.32	6.4	2.88	371	0.46	8.1	3.60
Missouri	3,553	1.18	13.1	7.25	5,487	0.89	9.2	7.48	1,769	0.30	5.1	2.73
Montana	1,786	0.47	10.4	2.43	2,962	0.52	9.6	3.54	538	0.38	8.2	2.52

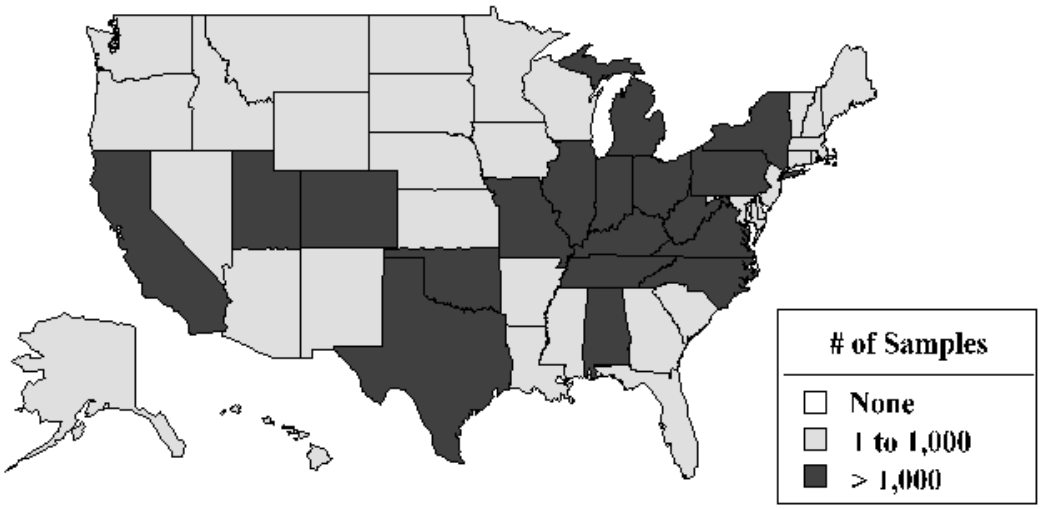
See footnotes at end of table.

Table 6-8 (page 2 of 2). Pneumoconiotic agents: Number of MSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1970-1994

	1970-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Nebraska	146	0.46	9.6	2.83	484	0.17	2.5	2.18	174	0.13	1.7	2.75
Nevada	1,018	2.44	23.9	9.23	2,260	0.85	19.6	3.18	563	0.40	9.9	2.44
New Hampshire	214	1.04	23.8	3.20	231	0.37	8.7	1.70	58	0.41	12.1	1.74
New Jersey	1,023	0.80	22.1	2.55	1,239	0.60	13.3	2.88	194	0.30	7.2	1.67
New Mexico	1,845	0.59	10.8	3.78	3,128	0.61	12.4	3.15	946	0.55	10.8	3.29
New York	1,758	0.79	11.5	4.97	4,169	0.41	6.6	3.63	1,065	0.29	5.1	3.00
North Carolina	2,877	0.82	10.4	5.75	4,757	0.38	5.5	4.48	1,260	0.23	4.3	2.75
North Dakota	568	0.38	6.9	2.39	722	0.19	2.1	2.34	128	0.12	0.0	-
Ohio	12,194	0.71	18.8	2.22	15,819	0.40	7.2	2.33	3,014	0.29	4.9	2.03
Oklahoma	2,221	0.55	11.6	3.29	4,023	0.56	8.7	4.33	1,066	0.43	4.4	6.58
Oregon	351	0.47	5.7	4.86	1,716	1.26	4.7	23.90	716	2.40	2.4	96.11
Pennsylvania	37,716	0.50	9.7	2.43	31,159	0.45	8.7	2.21	6,588	0.39	7.0	2.46
Rhode Island	71	0.82	18.3	2.69	84	0.55	11.9	2.95	24	0.49	16.7	2.04
South Carolina	1,012	2.90	21.2	12.54	2,892	0.31	6.8	2.62	995	0.28	2.3	7.39
South Dakota	1,434	0.82	16.0	3.47	1,650	0.47	7.1	4.37	361	0.19	4.2	2.02
Tennessee	6,861	0.49	9.5	2.41	9,690	0.42	8.5	2.33	1,724	0.38	7.6	2.45
Texas	2,147	0.86	11.8	5.76	8,021	0.53	5.4	7.49	2,521	0.27	3.8	4.69
Utah	2,820	0.78	20.1	2.27	7,613	0.73	15.7	2.82	1,275	0.52	11.1	2.15
Vermont	973	0.55	14.4	1.87	897	0.57	15.8	2.37	249	0.51	13.3	2.26
Virginia	26,679	0.59	13.6	2.24	32,635	0.55	12.8	2.19	5,109	0.50	11.6	1.97
Washington	1,006	0.68	14.7	3.24	2,069	0.47	9.0	3.50	934	0.30	6.5	2.51
West Virginia	45,966	0.66	16.1	2.20	69,427	0.51	10.1	2.11	10,354	0.51	10.4	2.09
Wisconsin	2,151	0.48	9.5	2.82	2,406	0.53	10.6	3.36	830	0.53	6.7	5.57
Wyoming	2,506	0.99	16.7	4.34	3,022	0.60	11.1	3.48	815	0.39	9.4	2.29
TOTAL	251,658	0.72	14.1	3.20	356,348	0.52	10.3	2.61	76,145	0.43	8.0	2.59

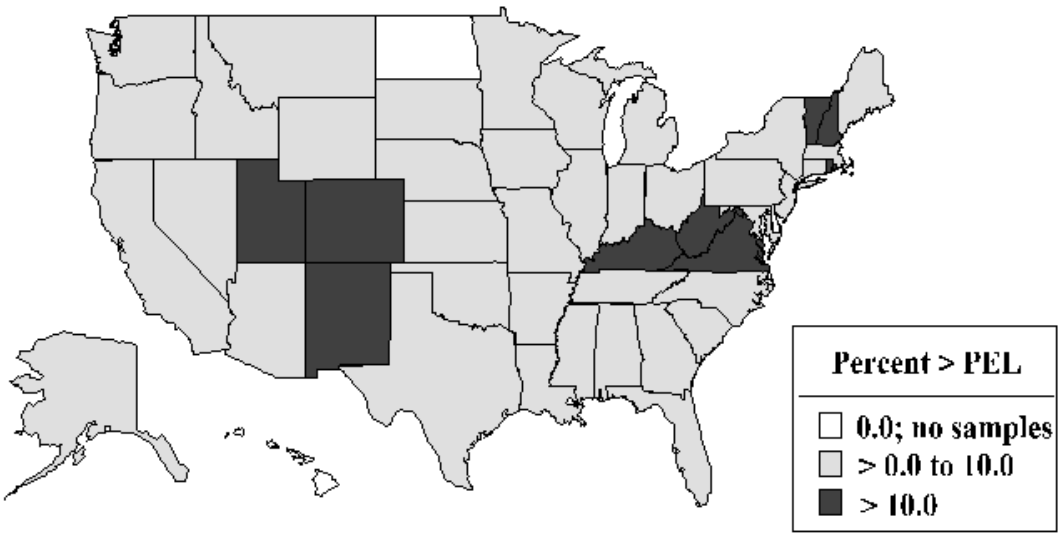
- indicates incalculable field.
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data and respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System.

Figure 6-7. Pneumoconiotic agents: Number of MSHA inspector samples collected by state, 1993-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data and respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System.

Figure 6-8. Pneumoconiotic agents: Percent of MSHA inspector samples that exceeded the permissible exposure limit (PEL), by state, 1993-1994

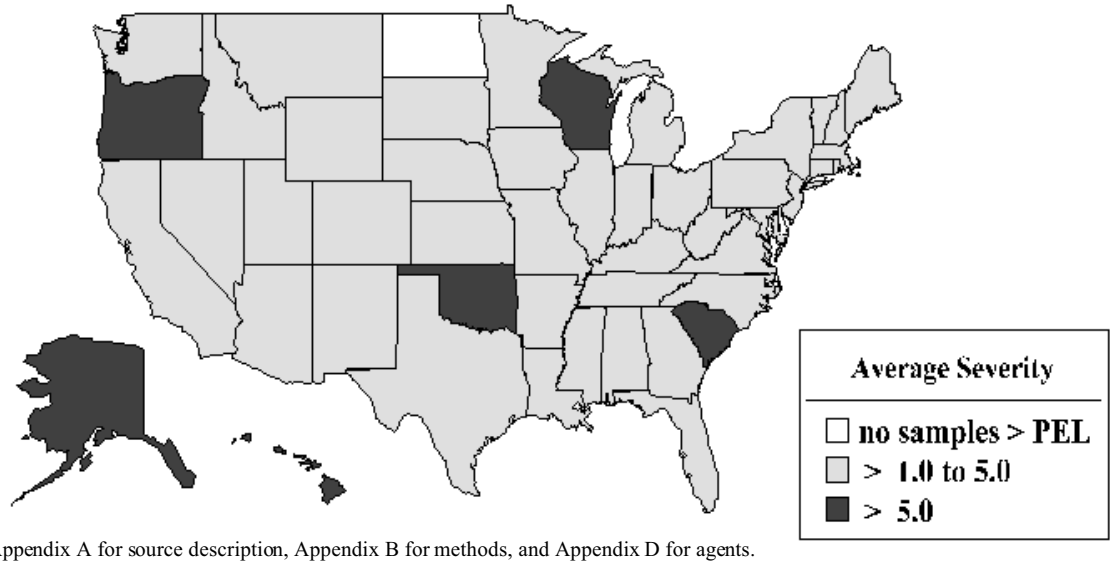


NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data and respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System.

Figure 6-9. Pneumoconiotic agents: Average severity level by state for MSHA inspector samples, 1993-1994

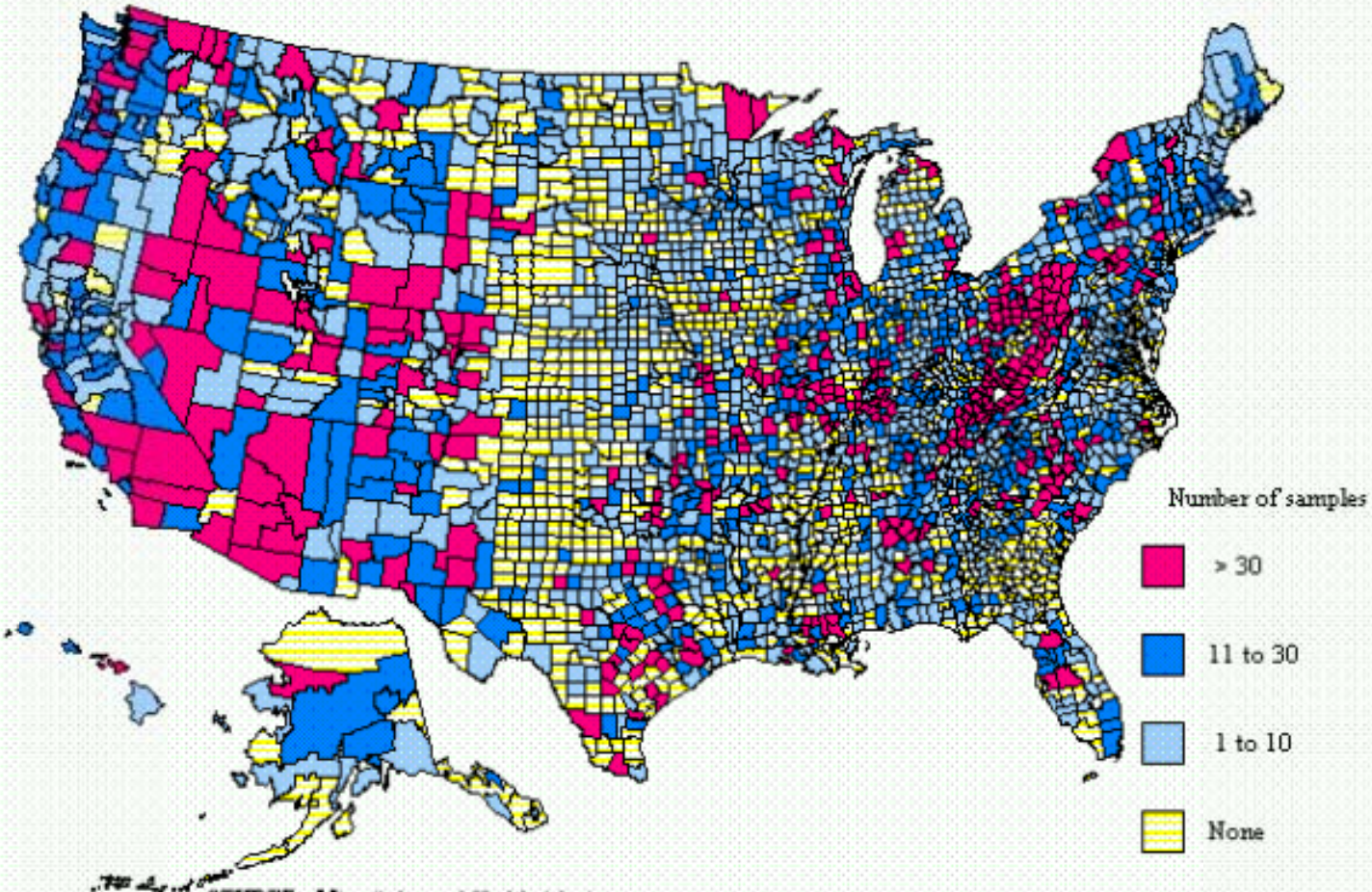
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data and respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System.

Figure 6-10. Pneumoconiotic agents: Average severity level by state for MSHA inspector samples that exceeded the permissible exposure limit (PEL), 1993-1994



NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Mine Safety and Health Administration: respirable coal mine dust data and respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System.

Figure 6-11. Pneumoconiotic agents: Number of MSHA inspector samples collected by county, 1993-1994



SOURCE: Mine Safety and Health Administration: respirable coal mine dust data and respirable coal mine quartz data. Bureau of Mines: Mine Inspection Data Analysis System

Table 6-9 (page 1 of 2). Pneumoconiotic agents: Number of OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1979-1994

	1979-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Alabama	560	0.76	19.6	2.95	839	0.55	7.2	6.40	93	1.27	7.5	15.66
Alaska	93	0.38	1.1	34.59	149	0.16	4.0	3.31	4	0.00	0.0	-
Arizona	303	0.15	4.6	2.35	182	0.28	3.3	6.59	12	1.52	8.3	17.36
Arkansas	184	0.26	7.6	1.90	690	0.41	5.1	7.06	186	0.20	4.8	2.20
California	52	1.05	13.5	7.30	1,462	2.11	3.6	56.84	25	0.21	8.0	1.85
Colorado	1,562	0.41	5.3	5.89	2,673	4.06	2.8	141.51	126	0.24	6.3	2.67
Connecticut	698	0.49	11.0	3.06	1,285	0.26	3.1	7.12	164	0.10	1.8	3.38
Delaware	90	0.22	5.6	1.49	75	0.08	2.7	1.77	8	0.08	0.0	-
District of Columbia	62	0.08	1.6	2.04	47	1.96	8.5	22.75	24	1.66	8.3	19.75
Florida	263	1.12	9.9	10.06	1,176	0.14	2.5	4.68	109	0.08	2.8	1.67
Georgia	919	0.89	18.2	3.98	2,789	0.54	5.5	8.67	340	0.39	4.1	7.27
Hawaii	14	0.08	0.0	-	20	0.00	0.0	-	3	0.00	0.0	-
Idaho	153	0.84	9.8	7.28	746	0.11	1.1	5.64	171	0.04	0.0	-
Illinois	1,451	0.98	11.4	7.35	4,549	0.41	2.9	12.51	650	0.06	0.8	3.95
Indiana	516	0.53	15.1	2.09	886	0.35	6.4	3.38	93	0.12	3.2	1.47
Iowa	845	0.52	9.6	3.73	1,284	0.29	5.2	3.14	128	0.41	14.1	2.14
Kansas	265	0.42	8.3	3.23	450	0.10	1.8	2.95	72	0.02	0.0	-
Kentucky	286	1.05	12.9	7.41	767	1.73	7.8	21.08	146	0.35	4.8	6.73
Louisiana	261	0.48	10.3	3.36	499	0.13	2.8	3.00	25	0.12	0.0	-
Maine	111	0.28	9.0	2.19	145	0.57	6.2	7.88	0	-	-	-
Maryland	121	0.89	8.3	9.43	752	0.73	9.6	6.71	122	0.25	4.1	3.49
Massachusetts	1,015	0.60	13.0	3.57	2,695	0.13	2.9	3.34	204	0.30	4.9	4.78
Michigan	0	-	-	-	1,781	3.05	4.6	64.42	528	9.69	4.2	230.81
Minnesota	59	1.17	35.6	2.59	80	0.01	0.0	-	0	-	-	-
Mississippi	93	1.07	9.7	9.06	535	0.78	4.3	16.78	43	0.04	0.0	-
Missouri	666	0.45	8.4	3.90	1,076	2.15	4.9	42.12	18	0.00	0.0	-
Montana	692	0.18	2.0	5.33	570	0.46	7.0	5.63	0	-	-	-

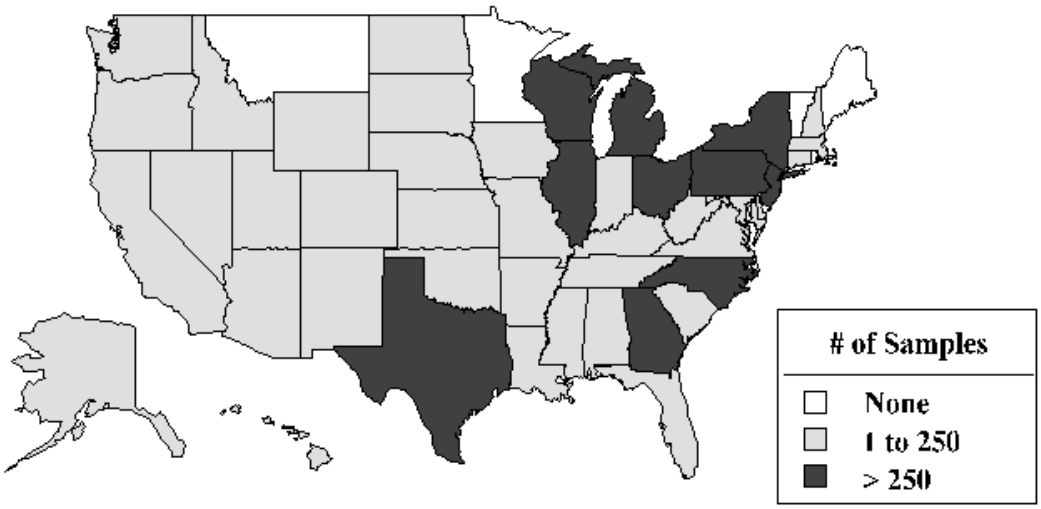
See footnotes at end of table.

Table 6-9 (page 2 of 2). Pneumoconiotic agents: Number of OSHA inspector samples, percent exceeding the permissible exposure limit (PEL) and average severity levels (Avg. Sev.), by state, 1979-1994

	1979-1984				1985-1994				1993-1994			
	Total samples		Samples > PEL		Total samples		Samples > PEL		Total samples		Samples > PEL	
State	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.	Number	Avg. Sev.	%	Avg. Sev.
Nebraska	123	0.31	5.7	3.59	571	0.16	4.9	2.23	105	0.05	1.0	1.36
Nevada	59	0.75	13.6	4.34	229	4.34	33.6	12.68	15	0.08	0.0	-
New Hampshire	325	0.58	11.4	3.69	720	0.20	3.2	4.46	50	0.06	0.0	-
New Jersey	973	0.58	10.6	4.27	1,705	0.95	7.8	11.36	274	3.55	4.7	74.24
New Mexico	62	0.56	16.1	2.82	31	0.06	0.0	-	8	0.21	0.0	-
New York	1,807	0.64	11.7	4.39	2,547	0.27	3.4	6.54	503	0.21	3.0	5.50
North Carolina	561	14.85	13.4	108.98	1,236	0.48	6.5	5.64	514	0.49	2.5	16.58
North Dakota	204	0.42	7.8	3.68	475	0.14	2.1	1.85	57	0.09	0.0	-
Ohio	2,678	0.57	12.7	3.22	6,001	0.37	4.5	6.86	390	0.66	6.2	9.52
Oklahoma	880	0.33	4.4	5.25	1,743	0.76	2.0	35.40	75	0.09	1.3	1.73
Oregon	311	0.35	7.1	1.99	328	2.23	9.1	23.41	90	5.41	4.4	120.36
Pennsylvania	2,229	0.80	15.8	3.69	3,145	0.72	11.1	5.40	258	0.45	10.5	3.38
Rhode Island	401	0.90	15.0	5.22	378	0.87	7.9	9.87	0	-	-	-
South Carolina	201	0.10	2.0	2.07	859	0.44	6.3	5.43	174	0.98	6.3	14.33
South Dakota	96	0.17	4.2	1.75	536	0.10	2.1	1.97	82	0.10	2.4	1.74
Tennessee	48	0.53	12.5	2.32	590	1.25	8.6	13.14	126	0.18	4.0	2.07
Texas	2,324	0.78	7.2	9.35	3,998	0.81	5.4	14.16	523	2.71	4.8	55.86
Utah	11	0.71	27.3	2.58	66	0.26	4.5	2.83	7	0.35	14.3	1.30
Vermont	0	-	-	-	3	0.10	0.0	-	0	-	-	-
Virginia	271	0.46	11.4	2.56	462	0.87	17.7	3.92	8	1.82	25.0	7.00
Washington	27	0.82	37.0	1.96	285	1.16	18.9	5.56	116	0.54	13.8	3.27
West Virginia	480	1.11	15.0	6.39	651	0.47	6.6	6.34	8	0.00	0.0	-
Wisconsin	2,066	0.52	13.3	2.82	3,857	0.29	5.9	3.39	650	0.09	1.5	1.61
Wyoming	23	0.27	4.3	2.57	7	0.13	0.0	-	3	0.10	0.0	-
TOTAL	27,494	0.91	11.0	6.95	58,625	0.82	5.2	14.40	7,330	1.33	3.9	32.18

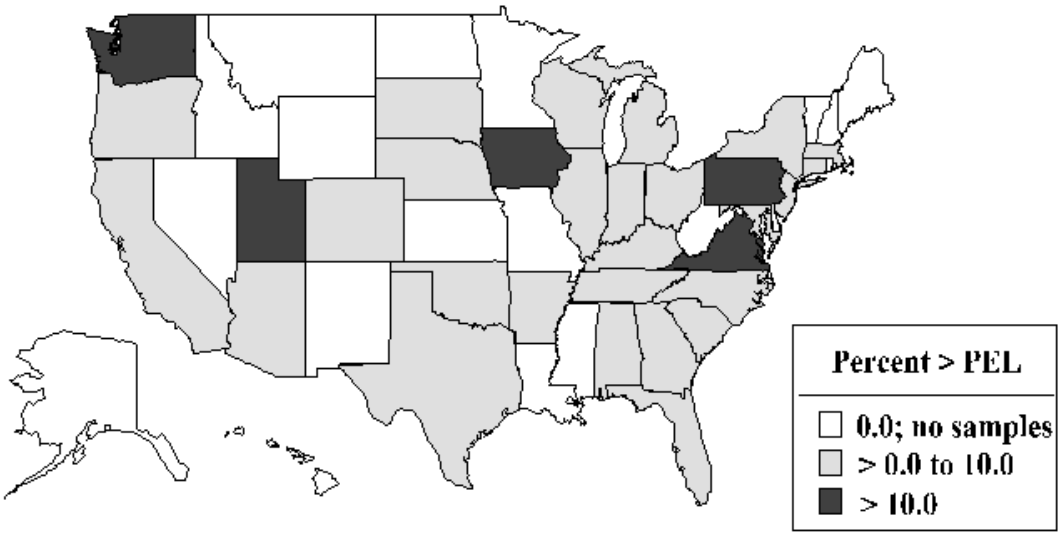
- indicates incalculable field.
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 6-12. Pneumoconiotic agents: Number of OSHA inspector samples collected by state, 1993-1994



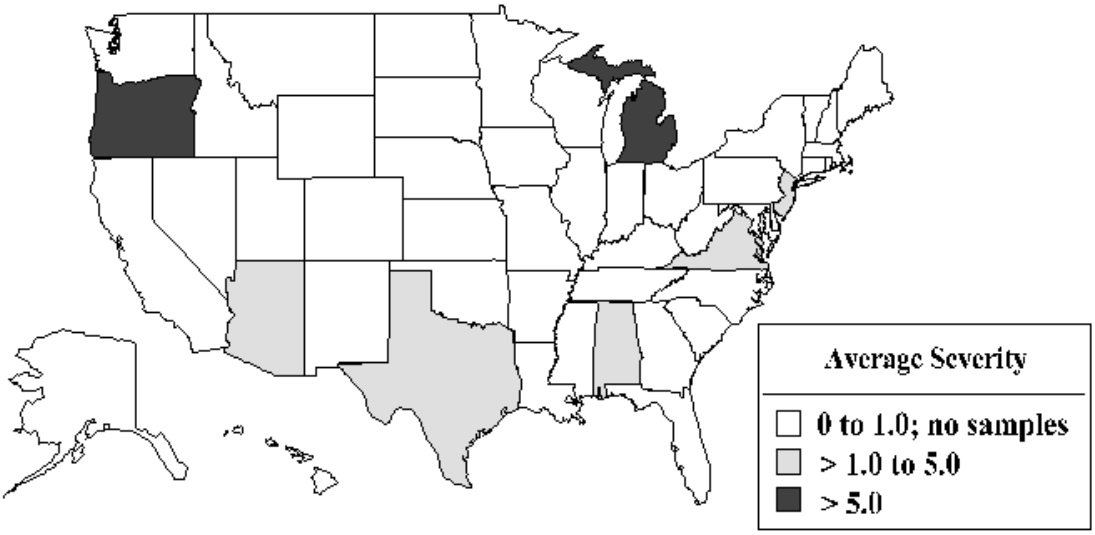
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System .

Figure 6-13. Pneumoconiotic agents: Percent of OSHA inspector samples that exceeded the permissible exposure limit (PEL), by state, 1993-1994



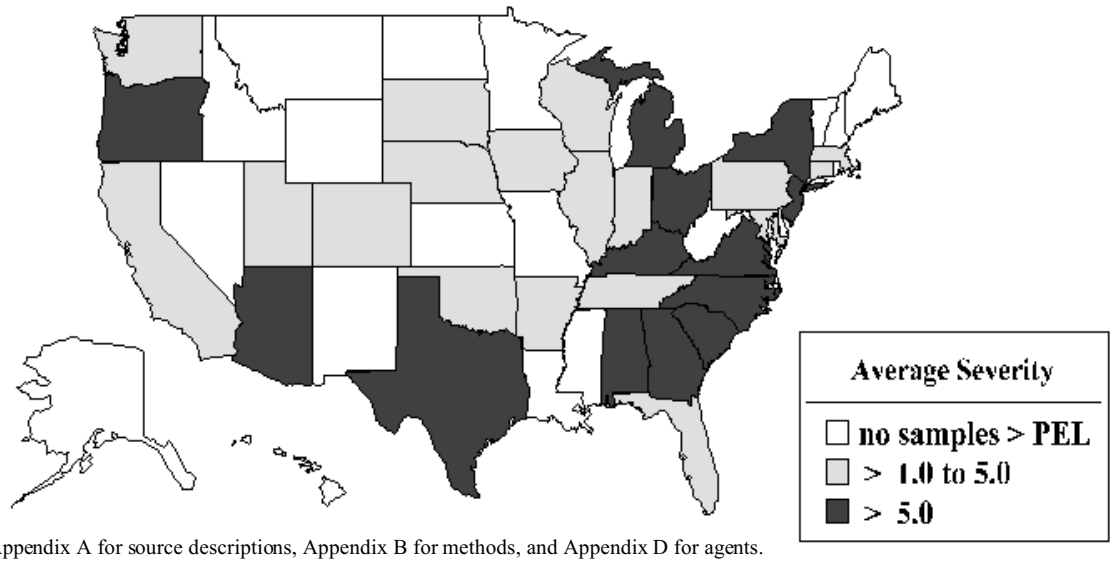
NOTE: See Appendix A for source description, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System .

Figure 6-14. Pneumoconiotic agents: Average severity level by state for OSHA inspector samples, 1993-1994



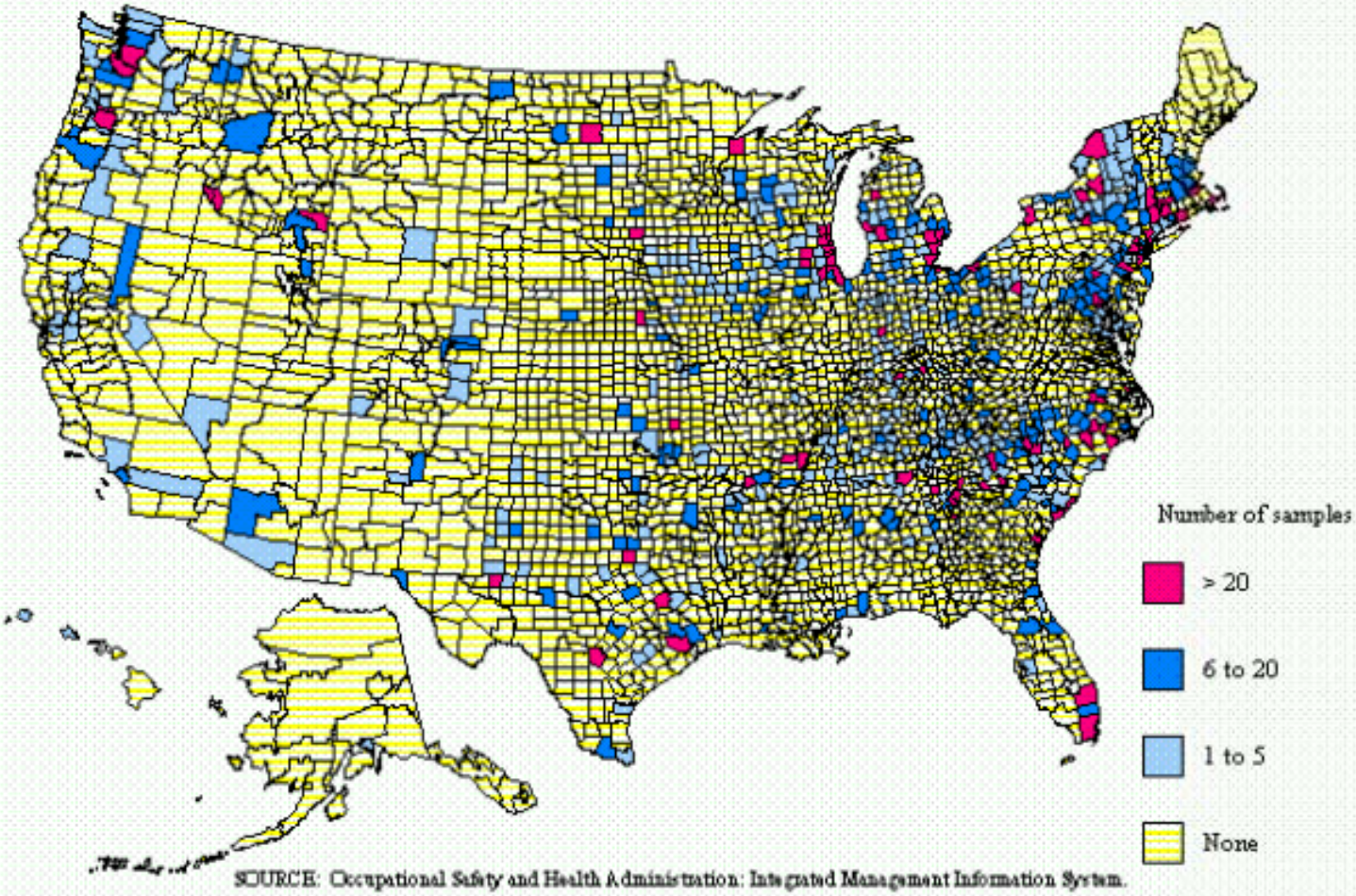
NOTE: See Appendix A for source descriptions, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 6-15. Pneumoconiotic agents: Average severity level by state for OSHA inspector samples that exceeded the permissible exposure limit (PEL), 1993-1994



NOTE: See Appendix A for source descriptions, Appendix B for methods, and Appendix D for agents.
SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

Figure 6-16. Pneumoconiotic agents: Number of OSHA inspector samples collected by county, 1993-1994



SOURCE: Occupational Safety and Health Administration: Integrated Management Information System.

STATE SECTION

List of Tables and Figures

State Section

Each table, figure, and the selected statistics listed below is repeated for each state. All tables and figures for a state are grouped together. A two-letter abbreviation, illustrated below as [*XX*], *is incorporated into the final table/figure identifier. The state name is inserted where designated.*

[*State Name*]		Selected statistics from the United States section
Figure	[*XX*]-1.	All pneumoconioses: [*State Name*] and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992
Table	[*XX*]-1.	Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, [*State Name*] residents age 15 and over, 1968-1992
Figure	[*XX*]-2.	All pneumoconioses: Distribution of deaths by sex and race, [*State Name*] residents age 15 and over, 1968-1992
Table	[*XX*]-2.	All pneumoconioses: Distribution of deaths by sex, race, and age, [*State Name*] residents age 15 and over, 1968-1992
Figure	[*XX*]-3.	Pneumoconiosis deaths by condition, [*State Name*] residents age 15 and over, 1968-1992
Figure	[*XX*]-4.	[*State Name*] and U. S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992
Table	[*XX*]-3.	Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, [*State Name*] residents age 15 and over, 1983-1992

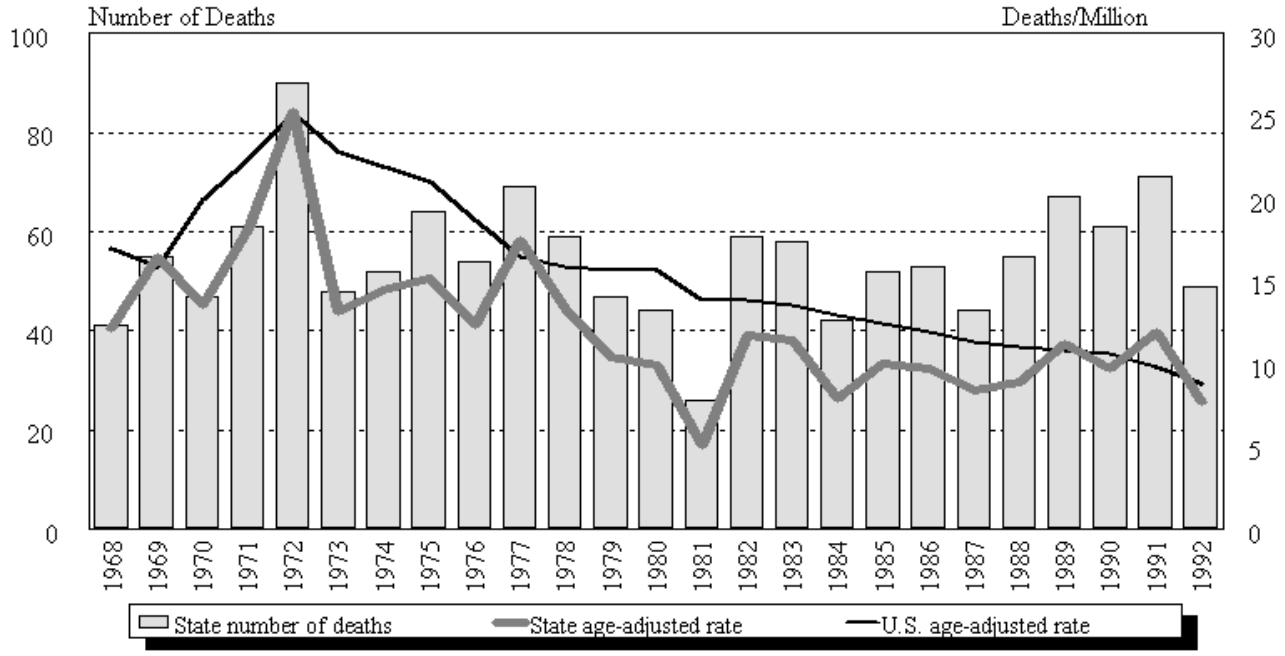
Alabama: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	303	12
Crude mortality rate (per 1,000,000 population)	19.16	9
Age-adjusted mortality rate (per 1,000,000 population)	9.89	10
Total years of potential life lost to life expectancy	3,388	12
Years of potential life lost to life expectancy (per death)	11.2	42

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	94	31.0
Coal workers' pneumoconiosis	146	48.2
Silicosis	25	8.3
Byssinosis	2	0.7
Unspecified/Other pneumoconiosis	36	11.9

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure AL-1. All pneumoconioses: Alabama and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Alabama

Table AL-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Alabama residents age 15 and over, 1968-1992

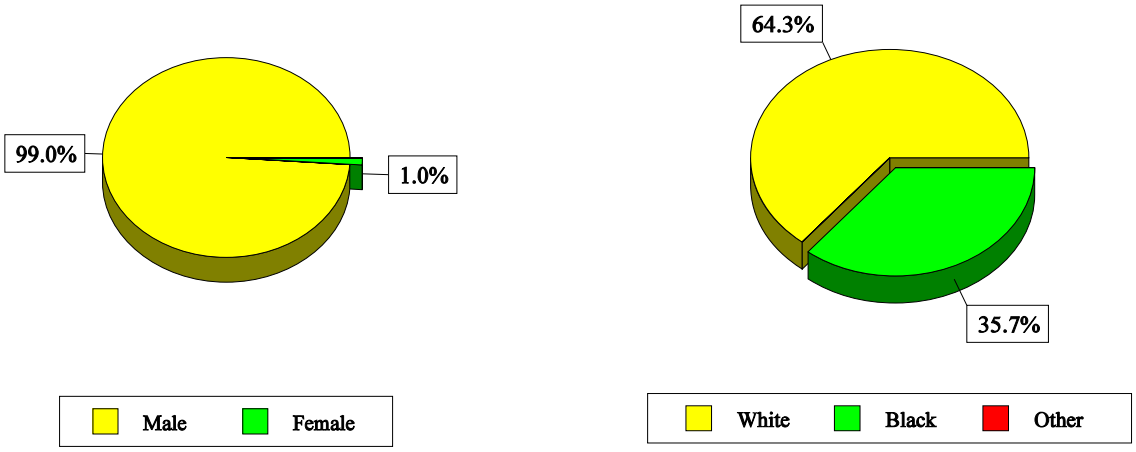
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	3	0.95	21	6.47			17	4.66	41	12.09
1969	-	-	7	2.09	27	8.15			22	6.55	55	16.48
1970	-	-	2	0.55	19	5.73			26	7.24	47	13.53
1971	-	-	5	1.58	15	5.11			42	11.75	61	18.14
1972	-	-	8	2.96	22	6.33			60	15.94	90	25.23
1973	-	-	6	1.65	12	3.36			30	8.12	48	13.13
1974	1	0.32	12	3.72	9	2.45			31	8.21	52	14.44
1975	1	0.21	17	4.13	17	4.06			29	6.73	64	15.14
1976	-	-	22	5.13	6	1.26			26	5.98	54	12.38
1977	2	0.56	27	7.08	14	3.65			29	6.93	69	17.53
1978	2	0.54	17	3.68	10	2.41			30	6.75	59	13.38
1979	2	0.49	19	3.91	11	2.91	2	0.53	17	3.56	47	10.45
1980	2	0.53	13	3.05	5	1.40	1	0.23	23	4.74	44	9.95
1981	-	-	18	3.42	2	0.35	-	-	6	1.27	26	5.03
1982	5	1.08	40	7.20	4	0.91	-	-	10	2.54	59	11.73
1983	4	0.91	32	6.08	4	0.84	-	-	18	3.63	58	11.45
1984	4	0.90	26	4.51	4	1.09	-	-	9	1.62	42	7.89
1985	7	1.55	30	5.78	1	0.22	-	-	15	2.72	52	10.04
1986	9	1.90	32	5.58	7	1.52	1	0.22	4	0.53	53	9.75
1987	6	1.31	23	4.21	6	1.09	-	-	10	2.09	44	8.42
1988	10	2.09	33	4.86	6	1.09	-	-	6	0.92	55	8.95
1989	22	4.29	33	4.70	4	0.87	-	-	8	1.37	67	11.24
1990	21	4.42	29	3.41	3	0.74	1	0.13	7	1.01	61	9.71
1991	23	4.81	28	3.71	9	1.64	1	0.13	10	1.61	71	11.90
1992	18	3.28	23	3.24	3	0.47	-	-	5	0.67	49	7.66

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure AL-2. All pneumoconioses: Distribution of deaths by sex and race, Alabama residents age 15 and over, 1968-1992



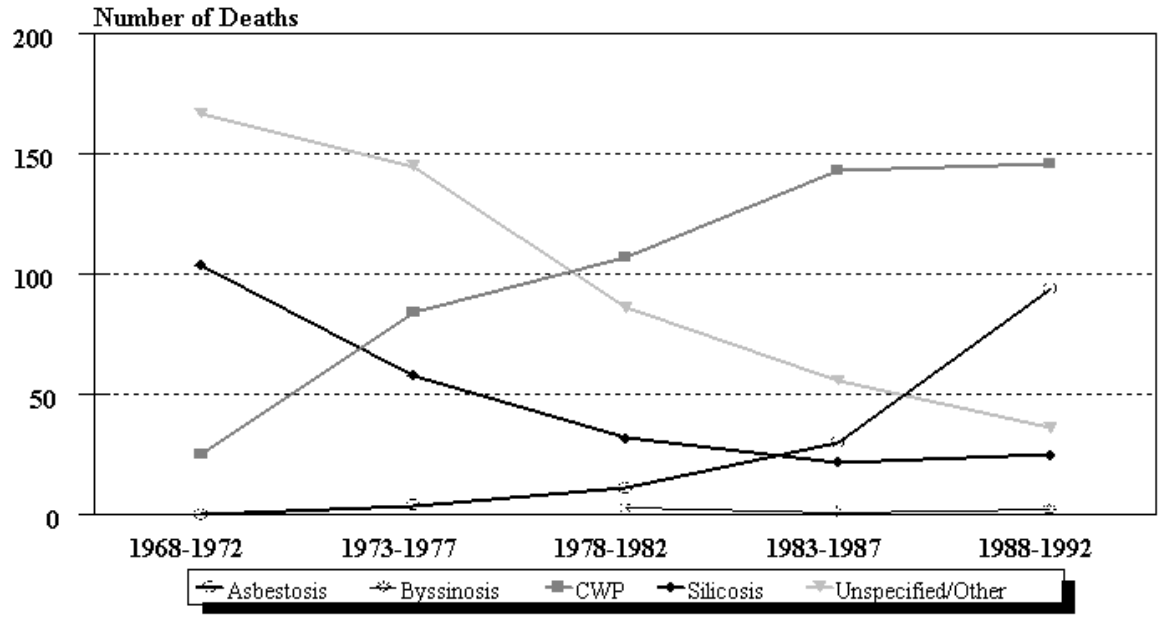
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table AL-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Alabama residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		1,368	100.0	303	100.0
Sex	Male	1,355	99.0	299	98.7
	Female	13	1.0	4	1.3
Race	White	880	64.3	227	74.9
	Black	488	35.7	76	25.1
	Other	0	0.0	0	0.0
Age	15-24	1	0.1	1	0.3
	25-34	2	0.1	1	0.3
	35-44	14	1.0	3	1.0
	45-54	42	3.1	2	0.7
	55-64	191	14.0	23	7.6
	65-74	489	35.7	89	29.4
	75-84	464	33.9	124	40.9
	85+	165	12.1	60	19.8
	Mean age	73.0		75.9	
	Range for age	16-101		16-95	

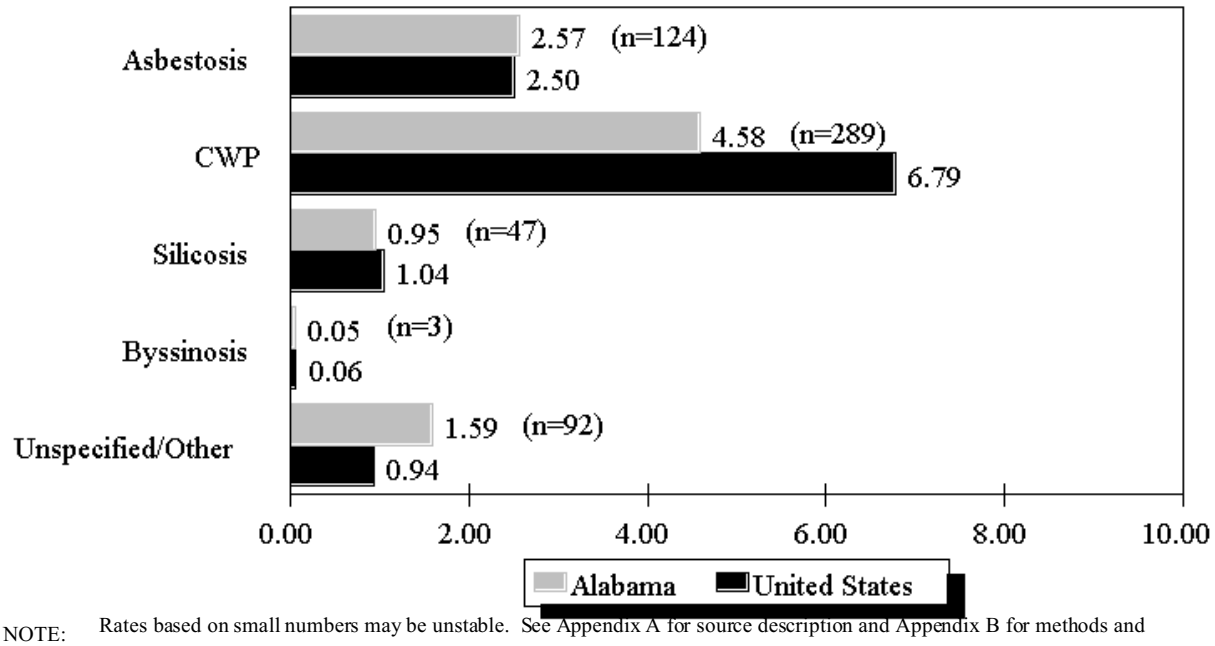
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure AL-3. Pneumoconiosis deaths by condition, Alabama residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure AL-4. Alabama and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table AL-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Alabama residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Autauga	-	-	-	-	1	3.99	-	-	-	-	1	3.99
Baldwin	10	8.06	2	1.01	-	-	-	-	1	0.50	13	9.58
Barbour	-	-	-	-	1	1.73	-	-	-	-	1	1.73
Bibb	-	-	-	-	-	-	-	-	2	9.53	2	9.53
Blount	-	-	5	6.49	-	-	-	-	-	-	5	6.49
Butler	1	1.59	-	-	-	-	-	-	-	-	1	1.59
Calhoun	2	1.38	6	4.15	1	0.50	-	-	1	0.50	10	6.53
Chambers	-	-	-	-	-	-	1	2.37	-	-	1	2.37
Cherokee	-	-	-	-	-	-	1	2.55	-	-	1	2.55
Chilton	-	-	1	1.45	-	-	1	1.45	-	-	2	2.90
Clarke	3	9.52	-	-	-	-	-	-	-	-	3	9.52
Cleburne	-	-	-	-	1	7.68	-	-	-	-	1	7.68
Colbert	2	3.39	-	-	2	3.39	-	-	-	-	4	6.79
Coosa	-	-	-	-	-	-	-	-	2	16.25	2	16.25
Covington	2	3.28	2	2.00	-	-	-	-	-	-	4	5.27
Cullman	-	-	3	3.48	-	-	-	-	-	-	3	3.48
Dale	-	-	-	-	1	2.76	-	-	-	-	1	2.76
Dallas	-	-	1	0.92	-	-	-	-	-	-	1	0.92
De Kalb	1	1.73	1	0.81	-	-	-	-	2	4.36	4	6.90
Escambia	2	5.52	-	-	-	-	-	-	-	-	2	5.52
Etowah	1	0.86	3	1.75	-	-	-	-	2	0.89	6	3.51
Fayette	-	-	2	4.09	-	-	-	-	1	5.02	3	9.11
Geneva	-	-	1	3.63	-	-	-	-	-	-	1	3.63
Henry	1	2.59	-	-	-	-	-	-	-	-	1	2.59
Houston	1	1.32	-	-	-	-	-	-	-	-	1	1.32
Jackson	-	-	2	3.27	1	2.09	-	-	-	-	2	3.27
Jefferson	8	0.89	118	11.21	25	2.95	-	-	45	4.80	196	19.85
Lamar	1	5.76	-	-	-	-	-	-	-	-	1	5.76
Lauderdale	1	1.18	-	-	-	-	-	-	-	-	1	1.18
Lawrence	1	3.43	1	1.84	-	-	-	-	-	-	2	5.27
Limestone	-	-	1	1.12	1	2.10	-	-	-	-	2	3.21
Madison	2	1.04	-	-	-	-	-	-	-	-	2	1.04

See footnotes at end of table.

Table AL-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Alabama residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Marion	-	-	5	**8.51**	-	-	-	-	1	**3.08**	6	**11.59**
Marshall	1	**0.69**	2	**2.01**	-	-	-	-	-	-	3	**2.70**
Mobile	70	**17.91**	1	**0.16**	1	**0.29**	-	-	1	**0.16**	73	**18.53**
Monroe	2	**6.54**	-	-	-	-	-	-	1	**1.94**	3	**8.48**
Montgomery	-	-	2	**0.82**	-	-	-	-	-	-	2	**0.82**
Morgan	2	**1.69**	3	**2.30**	-	-	-	-	1	**0.61**	6	**4.60**
Perry	-	-	1	**2.65**	-	-	-	-	-	-	1	**2.65**
Pickens	2	**6.08**	1	**4.31**	-	-	-	-	-	-	3	**10.39**
Pike	-	-	-	-	1	**4.46**	-	-	-	-	1	**4.46**
Russell	1	**2.11**	1	**2.11**	-	-	-	-	-	-	2	**4.22**
St. Clair	-	-	9	**14.26**	3	**4.75**	-	-	3	**3.88**	14	**20.73**
Shelby	2	**3.03**	13	**18.00**	-	-	-	-	1	**1.61**	16	**22.64**
Sumter	-	-	1	**2.38**	-	-	-	-	-	-	1	**2.38**
Talladega	-	-	-	-	1	**1.35**	-	-	-	-	1	**1.35**
Tallapoosa	1	**1.06**	1	**2.27**	1	**2.27**	-	-	1	**2.27**	4	**7.88**
Tuscaloosa	-	-	16	**9.71**	5	**3.17**	-	-	5	**3.54**	25	**15.63**
Walker	2	**2.82**	83	**79.82**	1	**0.68**	-	-	22	**20.11**	108	**103.44**
Washington	2	**13.46**	-	-	-	-	-	-	-	-	2	**13.46**
Winston	-	-	1	**2.22**	-	-	-	-	-	-	1	**2.22**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

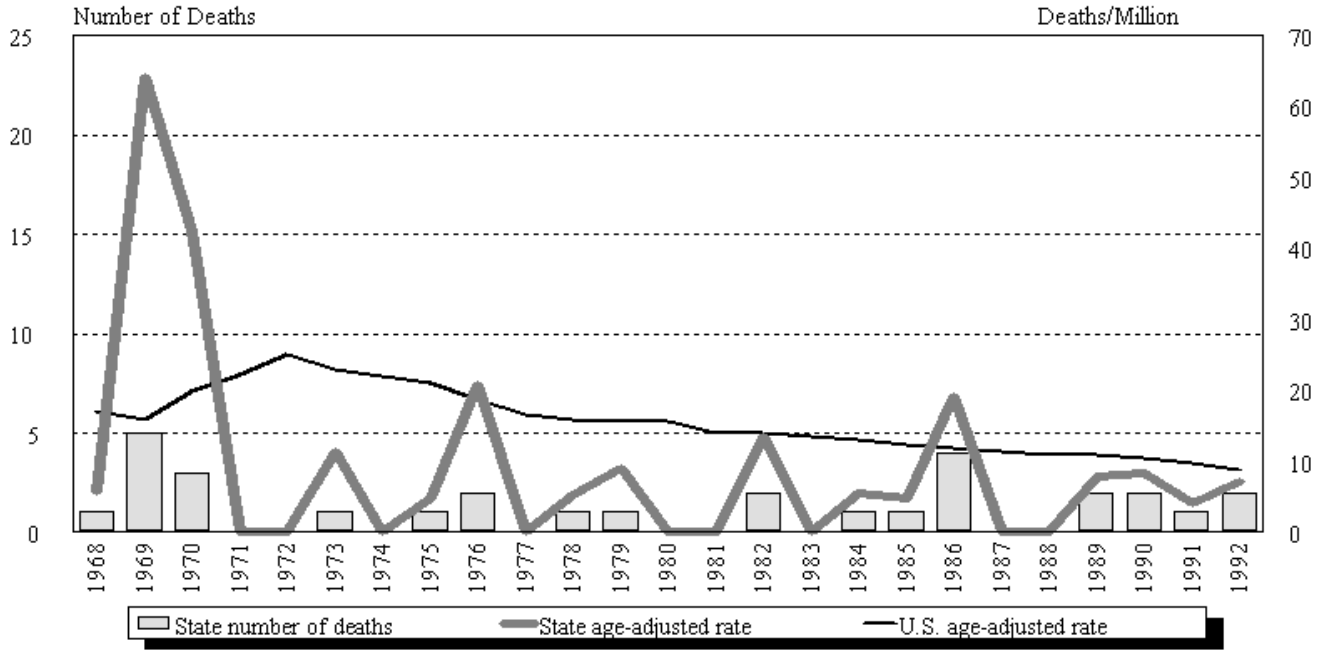
Alaska: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	7	49
Crude mortality rate (per 1,000,000 population)	3.48	47
Age-adjusted mortality rate (per 1,000,000 population)	5.61	23
Total years of potential life lost to life expectancy	100	50
Years of potential life lost to life expectancy (per death)	14.3	3

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	5	71.4
Coal workers' pneumoconiosis	1	14.3
Silicosis	1	14.3
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	0	0.0

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure AK-1. All pneumoconioses: Alaska and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Alaska

Table AK-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Alaska residents age 15 and over, 1968-1992

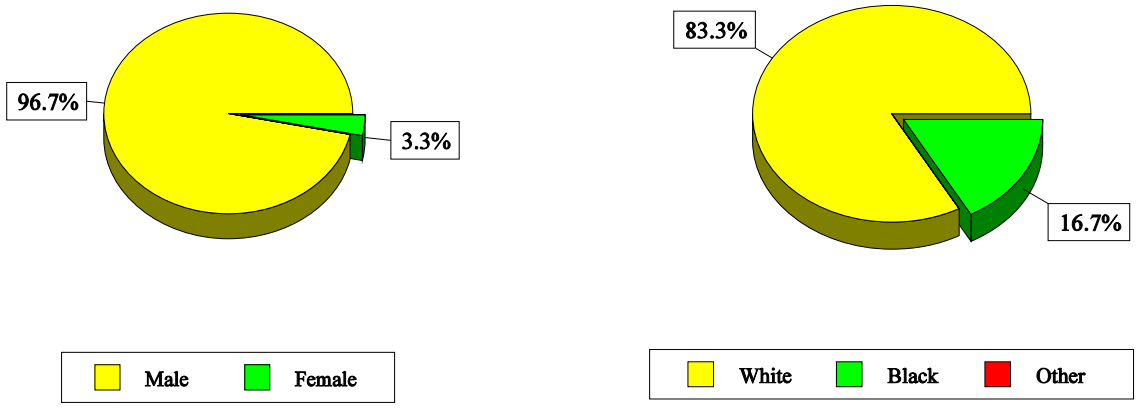
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	1	5.79	-	-	-	-			-	-	1	5.79
1969	-	-	1	13.64	4	50.48			-	-	5	64.11
1970	-	-	-	-	1	15.29			2	27.28	3	42.56
1971	-	-	-	-	-	-			-	-	-	-
1972	-	-	-	-	-	-			-	-	-	-
1973	-	-	-	-	1	11.40			-	-	1	11.40
1974	-	-	-	-	-	-			-	-	-	-
1975	1	4.89	-	-	-	-			-	-	1	4.89
1976	1	9.73	-	-	1	11.01			-	-	2	20.74
1977	-	-	-	-	-	-			-	-	-	-
1978	-	-	-	-	-	-			1	5.29	1	5.29
1979	-	-	-	-	-	-	-	-	1	9.12	1	9.12
1980	-	-	-	-	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	2	13.40	-	-	-	-	2	13.40
1983	-	-	-	-	-	-	-	-	-	-	-	-
1984	-	-	1	5.58	-	-	-	-	-	-	1	5.58
1985	-	-	-	-	1	4.90	-	-	-	-	1	4.90
1986	1	4.63	1	4.83	2	9.67	-	-	-	-	4	19.13
1987	-	-	-	-	-	-	-	-	-	-	-	-
1988	-	-	-	-	-	-	-	-	-	-	-	-
1989	2	7.96	-	-	-	-	-	-	-	-	2	7.96
1990	1	4.17	-	-	1	4.12	-	-	-	-	2	8.28
1991	1	4.03	-	-	-	-	-	-	-	-	1	4.03
1992	1	3.53	1	3.64	-	-	-	-	-	-	2	7.17

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure AK-2. All pneumoconioses: Distribution of deaths by sex and race, Alaska residents age 15 and over, 1968-1992



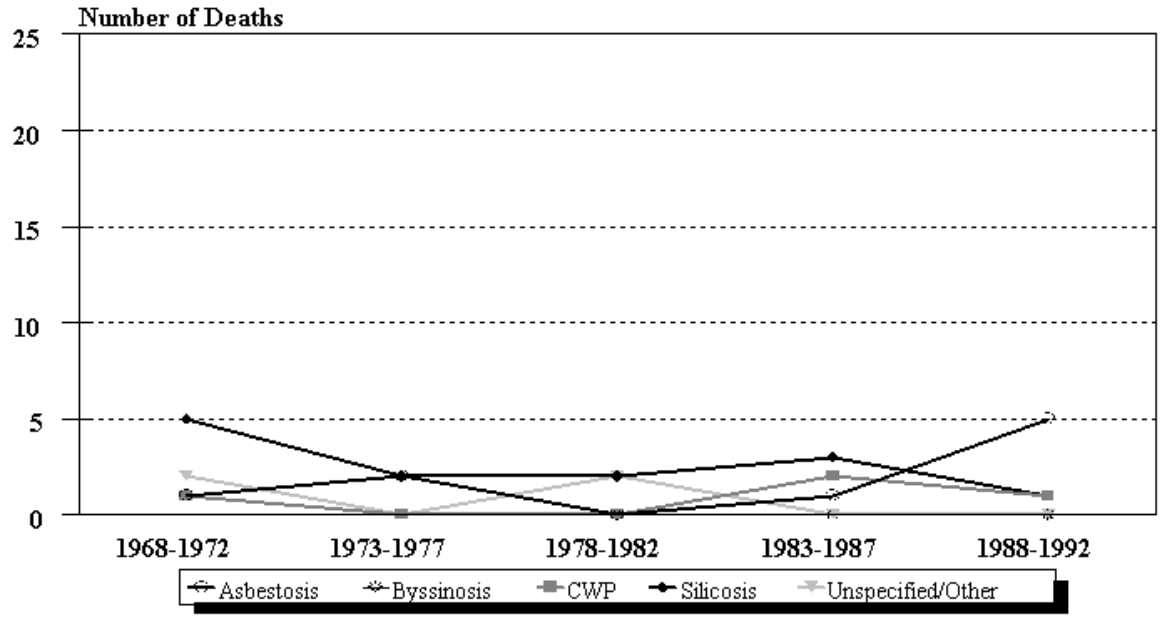
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table AK-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Alaska residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		30	100.0	7	100.0
Sex	Male	29	96.7	7	100.0
	Female	1	3.3	0	0.0
Race	White	25	83.3	7	100.0
	Black	0	0.0	0	0.0
	Other	5	16.7	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	0	0.0	0	0.0
	35-44	0	0.0	0	0.0
	45-54	2	6.7	0	0.0
	55-64	3	10.0	2	28.6
	65-74	12	40.0	3	42.9
	75-84	12	40.0	2	28.6
	85+	1	3.3	0	0.0
	Mean age	72.0		69.9	
	Range for age	47-97		61-80	

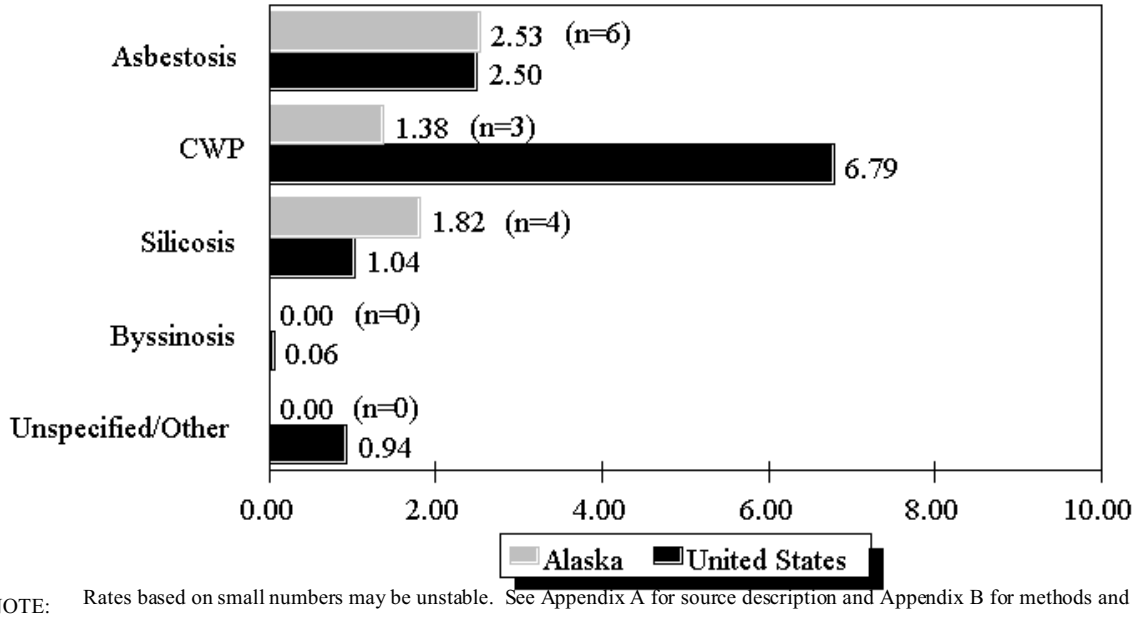
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure AK-3. Pneumoconiosis deaths by condition, Alaska residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure AK-4. Alaska and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table AK-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Alaska residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Anchorage	3	**2.91**	1	**1.30**	2	**2.61**	-	**-**	-	**-**	6	**6.82**
Fairbanks	1	**3.51**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.51**
Juneau	-	**-**	-	**-**	1	**7.42**	-	**-**	-	**-**	1	**7.42**
Matanuska-Susitna	1	**4.84**	2	**10.34**	-	**-**	-	**-**	-	**-**	3	**15.18**
North Slope	-	**-**	-	**-**	1	**46.17**	-	**-**	-	**-**	1	**46.17**
Wrangell-Petersburg	1	**22.65**	-	**-**	-	**-**	-	**-**	-	**-**	1	**22.65**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

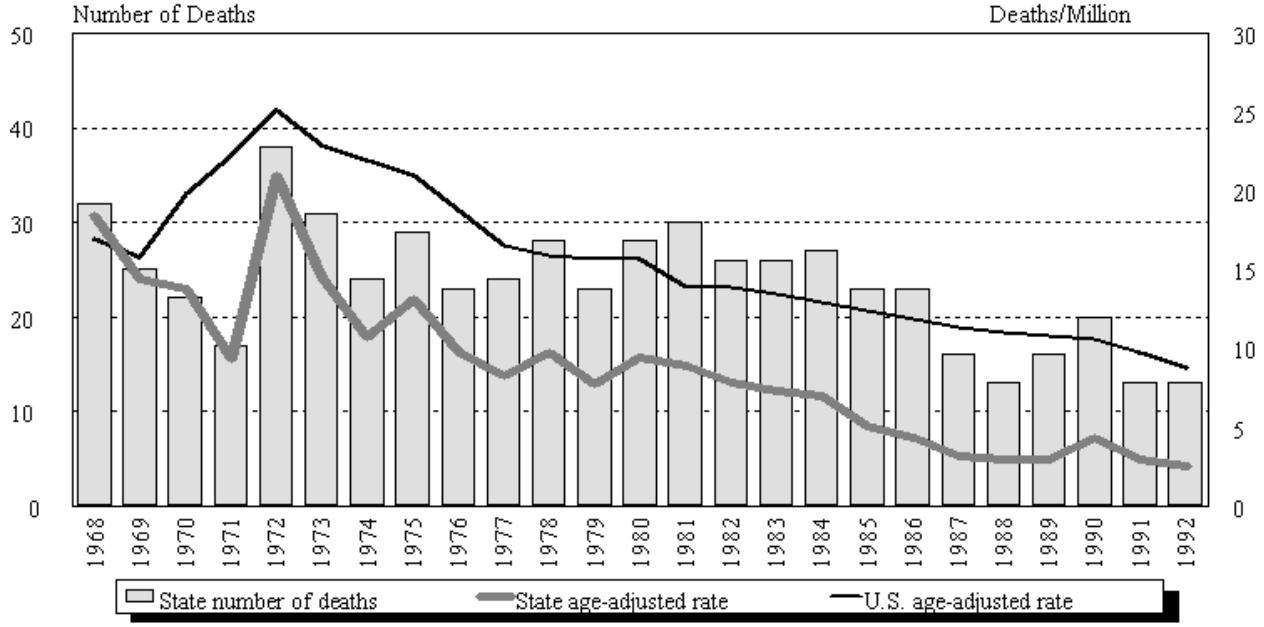
Arizona: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	75	31
Crude mortality rate (per 1,000,000 population)	5.28	40
Age-adjusted mortality rate (per 1,000,000 population)	3.15	40
Total years of potential life lost to life expectancy	933	31
Years of potential life lost to life expectancy (per death)	12.4	17

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	30	40.0
Coal workers' pneumoconiosis	20	26.7
Silicosis	15	20.0
Byssinosis	1	1.3
Unspecified/Other pneumoconiosis	9	12.0

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure AZ-1. All pneumoconioses: Arizona and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Arizona

Table AZ-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Arizona residents age 15 and over, 1968-1992

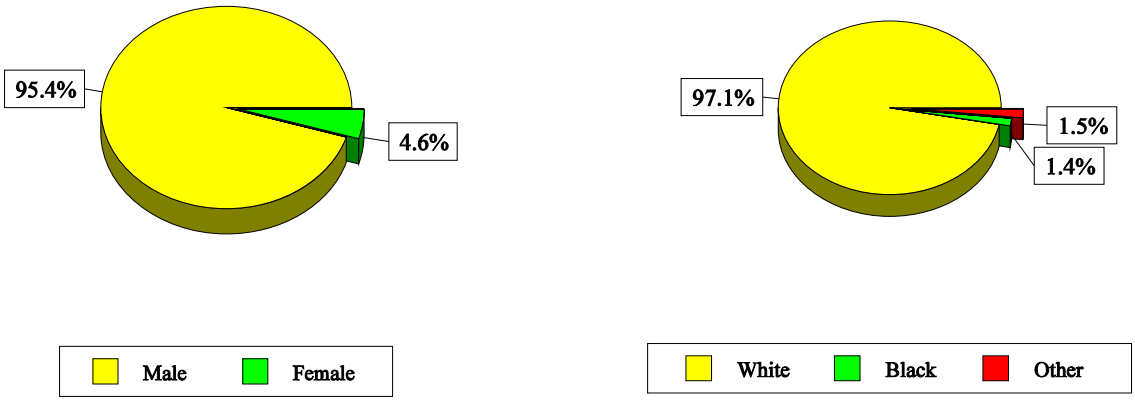
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	2	1.33	28	15.87			3	1.79	32	18.40
1969	-	-	2	1.10	21	11.83			3	2.02	25	14.43
1970	1	0.51	2	1.51	16	9.80			3	1.97	22	13.79
1971	-	-	2	1.04	11	6.23			4	2.04	17	9.31
1972	6	3.12	2	1.02	24	14.05			8	3.78	38	20.95
1973	1	0.84	5	2.20	12	5.64			14	6.32	31	14.53
1974	1	0.54	4	1.74	15	6.65			5	2.22	24	10.70
1975	3	1.63	-	-	18	8.27			9	3.70	29	13.18
1976	3	1.25	5	2.20	10	4.37			7	3.14	23	9.79
1977	2	0.70	2	0.70	12	4.03			9	3.07	24	8.26
1978	3	1.22	6	1.82	10	3.58			9	3.12	28	9.74
1979	5	1.81	6	2.15	5	1.56	1	0.28	6	1.95	23	7.75
1980	2	0.94	8	2.79	11	3.78	-	-	7	1.89	28	9.39
1981	2	0.81	14	4.07	12	3.35	-	-	2	0.61	30	8.85
1982	6	1.86	10	2.44	10	3.54	-	-	-	-	26	7.85
1983	3	0.86	9	2.76	9	2.40	-	-	5	1.35	26	7.36
1984	7	1.84	10	2.68	7	1.63	1	0.38	3	0.80	27	6.96
1985	10	2.21	8	1.78	3	0.59	-	-	2	0.46	23	5.04
1986	5	0.86	7	1.43	7	1.36	-	-	4	0.68	23	4.33
1987	8	1.84	2	0.29	5	0.93	-	-	3	0.46	16	3.17
1988	7	1.82	4	0.92	1	0.16	-	-	1	0.11	13	3.01
1989	3	0.54	5	0.87	6	1.15	-	-	2	0.38	16	2.95
1990	6	1.39	5	0.97	5	1.24	1	0.36	3	0.40	20	4.36
1991	6	1.51	4	0.60	2	0.50	-	-	1	0.36	13	2.97
1992	8	1.72	2	0.23	1	0.21	-	-	2	0.35	13	2.51

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure AZ-2. All pneumoconioses: Distribution of deaths by sex and race, Arizona residents age 15 and over, 1968-1992



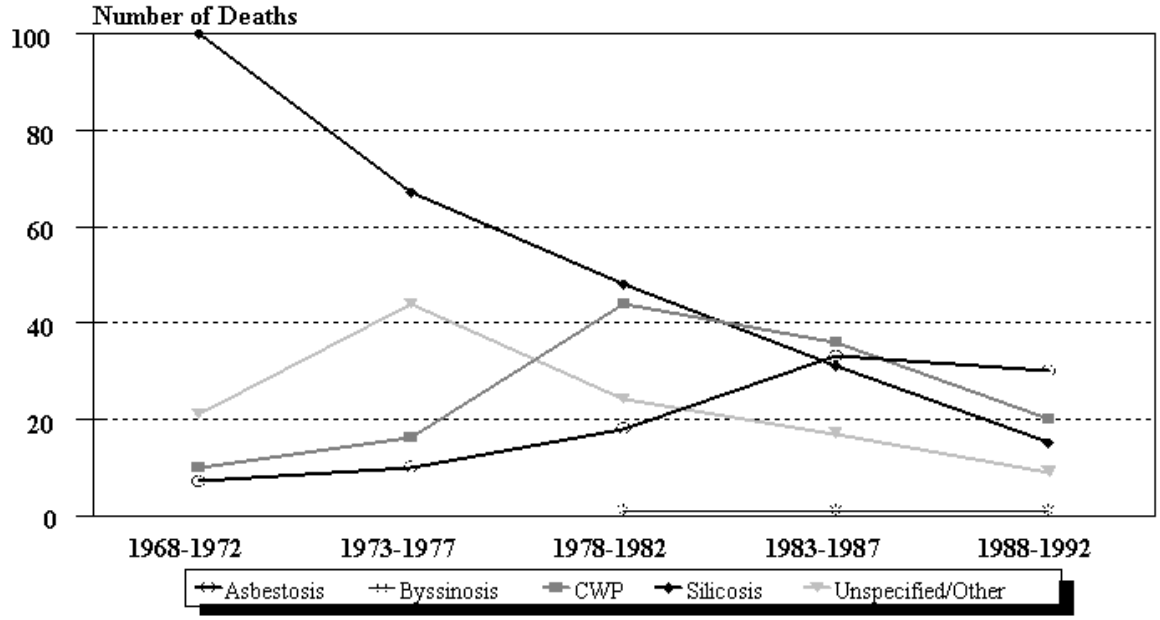
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table AZ-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Arizona residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		590	100.0	75	100.0
Sex	Male	563	95.4	75	100.0
	Female	27	4.6	0	0.0
Race	White	573	97.1	71	94.7
	Black	8	1.4	2	2.7
	Other	9	1.5	2	2.7
Age	15-24	0	0.0	0	0.0
	25-34	1	0.2	0	0.0
	35-44	5	0.8	0	0.0
	45-54	19	3.2	2	2.7
	55-64	98	16.6	13	17.3
	65-74	219	37.1	23	30.7
	75-84	199	33.7	27	36.0
	85+	49	8.3	10	13.3
	Mean age	71.8		73.7	
	Range for age	30-95		48-93	

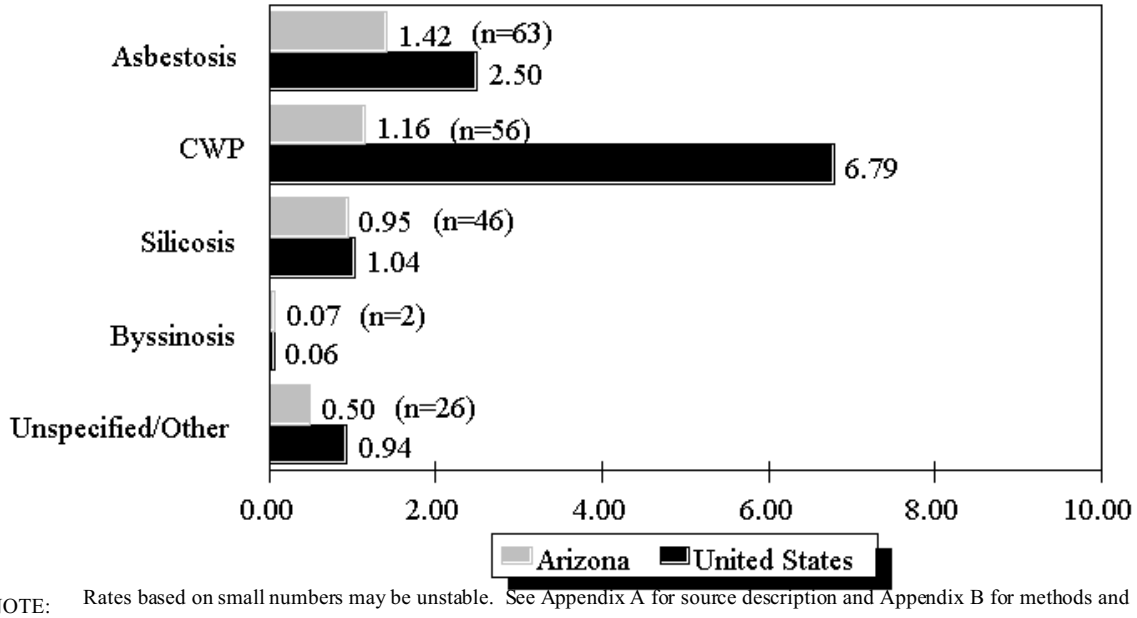
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure AZ-3. Pneumoconiosis deaths by condition, Arizona residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure AZ-4. Arizona and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table AZ-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Arizona residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Apache	-	**-**	2	**4.76**	-	**-**	-	**-**	-	**-**	2	**4.76**
Cochise	4	**3.33**	3	**2.30**	3	**2.30**	-	**-**	-	**-**	10	**7.94**
Coconino	1	**1.55**	1	**1.55**	-	**-**	-	**-**	-	**-**	2	**3.09**
Gila	-	**-**	-	**-**	1	**1.05**	-	**-**	2	**2.88**	3	**3.93**
Graham	-	**-**	-	**-**	-	**-**	-	**-**	2	**4.26**	2	**4.26**
Greenlee	-	**-**	-	**-**	2	**21.74**	-	**-**	-	**-**	2	**21.74**
Maricopa	35	**1.50**	28	**1.14**	21	**0.74**	-	**-**	14	**0.49**	96	**3.81**
Mohave	3	**1.99**	2	**1.26**	4	**2.72**	-	**-**	-	**-**	9	**5.97**
Navajo	1	**1.83**	-	**-**	1	**1.83**	-	**-**	-	**-**	2	**3.67**
Pima	9	**0.96**	13	**1.43**	9	**1.20**	1	**0.16**	4	**0.56**	35	**4.15**
Pinal	3	**2.25**	2	**1.39**	2	**1.06**	-	**-**	1	**0.53**	8	**5.24**
Yavapai	3	**1.58**	4	**2.21**	3	**1.29**	-	**-**	2	**0.67**	12	**5.75**
Yuma	4	**3.39**	1	**0.95**	-	**-**	1	**0.95**	1	**0.56**	7	**5.72**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

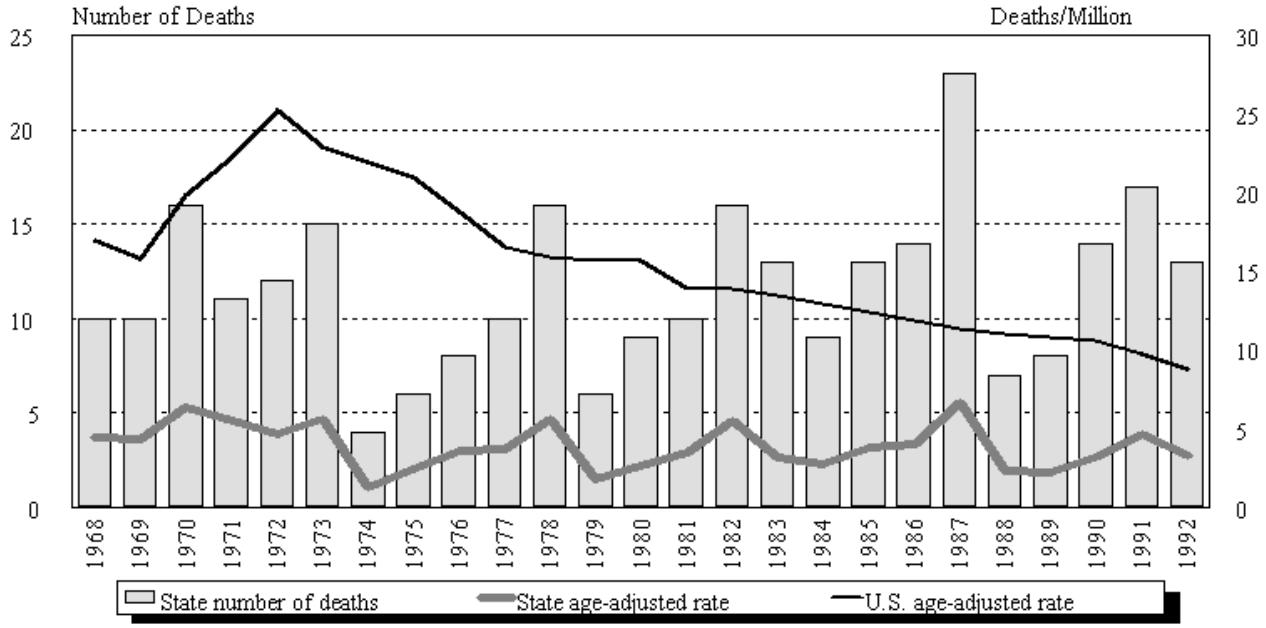
Arkansas: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	59	37
Crude mortality rate (per 1,000,000 population)	6.43	33
Age-adjusted mortality rate (per 1,000,000 population)	3.16	39
Total years of potential life lost to life expectancy	699	36
Years of potential life lost to life expectancy (per death)	11.8	28

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	20	33.9
Coal workers' pneumoconiosis	29	49.2
Silicosis	5	8.5
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	5	8.5

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure AR-1. All pneumoconioses: Arkansas and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Arkansas

Table AR-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Arkansas residents age 15 and over, 1968-1992

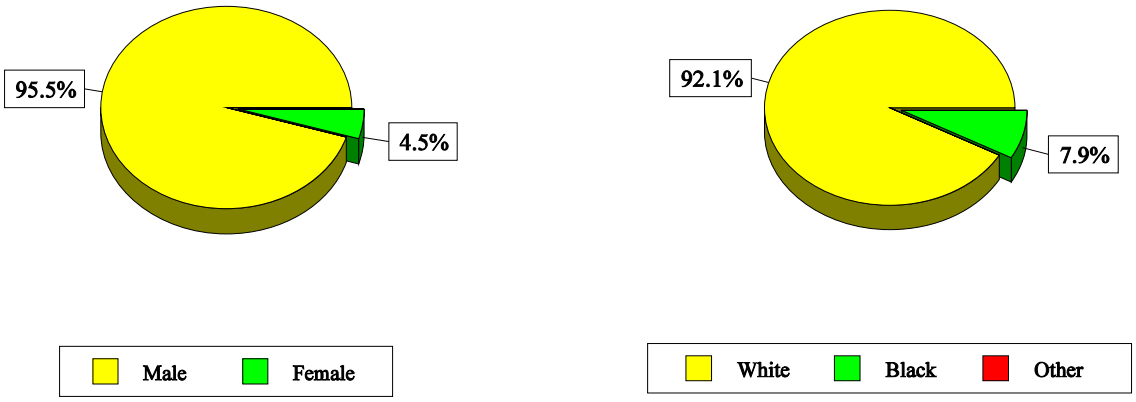
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	7	3.12			3	1.39	10	4.51
1969	-	-	2	0.75	3	1.51			5	2.07	10	4.33
1970	-	-	1	0.32	11	4.40			4	1.61	16	6.32
1971	-	-	2	1.06	4	2.01			6	2.97	11	5.52
1972	-	-	-	-	6	2.68			6	2.02	12	4.70
1973	-	-	3	1.21	4	1.62			8	2.77	15	5.60
1974	-	-	-	-	-	-			4	1.23	4	1.23
1975	-	-	1	0.37	1	0.51			4	1.53	6	2.41
1976	-	-	1	0.28	3	1.45			4	1.87	8	3.60
1977	-	-	3	1.06	2	0.71			5	1.90	10	3.67
1978	1	0.35	4	1.21	2	0.83			9	3.28	16	5.67
1979	-	-	3	1.07	1	0.34	-	-	2	0.40	6	1.81
1980	1	0.25	7	2.11	2	0.58	-	-	-	-	9	2.69
1981	2	0.67	4	0.75	4	2.13	-	-	-	-	10	3.55
1982	2	0.67	8	2.48	2	0.95	-	-	4	1.42	16	5.52
1983	1	0.33	8	1.83	4	1.05	-	-	-	-	13	3.22
1984	3	1.13	4	1.24	-	-	-	-	2	0.34	9	2.72
1985	-	-	9	1.96	2	1.20	-	-	2	0.66	13	3.82
1986	7	2.24	6	1.50	-	-	-	-	1	0.33	14	4.08
1987	10	3.65	7	1.38	2	0.69	-	-	4	0.98	23	6.69
1988	4	1.70	3	0.60	-	-	-	-	-	-	7	2.30
1989	1	0.20	4	0.92	2	0.83	-	-	1	0.33	8	2.28
1990	4	1.22	9	1.66	-	-	-	-	1	0.33	14	3.21
1991	6	2.05	7	1.38	2	0.70	-	-	2	0.52	17	4.64
1992	5	1.53	6	1.05	1	0.54	-	-	1	0.19	13	3.31

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure AR-2. All pneumoconioses: Distribution of deaths by sex and race, Arkansas residents age 15 and over, 1968-1992



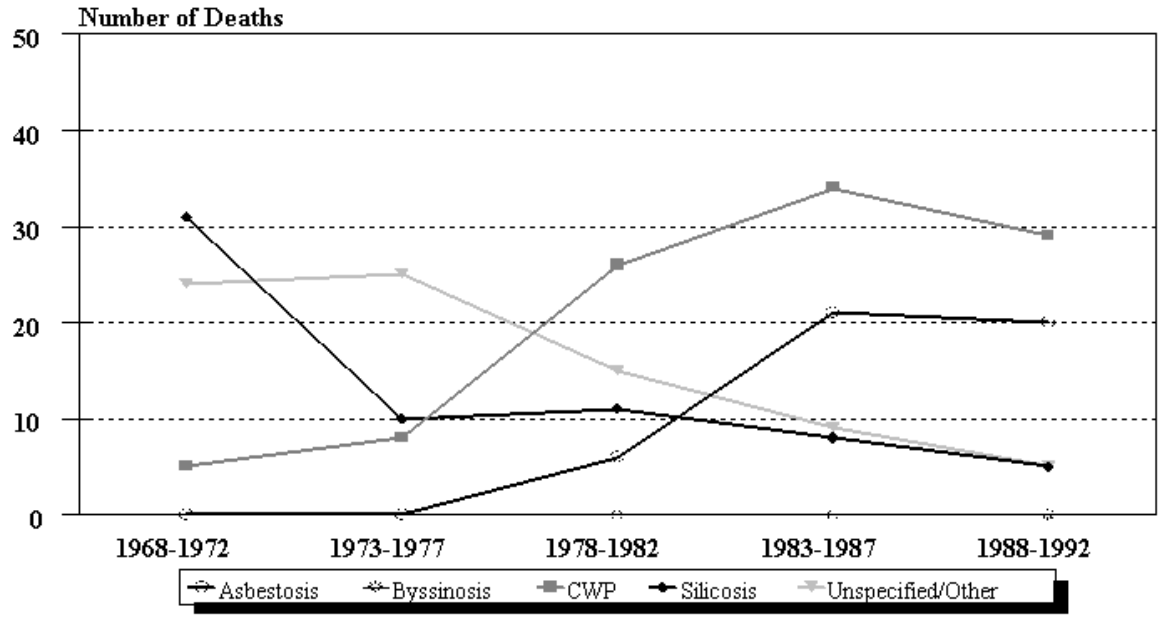
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table AR-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Arkansas residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		290	100.0	59	100.0
Sex	Male	277	95.5	58	98.3
	Female	13	4.5	1	1.7
Race	White	267	92.1	53	89.8
	Black	23	7.9	6	10.2
	Other	0	0.0	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	0	0.0	0	0.0
	35-44	3	1.0	1	1.7
	45-54	10	3.4	1	1.7
	55-64	50	17.2	7	11.9
	65-74	96	33.1	16	27.1
	75-84	102	35.2	25	42.4
	85+	29	10.0	9	15.3
	Mean age	72.3		75.2	
	Range for age	41-97		44-97	

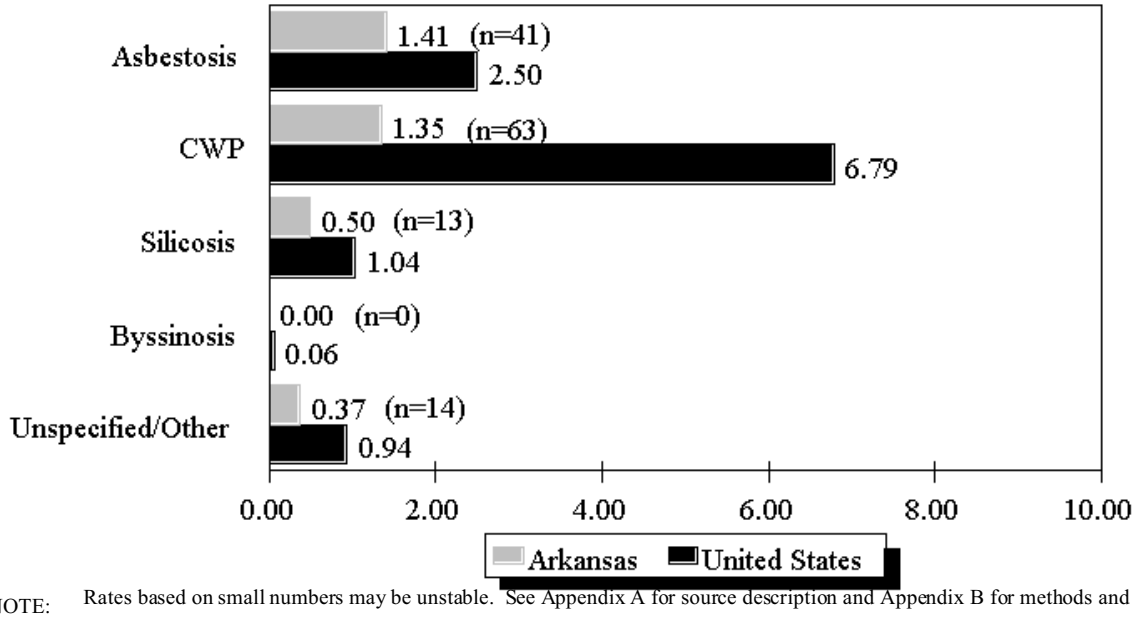
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure AR-3. Pneumoconiosis deaths by condition, Arkansas residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure AR-4. Arkansas and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table AR-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Arkansas residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Ashley	1	**4.02**	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.02**
Baxter	1	**1.83**	1	**0.74**	-	**-**	-	**-**	-	**-**	2	**2.57**
Benton	2	**1.74**	1	**0.43**	-	**-**	-	**-**	-	**-**	3	**2.17**
Clark	2	**8.74**	1	**4.37**	-	**-**	-	**-**	-	**-**	3	**13.12**
Clay	-	**-**	1	**1.61**	-	**-**	-	**-**	-	**-**	1	**1.61**
Cleveland	1	**4.97**	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.97**
Columbia	1	**1.30**	1	**1.30**	-	**-**	-	**-**	-	**-**	2	**2.59**
Crawford	-	**-**	1	**2.69**	-	**-**	-	**-**	-	**-**	1	**2.69**
Crittenden	-	**-**	1	**2.49**	-	**-**	-	**-**	-	**-**	1	**2.49**
Dallas	1	**3.24**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.24**
Drew	1	**6.13**	-	**-**	-	**-**	-	**-**	-	**-**	1	**6.13**
Faulkner	1	**1.07**	1	**1.07**	-	**-**	-	**-**	-	**-**	2	**2.14**
Franklin	-	**-**	2	**8.42**	-	**-**	-	**-**	4	**16.84**	6	**25.26**
Fulton	1	**3.13**	2	**10.04**	1	**3.13**	-	**-**	-	**-**	4	**16.30**
Garland	-	**-**	1	**0.42**	-	**-**	-	**-**	1	**0.42**	2	**0.83**
Greene	1	**1.28**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.28**
Hempstead	-	**-**	-	**-**	1	**7.08**	-	**-**	-	**-**	1	**7.08**
Hot Spring	-	**-**	-	**-**	1	**3.24**	-	**-**	-	**-**	1	**3.24**
Independence	-	**-**	-	**-**	1	**3.05**	-	**-**	-	**-**	1	**3.05**
Jefferson	2	**2.46**	-	**-**	1	**0.54**	-	**-**	-	**-**	3	**3.00**
Johnson	-	**-**	14	**34.80**	-	**-**	-	**-**	1	**1.88**	15	**36.68**
Lincoln	-	**-**	1	**3.42**	-	**-**	-	**-**	-	**-**	1	**3.42**
Logan	1	**1.68**	4	**9.36**	-	**-**	-	**-**	1	**4.32**	6	**15.36**
Lonoke	2	**6.06**	1	**1.39**	-	**-**	-	**-**	-	**-**	3	**7.45**
Miller	1	**2.60**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.60**
Mississippi	1	**2.02**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.02**
Montgomery	-	**-**	1	**4.20**	2	**18.22**	-	**-**	-	**-**	3	**22.42**
Nevada	1	**8.41**	-	**-**	1	**3.07**	-	**-**	-	**-**	2	**11.47**
Ouachita	2	**5.64**	2	**4.01**	-	**-**	-	**-**	-	**-**	4	**9.65**
Perry	-	**-**	1	**5.56**	-	**-**	-	**-**	-	**-**	1	**5.56**
Phillips	1	**5.69**	-	**-**	-	**-**	-	**-**	-	**-**	1	**5.69**

See footnotes at end of table.

Table AR-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Arkansas residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Poinsett	1	**3.73**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.73**
Polk	-	**-**	1	**1.85**	-	**-**	-	**-**	-	**-**	1	**1.85**
Pope	-	**-**	4	**4.56**	-	**-**	-	**-**	1	**2.48**	5	**7.04**
Pulaski	8	**2.33**	1	**0.17**	4	**1.07**	-	**-**	-	**-**	13	**3.57**
St. Francis	1	**3.67**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.67**
Saline	3	**3.90**	1	**1.04**	-	**-**	-	**-**	-	**-**	4	**4.94**
Scott	-	**-**	2	**11.94**	-	**-**	-	**-**	-	**-**	2	**11.94**
Sebastian	1	**1.04**	11	**5.61**	1	**1.04**	-	**-**	4	**2.99**	17	**10.68**
Sharp	-	**-**	1	**4.13**	-	**-**	-	**-**	-	**-**	1	**4.13**
Union	1	**0.78**	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.78**
Washington	1	**0.51**	1	**0.51**	-	**-**	-	**-**	-	**-**	2	**1.02**
White	1	**1.83**	2	**2.62**	-	**-**	-	**-**	1	**1.83**	4	**6.28**
Yell	-	**-**	2	**4.35**	-	**-**	-	**-**	1	**4.88**	3	**9.23**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

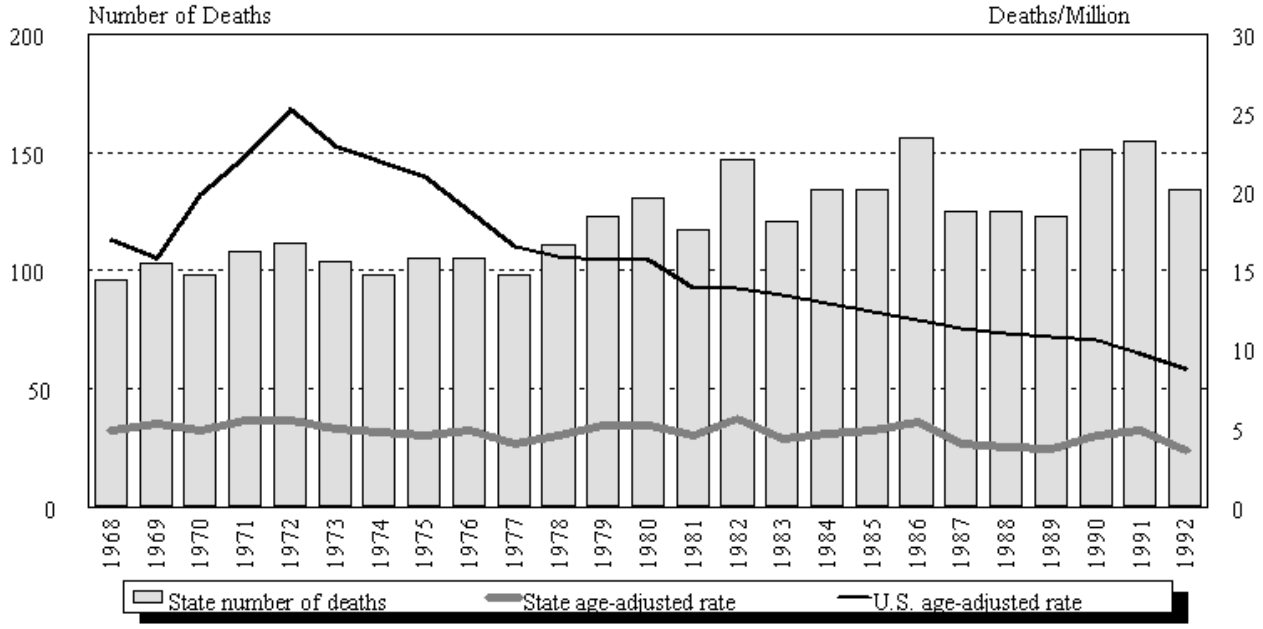
California: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	688	6
Crude mortality rate (per 1,000,000 population)	5.93	37
Age-adjusted mortality rate (per 1,000,000 population)	4.12	33
Total years of potential life lost to life expectancy	8,612	6
Years of potential life lost to life expectancy (per death)	12.5	15

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	459	66.7
Coal workers' pneumoconiosis	114	16.6
Silicosis	78	11.3
Byssinosis	4	0.6
Unspecified/Other pneumoconiosis	36	5.2

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure CA-1. All pneumoconioses: California and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

California

Table CA-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, California residents age 15 and over, 1968-1992

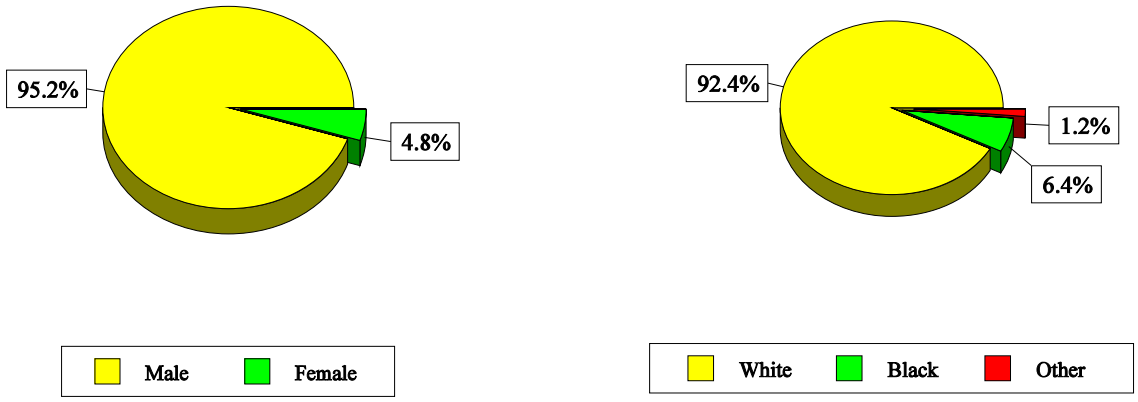
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	6	0.39	14	0.59	46	2.34			32	1.70	96	4.91
1969	10	0.60	12	0.58	56	2.90			27	1.39	103	5.35
1970	5	0.30	18	0.93	59	2.94			20	0.96	98	4.92
1971	11	0.63	17	0.79	51	2.56			33	1.72	108	5.52
1972	8	0.46	18	0.71	46	2.27			46	2.36	112	5.53
1973	17	0.94	20	0.87	37	1.75			33	1.55	104	4.96
1974	9	0.50	21	0.97	41	1.90			30	1.52	98	4.76
1975	11	0.54	25	1.02	34	1.33			37	1.73	105	4.54
1976	23	1.09	24	1.02	28	1.33			32	1.53	105	4.87
1977	24	1.03	17	0.60	27	1.08			30	1.29	98	4.00
1978	33	1.47	20	0.71	30	1.17			35	1.53	111	4.59
1979	63	2.84	24	1.04	21	0.84	-	-	17	0.62	123	5.24
1980	59	2.50	24	0.93	29	1.08	-	-	21	0.75	131	5.20
1981	57	2.44	24	0.78	22	0.80	-	-	14	0.55	117	4.56
1982	86	3.56	21	0.71	26	0.86	2	0.08	18	0.62	147	5.60
1983	67	2.59	25	0.77	19	0.68	-	-	13	0.44	121	4.37
1984	77	2.88	24	0.76	22	0.70	-	-	14	0.50	134	4.72
1985	83	3.22	20	0.61	22	0.78	1	0.05	11	0.33	134	4.88
1986	112	4.08	23	0.65	14	0.45	-	-	8	0.25	156	5.38
1987	80	2.77	18	0.45	17	0.58	-	-	10	0.26	125	4.06
1988	81	2.62	16	0.40	19	0.50	1	0.04	10	0.26	125	3.78
1989	87	2.64	7	0.21	16	0.42	2	0.10	11	0.36	123	3.74
1990	102	3.11	28	0.85	15	0.36	-	-	7	0.22	151	4.52
1991	94	2.72	41	1.56	16	0.44	-	-	4	0.14	155	4.86
1992	95	2.66	22	0.55	12	0.30	1	0.03	4	0.12	134	3.66

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure CA-2. All pneumoconioses: Distribution of deaths by sex and race, California residents age 15 and over, 1968-1992



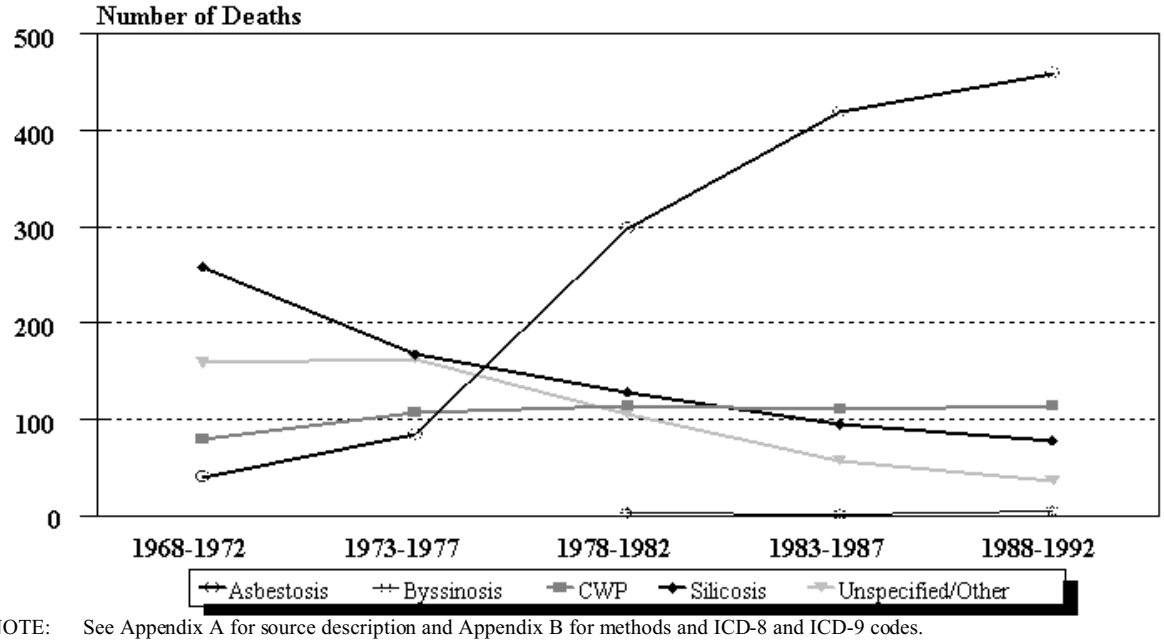
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table CA-2. All pneumoconioses: Distribution of deaths by sex, race, and age, California residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		3,014	100.0	688	100.0
Sex	Male	2,870	95.2	661	96.1
	Female	144	4.8	27	3.9
Race	White	2,783	92.4	610	88.7
	Black	194	6.4	63	9.2
	Other	37	1.2	15	2.2
Age	15-24	7	0.2	2	0.3
	25-34	7	0.2	2	0.3
	35-44	33	1.1	8	1.2
	45-54	99	3.3	20	2.9
	55-64	522	17.3	85	12.4
	65-74	1,043	34.6	212	30.8
	75-84	999	33.1	277	40.3
	85+	304	10.1	82	11.9
	Mean age	72.2		73.6	
	Range for age	18-104		19-104	

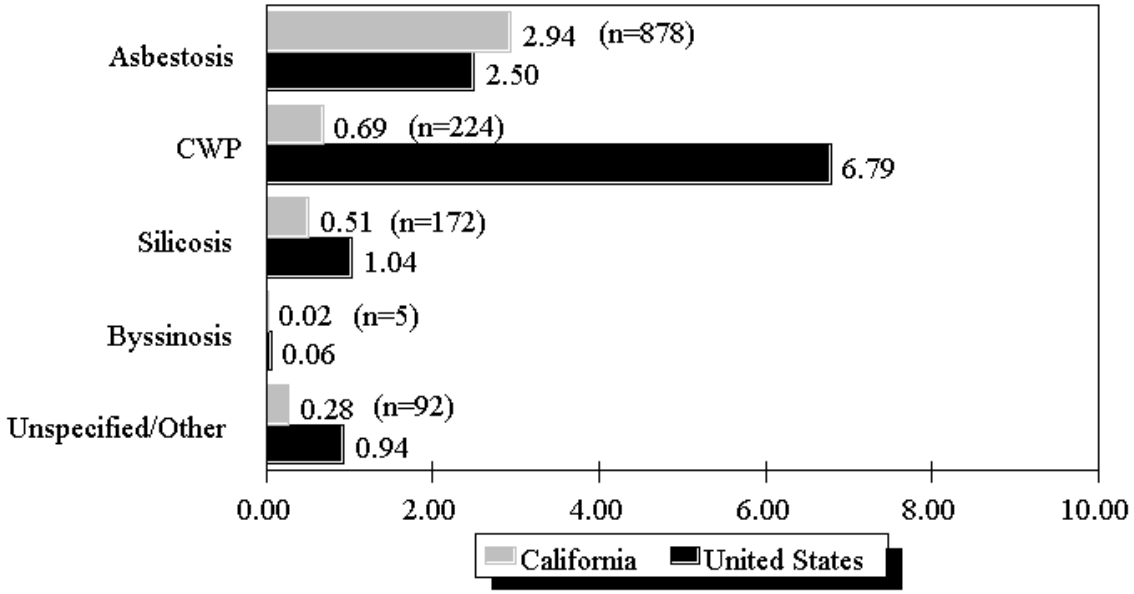
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure CA-3. Pneumoconiosis deaths by condition, California residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure CA-4. California and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table CA-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, California residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Alameda	75	**5.88**	3	**0.20**	13	**0.85**	-	**-**	3	**0.30**	94	**7.23**
Amador	2	**5.77**	-	**-**	-	**-**	-	**-**	2	**3.14**	4	**8.91**
Butte	8	**3.30**	3	**0.68**	3	**1.28**	-	**-**	-	**-**	14	**5.26**
Calaveras	1	**1.55**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.55**
Colusa	-	**-**	1	**3.46**	-	**-**	-	**-**	-	**-**	1	**3.46**
Contra Costa	76	**9.18**	2	**0.24**	12	**1.46**	-	**-**	2	**0.17**	90	**10.75**
El Dorado	6	**4.19**	-	**-**	4	**2.41**	-	**-**	3	**2.56**	12	**8.56**
Fresno	7	**1.01**	10	**1.27**	5	**0.71**	1	**0.25**	3	**0.51**	26	**3.74**
Humboldt	3	**2.90**	2	**1.93**	-	**-**	-	**-**	-	**-**	5	**4.83**
Imperial	3	**2.57**	1	**1.56**	1	**0.73**	-	**-**	-	**-**	5	**4.85**
Kern	6	**1.53**	6	**0.86**	5	**1.02**	1	**0.25**	1	**0.25**	19	**3.90**
Kings	-	**-**	1	**0.93**	-	**-**	-	**-**	-	**-**	1	**0.93**
Lake	3	**2.69**	3	**4.46**	1	**0.67**	-	**-**	-	**-**	6	**7.14**
Lassen	-	**-**	2	**7.28**	-	**-**	-	**-**	-	**-**	2	**7.28**
Los Angeles	174	**2.22**	37	**0.39**	22	**0.27**	-	**-**	20	**0.24**	251	**3.10**
Madera	3	**3.32**	-	**-**	-	**-**	-	**-**	-	**-**	3	**3.32**
Marin	11	**4.04**	2	**0.51**	2	**0.51**	-	**-**	2	**0.92**	17	**5.98**
Mariposa	2	**8.70**	-	**-**	2	**8.70**	-	**-**	-	**-**	4	**17.40**
Mendocino	2	**1.98**	1	**1.31**	2	**1.98**	-	**-**	-	**-**	4	**4.60**
Merced	2	**1.25**	1	**0.78**	2	**1.25**	-	**-**	-	**-**	5	**3.28**
Modoc	1	**8.55**	-	**-**	-	**-**	-	**-**	-	**-**	1	**8.55**
Monterey	4	**1.17**	2	**0.59**	2	**0.77**	1	**0.38**	1	**0.20**	10	**3.11**
Napa	24	**14.91**	3	**1.55**	1	**0.35**	-	**-**	-	**-**	28	**16.81**
Nevada	5	**3.40**	-	**-**	8	**6.10**	-	**-**	1	**1.06**	13	**9.50**
Orange	59	**2.70**	11	**0.43**	13	**0.52**	-	**-**	8	**0.41**	90	**4.02**
Placer	10	**5.25**	1	**0.37**	4	**1.79**	-	**-**	1	**0.68**	16	**8.09**
Plumas	-	**-**	1	**2.59**	-	**-**	-	**-**	-	**-**	1	**2.59**
Riverside	31	**2.30**	7	**0.40**	11	**0.82**	-	**-**	1	**0.05**	49	**3.52**
Sacramento	29	**2.82**	3	**0.21**	6	**0.62**	-	**-**	4	**0.33**	42	**3.98**
San Benito	1	**3.72**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.72**
San Bernardino	26	**2.17**	7	**0.52**	7	**0.62**	-	**-**	6	**0.46**	46	**3.78**

See footnotes at end of table.

Table CA-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, California residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
San Diego	59	**2.62**	24	**0.83**	4	**0.15**	-	**-**	2	**0.09**	87	**3.59**
San Francisco	56	**5.58**	3	**0.25**	5	**0.44**	-	**-**	1	**0.06**	65	**6.33**
San Joaquin	6	**1.18**	3	**0.39**	4	**0.79**	-	**-**	7	**0.92**	20	**3.28**
San Luis Obispo	4	**1.21**	1	**0.50**	1	**0.50**	-	**-**	1	**0.24**	7	**2.45**
San Mateo	32	**4.36**	3	**0.42**	3	**0.34**	-	**-**	5	**0.52**	43	**5.65**
Santa Barbara	5	**1.25**	6	**1.40**	2	**0.29**	-	**-**	5	**1.25**	18	**4.19**
Santa Clara	20	**1.56**	2	**0.11**	8	**0.52**	-	**-**	3	**0.21**	33	**2.40**
Santa Cruz	8	**2.90**	1	**0.23**	-	**-**	1	**0.58**	-	**-**	10	**3.72**
Shasta	9	**4.68**	3	**1.77**	2	**1.07**	-	**-**	1	**0.38**	15	**7.90**
Siskiyou	3	**4.07**	1	**1.03**	1	**1.03**	-	**-**	2	**3.04**	7	**9.18**
Solano	40	**16.13**	5	**2.08**	1	**0.29**	1	**0.42**	1	**0.29**	48	**19.21**
Sonoma	28	**5.93**	48	**13.93**	3	**0.56**	-	**-**	2	**0.26**	81	**20.68**
Stanislaus	4	**1.07**	3	**0.53**	-	**-**	-	**-**	-	**-**	7	**1.61**
Sutter	1	**1.74**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.74**
Tehama	2	**2.67**	1	**0.89**	2	**3.56**	-	**-**	-	**-**	5	**7.11**
Trinity	-	**-**	-	**-**	1	**4.38**	-	**-**	-	**-**	1	**4.38**
Tulare	6	**1.76**	2	**0.41**	2	**0.41**	-	**-**	-	**-**	10	**2.58**
Toulumne	1	**1.78**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.78**
Ventura	14	**2.36**	6	**0.97**	7	**1.08**	-	**-**	2	**0.32**	28	**4.53**
Yolo	3	**2.08**	-	**-**	-	**-**	-	**-**	2	**1.55**	5	**3.64**
Yuba	3	**5.47**	2	**2.51**	-	**-**	-	**-**	-	**-**	5	**7.98**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

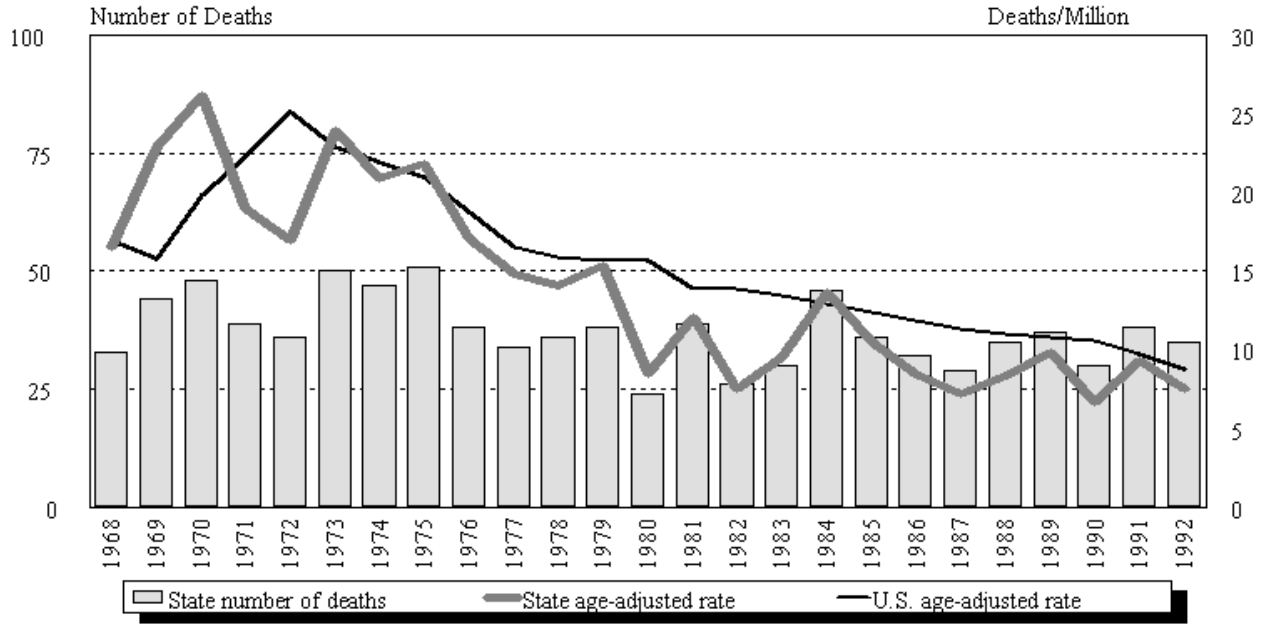
Colorado: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	175	20
Crude mortality rate (per 1,000,000 population)	13.63	12
Age-adjusted mortality rate (per 1,000,000 population)	8.39	11
Total years of potential life lost to life expectancy	1,818	20
Years of potential life lost to life expectancy (per death)	10.4	47

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	22	12.6
Coal workers' pneumoconiosis	87	49.7
Silicosis	58	33.1
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	8	4.6

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure CO-1. All pneumoconioses: Colorado and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Colorado

Table CO-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Colorado residents age 15 and over, 1968-1992

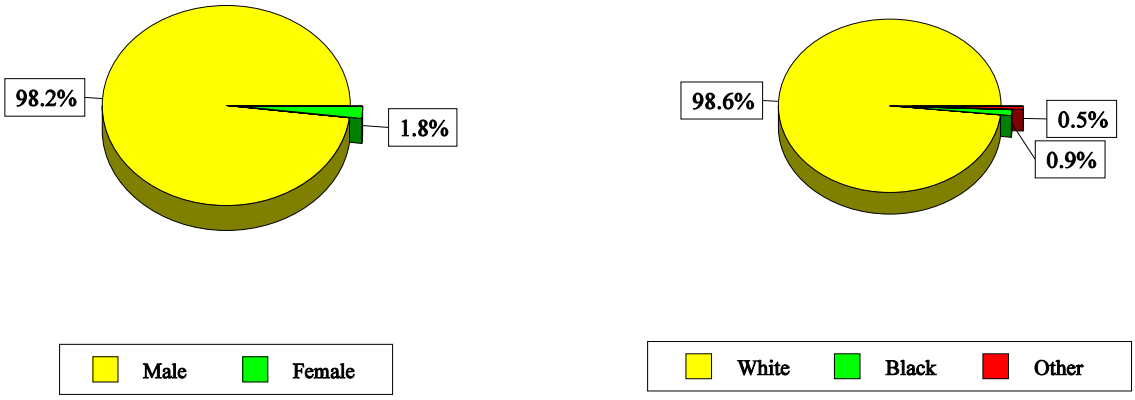
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	1	0.57	1	0.38	26	13.34			5	2.29	33	16.58
1969	-	-	2	0.62	31	16.52			11	5.80	44	22.94
1970	-	-	6	3.09	32	17.96			13	7.03	48	26.18
1971	-	-	5	2.05	28	14.07			8	3.85	39	19.00
1972	-	-	12	5.36	16	8.63			8	3.00	36	16.99
1973	-	-	10	4.35	22	11.24			19	8.88	50	23.91
1974	-	-	11	4.82	26	11.69			12	5.51	47	20.91
1975	-	-	14	5.59	21	9.21			18	7.71	51	21.78
1976	-	-	11	5.43	23	10.25			6	2.25	38	17.10
1977	2	0.94	11	4.62	13	5.75			8	3.49	34	14.80
1978	2	0.95	11	4.46	13	5.66			10	3.04	36	14.11
1979	-	-	8	3.66	18	6.74	-	-	12	5.02	38	15.41
1980	-	-	10	3.27	8	2.99	-	-	6	2.26	24	8.52
1981	-	-	16	5.02	16	5.60	-	-	7	1.46	39	12.07
1982	-	-	15	3.66	7	2.55	-	-	4	1.28	26	7.49
1983	6	2.50	10	2.22	13	4.55	-	-	2	0.65	30	9.54
1984	7	2.48	25	6.84	10	3.27	-	-	4	1.04	46	13.63
1985	3	0.98	22	5.97	7	2.42	-	-	4	1.10	36	10.47
1986	6	1.92	15	3.43	8	2.23	-	-	4	1.09	32	8.43
1987	3	0.83	15	3.52	8	2.19	-	-	3	0.70	29	7.24
1988	6	1.62	21	4.71	8	2.05	-	-	-	-	35	8.38
1989	3	0.91	17	4.11	16	4.48	-	-	1	0.34	37	9.83
1990	4	1.24	15	3.13	10	2.12	-	-	1	0.23	30	6.72
1991	5	1.32	15	2.82	15	4.55	-	-	3	0.65	38	9.33
1992	4	1.28	19	3.14	9	2.23	-	-	3	0.85	35	7.50

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure CO-2. All pneumoconioses: Distribution of deaths by sex and race, Colorado residents age 15 and over, 1968-1992



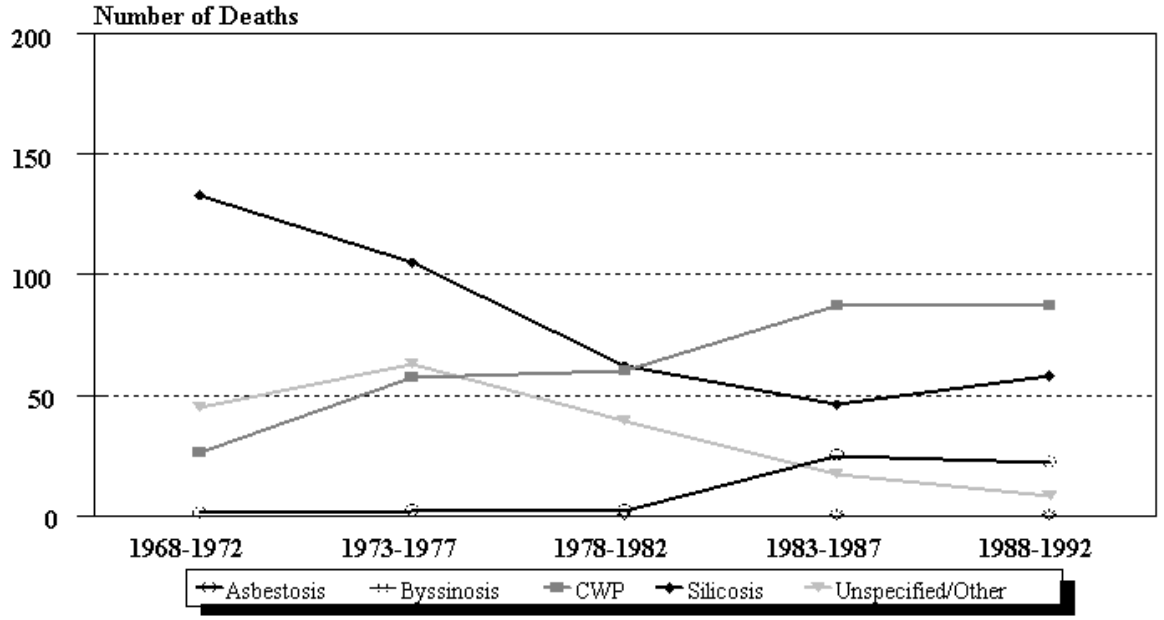
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table CO-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Colorado residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		931	100.0	175	100.0
Sex	Male	914	98.2	173	98.9
	Female	17	1.8	2	1.1
Race	White	918	98.6	170	97.1
	Black	8	0.9	2	1.1
	Other	5	0.5	3	1.7
Age	15-24	1	0.1	0	0.0
	25-34	2	0.2	0	0.0
	35-44	7	0.8	1	0.6
	45-54	32	3.4	3	1.7
	55-64	152	16.3	10	5.7
	65-74	291	31.3	43	24.6
	75-84	308	33.1	75	42.9
	85+	138	14.8	43	24.6
	Mean age	73.1		77.7	
	Range for age	23-100		44-98	

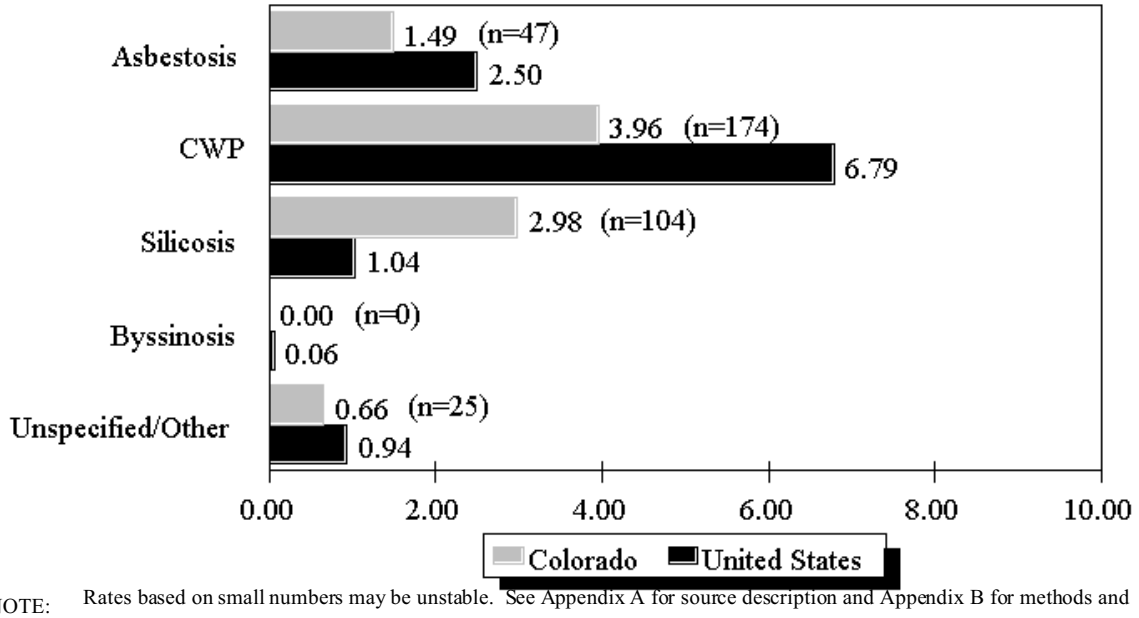
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure CO-3. Pneumoconiosis deaths by condition, Colorado residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure CO-4. Colorado and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table CO-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Colorado residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Adams	2	**1.05**	7	**3.05**	5	**2.37**	-	**-**	1	**0.40**	15	**6.87**
Alamosa	-	**-**	1	**10.84**	-	**-**	-	**-**	-	**-**	1	**10.84**
Arapahoe	4	**1.54**	5	**1.52**	4	**1.14**	-	**-**	-	**-**	13	**4.20**
Boulder	4	**2.07**	10	**4.12**	3	**1.49**	-	**-**	1	**0.38**	17	**7.69**
Chaffee	1	**6.71**	-	**-**	2	**10.06**	-	**-**	-	**-**	3	**16.77**
Conejos	-	**-**	-	**-**	1	**13.30**	-	**-**	-	**-**	1	**13.30**
Crowley	-	**-**	1	**10.22**	-	**-**	-	**-**	-	**-**	1	**10.22**
Delta	1	**3.37**	10	**21.36**	4	**9.37**	-	**-**	-	**-**	15	**34.10**
Denver	9	**1.47**	16	**1.99**	13	**1.84**	-	**-**	2	**0.19**	40	**5.48**
Dolores	-	**-**	-	**-**	2	**85.14**	-	**-**	-	**-**	2	**85.14**
Douglas	-	**-**	1	**3.88**	-	**-**	-	**-**	-	**-**	1	**3.88**
Eagle	1	**14.17**	-	**-**	1	**14.17**	-	**-**	-	**-**	2	**28.34**
El Paso	1	**0.37**	7	**1.94**	4	**1.09**	-	**-**	-	**-**	12	**3.40**
Fremont	2	**5.24**	28	**40.67**	4	**5.58**	-	**-**	1	**2.62**	35	**54.11**
Garfield	-	**-**	-	**-**	1	**4.65**	-	**-**	-	**-**	1	**4.65**
Gunnison	-	**-**	3	**40.21**	-	**-**	-	**-**	1	**17.70**	4	**57.91**
Huerfano	-	**-**	7	**39.66**	-	**-**	-	**-**	1	**4.60**	8	**44.26**
Jefferson	10	**2.82**	8	**2.03**	4	**0.97**	-	**-**	3	**0.75**	25	**6.57**
Lake	-	**-**	1	**22.27**	1	**22.27**	-	**-**	1	**15.85**	3	**60.39**
Laplata	-	**-**	-	**-**	2	**7.90**	-	**-**	-	**-**	2	**7.90**
Larimer	3	**1.13**	3	**1.13**	-	**-**	-	**-**	-	**-**	6	**2.27**
Las Animas	-	**-**	24	**64.55**	2	**4.12**	-	**-**	11	**33.98**	37	**102.65**
Lincoln	-	**-**	1	**6.64**	-	**-**	-	**-**	-	**-**	1	**6.64**
Mesa	5	**3.76**	10	**6.85**	11	**9.19**	-	**-**	-	**-**	25	**18.71**
Mineral	-	**-**	-	**-**	3	**351.61**	-	**-**	-	**-**	3	**351.61**
Montezuma	1	**5.43**	3	**13.96**	5	**24.81**	-	**-**	1	**5.43**	10	**49.63**
Montrose	-	**-**	3	**7.12**	10	**25.01**	-	**-**	-	**-**	13	**32.13**
Morgan	-	**-**	1	**1.76**	-	**-**	-	**-**	-	**-**	1	**1.76**
Otero	-	**-**	1	**1.66**	-	**-**	-	**-**	-	**-**	1	**1.66**
Ouray	-	**-**	-	**-**	4	**134.34**	-	**-**	-	**-**	4	**134.34**
Park	-	**-**	-	**-**	1	**21.09**	-	**-**	-	**-**	1	**21.09**

See footnotes at end of table.

Table CO-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Colorado residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Phillips	-	**-**	-	**-**	1	**6.03**	-	**-**	-	**-**	1	**6.03**
Pueblo	2	**1.11**	8	**3.29**	7	**5.04**	-	**-**	1	**0.36**	18	**9.81**
Routt	-	**-**	2	**24.02**	-	**-**	-	**-**	-	**-**	2	**24.02**
Saguache	-	**-**	-	**-**	2	**24.46**	-	**-**	-	**-**	2	**24.46**
San Juan	-	**-**	-	**-**	2	**331.59**	-	**-**	-	**-**	2	**331.59**
Washington	1	**30.03**	-	**-**	-	**-**	-	**-**	-	**-**	1	**30.03**
Weld	-	**-**	13	**7.80**	5	**4.09**	-	**-**	1	**1.01**	19	**12.90**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

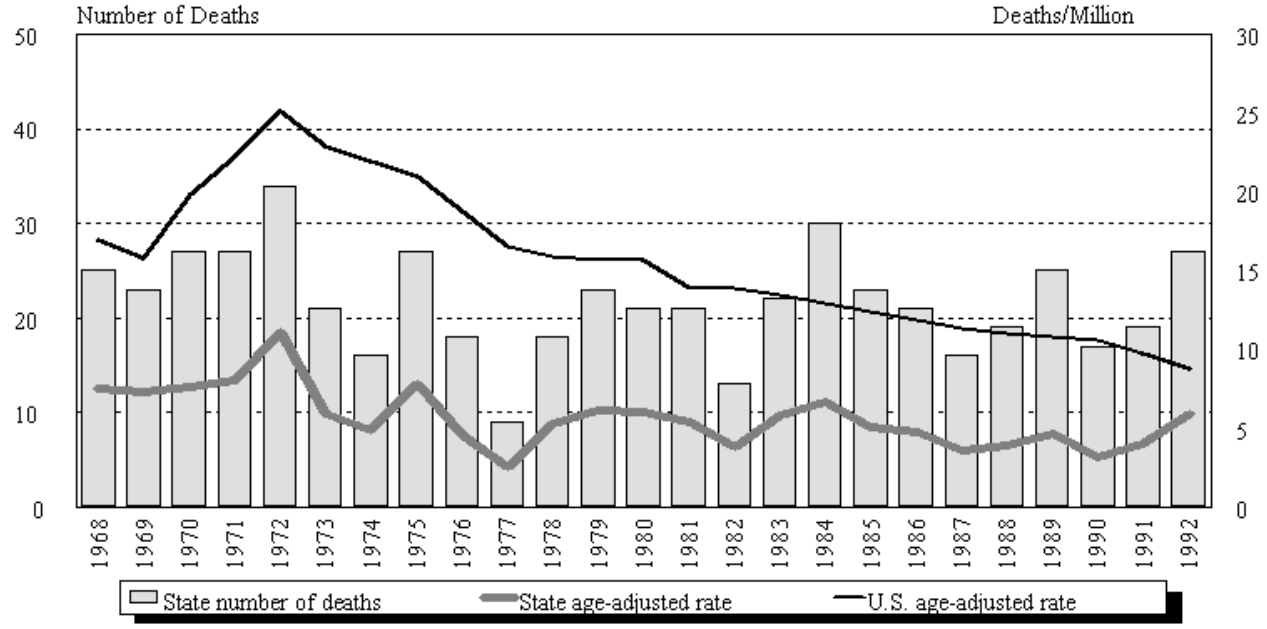
Connecticut: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	107	28
Crude mortality rate (per 1,000,000 population)	8.07	28
Age-adjusted mortality rate (per 1,000,000 population)	4.34	32
Total years of potential life lost to life expectancy	1,204	28
Years of potential life lost to life expectancy (per death)	11.3	40

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	66	61.7
Coal workers' pneumoconiosis	13	12.1
Silicosis	13	12.1
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	15	14.0

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure CT-1. All pneumoconioses: Connecticut and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Connecticut

Table CT-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Connecticut residents age 15 and over, 1968-1992

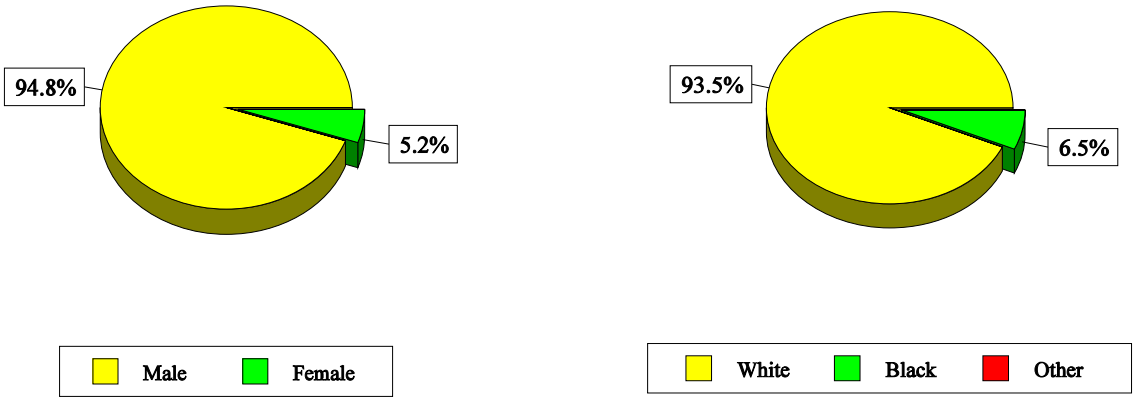
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	6	1.67	13	3.86			7	2.41	25	7.56
1969	1	0.38	4	1.36	12	3.55			6	2.07	23	7.35
1970	1	0.38	3	0.80	16	4.45			8	2.22	27	7.67
1971	2	0.73	7	1.91	6	1.82			12	3.62	27	8.08
1972	4	1.43	10	3.95	10	2.54			10	3.21	34	11.12
1973	2	0.38	5	1.52	6	1.94			9	2.43	21	5.92
1974	2	0.76	2	0.69	9	2.51			3	0.92	16	4.88
1975	4	1.51	4	1.23	10	2.63			9	2.49	27	7.87
1976	-	-	1	0.23	10	2.18			7	2.18	18	4.58
1977	2	0.54	2	0.44	3	0.77			3	1.07	9	2.49
1978	4	1.27	2	0.23	5	1.40			7	2.35	18	5.25
1979	3	0.99	12	2.94	6	1.57	-	-	3	0.99	23	6.17
1980	3	1.10	7	1.69	6	1.63	-	-	5	1.61	21	6.03
1981	4	1.10	3	0.87	3	0.71	-	-	11	2.72	21	5.40
1982	2	0.64	1	0.28	7	2.29	-	-	3	0.58	13	3.80
1983	11	3.32	4	0.76	4	0.99	-	-	3	0.80	22	5.87
1984	7	1.86	7	1.22	9	2.13	1	0.19	7	1.49	30	6.70
1985	8	1.93	6	1.01	6	1.58	-	-	3	0.54	23	5.06
1986	12	3.02	3	0.44	3	0.71	-	-	3	0.62	21	4.80
1987	9	2.30	3	0.43	2	0.35	-	-	2	0.51	16	3.59
1988	10	2.23	1	0.17	5	1.03	-	-	3	0.51	19	3.93
1989	14	2.79	6	0.91	1	0.16	-	-	4	0.76	25	4.62
1990	11	1.89	2	0.51	2	0.41	-	-	2	0.41	17	3.22
1991	14	3.42	1	0.08	2	0.41	-	-	2	0.16	19	4.06
1992	17	4.05	3	0.39	3	0.66	-	-	4	0.82	27	5.91

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure CT-2. All pneumoconioses: Distribution of deaths by sex and race, Connecticut residents age 15 and over, 1968-1992



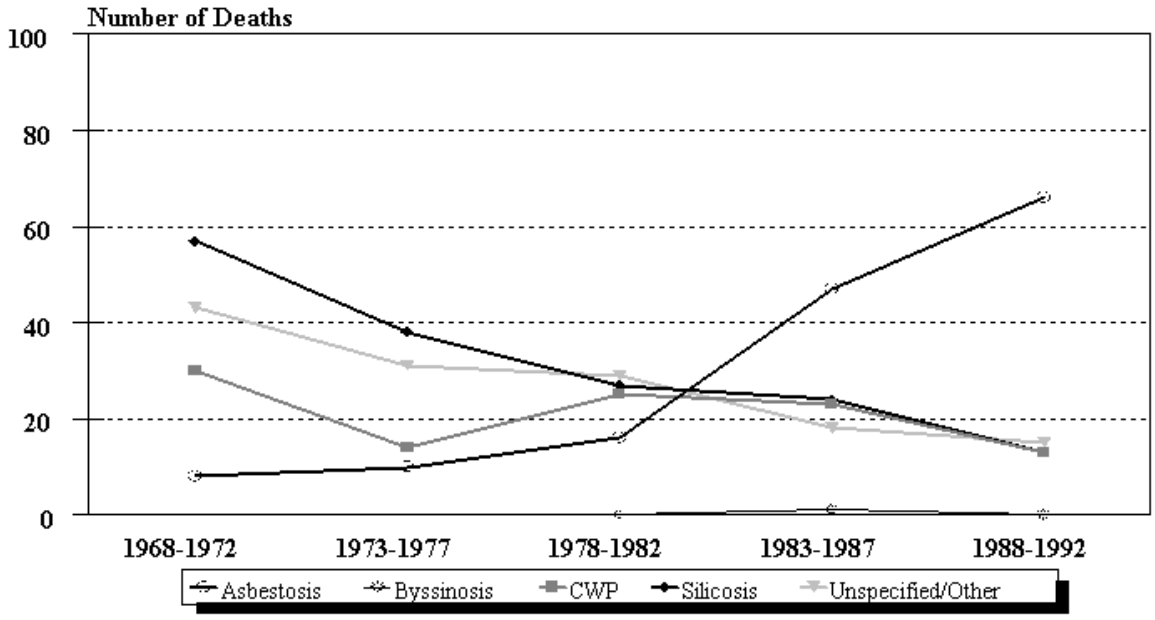
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table CT-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Connecticut residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		542	100.0	107	100.0
Sex	Male	514	94.8	102	95.3
	Female	28	5.2	5	4.7
Race	White	507	93.5	101	94.4
	Black	35	6.5	6	5.6
	Other	0	0.0	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	0	0.0	0	0.0
	35-44	4	0.7	0	0.0
	45-54	25	4.6	0	0.0
	55-64	87	16.1	9	8.4
	65-74	173	31.9	42	39.3
	75-84	190	35.1	41	38.3
	85+	63	11.6	15	14.0
	Mean age	72.6		75.1	
	Range for age	40-97		59-93	

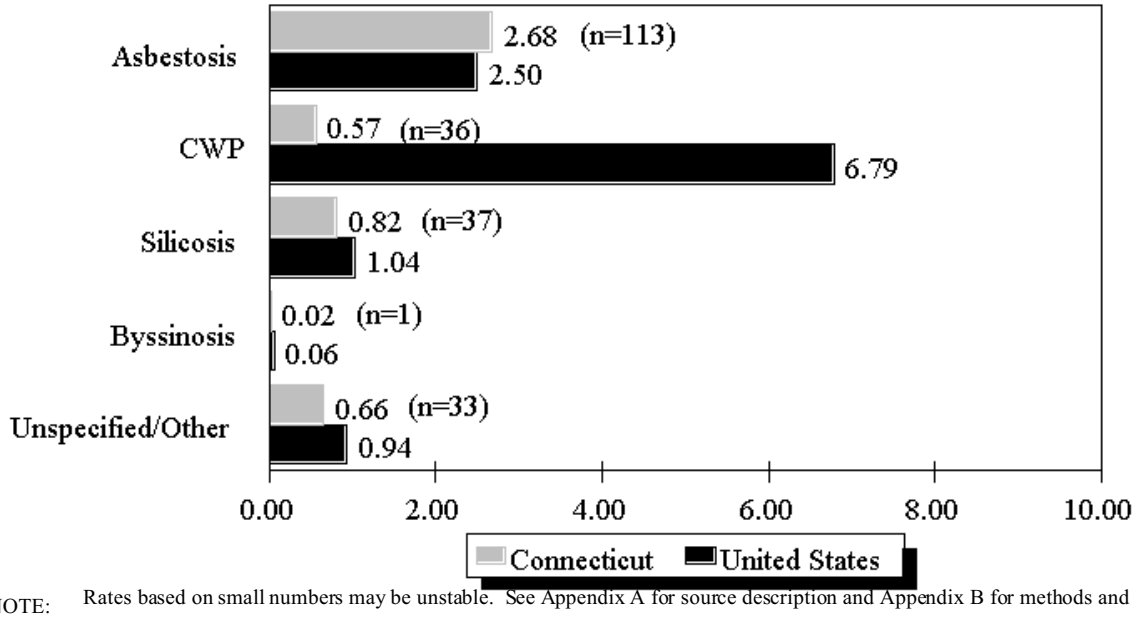
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure CT-3. Pneumoconiosis deaths by condition, Connecticut residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure CT-4. Connecticut and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table CT-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Connecticut residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Fairfield	20	**1.60**	22	**1.50**	11	**0.78**	-	**-**	12	**1.06**	64	**4.88**
Hartford	26	**2.40**	5	**0.28**	8	**0.57**	-	**-**	10	**0.80**	49	**4.04**
Litchfield	4	**1.71**	3	**0.80**	1	**0.59**	-	**-**	3	**0.80**	11	**3.89**
Middlesex	4	**1.79**	-	**-**	2	**0.69**	-	**-**	-	**-**	6	**2.48**
New Haven	16	**1.42**	4	**0.22**	9	**0.97**	-	**-**	7	**0.59**	36	**3.21**
New London	38	**14.97**	-	**-**	5	**2.31**	1	**0.23**	1	**0.23**	45	**17.74**
Tolland	3	**3.21**	-	**-**	-	**-**	-	**-**	-	**-**	3	**3.21**
Windham	2	**2.23**	2	**1.61**	1	**1.12**	-	**-**	-	**-**	5	**4.96**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

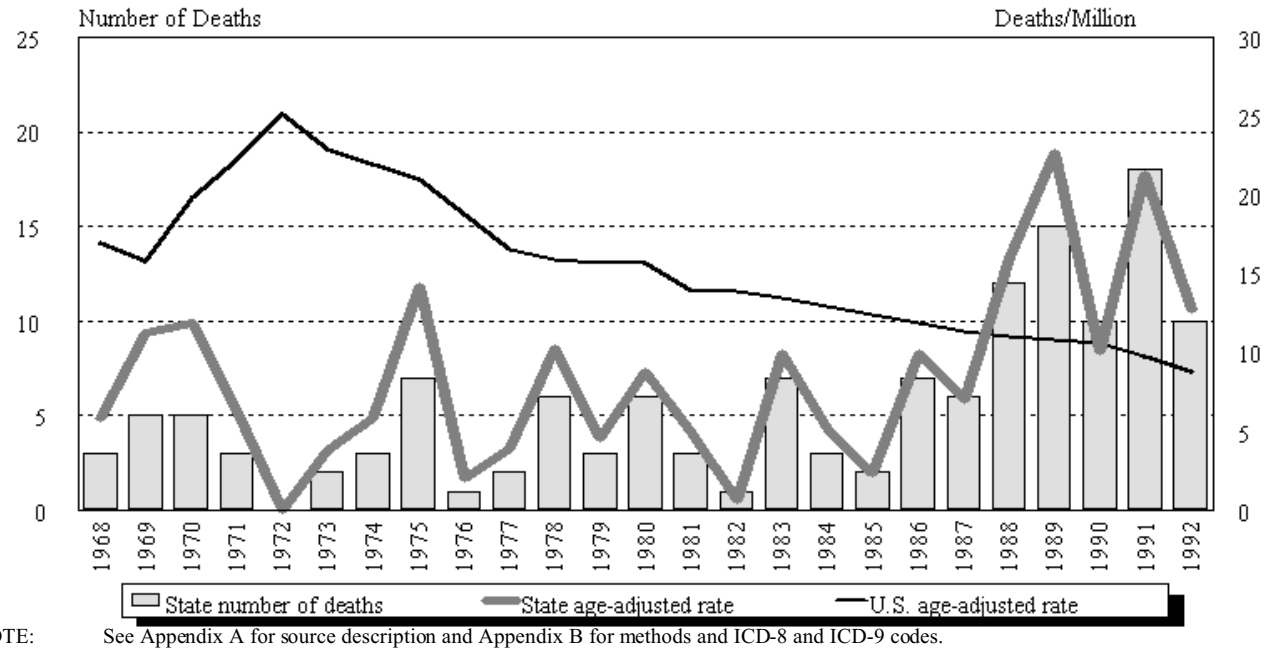
Delaware: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	65	33
Crude mortality rate (per 1,000,000 population)	24.60	5
Age-adjusted mortality rate (per 1,000,000 population)	16.54	5
Total years of potential life lost to life expectancy	895	32
Years of potential life lost to life expectancy (per death)	13.8	6

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	49	75.4
Coal workers' pneumoconiosis	12	18.5
Silicosis	4	6.2
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	2	3.1

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure DE-1. All pneumoconioses: Delaware and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Delaware

Table DE-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Delaware residents age 15 and over, 1968-1992

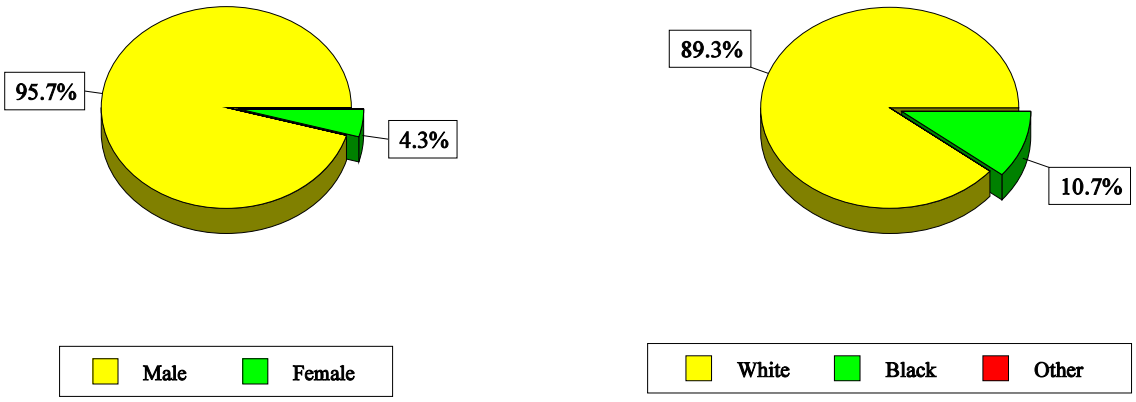
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	3	5.82	-	-			-	-	3	5.82
1969	-	-	1	2.36	1	1.73			3	7.11	5	11.20
1970	-	-	2	4.73	-	-			3	7.19	5	11.92
1971	-	-	2	3.96	1	2.30			-	-	3	6.26
1972	-	-	-	-	-	-			-	-	-	-
1973	-	-	-	-	-	-			2	3.77	2	3.77
1974	-	-	2	4.27	1	1.54			-	-	3	5.80
1975	2	4.43	3	5.63	3	6.23			-	-	7	14.21
1976	1	2.01	-	-	-	-			-	-	1	2.01
1977	-	-	2	3.87	-	-			-	-	2	3.87
1978	1	1.39	2	3.27	1	1.88			2	3.76	6	10.29
1979	-	-	-	-	-	-	-	-	3	4.53	3	4.53
1980	-	-	3	4.26	1	0.69	-	-	2	3.81	6	8.76
1981	-	-	3	4.83	-	-	-	-	-	-	3	4.83
1982	-	-	-	-	1	0.66	-	-	-	-	1	0.66
1983	3	4.25	4	5.68	-	-	-	-	-	-	7	9.92
1984	-	-	3	5.19	-	-	-	-	-	-	3	5.19
1985	1	1.15	1	1.15	-	-	-	-	-	-	2	2.29
1986	3	4.05	4	5.90	-	-	-	-	-	-	7	9.95
1987	3	3.91	1	1.42	-	-	-	-	2	1.64	6	6.97
1988	8	11.91	2	2.06	1	1.03	-	-	2	2.06	12	16.02
1989	13	18.97	1	1.34	1	2.36	-	-	-	-	15	22.67
1990	6	6.68	4	3.41	1	0.96	-	-	-	-	10	10.09
1991	14	17.27	4	4.07	-	-	-	-	-	-	18	21.35
1992	8	10.54	1	1.26	1	0.90	-	-	-	-	10	12.70

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure DE-2. All pneumoconioses: Distribution of deaths by sex and race, Delaware residents age 15 and over, 1968-1992



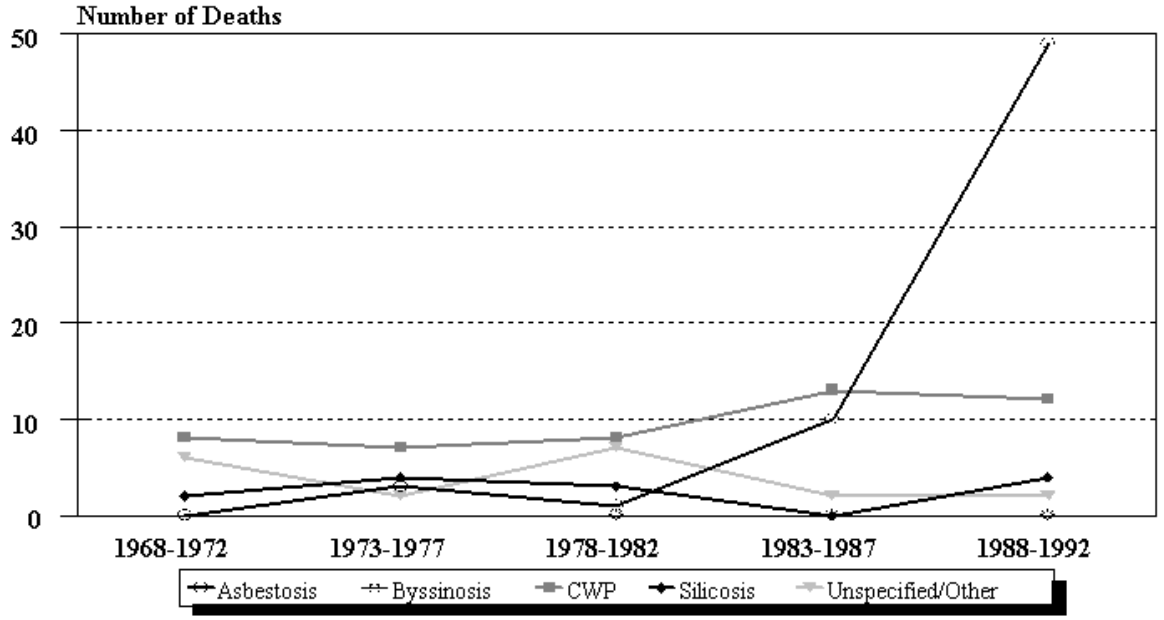
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table DE-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Delaware residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		140	100.0	65	100.0
Sex	Male	134	95.7	61	93.8
	Female	6	4.3	4	6.2
Race	White	125	89.3	59	90.8
	Black	15	10.7	6	9.2
	Other	0	0.0	0	0.0
Age	15-24	2	1.4	0	0.0
	25-34	0	0.0	0	0.0
	35-44	1	0.7	1	1.5
	45-54	7	5.0	4	6.2
	55-64	21	15.0	10	15.4
	65-74	53	37.9	23	35.4
	75-84	47	33.6	22	33.8
	85+	9	6.4	5	7.7
	Mean age	71.0		70.9	
	Range for age	21-95		43-91	

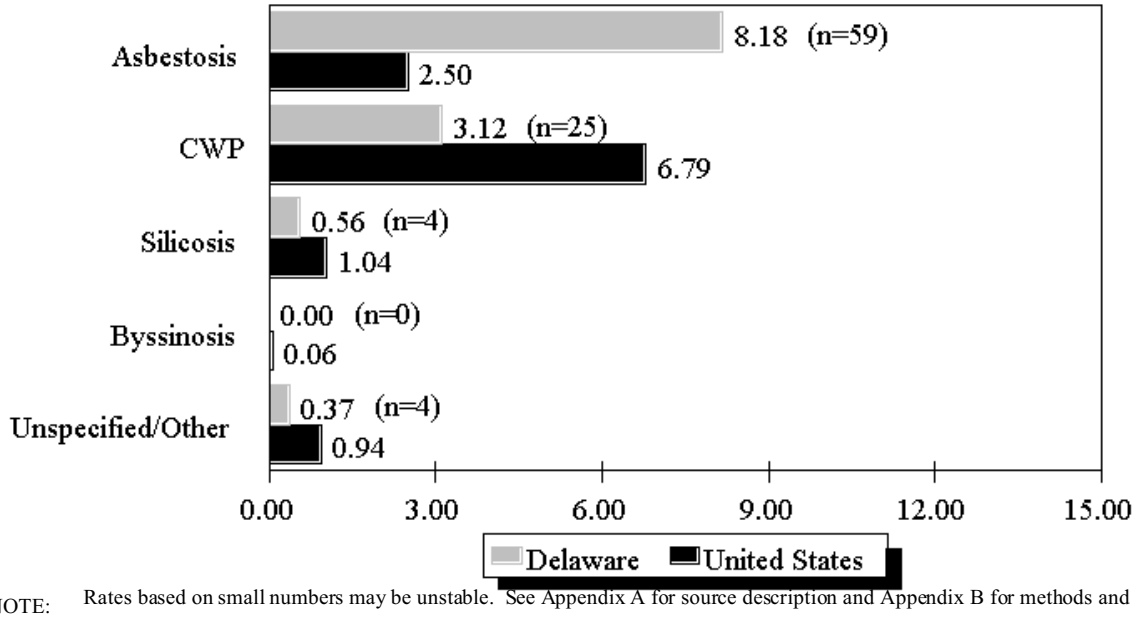
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure DE-3. Pneumoconiosis deaths by condition, Delaware residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure DE-4. Delaware and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table DE-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Delaware residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Kent	6	**5.71**	8	**6.68**	1	**0.61**	-	**-**	-	**-**	14	**12.39**
New Castle	37	**8.49**	14	**2.63**	2	**0.30**	-	**-**	2	**0.30**	54	**11.56**
Sussex	16	**9.83**	3	**2.29**	1	**1.36**	-	**-**	2	**0.84**	22	**14.32**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

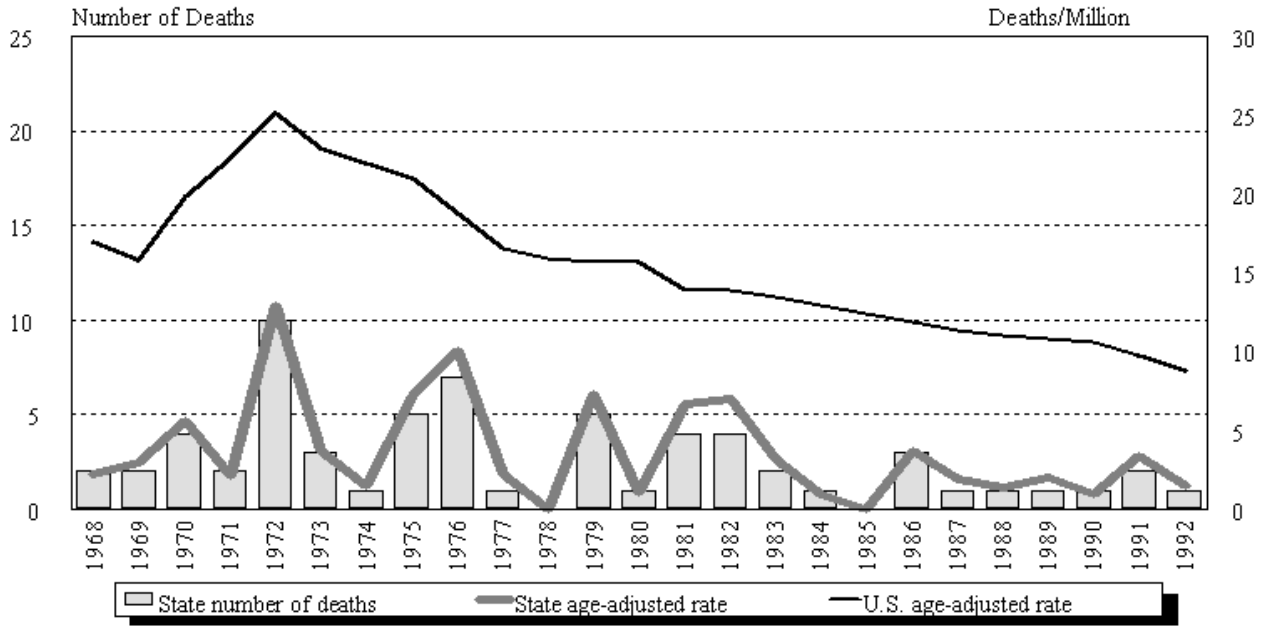
District of Columbia: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	6	51
Crude mortality rate (per 1,000,000 population)	2.37	51
Age-adjusted mortality rate (per 1,000,000 population)	1.84	49
Total years of potential life lost to life expectancy	126	49
Years of potential life lost to life expectancy (per death)	21.0	1

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	1	16.7
Coal workers' pneumoconiosis	1	16.7
Silicosis	2	33.3
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	2	33.3

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure DC-1. All pneumoconioses: District of Columbia and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

District of Columbia

Table DC-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, District of Columbia residents age 15 and over, 1968-1992

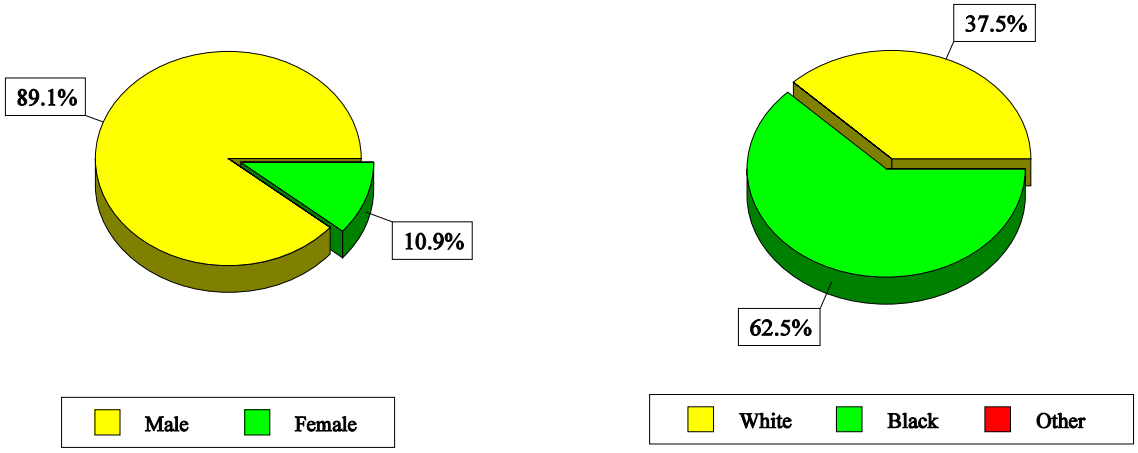
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	1	1.44	1	0.74			1	1.44	2	2.18
1969	1	1.44	-	-	1	1.51			-	-	2	2.95
1970	-	-	1	1.88	-	-			3	3.75	4	5.63
1971	-	-	1	1.43	-	-			1	0.72	2	2.15
1972	-	-	2	2.87	6	7.92			2	2.18	10	12.97
1973	1	1.08	-	-	1	1.08			1	1.54	3	3.69
1974	-	-	-	-	-	-			1	1.43	1	1.43
1975	-	-	1	1.42	1	1.58			3	4.22	5	7.23
1976	-	-	2	2.84	3	4.62			2	2.66	7	10.11
1977	-	-	-	-	1	2.22			-	-	1	2.22
1978	-	-	-	-	-	-			-	-	-	-
1979	1	1.39	2	2.11	2	3.77	-	-	-	-	5	7.27
1980	-	-	-	-	1	1.06	-	-	-	-	1	1.06
1981	1	2.53	1	0.56	1	1.04	-	-	1	2.53	4	6.66
1982	-	-	1	1.41	3	5.54	-	-	-	-	4	6.95
1983	1	1.76	1	1.41	-	-	-	-	-	-	2	3.17
1984	-	-	-	-	1	0.99	-	-	-	-	1	0.99
1985	-	-	-	-	-	-	-	-	-	-	-	-
1986	2	1.88	-	-	1	1.83	-	-	-	-	3	3.71
1987	1	1.87	-	-	-	-	-	-	-	-	1	1.87
1988	-	-	1	1.41	-	-	-	-	-	-	1	1.41
1989	-	-	-	-	-	-	-	-	1	1.97	1	1.97
1990	-	-	-	-	1	0.91	-	-	-	-	1	0.91
1991	1	1.47	-	-	-	-	-	-	1	1.91	2	3.38
1992	-	-	-	-	1	1.47	-	-	-	-	1	1.47

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure DC-2. All pneumoconioses: Distribution of deaths by sex and race, District of Columbia residents age 15 and over, 1968-1992



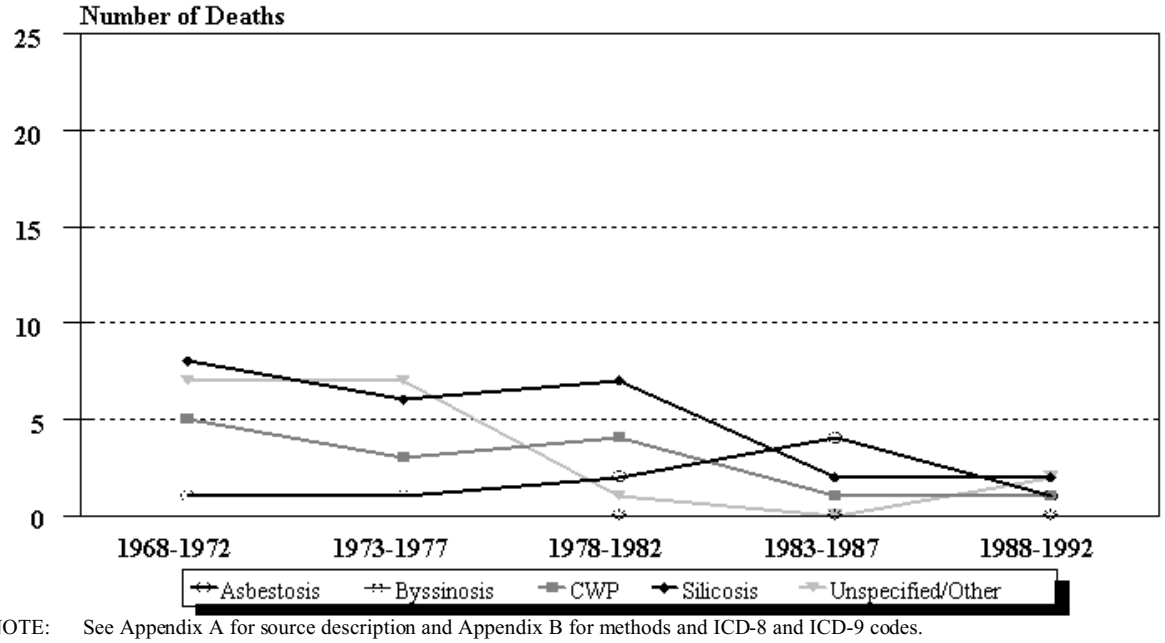
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table DC-2. All pneumoconioses: Distribution of deaths by sex, race, and age, District of Columbia residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		64	100.0	6	100.0
Sex	Male	57	89.1	6	100.0
	Female	7	10.9	0	0.0
Race	White	24	37.5	1	16.7
	Black	40	62.5	5	83.3
	Other	0	0.0	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	1	1.6	0	0.0
	35-44	3	4.7	2	33.3
	45-54	6	9.4	0	0.0
	55-64	11	17.2	0	0.0
	65-74	22	34.4	3	50.0
	75-84	17	26.6	1	16.7
	85+	4	6.3	0	0.0
	Mean age	68.6		62.3	
	Range for age	30-100		37-83	

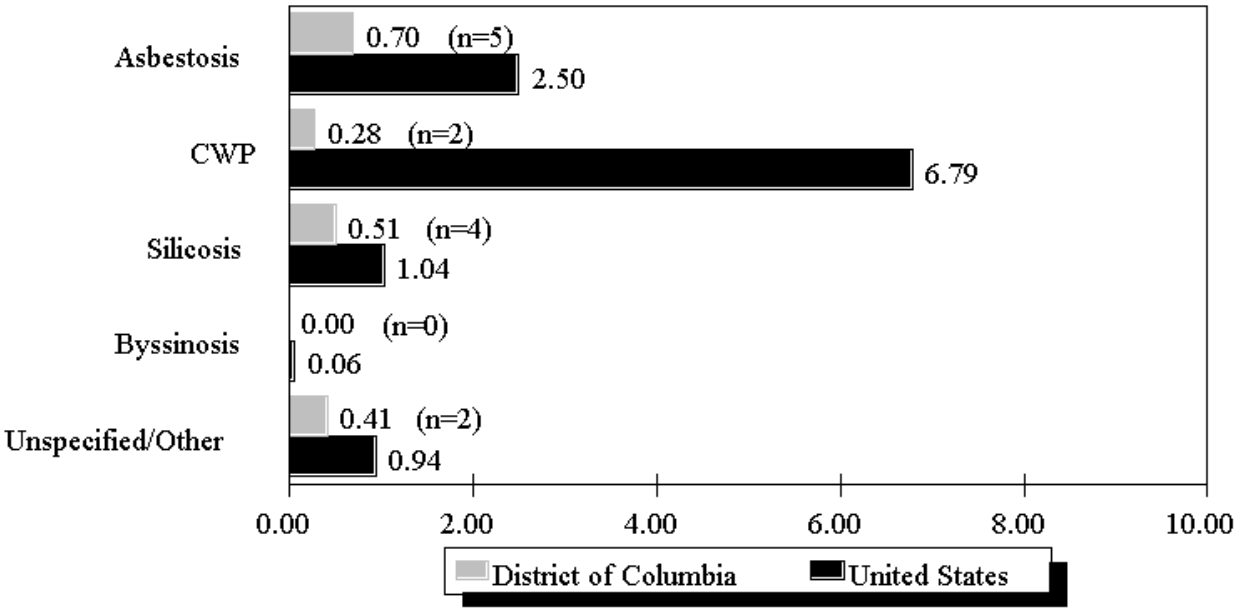
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure DC-3. Pneumoconiosis deaths by condition, District of Columbia residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure DC-4. District of Columbia and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table DC-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Washington, D.C. residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Washington, D.C.	5	**0.67**	2	**0.34**	4	**0.50**	-	**-**	2	**0.45**	13	**1.95**

- indicates no deaths listed.

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

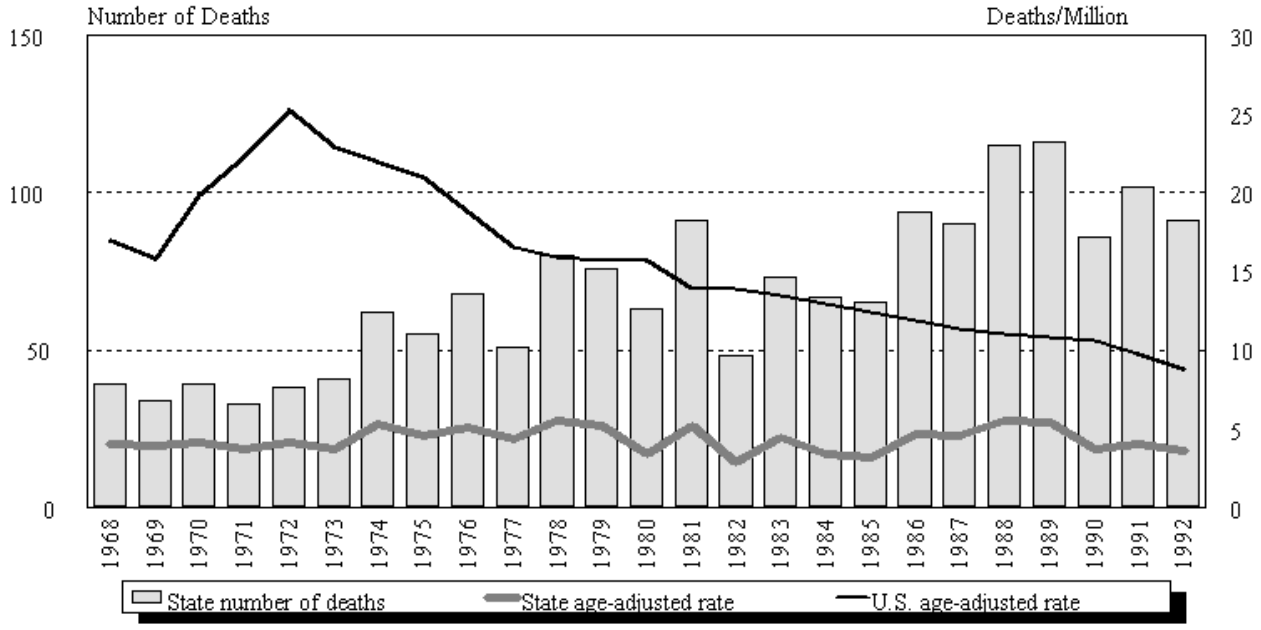
Florida: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	510	8
Crude mortality rate (per 1,000,000 population)	9.66	22
Age-adjusted mortality rate (per 1,000,000 population)	4.41	31
Total years of potential life lost to life expectancy	6,229	8
Years of potential life lost to life expectancy (per death)	12.2	24

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	264	51.8
Coal workers' pneumoconiosis	151	29.6
Silicosis	50	9.8
Byssinosis	2	0.4
Unspecified/Other pneumoconiosis	46	9.0

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure FL-1. All pneumoconioses: Florida and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Florida

Table FL-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Florida residents age 15 and over, 1968-1992

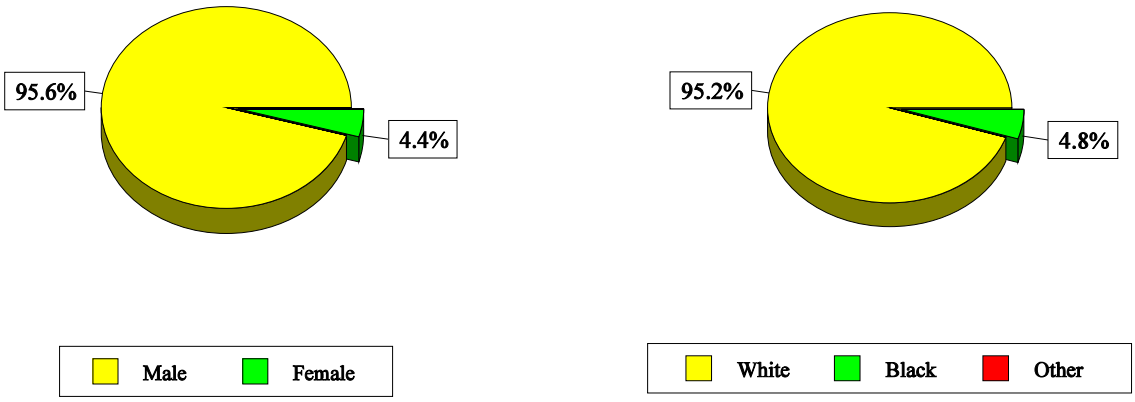
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	2	0.18	20	2.28	13	1.25			7	0.64	39	4.04
1969	2	0.30	12	1.62	14	1.31			6	0.66	34	3.89
1970	2	0.25	10	1.11	18	1.90			10	1.11	39	4.17
1971	-	-	9	1.08	13	1.38			11	1.26	33	3.73
1972	2	0.27	16	1.55	8	1.02			12	1.27	38	4.11
1973	3	0.23	9	0.75	20	1.76			9	0.96	41	3.70
1974	3	0.33	23	1.95	16	1.30			22	1.83	62	5.30
1975	2	0.17	22	1.82	16	1.33			17	1.38	55	4.53
1976	4	0.28	24	1.78	15	1.02			26	2.07	68	5.09
1977	2	0.10	17	1.50	16	1.33			18	1.47	51	4.30
1978	15	1.23	36	2.45	13	0.92			19	1.20	80	5.52
1979	17	1.30	35	2.27	11	0.75	-	-	13	0.90	76	5.22
1980	10	0.61	32	1.65	13	0.62	-	-	10	0.55	63	3.36
1981	9	0.41	52	3.16	17	0.91	-	-	13	0.76	91	5.25
1982	12	0.85	26	1.42	6	0.34	-	-	4	0.23	48	2.85
1983	20	1.39	35	1.85	11	0.68	-	-	7	0.52	73	4.44
1984	19	0.95	32	1.65	10	0.48	-	-	6	0.28	67	3.36
1985	27	1.54	20	0.95	10	0.38	-	-	9	0.35	65	3.17
1986	35	2.03	38	1.59	14	0.78	-	-	7	0.24	94	4.64
1987	41	2.17	34	1.78	11	0.49	-	-	5	0.16	90	4.52
1988	59	3.07	35	1.49	13	0.64	-	-	9	0.32	115	5.47
1989	56	2.55	35	1.37	14	1.06	-	-	11	0.48	116	5.46
1990	43	1.80	25	1.02	12	0.64	1	0.05	5	0.18	86	3.69
1991	54	2.21	33	1.27	7	0.22	-	-	10	0.39	102	4.01
1992	52	2.20	23	0.76	4	0.13	1	0.14	11	0.36	91	3.59

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure FL-2. All pneumoconioses: Distribution of deaths by sex and race, Florida residents age 15 and over, 1968-1992



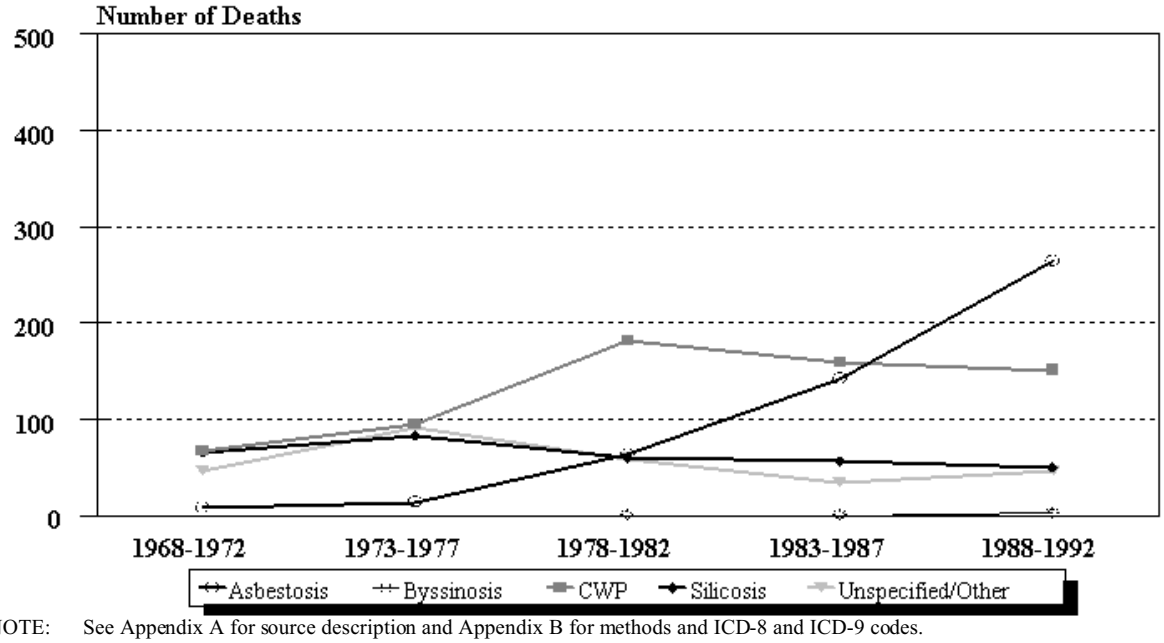
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table FL-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Florida residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		1,717	100.0	510	100.0
Sex	Male	1,642	95.6	491	96.3
	Female	75	4.4	19	3.7
Race	White	1,635	95.2	490	96.1
	Black	82	4.8	20	3.9
	Other	0	0.0	0	0.0
Age	15-24	4	0.2	1	0.2
	25-34	2	0.1	1	0.2
	35-44	11	0.6	2	0.4
	45-54	62	3.6	10	2.0
	55-64	264	15.4	58	11.4
	65-74	607	35.4	185	36.3
	75-84	612	35.6	202	39.6
	85+	155	9.0	51	10.0
	Mean age	72.3		74.0	
	Range for age	15-96		22-93	

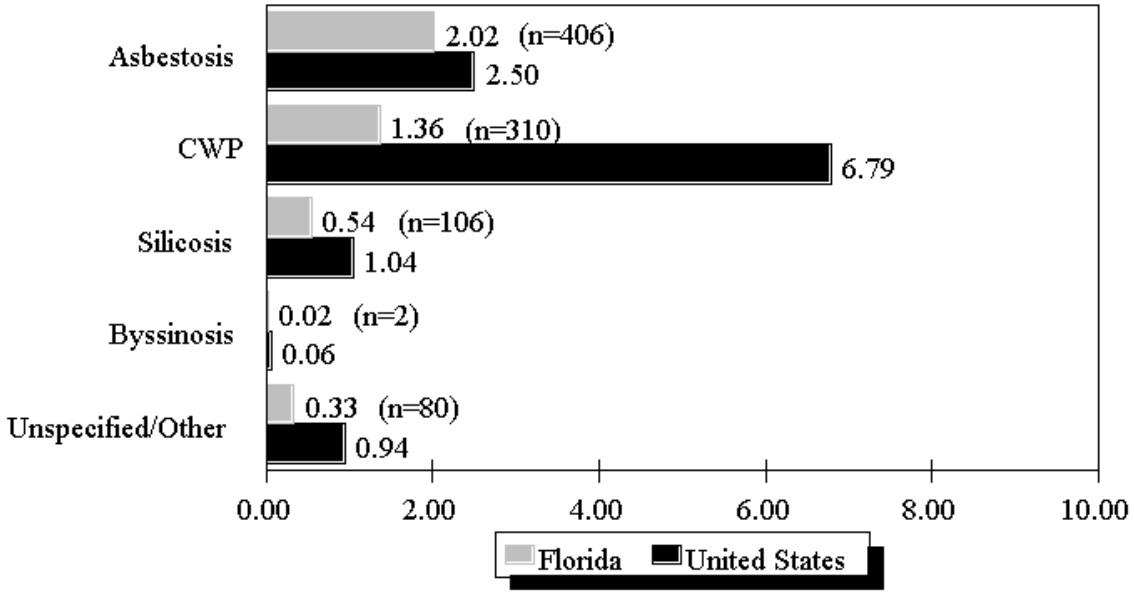
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure FL-3. Pneumoconiosis deaths by condition, Florida residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure FL-4. Florida and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table FL-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Florida residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Alachua	3	**2.11**	5	**2.57**	1	**0.84**	-	**-**	1	**0.43**	9	**5.12**
Bay	7	**4.92**	4	**3.01**	-	**-**	-	**-**	-	**-**	11	**7.93**
Bradford	2	**7.30**	2	**5.27**	-	**-**	-	**-**	-	**-**	4	**12.57**
Brevard	8	**1.87**	20	**3.36**	6	**1.03**	-	**-**	2	**0.26**	35	**6.32**
Broward	41	**1.78**	16	**0.56**	5	**0.30**	-	**-**	5	**0.22**	67	**2.86**
Calhoun	1	**4.00**	-	**-**	1	**14.29**	-	**-**	-	**-**	2	**18.28**
Charlotte	2	**0.70**	2	**0.70**	-	**-**	-	**-**	-	**-**	4	**1.40**
Citrus	10	**4.32**	8	**3.74**	2	**0.86**	-	**-**	2	**0.86**	22	**9.79**
Clay	1	**1.41**	2	**1.72**	1	**1.41**	-	**-**	1	**1.41**	5	**5.96**
Collier	1	**0.25**	5	**1.71**	1	**0.48**	-	**-**	1	**0.48**	8	**2.91**
Columbia	-	**-**	2	**2.88**	-	**-**	-	**-**	2	**4.68**	4	**7.56**
Dade	28	**0.98**	5	**0.11**	3	**0.10**	-	**-**	1	**0.05**	37	**1.25**
Duval	34	**5.48**	9	**1.15**	8	**1.37**	-	**-**	3	**0.31**	53	**8.14**
Escambia	19	**7.09**	3	**0.74**	1	**0.25**	-	**-**	-	**-**	23	**8.08**
Flagler	-	**-**	1	**1.86**	1	**2.10**	-	**-**	-	**-**	2	**3.96**
Gadsden	2	**5.25**	1	**1.24**	-	**-**	-	**-**	-	**-**	3	**6.48**
Gilchrist	1	**10.25**	-	**-**	-	**-**	-	**-**	-	**-**	1	**10.25**
Gulf	2	**14.80**	-	**-**	-	**-**	-	**-**	-	**-**	2	**14.80**
Hamilton	-	**-**	-	**-**	1	**11.27**	-	**-**	-	**-**	1	**11.27**
Hardee	-	**-**	1	**2.53**	-	**-**	-	**-**	-	**-**	1	**2.53**
Hendry	-	**-**	1	**2.85**	-	**-**	-	**-**	-	**-**	1	**2.85**
Hernando	6	**2.87**	5	**3.81**	4	**1.98**	-	**-**	1	**0.33**	16	**9.00**
Highlands	4	**1.39**	2	**0.69**	-	**-**	-	**-**	-	**-**	6	**2.08**
Hillsborough	14	**1.56**	15	**1.44**	9	**1.15**	-	**-**	2	**0.14**	40	**4.29**
Holmes	1	**2.74**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.74**
Indian River	4	**2.07**	1	**0.70**	2	**0.67**	-	**-**	1	**0.70**	8	**4.14**
Jackson	1	**2.33**	1	**2.33**	1	**3.61**	-	**-**	-	**-**	3	**8.26**
Lake	3	**1.01**	10	**2.97**	1	**0.42**	-	**-**	3	**0.77**	17	**5.16**
Lee	14	**2.20**	4	**0.70**	4	**0.39**	-	**-**	1	**0.10**	23	**3.40**
Leon	4	**3.03**	-	**-**	1	**0.85**	1	**0.58**	-	**-**	6	**4.45**
Levy	1	**2.90**	2	**5.79**	1	**1.73**	-	**-**	1	**1.73**	5	**12.16**
Manatee	7	**2.60**	5	**0.77**	1	**0.11**	-	**-**	3	**0.55**	16	**4.03**
Marion	3	**0.94**	20	**5.40**	5	**1.35**	-	**-**	2	**0.57**	30	**8.25**

See footnotes at end of table.

Table FL-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Florida residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Martin	7	**3.75**	-	**-**	-	**-**	-	**-**	-	**-**	7	**3.75**
Monroe	1	**1.02**	2	**1.72**	1	**0.71**	-	**-**	-	**-**	4	**3.45**
Nassau	1	**2.66**	-	**-**	-	**-**	-	**-**	3	**5.63**	4	**8.30**
Okaloosa	4	**3.25**	-	**-**	1	**0.85**	-	**-**	1	**0.70**	6	**4.81**
Okeechobee	1	**5.83**	2	**3.78**	-	**-**	-	**-**	1	**2.95**	4	**12.56**
Orange	12	**1.73**	26	**3.89**	3	**0.47**	1	**0.18**	10	**1.37**	52	**7.64**
Osceola	2	**2.05**	8	**8.65**	1	**1.02**	-	**-**	-	**-**	10	**10.70**
Palm Beach	30	**2.11**	6	**0.36**	2	**0.18**	-	**-**	2	**0.07**	40	**2.72**
Pasco	23	**4.61**	17	**2.24**	12	**1.59**	-	**-**	9	**1.10**	60	**9.45**
Pinellas	41	**2.35**	35	**2.08**	10	**0.37**	-	**-**	12	**0.59**	98	**5.39**
Polk	6	**1.15**	13	**2.26**	4	**0.83**	-	**-**	3	**0.41**	26	**4.65**
Putnam	5	**4.91**	8	**7.03**	2	**1.87**	-	**-**	-	**-**	15	**13.81**
St. Johns	4	**3.34**	6	**6.22**	-	**-**	-	**-**	-	**-**	10	**9.56**
St. Lucie	7	**3.15**	4	**1.61**	3	**2.03**	-	**-**	-	**-**	14	**6.79**
Santa Rosa	6	**8.24**	2	**3.09**	-	**-**	-	**-**	-	**-**	8	**11.32**
Sarasota	9	**1.76**	7	**0.80**	1	**0.65**	-	**-**	1	**0.08**	18	**3.28**
Seminole	3	**0.98**	4	**1.24**	3	**0.79**	-	**-**	-	**-**	10	**3.01**
Sumter	2	**3.40**	1	**2.16**	1	**1.24**	-	**-**	-	**-**	4	**6.80**
Suwannee	3	**8.10**	-	**-**	-	**-**	-	**-**	-	**-**	3	**8.10**
Taylor	1	**3.13**	1	**3.13**	-	**-**	-	**-**	-	**-**	2	**6.26**
Volusia	11	**1.64**	15	**1.86**	2	**0.29**	-	**-**	6	**0.74**	34	**4.53**
Wakulla	1	**7.94**	1	**4.37**	-	**-**	-	**-**	-	**-**	2	**12.31**
Washington	2	**9.94**	-	**-**	-	**-**	-	**-**	-	**-**	2	**9.94**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

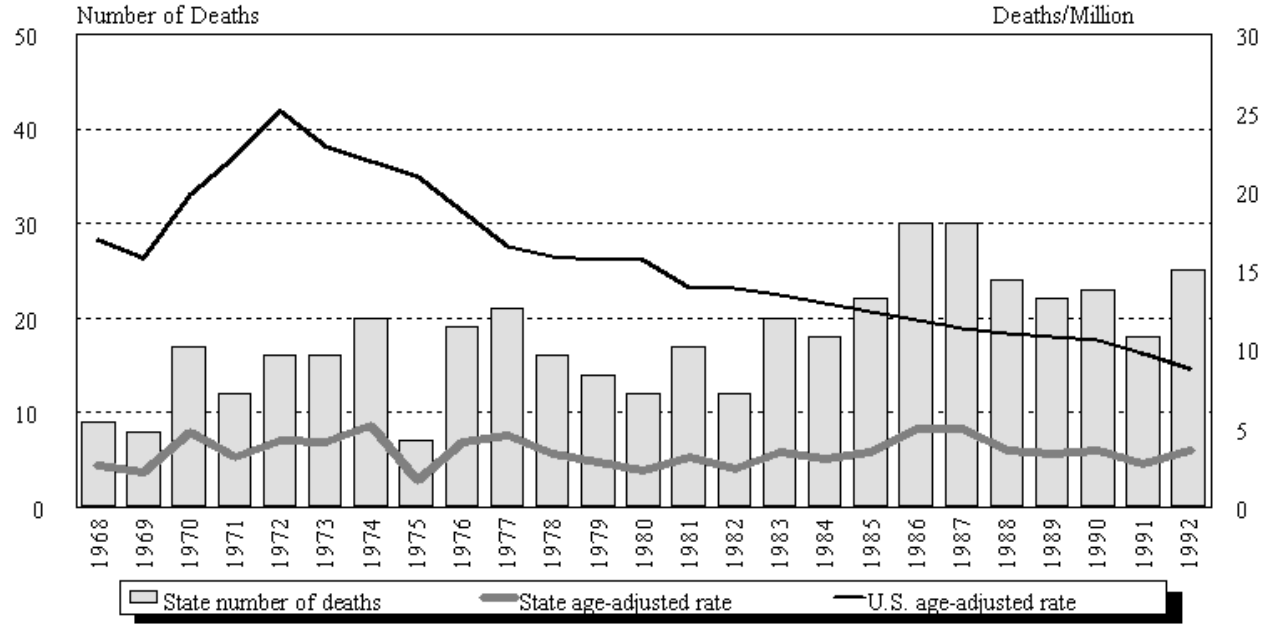
Georgia: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	112	25
Crude mortality rate (per 1,000,000 population)	4.44	45
Age-adjusted mortality rate (per 1,000,000 population)	3.37	37
Total years of potential life lost to life expectancy	1,492	24
Years of potential life lost to life expectancy (per death)	13.3	7

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	55	49.1
Coal workers' pneumoconiosis	22	19.6
Silicosis	23	20.5
Byssinosis	2	1.8
Unspecified/Other pneumoconiosis	10	8.9

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure GA-1. All pneumoconioses: Georgia and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Georgia

Table GA-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Georgia residents age 15 and over, 1968-1992

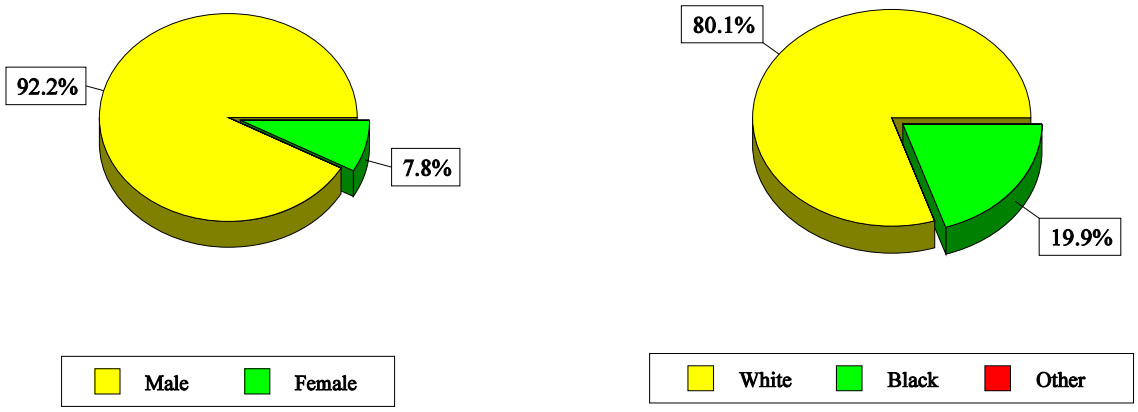
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	3	0.92	-	-	4	1.09			2	0.60	9	2.62
1969	-	-	-	-	5	1.31			3	0.87	8	2.18
1970	1	0.27	-	-	11	3.06			5	1.47	17	4.80
1971	-	-	2	0.42	6	1.64			4	1.12	12	3.19
1972	2	0.62	-	-	8	1.95			6	1.66	16	4.24
1973	3	0.80	2	0.52	9	2.28			2	0.52	16	4.12
1974	3	0.80	1	0.26	11	2.78			5	1.34	20	5.17
1975	1	0.25	2	0.53	-	-			4	0.94	7	1.72
1976	1	0.22	3	0.40	9	1.99			6	1.57	19	4.18
1977	-	-	1	0.24	12	2.53			9	1.99	21	4.58
1978	2	0.48	1	0.21	7	1.50			6	1.20	16	3.39
1979	3	0.73	2	0.30	7	1.39	-	-	3	0.53	14	2.85
1980	4	0.74	2	0.42	1	0.16	-	-	5	1.00	12	2.32
1981	2	0.38	4	0.77	6	1.15	2	0.38	3	0.49	17	3.18
1982	8	1.79	2	0.38	2	0.29	-	-	-	-	12	2.46
1983	5	1.03	1	0.19	7	1.08	3	0.62	4	0.55	20	3.47
1984	2	0.47	4	0.53	5	0.88	5	0.86	2	0.37	18	3.11
1985	4	0.67	3	0.39	9	1.38	1	0.28	5	0.82	22	3.54
1986	11	1.76	6	1.07	9	1.41	2	0.30	2	0.40	30	4.94
1987	12	1.95	2	0.29	6	1.25	4	0.64	6	0.88	30	5.01
1988	8	1.32	6	0.86	6	0.80	-	-	4	0.63	24	3.61
1989	6	0.86	7	1.07	7	1.09	1	0.19	1	0.17	22	3.37
1990	13	2.21	4	0.56	4	0.60	-	-	2	0.18	23	3.55
1991	10	1.74	3	0.38	3	0.38	1	0.11	1	0.11	18	2.71
1992	18	2.77	2	0.16	3	0.38	-	-	2	0.32	25	3.64

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure GA-2. All pneumoconioses: Distribution of deaths by sex and race, Georgia residents age 15 and over, 1968-1992



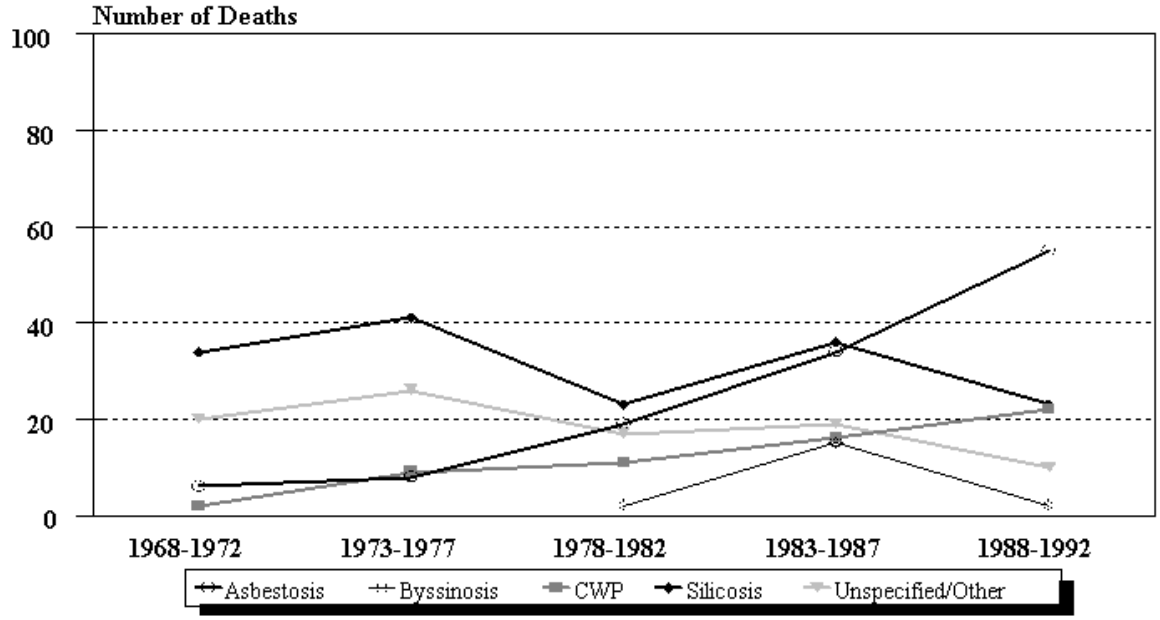
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table GA-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Georgia residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		448	100.0	112	100.0
Sex	Male	413	92.2	106	94.6
	Female	35	7.8	6	5.4
Race	White	359	80.1	90	80.4
	Black	89	19.9	22	19.6
	Other	0	0.0	0	0.0
Age	15-24	2	0.4	0	0.0
	25-34	0	0.0	0	0.0
	35-44	8	1.8	2	1.8
	45-54	43	9.6	2	1.8
	55-64	93	20.8	16	14.3
	65-74	176	39.3	50	44.6
	75-84	94	21.0	34	30.4
	85+	32	7.1	8	7.1
	Mean age	68.4		71.9	
	Range for age	18-96		39-95	

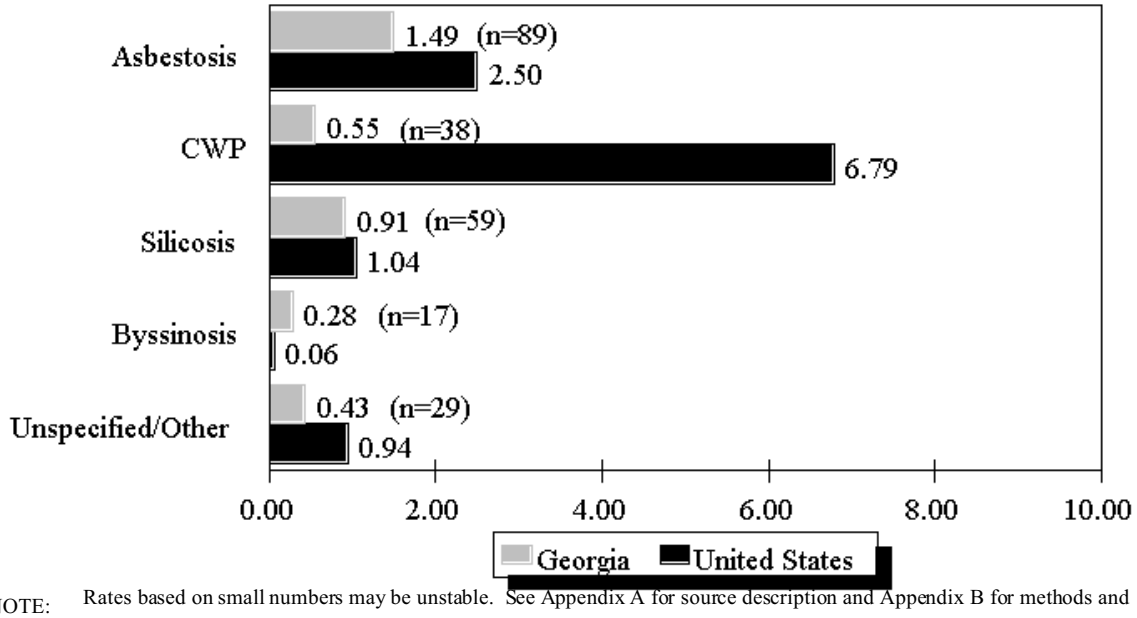
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure GA-3. Pneumoconiosis deaths by condition, Georgia residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure GA-4. Georgia and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table GA-3 (page 1 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Georgia residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Baldwin	-	-	-	-	1	1.63	-	-	1	1.63	2	3.26
Bartow	-	-	1	1.35	1	2.67	-	-	-	-	2	4.01
Ben Hill	1	2.78	1	2.78	-	-	-	-	-	-	2	5.55
Bibb	1	0.69	1	0.69	1	0.36	-	-	2	0.72	5	2.46
Brantley	2	22.79	-	-	-	-	-	-	-	-	2	22.79
Bryan	1	7.83	-	-	-	-	-	-	-	-	1	7.83
Burke	1	5.63	-	-	-	-	-	-	-	-	1	5.63
Camden	1	7.66	-	-	-	-	-	-	-	-	1	7.66
Carroll	1	0.92	1	1.85	1	0.92	-	-	-	-	3	3.70
Catoosa	2	4.32	-	-	1	2.62	-	-	-	-	3	6.93
Chatham	9	4.37	2	0.75	1	0.49	-	-	1	0.27	13	5.88
Cherokee	-	-	1	2.03	-	-	-	-	1	2.03	2	4.06
Clarke	-	-	1	1.87	3	5.91	-	-	-	-	4	7.78
Clayton	2	1.89	-	-	1	0.95	-	-	3	2.65	6	5.49
Cobb	4	1.36	1	0.30	3	0.99	2	0.69	1	0.30	11	3.63
Coffee	-	-	-	-	1	2.15	-	-	-	-	1	2.15
Columbia	2	5.46	-	-	-	-	1	2.73	-	-	3	8.19
Coweta	1	2.38	-	-	-	-	2	4.77	-	-	3	7.15
Crisp	-	-	-	-	-	-	-	-	1	2.30	1	2.30
Dade	-	-	2	14.02	-	-	-	-	-	-	2	14.02
De Kalb	3	0.76	2	0.41	6	1.23	-	-	4	0.82	15	3.22
Dodge	-	-	-	-	-	-	-	-	1	5.57	1	5.57
Dougherty	1	1.24	-	-	-	-	-	-	-	-	1	1.24
Douglas	1	2.29	-	-	-	-	1	2.29	-	-	2	4.59
Effingham	5	28.93	-	-	-	-	-	-	-	-	5	28.93
Elbert	-	-	-	-	6	18.77	-	-	-	-	6	18.77
Emanuel	1	4.79	-	-	-	-	-	-	-	-	1	4.79
Evans	-	-	1	11.91	-	-	-	-	-	-	1	11.91
Fannin	-	-	2	9.35	1	2.57	-	-	-	-	3	11.92
Fayette	-	-	1	2.05	-	-	-	-	-	-	1	2.05
Floyd	2	2.33	2	1.75	-	-	2	2.95	-	-	6	7.03
Forsyth	-	-	-	-	1	2.04	-	-	-	-	1	2.04

See footnotes at end of table.

Table GA-3 (page 2 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Georgia residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Fulton	1	**0.10**	2	**0.20**	1	**0.10**	2	**0.30**	3	**0.52**	9	**1.21**
Glynn	10	**12.95**	-	**-**	-	**-**	-	**-**	-	**-**	10	**12.95**
Gordon	-	**-**	1	**1.91**	-	**-**	-	**-**	1	**1.91**	2	**3.82**
Grady	-	**-**	-	**-**	1	**4.88**	-	**-**	-	**-**	1	**4.88**
Gwinnett	1	**0.50**	1	**0.50**	1	**0.50**	-	**-**	-	**-**	3	**1.50**
Habersham	1	**1.94**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.94**
Hall	2	**1.96**	2	**1.96**	-	**-**	1	**1.25**	-	**-**	5	**5.16**
Haralson	1	**4.68**	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.68**
Harris	-	**-**	-	**-**	1	**5.30**	-	**-**	-	**-**	1	**5.30**
Henry	1	**2.46**	-	**-**	1	**2.46**	-	**-**	-	**-**	2	**4.93**
Houston	-	**-**	-	**-**	1	**1.31**	-	**-**	1	**1.31**	2	**2.62**
Jeff Davis	1	**9.13**	-	**-**	-	**-**	-	**-**	-	**-**	1	**9.13**
Jefferson	1	**2.40**	-	**-**	-	**-**	1	**9.18**	-	**-**	2	**11.57**
Jones	-	**-**	-	**-**	2	**12.83**	-	**-**	-	**-**	2	**12.83**
Mcduffie	1	**7.19**	-	**-**	-	**-**	-	**-**	-	**-**	1	**7.19**
Mcintosh	-	**-**	2	**18.41**	-	**-**	-	**-**	-	**-**	2	**18.41**
Madison	1	**5.75**	-	**-**	2	**11.50**	-	**-**	-	**-**	3	**17.25**
Meriwether	-	**-**	-	**-**	-	**-**	1	**2.26**	-	**-**	1	**2.26**
Murray	-	**-**	1	**5.66**	1	**3.55**	-	**-**	1	**5.66**	3	**14.88**
Muscogee	-	**-**	2	**1.26**	3	**1.63**	1	**0.63**	-	**-**	6	**3.51**
Newton	-	**-**	-	**-**	-	**-**	1	**1.57**	-	**-**	1	**1.57**
Oglethorpe	-	**-**	-	**-**	3	**30.63**	-	**-**	-	**-**	3	**30.63**
Paulding	-	**-**	1	**2.46**	-	**-**	-	**-**	-	**-**	1	**2.46**
Pickens	1	**6.94**	-	**-**	-	**-**	-	**-**	-	**-**	1	**6.94**
Polk	-	**-**	-	**-**	1	**2.83**	-	**-**	-	**-**	1	**2.83**
Putnam	1	**6.93**	-	**-**	-	**-**	-	**-**	-	**-**	1	**6.93**
Rabun	1	**12.06**	-	**-**	-	**-**	-	**-**	-	**-**	1	**12.06**
Richmond	3	**1.14**	1	**0.64**	2	**1.02**	-	**-**	1	**0.38**	7	**3.18**
Rockdale	4	**9.98**	-	**-**	8	**17.03**	-	**-**	-	**-**	12	**27.01**
Stephens	-	**-**	1	**2.10**	-	**-**	-	**-**	-	**-**	1	**2.10**
Talbot	-	**-**	-	**-**	1	**6.88**	-	**-**	-	**-**	1	**6.88**
Tattnall	2	**11.73**	-	**-**	-	**-**	-	**-**	-	**-**	2	**11.73**
Telfair	1	**8.08**	-	**-**	-	**-**	-	**-**	-	**-**	1	**8.08**

See footnotes at end of table.

Table GA-3 (page 3 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Georgia residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Tift	1	**1.74**	2	**5.15**	-	**-**	-	**-**	-	**-**	3	**6.89**
Troup	4	**5.41**	-	**-**	-	**-**	-	**-**	-	**-**	4	**5.41**
Twiggs	-	**-**	-	**-**	-	**-**	-	**-**	1	**11.39**	1	**11.39**
Upson	-	**-**	-	**-**	-	**-**	1	**5.65**	-	**-**	1	**5.65**
Walker	1	**1.69**	3	**4.30**	-	**-**	-	**-**	2	**2.62**	6	**8.61**
Walton	1	**3.18**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.18**
Ware	5	**10.27**	-	**-**	-	**-**	-	**-**	-	**-**	5	**10.27**
Washington	2	**7.93**	-	**-**	1	**5.61**	-	**-**	3	**16.83**	6	**30.37**
Wayne	-	**-**	-	**-**	1	**2.60**	-	**-**	-	**-**	1	**2.60**
Whitfield	-	**-**	-	**-**	-	**-**	1	**1.01**	-	**-**	1	**1.01**
Wilkinson	-	**-**	-	**-**	-	**-**	-	**-**	1	**10.71**	1	**10.71**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

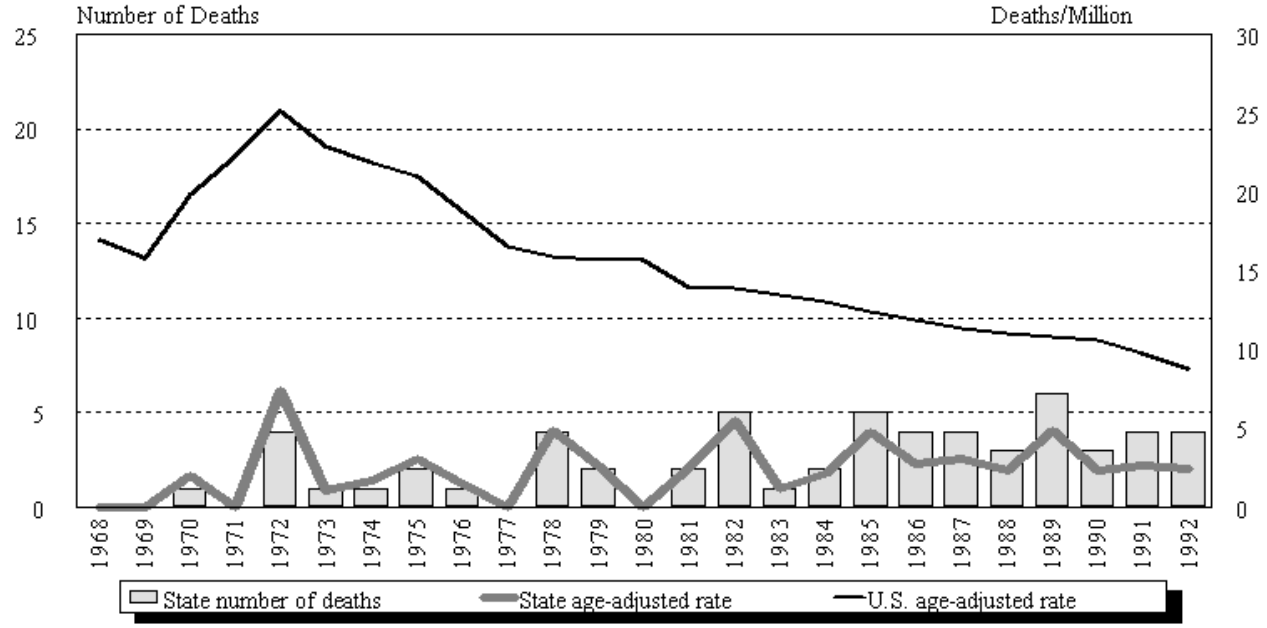
Hawaii: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	20	46
Crude mortality rate (per 1,000,000 population)	4.58	43
Age-adjusted mortality rate (per 1,000,000 population)	2.91	44
Total years of potential life lost to life expectancy	227	46
Years of potential life lost to life expectancy (per death)	11.4	36

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	20	100.0
Coal workers' pneumoconiosis	0	0.0
Silicosis	0	0.0
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	0	0.0

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure HI-1. All pneumoconioses: Hawaii and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Hawaii

Table HI-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Hawaii residents age 15 and over, 1968-1992

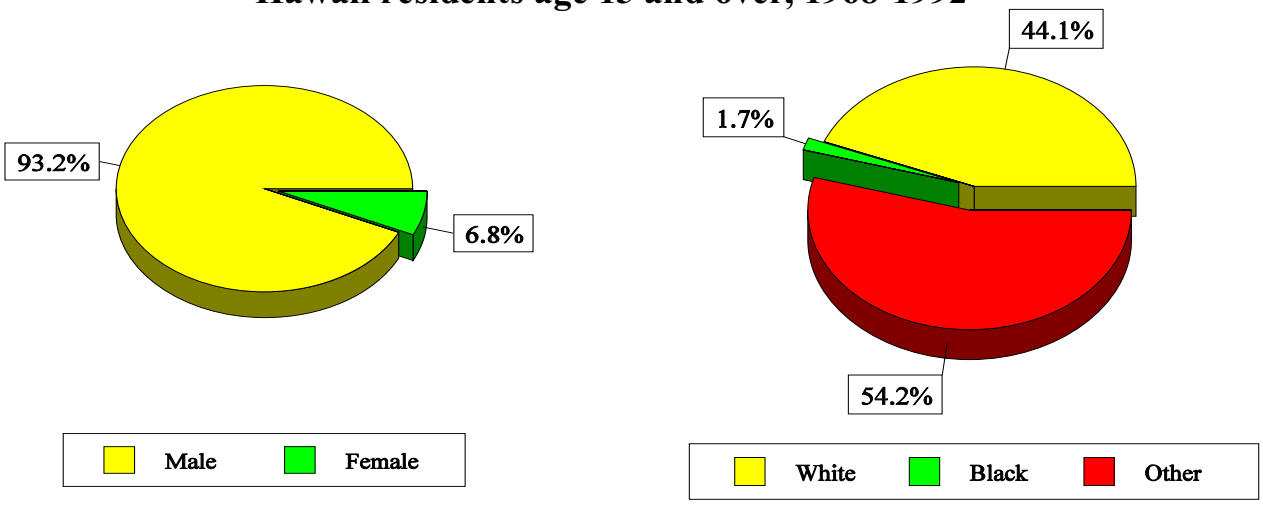
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	-	-			-	-	-	-
1969	-	-	-	-	-	-			-	-	-	-
1970	-	-	-	-	-	-			1	1.95	1	1.95
1971	-	-	-	-	-	-			-	-	-	-
1972	-	-	-	-	2	3.88			2	3.49	4	7.37
1973	-	-	-	-	1	1.04			-	-	1	1.04
1974	-	-	-	-	1	1.66			1	1.66	1	1.66
1975	-	-	1	1.45	1	1.64			-	-	2	3.09
1976	-	-	-	-	-	-			1	1.45	1	1.45
1977	-	-	-	-	-	-			-	-	-	-
1978	1	1.42	-	-	1	0.73			2	2.69	4	4.84
1979	2	2.64	-	-	-	-	-	-	-	-	2	2.64
1980	-	-	-	-	-	-	-	-	-	-	-	-
1981	1	1.24	1	1.24	-	-	-	-	-	-	2	2.48
1982	3	3.33	1	0.97	1	1.22	-	-	-	-	5	5.52
1983	1	1.20	-	-	-	-	-	-	-	-	1	1.20
1984	2	2.15	-	-	1	1.08	-	-	-	-	2	2.15
1985	5	4.76	-	-	-	-	-	-	-	-	5	4.76
1986	2	1.77	1	0.47	1	0.47	-	-	-	-	4	2.70
1987	3	2.30	-	-	-	-	-	-	1	0.74	4	3.04
1988	3	2.30	-	-	-	-	-	-	-	-	3	2.30
1989	6	4.87	-	-	-	-	-	-	-	-	6	4.87
1990	3	2.32	-	-	-	-	-	-	-	-	3	2.32
1991	4	2.64	-	-	-	-	-	-	-	-	4	2.64
1992	4	2.46	-	-	-	-	-	-	-	-	4	2.46

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure HI-2. All pneumoconioses: Distribution of deaths by sex and race, Hawaii residents age 15 and over, 1968-1992



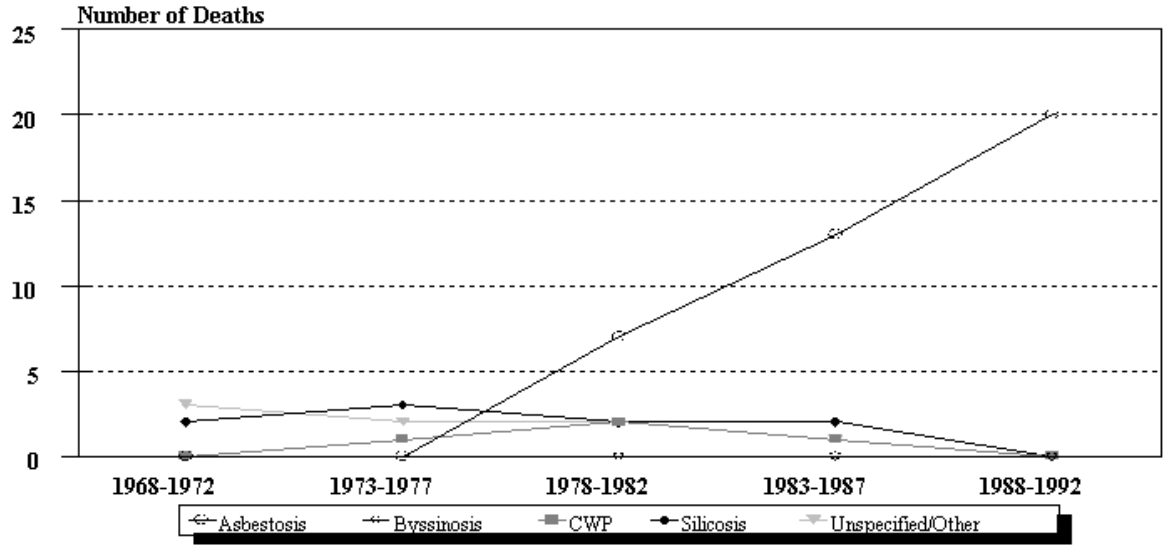
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table HI-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Hawaii residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		59	100.0	20	100.0
Sex	Male	55	93.2	20	100.0
	Female	4	6.8	0	0.0
Race	White	26	44.1	6	30.0
	Black	1	1.7	0	0.0
	Other	32	54.2	14	70.0
Age	15-24	0	0.0	0	0.0
	25-34	2	3.4	0	0.0
	35-44	0	0.0	0	0.0
	45-54	2	3.4	0	0.0
	55-64	10	16.9	2	10.0
	65-74	23	39.0	7	35.0
	75-84	14	23.7	9	45.0
	85+	8	13.6	2	10.0
	Mean age	70.8		74.2	
	Range for age	31-106		61-87	

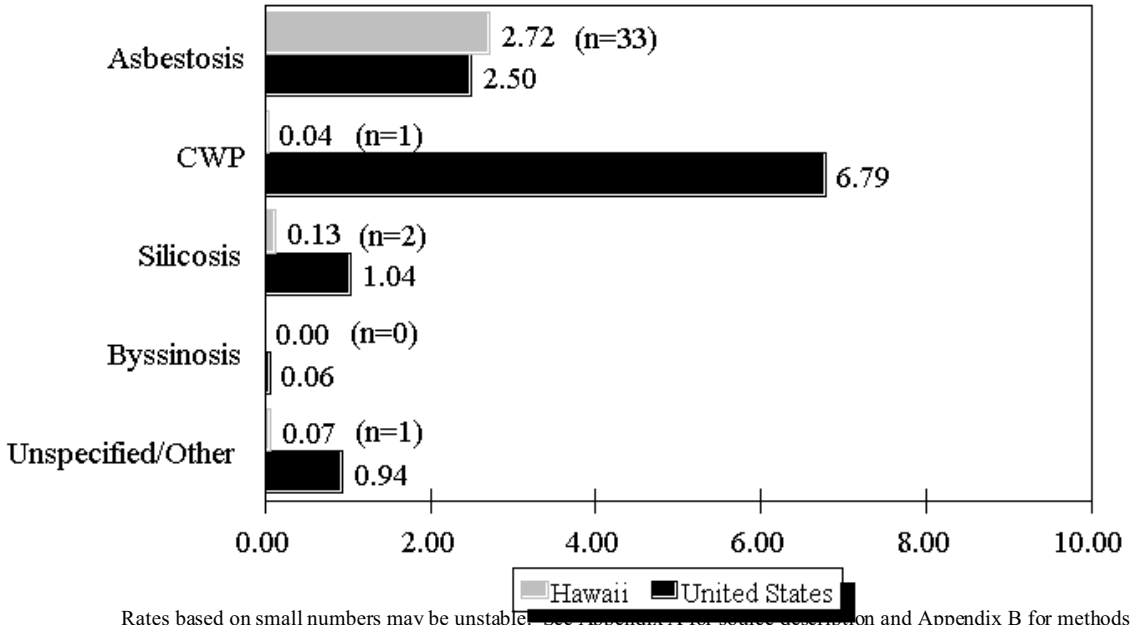
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure HI-3. Pneumoconiosis deaths by condition, Hawaii residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure HI-4. Hawaii and. U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table HI-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Hawaii residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Hawaii	1	**0.53**	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.53**
Honolulu	30	**3.66**	1	**0.09**	2	**0.23**	-	**-**	1	**0.09**	33	**3.93**
Kauai	2	**2.24**	-	**-**	-	**-**	-	**-**	-	**-**	2	**2.24**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

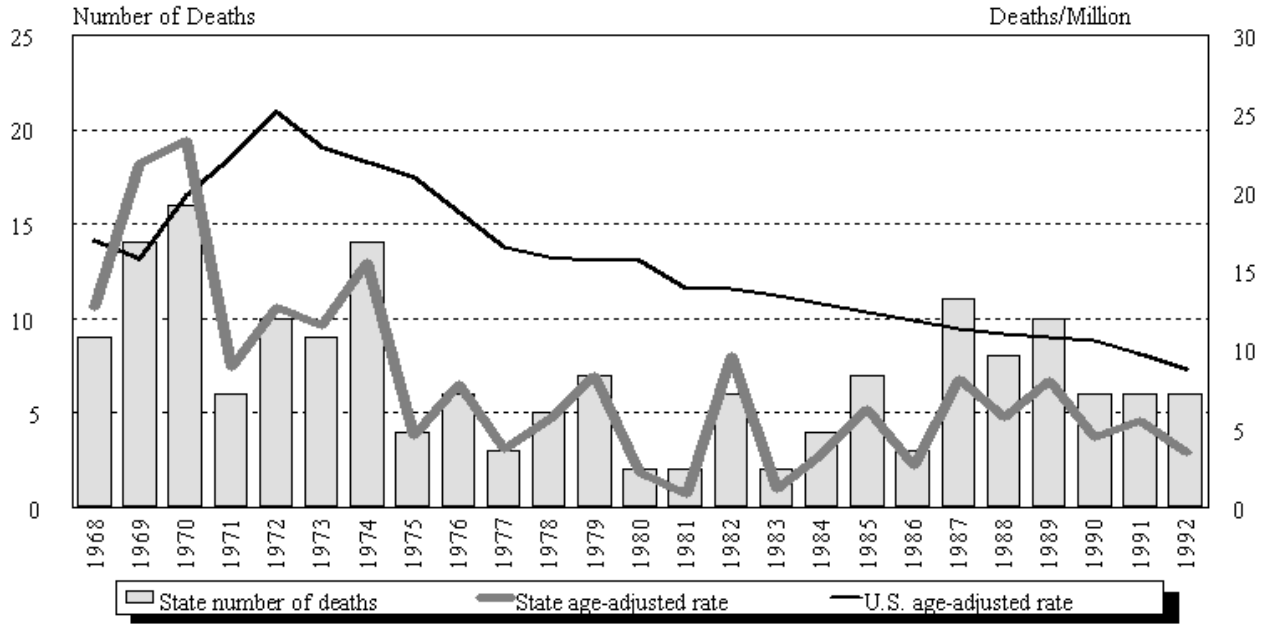
Idaho: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	36	41
Crude mortality rate (per 1,000,000 population)	9.62	23
Age-adjusted mortality rate (per 1,000,000 population)	5.43	24
Total years of potential life lost to life expectancy	408	41
Years of potential life lost to life expectancy (per death)	11.3	38

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	22	61.1
Coal workers' pneumoconiosis	1	2.8
Silicosis	13	36.1
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	0	0.0

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure ID-1. All pneumoconioses: Idaho and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Idaho

Table ID-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Idaho residents age 15 and over, 1968-1992

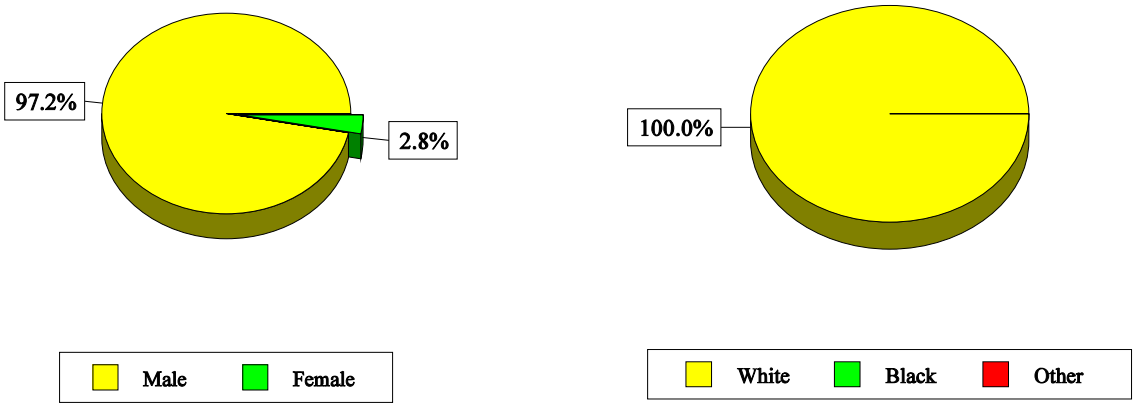
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	9	12.75			-	-	9	12.75
1969	-	-	-	-	14	21.87			-	-	14	21.87
1970	-	-	-	-	15	21.71			1	1.63	16	23.34
1971	-	-	-	-	5	7.25			1	1.60	6	8.85
1972	-	-	-	-	8	10.64			2	2.04	10	12.68
1973	1	1.55	1	1.43	7	8.56			-	-	9	11.54
1974	1	1.51	-	-	11	12.93			2	1.10	14	15.54
1975	-	-	-	-	4	4.60			-	-	4	4.60
1976	1	1.28	-	-	5	6.56			1	1.28	6	7.84
1977	-	-	-	-	2	2.46			1	1.23	3	3.69
1978	-	-	-	-	3	3.74			2	1.85	5	5.59
1979	2	2.50	-	-	3	3.16	-	-	2	2.72	7	8.38
1980	-	-	-	-	1	1.10	-	-	1	1.10	2	2.20
1981	-	-	-	-	2	0.83	-	-	-	-	2	0.83
1982	4	7.56	-	-	2	2.09	-	-	-	-	6	9.65
1983	1	0.73	-	-	1	0.38	-	-	-	-	2	1.12
1984	2	1.70	-	-	2	1.70	-	-	-	-	4	3.40
1985	2	2.27	2	1.35	1	0.99	-	-	2	1.66	7	6.26
1986	3	2.61	-	-	-	-	-	-	-	-	3	2.61
1987	6	5.23	1	0.35	4	2.59	-	-	-	-	11	8.18
1988	4	3.56	-	-	4	2.20	-	-	-	-	8	5.75
1989	5	4.37	-	-	5	3.67	-	-	-	-	10	8.04
1990	4	3.19	-	-	2	1.25	-	-	-	-	6	4.44
1991	6	5.52	-	-	-	-	-	-	-	-	6	5.52
1992	3	1.95	1	0.53	2	1.06	-	-	-	-	6	3.54

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure ID-2. All pneumoconioses: Distribution of deaths by sex and race, Idaho residents age 15 and over, 1968-1992



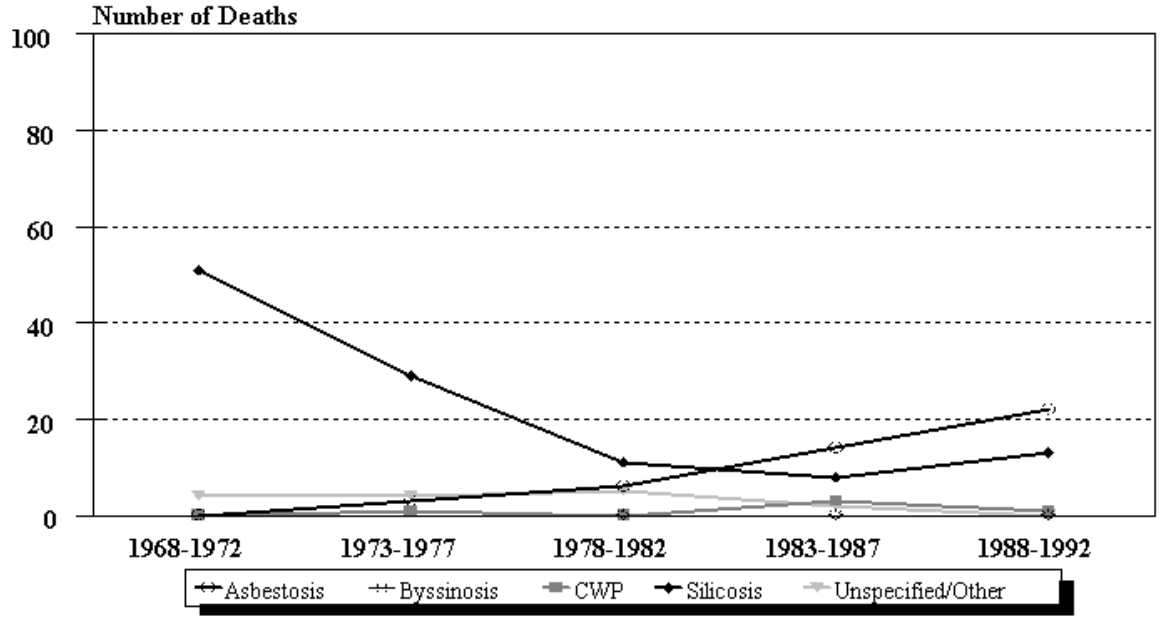
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table ID-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Idaho residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		176	100.0	36	100.0
Sex	Male	171	97.2	36	100.0
	Female	5	2.8	0	0.0
Race	White	176	100.0	36	100.0
	Black	0	0.0	0	0.0
	Other	0	0.0	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	0	0.0	0	0.0
	35-44	0	0.0	0	0.0
	45-54	7	4.0	0	0.0
	55-64	33	18.8	3	8.3
	65-74	72	40.9	14	38.9
	75-84	47	26.7	16	44.4
	85+	17	9.7	3	8.3
	Mean age	71.6		75.6	
	Range for age	47-92		56-86	

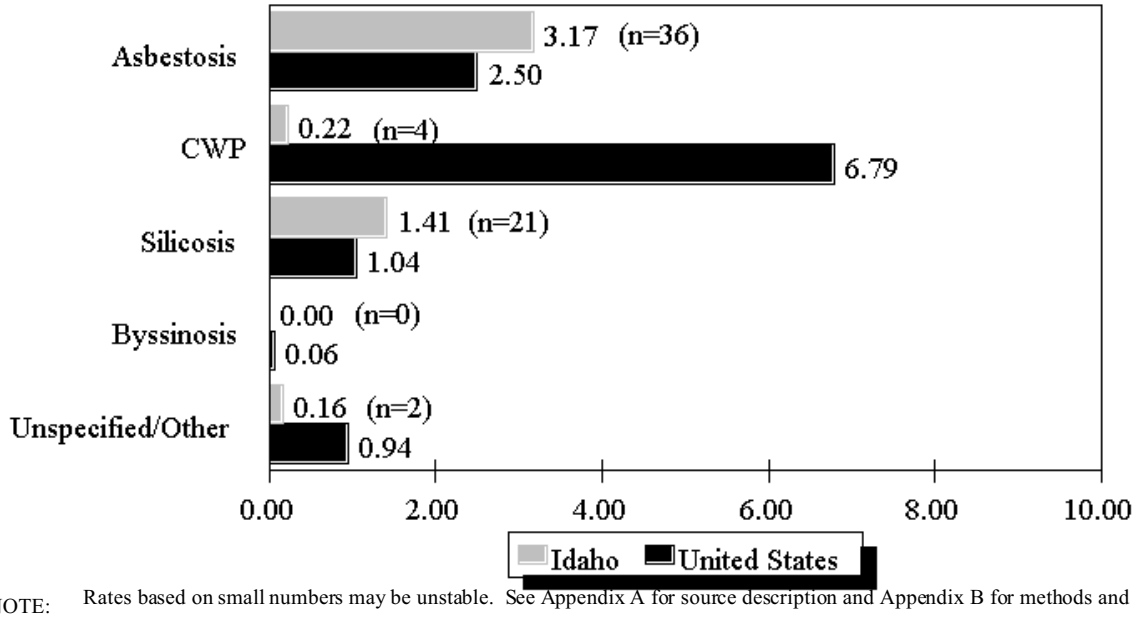
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure ID-3. Pneumoconiosis deaths by condition, Idaho residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure ID-4. Idaho and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table ID-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Idaho residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Ada	2	**0.66**	1	**0.33**	3	**1.33**	-	**-**	1	**0.33**	7	**2.65**
Bannock	5	**7.20**	1	**1.03**	-	**-**	-	**-**	-	**-**	6	**8.22**
Bingham	-	**-**	-	**-**	1	**3.48**	-	**-**	-	**-**	1	**3.48**
Blaine	1	**9.14**	-	**-**	1	**9.14**	-	**-**	-	**-**	2	**18.28**
Bonner	1	**3.59**	-	**-**	1	**1.97**	-	**-**	-	**-**	2	**5.56**
Bonneville	2	**3.92**	-	**-**	-	**-**	-	**-**	-	**-**	2	**3.92**
Boundary	1	**13.61**	-	**-**	-	**-**	-	**-**	-	**-**	1	**13.61**
Butte	-	**-**	-	**-**	1	**33.41**	-	**-**	-	**-**	1	**33.41**
Canyon	4	**4.26**	-	**-**	4	**2.09**	-	**-**	-	**-**	8	**6.35**
Cassia	2	**8.60**	-	**-**	-	**-**	-	**-**	-	**-**	2	**8.60**
Clearwater	1	**10.24**	-	**-**	-	**-**	-	**-**	-	**-**	1	**10.24**
Idaho	-	**-**	-	**-**	-	**-**	-	**-**	1	**6.45**	1	**6.45**
Kootenai	6	**7.57**	-	**-**	2	**1.56**	-	**-**	-	**-**	8	**9.13**
Latah	1	**1.95**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.95**
Minidoka	2	**10.95**	-	**-**	1	**5.47**	-	**-**	-	**-**	3	**16.42**
Nez Perce	2	**5.65**	-	**-**	1	**1.21**	-	**-**	-	**-**	3	**6.86**
Owyhee	1	**6.07**	-	**-**	-	**-**	-	**-**	-	**-**	1	**6.07**
Payette	2	**8.21**	-	**-**	-	**-**	-	**-**	-	**-**	2	**8.21**
Shoshone	2	**11.88**	-	**-**	5	**20.78**	-	**-**	-	**-**	7	**32.66**
Twin Falls	1	**1.89**	2	**1.56**	1	**0.78**	-	**-**	-	**-**	4	**4.23**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

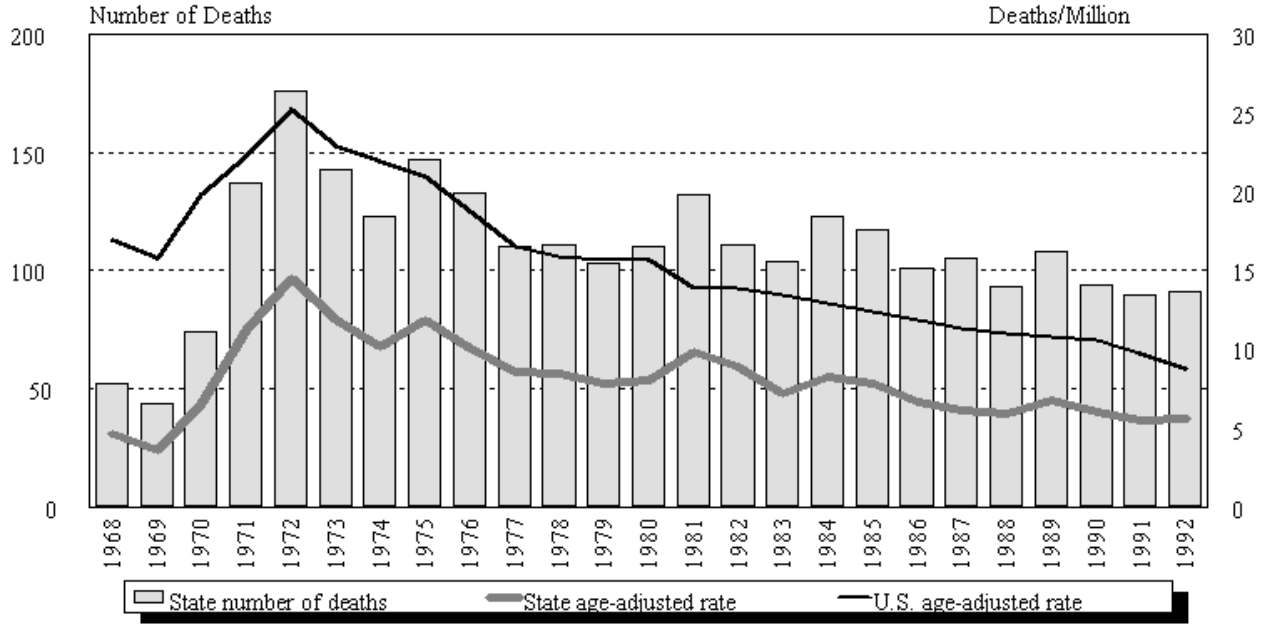
Illinois: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	476	9
Crude mortality rate (per 1,000,000 population)	10.64	21
Age-adjusted mortality rate (per 1,000,000 population)	5.95	20
Total years of potential life lost to life expectancy	5,544	9
Years of potential life lost to life expectancy (per death)	11.6	32

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	96	20.2
Coal workers' pneumoconiosis	229	48.1
Silicosis	50	10.5
Byssinosis	2	0.4
Unspecified/Other pneumoconiosis	102	21.4

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure IL-1. All pneumoconioses: Illinois and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Illinois

Table IL-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Illinois residents age 15 and over, 1968-1992

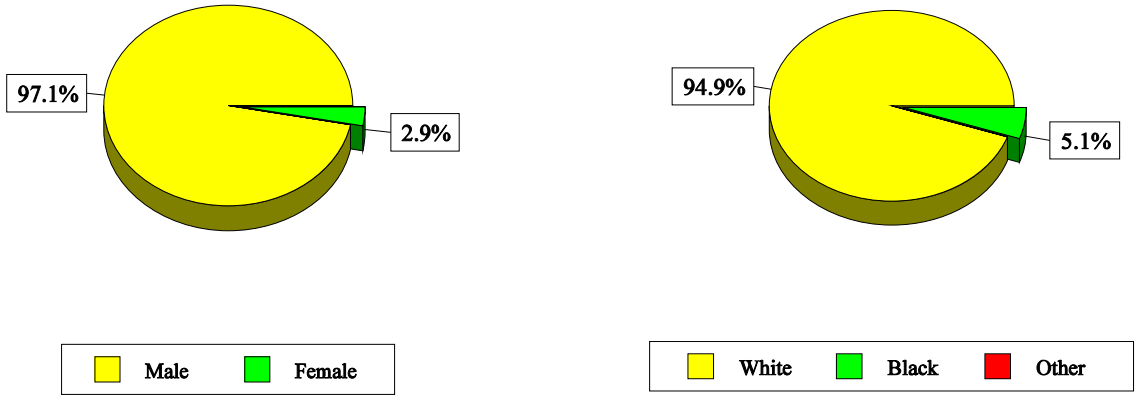
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	3	0.33	6	0.39	27	2.51			17	1.50	52	4.65
1969	1	0.10	8	0.58	20	1.72			15	1.19	44	3.60
1970	5	0.57	24	1.99	17	1.55			29	2.54	74	6.55
1971	3	0.29	40	3.39	19	1.69			76	5.92	137	11.19
1972	6	0.59	36	2.97	24	2.09			112	8.96	176	14.48
1973	1	0.09	33	2.96	20	1.67			89	7.11	143	11.83
1974	5	0.48	20	1.86	15	1.27			86	6.85	123	10.15
1975	2	0.22	40	3.09	21	1.77			86	6.96	147	11.92
1976	3	0.30	33	2.53	13	1.08			88	6.53	133	10.07
1977	6	0.57	34	2.53	6	0.43			65	5.12	110	8.55
1978	5	0.42	31	2.45	9	0.64			69	5.23	111	8.51
1979	6	0.55	36	2.63	13	1.11	-	-	48	3.60	103	7.90
1980	8	0.70	41	2.81	15	1.37	1	0.06	45	3.17	110	8.11
1981	13	1.29	86	6.01	11	0.90	-	-	22	1.63	132	9.83
1982	4	0.39	68	4.85	21	2.27	-	-	20	1.58	111	8.92
1983	11	0.89	68	4.50	11	0.84	-	-	14	0.96	104	7.19
1984	11	0.85	83	5.41	17	1.22	-	-	14	0.92	123	8.26
1985	14	1.08	78	5.19	15	1.09	-	-	12	0.60	117	7.80
1986	15	1.33	64	4.10	11	0.71	1	0.13	12	0.64	101	6.71
1987	10	0.79	63	3.46	15	1.10	-	-	18	0.85	105	6.11
1988	11	0.97	53	3.20	12	0.74	-	-	18	1.08	93	5.90
1989	26	1.78	38	2.52	9	0.54	-	-	36	1.95	108	6.74
1990	18	1.22	49	2.83	10	0.88	1	0.11	16	0.99	94	6.03
1991	20	1.51	43	2.29	8	0.69	-	-	19	1.04	90	5.53
1992	21	1.51	46	2.52	11	0.86	1	0.15	13	0.67	91	5.59

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure IL-2. All pneumoconioses: Distribution of deaths by sex and race, Illinois residents age 15 and over, 1968-1992



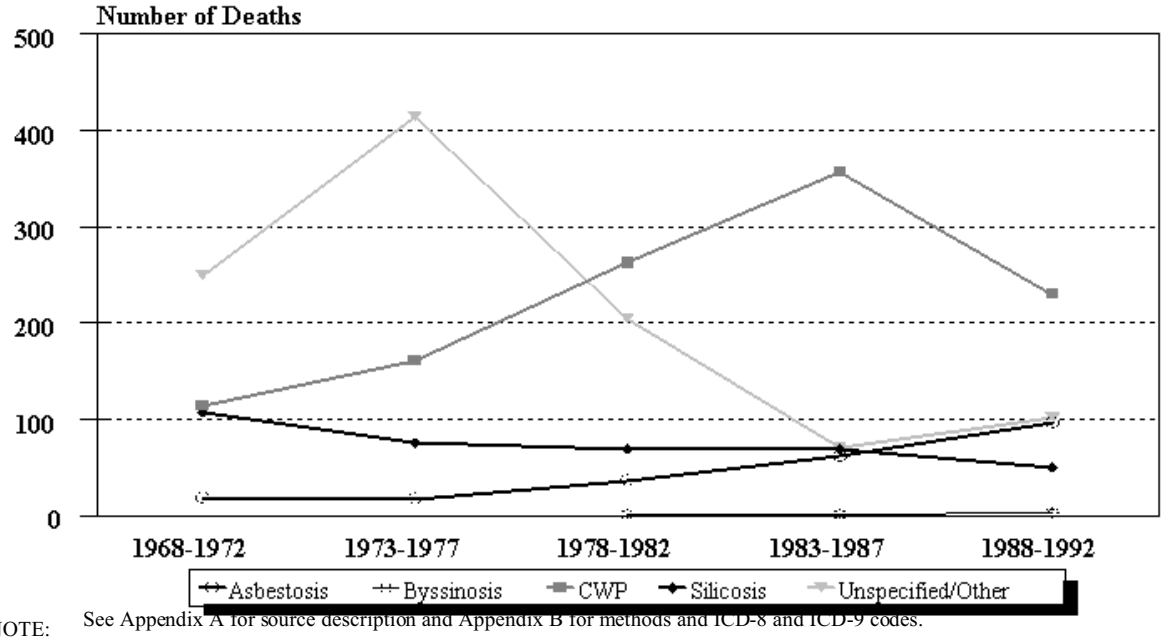
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table IL-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Illinois residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		2,732	100.0	476	100.0
Sex	Male	2,652	97.1	459	96.4
	Female	80	2.9	17	3.6
Race	White	2,592	94.9	444	93.3
	Black	140	5.1	32	6.7
	Other	0	0.0	0	0.0
Age	15-24	2	0.1	1	0.2
	25-34	6	0.2	1	0.2
	35-44	24	0.9	4	0.8
	45-54	107	3.9	11	2.3
	55-64	382	14.0	43	9.0
	65-74	887	32.5	141	29.6
	75-84	975	35.7	199	41.8
	85+	349	12.8	76	16.0
	Mean age	73.2		75.2	
	Range for age	24-118		24-95	

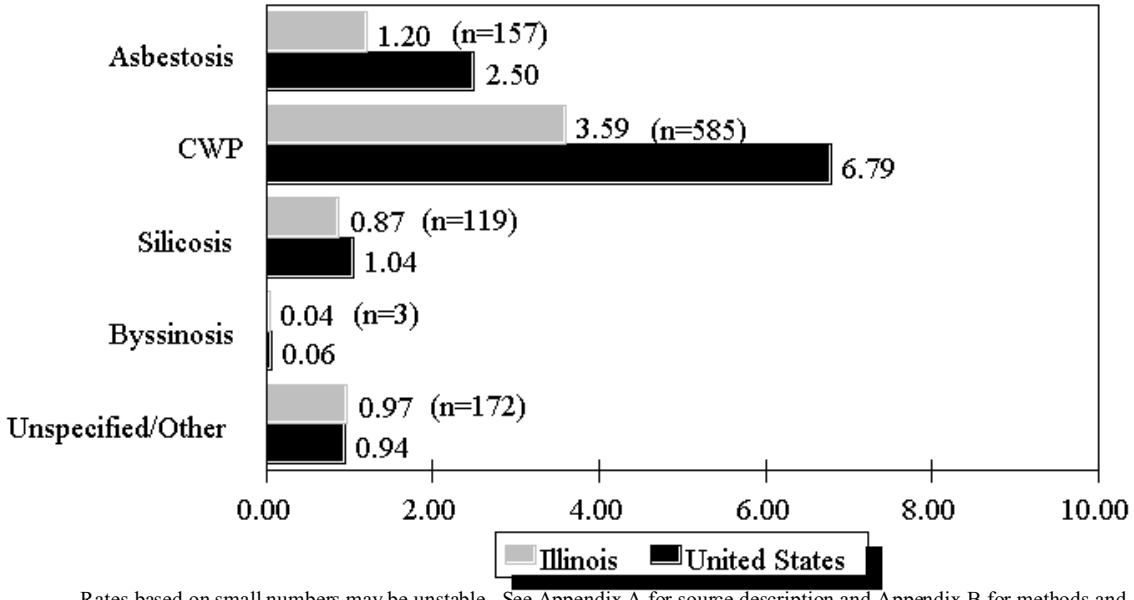
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure IL-3. Pneumoconiosis deaths by condition, Illinois residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure IL-4. Illinois and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table IL-3 (page 1 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Illinois residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Adams	-	-	-	-	2	1.02	-	-	-	-	2	1.02
Alexander	-	-	1	7.79	1	7.79	-	-	-	-	2	15.58
Bond	1	5.87	-	-	-	-	-	-	-	-	1	5.87
Boone	-	-	-	-	1	1.83	-	-	-	-	1	1.83
Bureau	1	2.43	-	-	-	-	-	-	-	-	1	2.43
Champaign	1	0.89	2	0.87	-	-	-	-	1	0.89	4	2.65
Christian	2	5.28	32	63.83	3	2.87	-	-	3	4.44	39	75.46
Clinton	1	3.07	1	1.34	1	1.34	-	-	1	1.34	4	7.09
Coles	1	0.85	-	-	1	2.14	-	-	-	-	2	3.00
Cook	34	0.62	45	0.70	30	0.55	-	-	22	0.35	131	2.22
Crawford	1	4.18	-	-	-	-	-	-	-	-	1	4.18
De Kalb	2	2.61	-	-	-	-	-	-	-	-	2	2.61
De Witt	-	-	1	2.27	1	8.76	-	-	-	-	2	11.03
Douglas	-	-	4	13.61	-	-	-	-	-	-	4	13.61
du Page	5	0.82	2	0.29	3	0.40	-	-	2	0.29	12	1.79
Edgar	-	-	1	4.19	1	7.43	-	-	1	4.19	3	15.80
Effingham	1	1.38	-	-	-	-	-	-	-	-	1	1.38
Fayette	-	-	-	-	-	-	1	7.27	-	-	1	7.27
Ford	1	5.86	-	-	-	-	-	-	-	-	1	5.86
Franklin	2	3.90	152	162.55	2	3.90	-	-	56	56.31	212	226.65
Fulton	-	-	17	23.97	-	-	-	-	1	0.84	18	24.81
Gallatin	-	-	3	35.72	-	-	-	-	-	-	3	35.72
Greene	-	-	1	2.02	-	-	-	-	1	2.02	2	4.05
Grundy	-	-	3	6.61	1	1.59	-	-	-	-	4	8.20
Hamilton	-	-	2	26.65	-	-	-	-	-	-	2	26.65
Hardin	-	-	1	14.87	1	7.03	-	-	1	14.87	3	36.76
Henderson	-	-	1	10.36	-	-	-	-	-	-	1	10.36
Henry	-	-	-	-	1	0.72	1	3.12	-	-	2	3.84
Iroquois	-	-	1	1.09	-	-	-	-	1	1.09	2	2.17
Jackson	1	2.26	8	10.07	-	-	-	-	1	0.93	10	13.26
Jefferson	2	2.00	12	19.35	-	-	-	-	2	4.94	16	26.29
Johnson	-	-	2	7.29	-	-	-	-	1	8.15	3	15.43
Kane	1	0.22	5	1.78	3	0.88	-	-	1	0.22	10	3.11

See footnotes at end of table.

Table IL-3 (page 2 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Illinois residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Kankakee	-	-	1	0.52	1	0.52	-	-	-	-	2	1.03
Kendall	-	-	-	-	1	3.63	-	-	-	-	1	3.63
Knox	-	-	8	8.73	-	-	-	-	2	1.24	10	9.97
Lake	38	8.93	8	1.77	6	1.64	-	-	2	0.55	50	11.90
La Salle	2	0.68	3	1.49	5	3.61	-	-	2	0.68	12	6.45
Lawrence	1	1.59	-	-	1	9.47	-	-	-	-	2	11.06
Livingston	1	2.52	1	2.52	-	-	-	-	1	2.52	3	7.55
Logan	1	1.17	-	-	-	-	-	-	-	-	1	1.17
McDonough	-	-	1	1.21	-	-	-	-	-	-	1	1.21
McHenry	2	1.18	3	1.95	-	-	-	-	-	-	5	3.13
McLean	9	9.80	2	0.94	-	-	-	-	-	-	11	10.75
Macon	2	1.17	-	-	-	-	-	-	-	-	2	1.17
Macoupin	2	5.02	5	6.77	3	5.70	-	-	2	2.48	11	16.76
Madison	16	5.08	8	2.53	8	2.34	-	-	1	0.19	32	9.75
Marion	-	-	1	0.83	-	-	1	3.78	-	-	2	4.61
Marshall	-	-	3	7.42	-	-	-	-	-	-	3	7.42
Massac	1	2.15	-	-	1	5.48	-	-	-	-	2	7.63
Menard	-	-	2	6.61	-	-	-	-	-	-	2	6.61
Mercer	-	-	1	5.40	-	-	-	-	-	-	1	5.40
Monroe	-	-	1	4.66	-	-	-	-	-	-	1	4.66
Montgomery	-	-	2	3.87	-	-	-	-	-	-	2	3.87
Morgan	2	3.65	-	-	-	-	-	-	1	1.00	3	4.65
Moultrie	-	-	1	2.01	-	-	-	-	-	-	1	2.01
Ogle	-	-	-	-	-	-	-	-	1	2.26	1	2.26
Peoria	2	1.11	9	2.83	2	0.80	-	-	1	0.25	14	4.98
Perry	-	-	16	38.43	2	5.76	-	-	8	15.40	25	55.44
Piatt	-	-	1	2.63	1	2.63	-	-	-	-	2	5.26
Pike	1	4.52	-	-	-	-	-	-	1	1.59	2	6.11
Pope	-	-	-	-	1	7.46	-	-	-	-	1	7.46
Putnam	-	-	1	7.81	-	-	-	-	-	-	1	7.81
Randolph	-	-	10	23.80	3	10.21	-	-	1	1.10	14	35.11
Richland	-	-	1	2.00	-	-	-	-	-	-	1	2.00

See footnotes at end of table.

Table IL-3 (page 3 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Illinois residents age 15 and over, 1983-1992

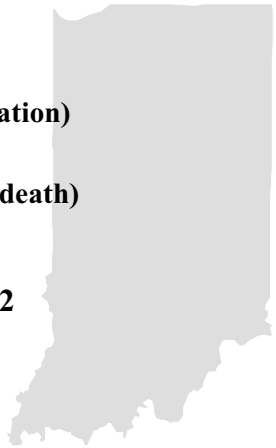
	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Rock Island	2	**0.92**	5	**2.46**	4	**1.50**	-	**-**	-	**-**	11	**4.88**
St Clair	7	**1.99**	11	**2.36**	10	**3.38**	-	**-**	3	**0.79**	30	**8.11**
Saline	1	**2.95**	48	**104.15**	-	**-**	-	**-**	19	**31.26**	68	**138.36**
Sangamon	2	**1.17**	18	**7.76**	1	**0.59**	-	**-**	1	**0.25**	21	**9.19**
Schuyler	-	**-**	1	**10.95**	-	**-**	-	**-**	-	**-**	1	**10.95**
Shelby	-	**-**	2	**5.32**	1	**3.78**	-	**-**	-	**-**	3	**9.10**
Stark	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.62**	1	**4.62**
Stephenson	-	**-**	-	**-**	1	**0.81**	-	**-**	-	**-**	1	**0.81**
Tazewell	1	**0.82**	1	**0.41**	-	**-**	-	**-**	2	**0.82**	4	**2.04**
Vermilion	-	**-**	4	**1.86**	1	**0.47**	-	**-**	-	**-**	5	**2.33**
Warren	1	**4.72**	2	**3.51**	1	**4.72**	-	**-**	-	**-**	4	**12.94**
Washington	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.12**	1	**2.12**
White	-	**-**	4	**12.44**	1	**4.57**	-	**-**	-	**-**	5	**17.01**
Whiteside	1	**1.57**	-	**-**	1	**0.73**	-	**-**	-	**-**	2	**2.30**
Will	2	**0.82**	3	**0.85**	8	**2.38**	-	**-**	4	**1.46**	17	**5.51**
Williamson	-	**-**	93	**89.26**	-	**-**	-	**-**	22	**20.60**	115	**109.86**
Winnebago	2	**0.84**	5	**1.27**	3	**0.64**	-	**-**	1	**0.21**	11	**2.97**
Woodford	1	**3.33**	2	**2.64**	-	**-**	-	**-**	-	**-**	3	**5.98**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Indiana: Selected statistics from the United States section

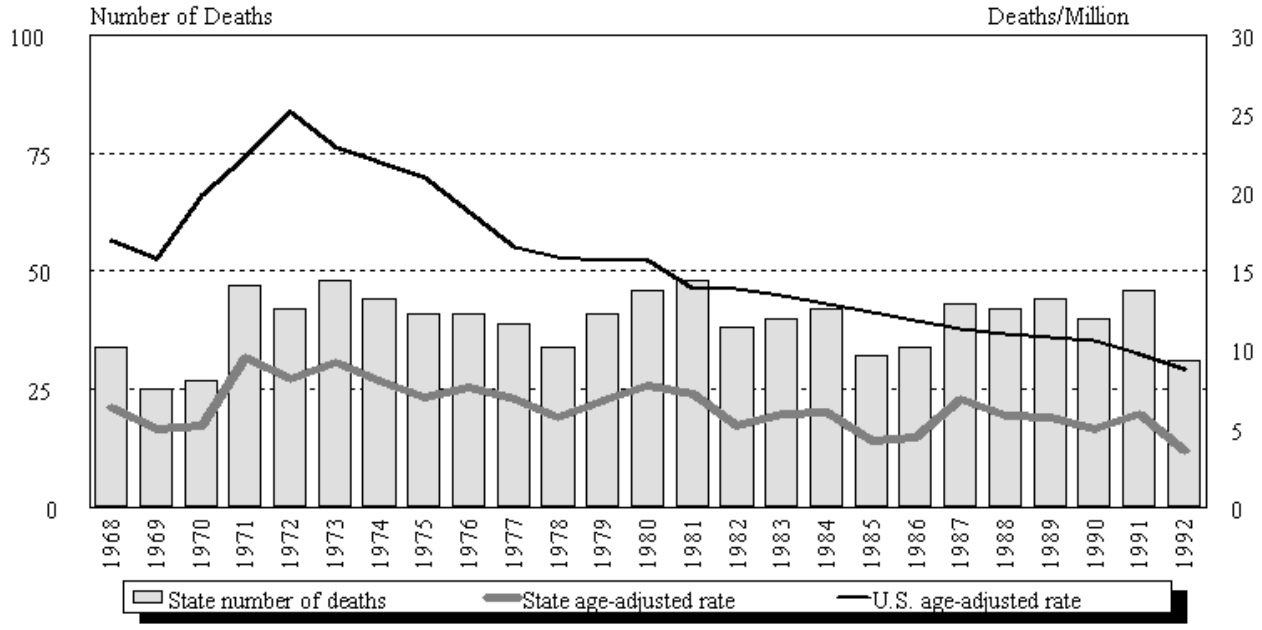


All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	203	19
Crude mortality rate (per 1,000,000 population)	9.38	24
Age-adjusted mortality rate (per 1,000,000 population)	5.20	26
Total years of potential life lost to life expectancy	2,350	19
Years of potential life lost to life expectancy (per death)	11.6	33

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	26	12.8
Coal workers' pneumoconiosis	123	60.6
Silicosis	28	13.8
Byssinosis	1	0.5
Unspecified/Other pneumoconiosis	26	12.8

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure IN-1. All pneumoconioses: Indiana and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Indiana

Table IN-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Indiana residents age 15 and over, 1968-1992

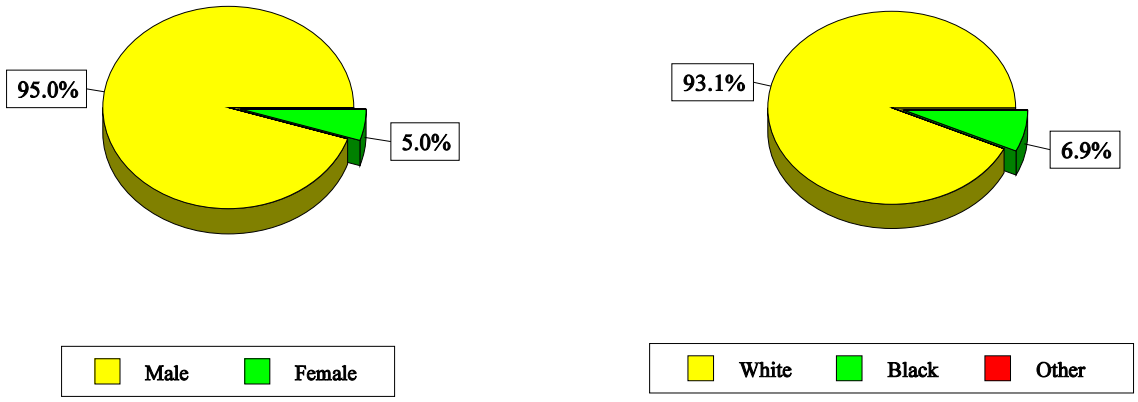
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	1	0.22	4	0.66	20	3.76			9	1.71	34	6.35
1969	-	-	3	0.67	17	3.31			5	0.96	25	4.94
1970	1	0.22	2	0.36	15	3.00			9	1.65	27	5.22
1971	1	0.21	9	1.95	17	3.27			21	4.30	47	9.50
1972	-	-	6	1.26	14	3.00			22	3.91	42	8.17
1973	-	-	14	2.81	13	2.49			21	3.91	48	9.21
1974	1	0.23	12	2.37	10	2.02			23	3.82	44	8.01
1975	1	0.20	14	2.29	7	1.27			21	3.60	41	6.95
1976	-	-	14	2.68	10	1.83			19	3.42	41	7.63
1977	-	-	18	3.48	11	1.84			11	1.81	39	6.91
1978	4	0.86	8	1.45	9	1.47			13	1.96	34	5.75
1979	3	0.71	15	2.27	12	2.10	-	-	11	1.66	41	6.74
1980	4	0.76	22	3.69	9	1.63	-	-	11	1.66	46	7.74
1981	2	0.36	24	3.89	6	0.68	-	-	18	2.64	48	7.16
1982	6	0.96	16	2.30	6	0.74	-	-	10	1.22	38	5.22
1983	3	0.45	22	3.21	8	1.32	-	-	7	0.99	40	5.97
1984	4	0.53	25	3.66	7	1.22	-	-	6	0.59	42	6.00
1985	3	0.52	21	2.70	3	0.35	-	-	5	0.64	32	4.20
1986	3	0.55	22	2.66	6	0.82	-	-	3	0.40	34	4.44
1987	3	0.60	25	4.08	8	1.45	-	-	7	0.72	43	6.84
1988	5	0.71	25	3.40	6	0.95	-	-	6	0.77	42	5.83
1989	5	0.59	27	3.47	6	0.86	-	-	6	0.75	44	5.68
1990	8	1.19	19	2.17	8	1.19	-	-	6	0.68	40	5.01
1991	4	0.64	33	3.96	4	0.64	1	0.16	4	0.52	46	5.93
1992	4	0.51	19	2.09	4	0.63	-	-	4	0.35	31	3.59

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure IN-2. All pneumoconioses: Distribution of deaths by sex and race, Indiana residents age 15 and over, 1968-1992



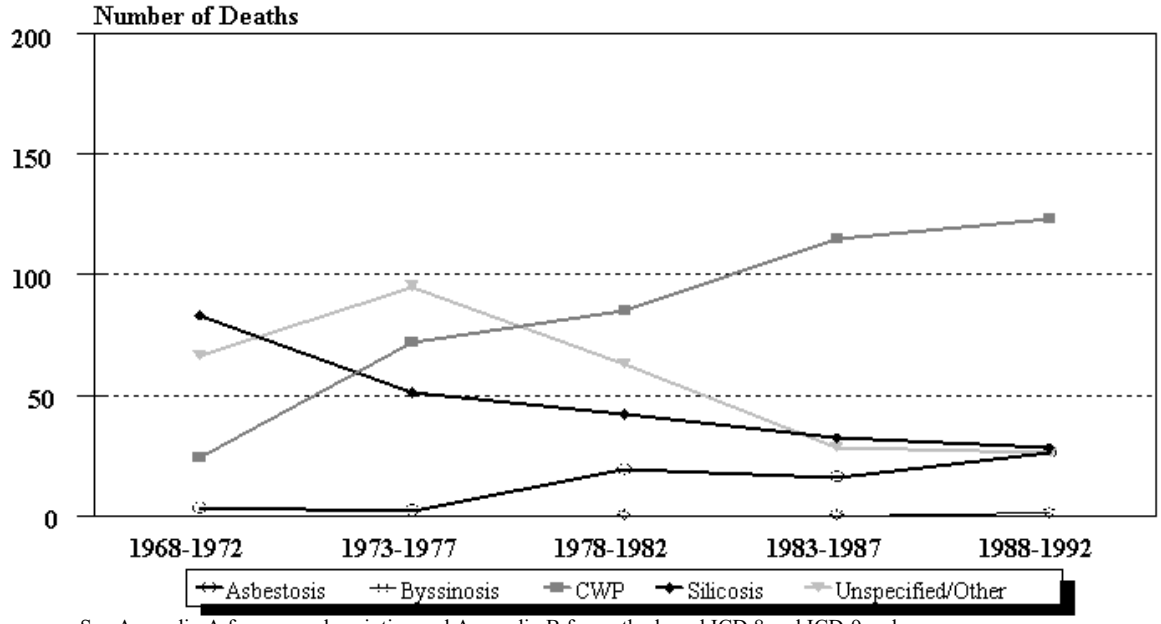
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table IN-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Indiana residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		989	100.0	203	100.0
Sex	Male	940	95.0	198	97.5
	Female	49	5.0	5	2.5
Race	White	921	93.1	188	92.6
	Black	68	6.9	15	7.4
	Other	0	0.0	0	0.0
Age	15-24	2	0.2	0	0.0
	25-34	4	0.4	1	0.5
	35-44	8	0.8	3	1.5
	45-54	27	2.7	1	0.5
	55-64	158	16.0	19	9.4
	65-74	334	33.8	61	30.0
	75-84	346	35.0	90	44.3
	85+	110	11.1	28	13.8
	Mean age	72.8		75.2	
	Range for age	24-99		34-93	

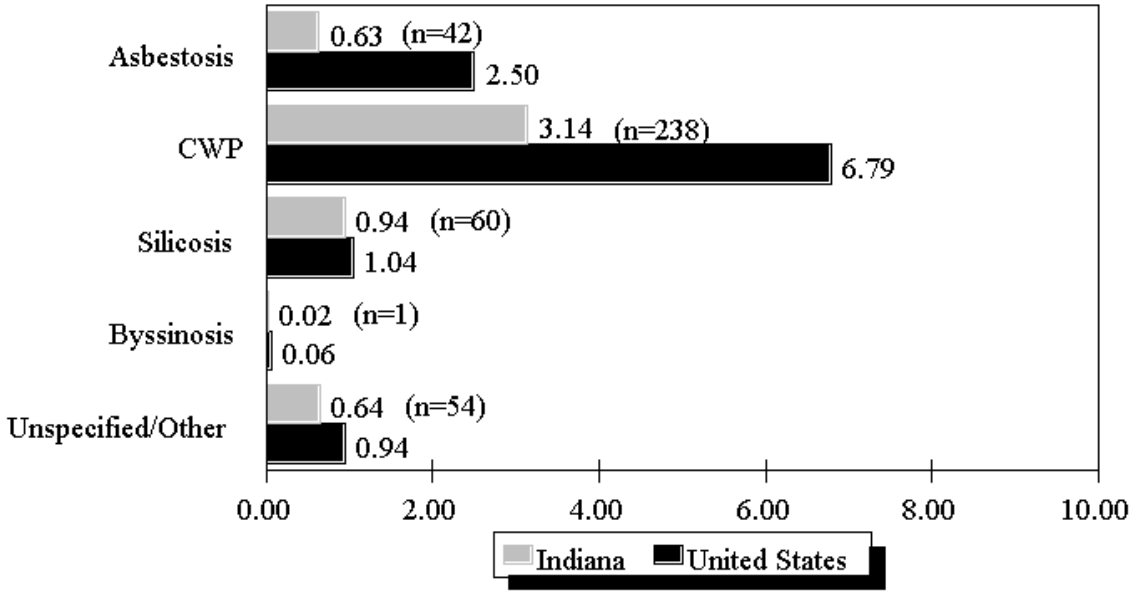
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure IN-3. Pneumoconiosis deaths by condition, Indiana residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure IN-4. Indiana and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table IN-3 (page 1 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Indiana residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Allen	1	**0.39**	10	**3.15**	-	**-**	-	**-**	-	**-**	11	**3.55**
Bartholomew	-	**-**	-	**-**	1	**0.94**	-	**-**	1	**1.75**	2	**2.69**
Boone	-	**-**	1	**1.22**	-	**-**	-	**-**	-	**-**	1	**1.22**
Cass	-	**-**	1	**1.17**	2	**3.55**	-	**-**	-	**-**	3	**4.72**
Clark	1	**0.66**	1	**1.23**	2	**1.90**	-	**-**	1	**1.23**	5	**5.03**
Clay	-	**-**	5	**9.54**	2	**5.14**	-	**-**	-	**-**	7	**14.69**
Daviess	-	**-**	2	**6.80**	-	**-**	-	**-**	2	**6.80**	4	**13.60**
Dearborn	-	**-**	3	**5.87**	1	**1.50**	-	**-**	-	**-**	4	**7.37**
De Kalb	-	**-**	1	**1.53**	-	**-**	-	**-**	-	**-**	1	**1.53**
Delaware	-	**-**	4	**2.67**	1	**0.44**	-	**-**	-	**-**	5	**3.11**
Dubois	-	**-**	3	**8.72**	-	**-**	-	**-**	-	**-**	3	**8.72**
Elkhart	-	**-**	6	**3.50**	1	**0.78**	-	**-**	-	**-**	7	**4.28**
Fayette	-	**-**	3	**7.15**	-	**-**	-	**-**	-	**-**	3	**7.15**
Floyd	-	**-**	1	**1.68**	1	**2.15**	-	**-**	-	**-**	2	**3.83**
Fountain	-	**-**	-	**-**	2	**4.34**	-	**-**	-	**-**	2	**4.34**
Fulton	-	**-**	1	**4.67**	-	**-**	-	**-**	-	**-**	1	**4.67**
Gibson	1	**2.88**	26	**44.62**	-	**-**	-	**-**	9	**14.15**	36	**61.66**
Grant	1	**1.27**	4	**4.47**	-	**-**	-	**-**	-	**-**	5	**5.74**
Greene	-	**-**	20	**40.01**	1	**2.95**	-	**-**	5	**7.84**	26	**50.80**
Hamilton	-	**-**	2	**2.21**	-	**-**	-	**-**	-	**-**	2	**2.21**
Hancock	-	**-**	2	**5.27**	-	**-**	-	**-**	-	**-**	2	**5.27**
Harrison	-	**-**	3	**7.75**	-	**-**	-	**-**	-	**-**	3	**7.75**
Hendricks	1	**1.66**	3	**3.67**	-	**-**	-	**-**	-	**-**	4	**5.33**
Henry	1	**1.91**	2	**1.86**	-	**-**	-	**-**	2	**1.86**	5	**5.62**
Howard	1	**0.73**	1	**0.73**	4	**3.47**	-	**-**	1	**0.73**	7	**5.65**
Huntington	1	**1.20**	1	**2.99**	-	**-**	-	**-**	-	**-**	2	**4.18**
Jackson	-	**-**	1	**1.20**	-	**-**	-	**-**	-	**-**	1	**1.20**
Jay	1	**4.31**	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.31**
Jefferson	-	**-**	1	**3.47**	1	**1.69**	-	**-**	-	**-**	2	**5.16**
Johnson	-	**-**	1	**0.68**	2	**3.03**	-	**-**	-	**-**	3	**3.71**
Knox	2	**4.63**	7	**7.85**	-	**-**	-	**-**	-	**-**	8	**10.17**
Kosciusko	-	**-**	6	**8.73**	-	**-**	-	**-**	-	**-**	6	**8.73**
Lagrange	-	**-**	1	**4.36**	-	**-**	-	**-**	-	**-**	1	**4.36**

See footnotes at end of table.

Table IN-3 (page 2 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Indiana residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Lake	5	**0.98**	7	**1.33**	9	**1.43**	-	**-**	6	**0.96**	27	**4.69**
La Porte	1	**0.51**	-	**-**	1	**0.94**	-	**-**	1	**0.51**	3	**1.96**
Lawrence	1	**1.04**	-	**-**	-	**-**	-	**-**	1	**2.27**	2	**3.30**
Madison	-	**-**	2	**0.75**	2	**0.75**	-	**-**	1	**0.38**	5	**1.88**
Marion	7	**0.86**	16	**1.57**	13	**1.84**	-	**-**	2	**0.22**	38	**4.48**
Marshall	-	**-**	1	**2.48**	-	**-**	-	**-**	-	**-**	1	**2.48**
Martin	-	**-**	1	**9.20**	-	**-**	-	**-**	1	**5.06**	2	**14.26**
Montgomery	-	**-**	2	**4.13**	-	**-**	-	**-**	-	**-**	2	**4.13**
Morgan	1	**2.14**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.14**
Newton	-	**-**	-	**-**	-	**-**	-	**-**	1	**7.76**	1	**7.76**
Noble	-	**-**	2	**4.44**	-	**-**	-	**-**	-	**-**	2	**4.44**
Ohio	-	**-**	1	**8.32**	-	**-**	-	**-**	-	**-**	1	**8.32**
Parke	-	**-**	-	**-**	1	**5.63**	-	**-**	-	**-**	1	**5.63**
Pike	-	**-**	8	**36.24**	-	**-**	-	**-**	8	**24.40**	16	**60.64**
Porter	-	**-**	5	**4.19**	1	**0.61**	-	**-**	-	**-**	6	**4.80**
Posey	-	**-**	4	**12.75**	-	**-**	-	**-**	-	**-**	4	**12.75**
Putnam	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.61**	1	**1.61**
Randolph	1	**3.33**	2	**4.86**	1	**1.53**	-	**-**	-	**-**	4	**9.72**
Ripley	-	**-**	2	**5.93**	1	**1.72**	-	**-**	-	**-**	3	**7.65**
St Joseph	1	**0.19**	1	**0.19**	1	**0.41**	-	**-**	-	**-**	3	**0.79**
Scott	-	**-**	5	**19.90**	-	**-**	-	**-**	-	**-**	5	**19.90**
Shelby	-	**-**	2	**4.02**	-	**-**	-	**-**	-	**-**	2	**4.02**
Spencer	-	**-**	-	**-**	2	**10.63**	-	**-**	-	**-**	2	**10.63**
Starke	-	**-**	1	**4.35**	-	**-**	-	**-**	1	**2.05**	2	**6.41**
Sullivan	1	**4.43**	8	**19.66**	-	**-**	-	**-**	1	**4.43**	10	**28.52**
Tippecanoe	1	**1.13**	1	**0.54**	2	**2.25**	-	**-**	-	**-**	4	**3.92**
Union	1	**15.13**	-	**-**	1	**6.38**	-	**-**	-	**-**	2	**21.51**
Vanderburgh	6	**1.79**	13	**4.76**	2	**0.49**	-	**-**	3	**1.36**	24	**8.41**
Vermillion	-	**-**	4	**8.38**	-	**-**	-	**-**	2	**10.56**	6	**18.93**
Vigo	2	**1.31**	8	**3.18**	-	**-**	1	**0.92**	2	**1.31**	13	**6.72**
Wabash	-	**-**	4	**6.40**	-	**-**	-	**-**	-	**-**	4	**6.40**

See footnotes at end of table.

Table IN-3 (page 3 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Indiana residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Warren	-	**-**	-	**-**	1	**19.59**	-	**-**	-	**-**	1	**19.59**
Warrick	2	**5.68**	8	**18.58**	-	**-**	-	**-**	2	**2.93**	12	**27.19**
Washington	-	**-**	1	**4.51**	1	**6.29**	-	**-**	-	**-**	2	**10.80**
Wayne	1	**1.29**	2	**1.89**	-	**-**	-	**-**	-	**-**	3	**3.18**
Wells	-	**-**	4	**12.22**	-	**-**	-	**-**	-	**-**	4	**12.22**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

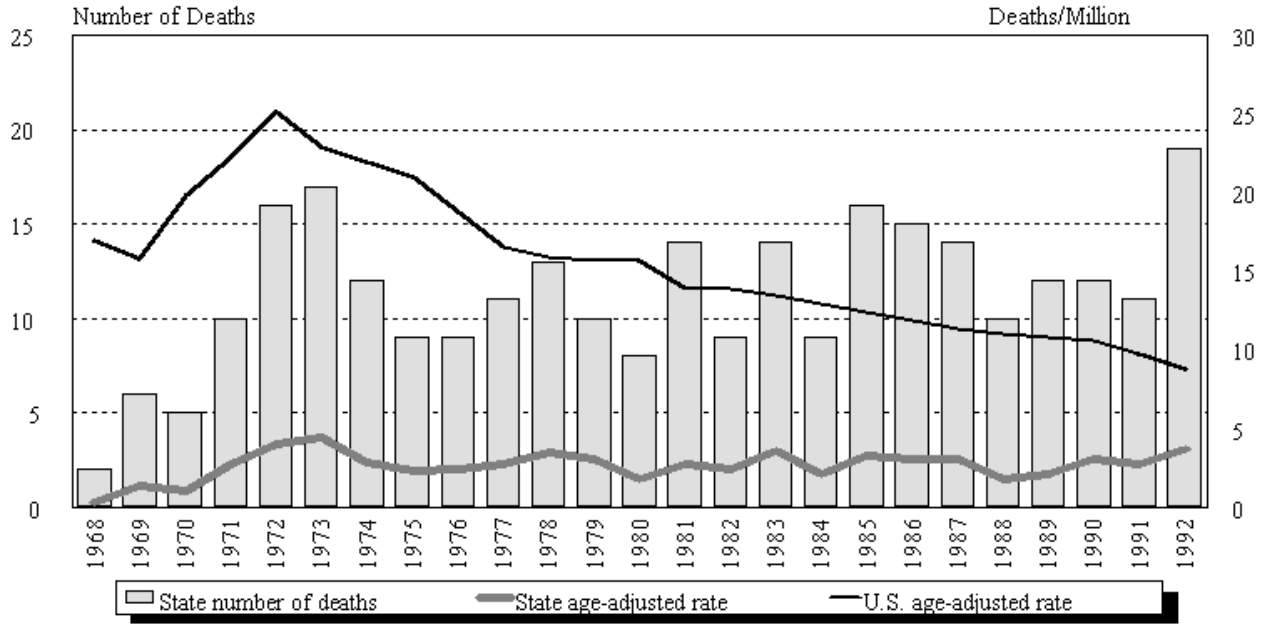
Iowa: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	64	34
Crude mortality rate (per 1,000,000 population)	5.90	38
Age-adjusted mortality rate (per 1,000,000 population)	2.67	45
Total years of potential life lost to life expectancy	701	35
Years of potential life lost to life expectancy (per death)	11.0	44

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	18	28.1
Coal workers' pneumoconiosis	33	51.6
Silicosis	9	14.1
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	4	6.3

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure IA-1. All pneumoconioses: Iowa and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Iowa

Table IA-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Iowa residents age 15 and over, 1968-1992

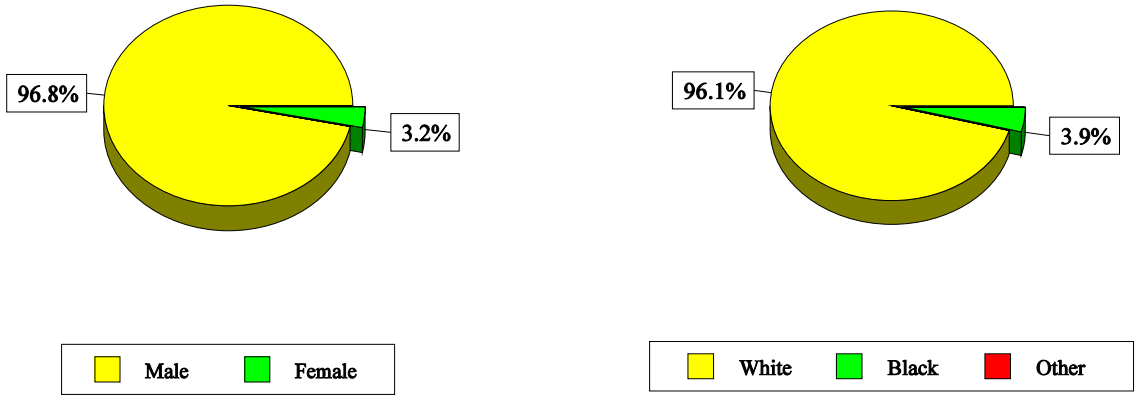
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	1	0.12	-	-	-	-			1	0.20	2	0.32
1969	-	-	-	-	6	1.42			-	-	6	1.42
1970	-	-	1	0.20	3	0.51			1	0.32	5	1.03
1971	-	-	1	0.19	2	0.72			7	1.89	10	2.80
1972	-	-	4	0.61	6	1.81			6	1.62	16	4.04
1973	-	-	7	1.92	4	1.22			7	1.66	17	4.41
1974	1	0.40	3	0.56	4	1.06			4	0.88	12	2.90
1975	1	0.32	2	0.63	2	0.37			4	1.01	9	2.33
1976	1	0.52	6	1.19	-	-			2	0.70	9	2.41
1977	1	0.53	7	1.57	1	0.18			2	0.48	11	2.76
1978	-	-	4	0.98	2	0.92			7	1.54	13	3.44
1979	1	0.08	7	2.33	-	-	-	-	2	0.61	10	3.02
1980	-	-	5	1.13	3	0.68	-	-	-	-	8	1.81
1981	1	0.38	11	1.91	1	0.30	-	-	1	0.18	14	2.77
1982	-	-	6	1.66	1	0.38	-	-	2	0.35	9	2.39
1983	1	0.17	8	1.98	3	0.85	-	-	2	0.56	14	3.57
1984	1	0.39	6	1.18	2	0.56	-	-	-	-	9	2.12
1985	3	1.20	10	1.54	2	0.34	-	-	1	0.17	16	3.25
1986	4	1.05	8	1.63	3	0.41	-	-	-	-	15	3.09
1987	6	1.19	3	0.75	5	1.11	-	-	-	-	14	3.05
1988	2	0.46	6	1.05	2	0.33	-	-	-	-	10	1.84
1989	2	0.45	9	1.62	1	0.07	-	-	-	-	12	2.14
1990	4	1.14	6	1.02	2	0.86	-	-	-	-	12	3.02
1991	3	1.15	6	1.13	2	0.44	-	-	-	-	11	2.72
1992	7	1.36	6	0.75	2	0.60	-	-	4	1.01	19	3.71

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure IA-2. All pneumoconioses: Distribution of deaths by sex and race, Iowa residents age 15 and over, 1968-1992



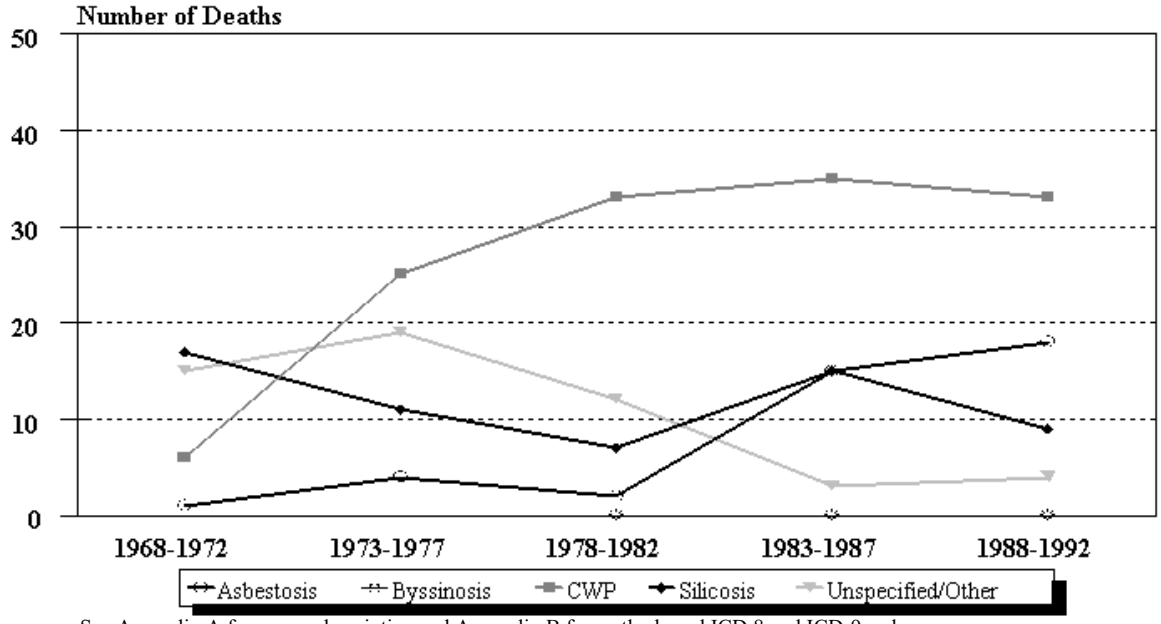
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table IA-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Iowa residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		283	100.0	64	100.0
Sex	Male	274	96.8	63	98.4
	Female	9	3.2	1	1.6
Race	White	272	96.1	61	95.3
	Black	11	3.9	3	4.7
	Other	0	0.0	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	0	0.0	0	0.0
	35-44	0	0.0	0	0.0
	45-54	9	3.2	1	1.6
	55-64	28	9.9	5	7.8
	65-74	89	31.4	20	31.3
	75-84	112	39.6	26	40.6
	85+	45	15.9	12	18.8
	Mean age	75.1		76.1	
	Range for age	45-100		47-100	

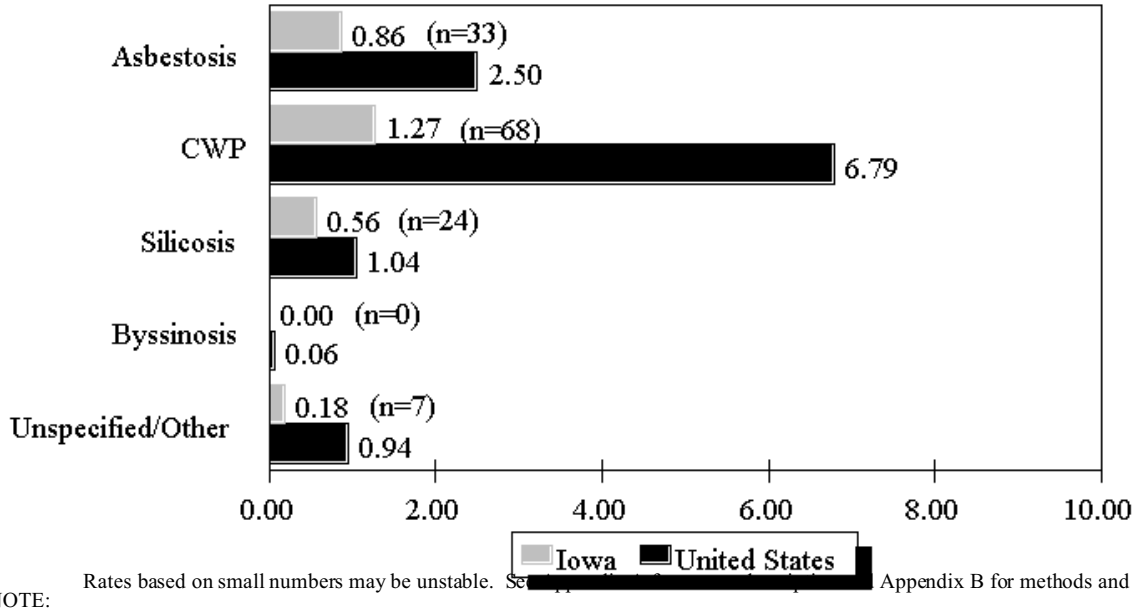
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure IA-3. Pneumoconiosis deaths by condition, Iowa residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure IA-4. Iowa and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table IA-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Iowa residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Adams	-	-	1	5.30	-	-	-	-	-	-	1	5.30
Appanoose	-	-	7	17.55	1	5.79	-	-	-	-	8	23.34
Black Hawk	2	1.24	2	0.78	6	3.71	-	-	1	0.85	11	6.58
Boone	-	-	6	12.16	-	-	-	-	-	-	6	12.16
Carroll	1	4.24	-	-	-	-	-	-	-	-	1	4.24
Cedar	2	10.48	-	-	-	-	-	-	-	-	2	10.48
Clinton	-	-	-	-	-	-	-	-	1	1.83	1	1.83
Dallas	-	-	2	2.76	-	-	-	-	-	-	2	2.76
Davis	-	-	2	14.04	-	-	-	-	-	-	2	14.04
Delaware	1	2.36	-	-	1	2.36	-	-	-	-	2	4.72
Des Moines	3	6.59	-	-	1	0.87	-	-	-	-	4	7.46
Emmet	-	-	1	7.48	-	-	-	-	-	-	1	7.48
Guthrie	-	-	1	2.46	-	-	-	-	-	-	1	2.46
Hamilton	-	-	-	-	1	5.13	-	-	-	-	1	5.13
Henry	1	5.28	-	-	-	-	-	-	-	-	1	5.28
Iowa	-	-	1	2.10	-	-	-	-	-	-	1	2.10
Jackson	1	7.62	1	1.78	-	-	-	-	-	-	2	9.40
Jasker	1	2.61	3	4.84	1	1.12	-	-	-	-	5	8.57
Jefferson	-	-	2	4.65	-	-	-	-	-	-	2	4.65
Johnson	-	-	-	-	1	0.89	-	-	-	-	1	0.89
Lee	2	4.64	-	-	1	0.95	-	-	2	3.27	5	8.87
Linn	2	1.37	1	0.68	2	1.53	-	-	-	-	5	3.58
Lucas	-	-	2	19.19	-	-	-	-	-	-	2	19.19
Madison	-	-	1	2.47	-	-	-	-	-	-	1	2.47
Marion	-	-	5	12.40	-	-	-	-	-	-	5	12.40
Mitchell	-	-	-	-	1	2.27	-	-	-	-	1	2.27
Monroe	-	-	5	35.91	-	-	-	-	-	-	5	35.91
Montgomery	-	-	1	2.01	-	-	-	-	-	-	1	2.01
Muscatine	1	1.13	-	-	2	2.26	-	-	-	-	3	3.39
Page	1	4.71	-	-	-	-	-	-	-	-	1	4.71
Polk	5	1.45	13	2.46	1	0.17	-	-	1	0.37	20	4.45
Pottawattamie	2	1.79	-	-	-	-	-	-	-	-	2	1.79

See footnotes at end of table.

Table IA-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Iowa residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Poweshiek	1	**5.07**	-	**-**	-	**-**	-	**-**	-	**-**	1	**5.07**
Scott	2	**0.78**	2	**1.17**	3	**1.56**	-	**-**	-	**-**	7	**3.50**
Sioux	1	**3.53**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.53**
Story	-	**-**	2	**4.26**	-	**-**	-	**-**	-	**-**	2	**4.26**
Tama	-	**-**	-	**-**	1	**4.77**	-	**-**	-	**-**	1	**4.77**
Union	-	**-**	1	**2.23**	-	**-**	-	**-**	-	**-**	1	**2.23**
Van Buren	-	**-**	1	**3.57**	-	**-**	-	**-**	-	**-**	1	**3.57**
Wapello	1	**0.87**	2	**1.74**	-	**-**	-	**-**	-	**-**	3	**2.61**
Wayne	-	**-**	1	**2.90**	-	**-**	-	**-**	-	**-**	1	**2.90**
Webster	-	**-**	2	**3.00**	-	**-**	-	**-**	2	**1.64**	4	**4.64**
Woodbury	3	**1.88**	-	**-**	1	**0.43**	-	**-**	-	**-**	4	**2.31**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

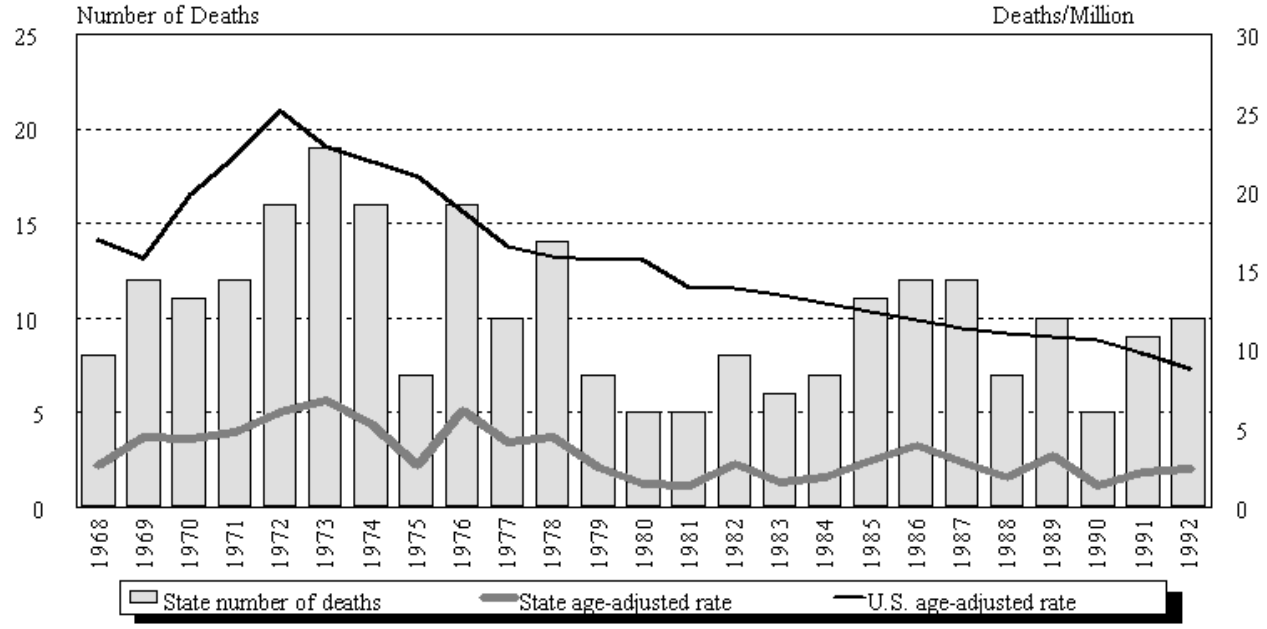
Kansas: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	41	38
Crude mortality rate (per 1,000,000 population)	4.28	46
Age-adjusted mortality rate (per 1,000,000 population)	2.25	48
Total years of potential life lost to life expectancy	513	38
Years of potential life lost to life expectancy (per death)	12.5	16

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	20	48.8
Coal workers' pneumoconiosis	10	24.4
Silicosis	3	7.3
Byssinosis	1	2.4
Unspecified/Other pneumoconiosis	7	17.1

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure KS-1. All pneumoconioses: Kansas and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Kansas

Table KS-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Kansas residents age 15 and over, 1968-1992

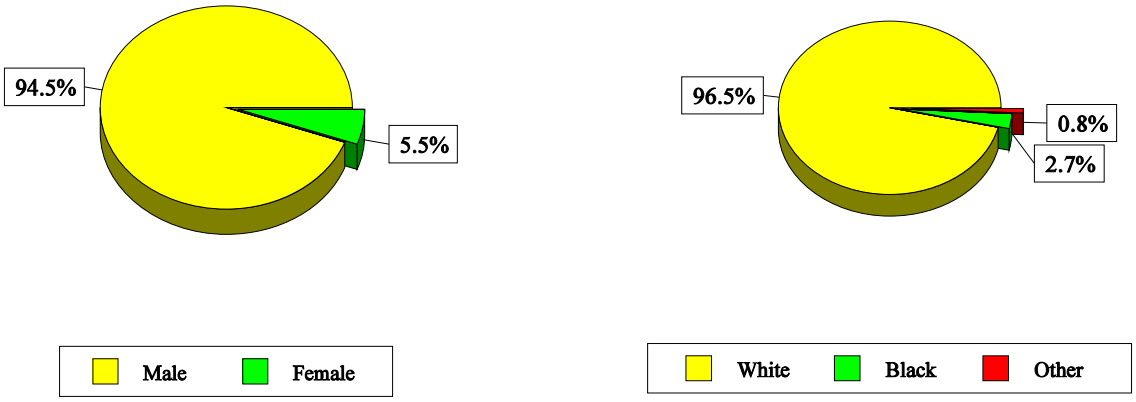
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	1	0.16	6	2.28			1	0.16	8	2.61
1969	-	-	-	-	9	3.06			3	1.34	12	4.40
1970	-	-	-	-	11	4.32			-	-	11	4.32
1971	-	-	1	0.26	8	3.31			3	1.17	12	4.74
1972	-	-	4	1.02	6	2.90			6	2.12	16	6.04
1973	-	-	5	1.68	9	3.70			5	1.44	19	6.82
1974	-	-	7	2.06	4	1.70			5	1.54	16	5.30
1975	1	0.24	1	0.50	-	-			5	1.89	7	2.63
1976	-	-	2	0.88	9	3.58			5	1.64	16	6.10
1977	-	-	2	1.18	4	1.39			5	1.77	10	4.10
1978	-	-	5	1.35	4	1.58			5	1.49	14	4.43
1979	1	0.48	2	0.75	2	0.85	-	-	2	0.47	7	2.55
1980	-	-	1	0.23	1	0.23	-	-	3	0.98	5	1.44
1981	-	-	1	0.11	3	0.95	-	-	1	0.37	5	1.42
1982	1	0.47	3	0.69	4	1.64	-	-	-	-	8	2.80
1983	1	0.36	2	0.46	2	0.46	-	-	1	0.36	6	1.64
1984	-	-	6	1.72	-	-	-	-	1	0.22	7	1.94
1985	2	0.69	6	1.32	2	0.57	-	-	1	0.36	11	2.94
1986	3	0.93	7	2.16	-	-	-	-	2	0.84	12	3.94
1987	5	1.33	2	0.30	5	1.21	-	-	-	-	12	2.84
1988	3	0.76	-	-	1	0.35	-	-	3	0.76	7	1.87
1989	5	1.87	4	1.28	-	-	-	-	1	0.09	10	3.24
1990	2	0.40	2	0.76	-	-	1	0.20	-	-	5	1.35
1991	3	0.59	2	0.69	1	0.20	-	-	3	0.78	9	2.25
1992	7	1.59	2	0.69	1	0.19	-	-	-	-	10	2.48

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure KS-2. All pneumoconioses: Distribution of deaths by sex and race, Kansas residents age 15 and over, 1968-1992



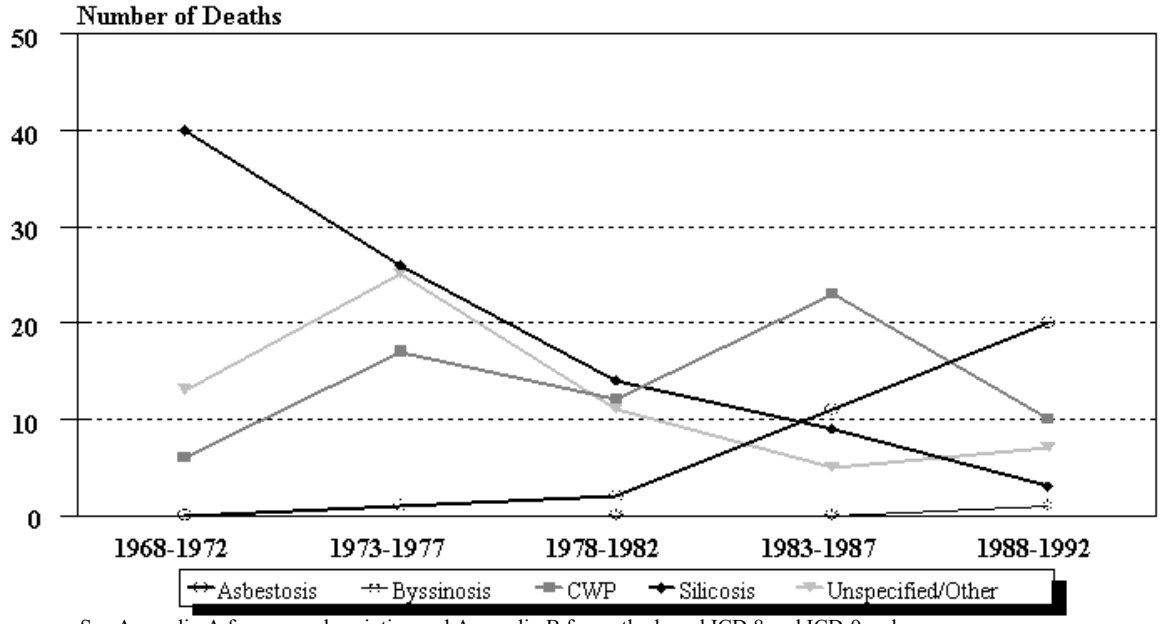
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table KS-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Kansas residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		255	100.0	41	100.0
Sex	Male	241	94.5	39	95.1
	Female	14	5.5	2	4.9
Race	White	246	96.5	38	92.7
	Black	7	2.7	3	7.3
	Other	2	0.8	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	1	0.4	0	0.0
	35-44	3	1.2	2	4.9
	45-54	10	3.9	2	4.9
	55-64	41	16.1	2	4.9
	65-74	87	34.1	11	26.8
	75-84	75	29.4	17	41.5
	85+	38	14.9	7	17.1
	Mean age	72.5		73.6	
	Range for age	27-95		37-90	

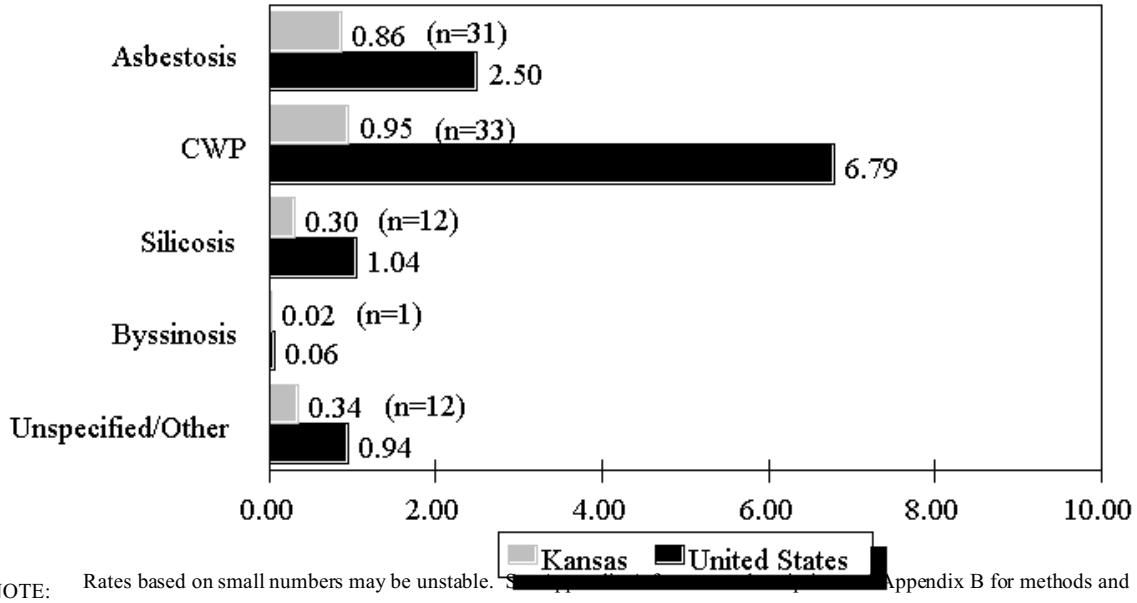
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure KS-3. Pneumoconiosis deaths by condition, Kansas residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure KS-4. Kansas and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table KS-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Kansas residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Atchison	-	-	-	-	2	3.92	-	-	2	7.47	4	11.39
Bourbon	-	-	1	5.46	-	-	-	-	-	-	1	5.46
Bulter	5	6.98	-	-	-	-	-	-	-	-	5	6.98
Cherokee	-	-	1	4.03	3	7.13	-	-	2	8.06	6	19.23
Cowley	1	0.92	-	-	-	-	-	-	-	-	1	0.92
Crawford	-	-	6	6.32	1	2.48	-	-	2	3.25	9	12.05
Dickson	-	-	-	-	-	-	-	-	1	4.43	1	4.43
Douglas	2	3.27	1	0.96	-	-	-	-	-	-	3	4.23
Franklin	-	-	1	1.55	-	-	-	-	-	-	1	1.55
Geary	1	5.14	-	-	-	-	-	-	-	-	1	5.14
Harvey	1	3.23	-	-	-	-	-	-	-	-	1	3.23
Jefferson	-	-	1	2.56	-	-	-	-	-	-	1	2.56
Jewell	1	14.93	-	-	-	-	-	-	-	-	1	14.93
Johnson	3	0.85	2	0.61	-	-	-	-	-	-	5	1.46
Kingman	1	3.51	-	-	-	-	-	-	-	-	1	3.51
Labette	1	1.27	1	3.72	-	-	-	-	-	-	2	4.99
Leavenworth	-	-	-	-	2	3.24	-	-	-	-	2	3.24
Linn	1	3.21	2	6.43	-	-	-	-	-	-	3	9.64
Marshall	2	8.21	-	-	-	-	-	-	-	-	2	8.21
Miami	-	-	-	-	-	-	-	-	1	4.50	1	4.50
Montgomery	1	0.75	-	-	-	-	-	-	-	-	1	0.75
Morris	1	12.04	-	-	-	-	-	-	-	-	1	12.04
Osage	1	2.06	3	6.18	-	-	-	-	1	2.06	5	10.31
Osborne	-	-	-	-	1	13.56	-	-	-	-	1	13.56
Pratt	1	2.88	-	-	-	-	-	-	-	-	1	2.88
Reno	-	-	6	10.58	-	-	-	-	-	-	6	10.58
Riley	1	3.41	-	-	-	-	-	-	-	-	1	3.41
Sedgwick	2	0.44	3	0.82	1	0.29	1	0.15	2	0.44	9	2.14
Shawnee	4	1.54	3	1.25	-	-	-	-	1	0.30	8	3.09
Stevens	-	-	-	-	1	9.11	-	-	-	-	1	9.11
Wilson	-	-	-	-	1	2.40	-	-	-	-	1	2.40
Woodson	-	-	1	15.67	-	-	-	-	-	-	1	15.67
Wyandotte	1	0.64	1	0.30	-	-	-	-	-	-	2	0.94

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

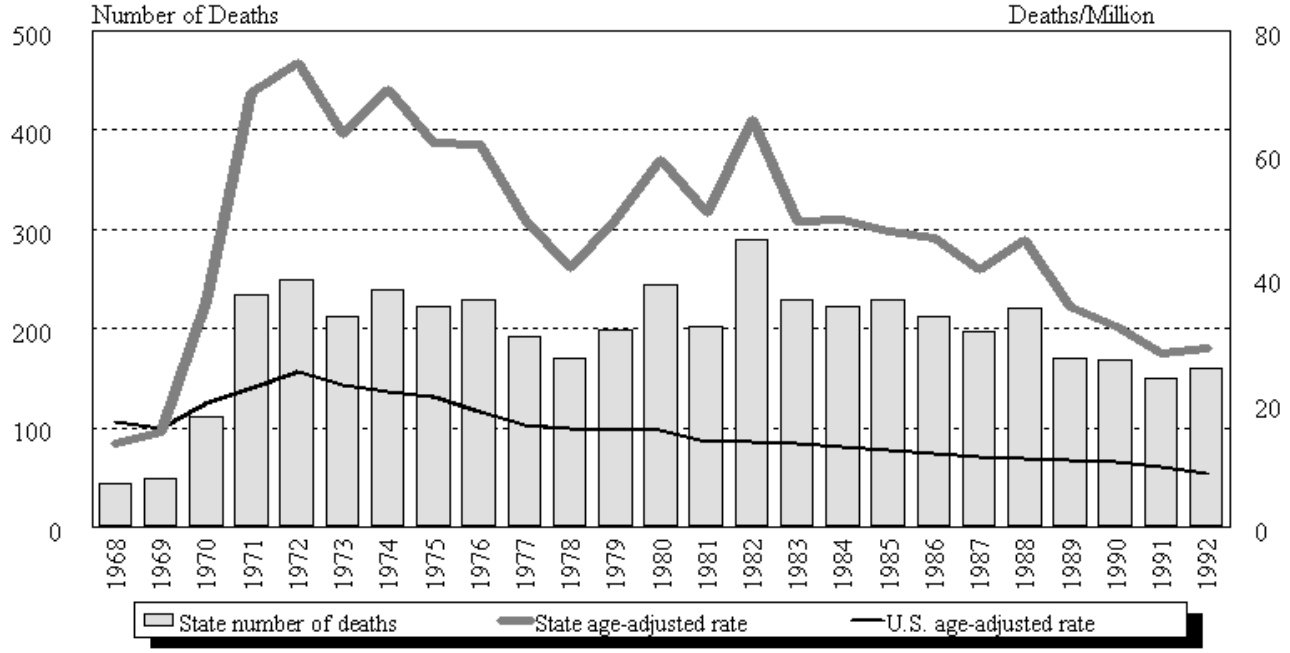
Kentucky: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	871	4
Crude mortality rate (per 1,000,000 population)	60.22	3
Age-adjusted mortality rate (per 1,000,000 population)	34.22	3
Total years of potential life lost to life expectancy	10,380	4
Years of potential life lost to life expectancy (per death)	11.9	26

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	19	2.2
Coal workers' pneumoconiosis	648	74.4
Silicosis	28	3.2
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	178	20.4

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure KY-1. All pneumoconioses: Kentucky and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Kentucky

Table KY-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Kentucky residents age 15 and over, 1968-1992

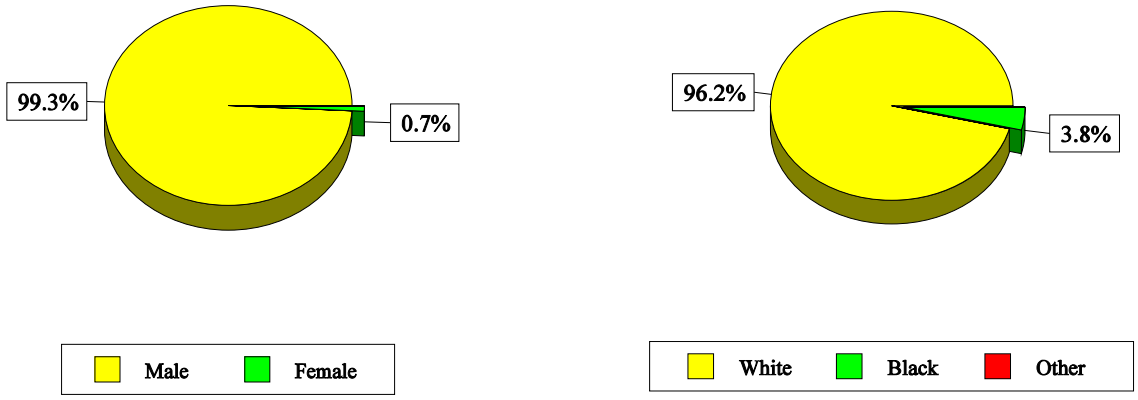
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	3	0.66	23	7.91			18	5.09	44	13.67
1969	-	-	7	2.41	22	6.75			22	6.88	49	15.37
1970	1	0.45	34	11.34	31	10.06			51	16.06	112	36.36
1971	-	-	80	24.29	25	8.14			138	40.56	234	69.92
1972	-	-	88	27.54	30	8.46			140	41.71	250	74.98
1973	-	-	72	22.00	24	6.57			119	35.42	213	63.28
1974	-	-	89	27.26	10	2.67			143	41.79	239	70.62
1975	-	-	89	24.56	15	4.16			123	34.39	222	61.87
1976	-	-	97	26.29	12	3.49			121	32.22	229	61.72
1977	-	-	94	24.16	13	3.25			89	22.97	193	49.66
1978	1	0.33	84	20.64	4	0.76			82	20.01	171	41.73
1979	1	0.26	109	26.91	10	3.23	-	-	80	19.76	199	49.73
1980	-	-	130	31.32	4	1.10	-	-	111	26.97	245	59.39
1981	6	1.63	159	39.89	4	1.00	-	-	34	8.14	203	50.66
1982	2	0.63	242	55.19	12	2.73	-	-	34	7.29	290	65.84
1983	-	-	196	42.34	6	1.19	-	-	27	5.85	229	49.38
1984	2	0.62	177	39.66	3	0.66	-	-	40	8.54	222	49.48
1985	4	1.18	195	39.71	10	2.63	-	-	21	4.28	229	47.63
1986	4	0.74	182	39.54	5	1.48	-	-	22	5.07	212	46.66
1987	3	0.65	161	32.93	2	0.57	-	-	31	7.36	197	41.50
1988	4	0.55	168	35.11	11	2.65	-	-	39	8.23	221	46.30
1989	4	1.24	137	28.59	3	0.81	-	-	26	5.03	170	35.67
1990	1	0.15	115	23.03	6	1.20	-	-	47	7.93	169	32.32
1991	5	1.40	112	19.95	2	0.55	-	-	32	6.56	150	28.12
1992	5	1.01	116	20.58	6	1.54	-	-	34	5.68	161	28.80

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure KY-2. All pneumoconioses: Distribution of deaths by sex and race, Kentucky residents age 15 and over, 1968-1992



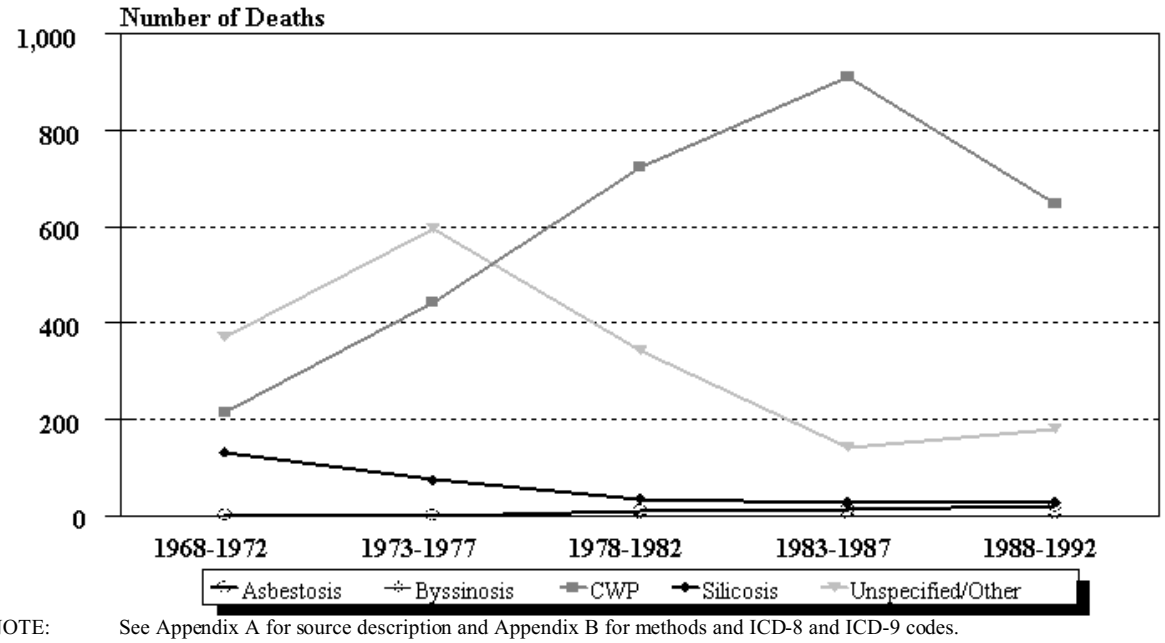
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table KY-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Kentucky residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		4,853	100.0	871	100.0
Sex	Male	4,821	99.3	866	99.4
	Female	32	0.7	5	0.6
Race	White	4,668	96.2	852	97.8
	Black	184	3.8	18	2.1
	Other	1	0.0	1	0.1
Age	15-24	1	0.0	0	0.0
	25-34	2	0.0	2	0.2
	35-44	39	0.8	8	0.9
	45-54	212	4.4	24	2.8
	55-64	913	18.8	86	9.9
	65-74	1,731	35.7	283	32.5
	75-84	1,496	30.8	330	37.9
	85+	459	9.5	138	15.8
	Mean age	71.5		74.5	
	Range for age	22-102		25-99	

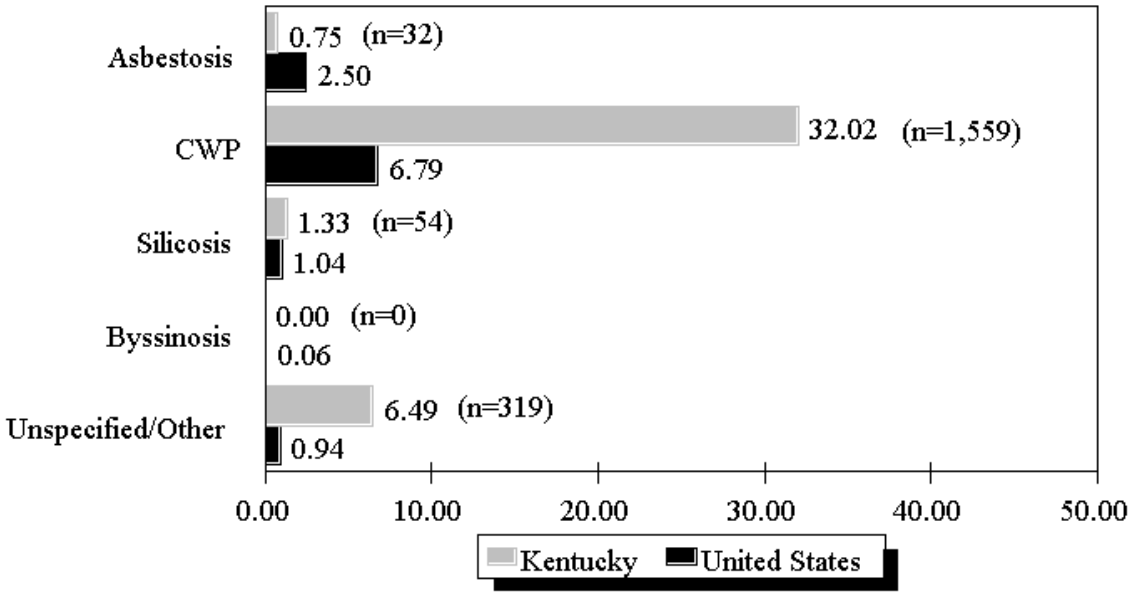
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure KY-3. Pneumoconiosis deaths by condition, Kentucky residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure KY-4. Kentucky and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table KY-3 (page 1 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Kentucky residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Adair	-	-	-	-	2	8.45	-	-	-	-	2	8.45
Barren	-	-	-	-	1	2.70	-	-	-	-	1	2.70
Bell	1	1.57	105	244.67	-	-	-	-	36	85.61	142	331.85
Boone	2	4.12	3	7.60	1	2.53	-	-	1	2.53	7	16.79
Bourbon	-	-	1	5.19	-	-	-	-	-	-	1	5.19
Boyd	1	0.91	6	7.07	-	-	-	-	3	3.53	10	11.51
Boyle	-	-	2	5.54	-	-	-	-	-	-	2	5.54
Breathitt	-	-	8	40.41	-	-	-	-	3	10.93	11	51.34
Breckinridge	-	-	1	5.52	-	-	-	-	1	2.68	2	8.20
Butler	-	-	2	12.51	-	-	-	-	7	51.43	9	63.94
Caldwell	-	-	2	4.78	-	-	-	-	-	-	2	4.78
Campbell	1	1.23	7	7.98	-	-	-	-	-	-	8	9.21
Carter	-	-	4	8.56	2	4.28	-	-	1	4.33	6	15.04
Casey	-	-	2	5.90	-	-	-	-	-	-	2	5.90
Christian	-	-	5	5.69	1	0.90	-	-	2	2.98	8	9.57
Clay	-	-	12	55.56	1	5.54	-	-	4	19.43	17	80.52
Clinton	-	-	1	9.78	-	-	-	-	-	-	1	9.78
Crittenden	-	-	4	26.43	2	19.02	-	-	3	22.73	8	58.67
Daviess	3	3.55	14	12.50	-	-	-	-	1	0.60	18	16.65
Elliott	-	-	2	24.83	-	-	-	-	-	-	2	24.83
Estill	-	-	2	10.04	-	-	-	-	-	-	2	10.04
Fayette	2	0.90	6	2.43	1	0.59	-	-	2	0.90	11	4.83
Fleming	-	-	1	7.63	-	-	-	-	1	7.63	2	15.25
Floyd	-	-	344	673.59	2	4.95	-	-	25	53.43	371	731.97
Franklin	-	-	2	2.65	-	-	-	-	1	1.33	3	3.98
Fulton	-	-	1	9.71	-	-	-	-	-	-	1	9.71
Garrard	-	-	1	3.51	-	-	-	-	-	-	1	3.51
Grant	-	-	3	14.95	-	-	-	-	-	-	3	14.95
Graves	1	0.99	-	-	-	-	-	-	1	0.99	2	1.97
Green	-	-	-	-	1	7.86	-	-	-	-	1	7.86
Greenup	1	1.68	6	12.10	2	3.36	-	-	1	1.68	10	18.83
Hardin	-	-	1	1.70	1	1.76	-	-	1	1.76	3	5.22
Harlan	1	3.89	177	365.53	1	1.40	-	-	53	115.64	232	486.45

See footnotes at end of table.

Table KY-3 (page 2 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Kentucky residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Hart	-	-	-	-	1	5.86	-	-	-	-	1	5.86
Henderson	-	-	9	11.99	-	-	-	-	-	-	9	11.99
Henry	-	-	1	3.55	-	-	-	-	-	-	1	3.55
Hopkins	-	-	32	52.14	-	-	-	-	10	14.92	42	67.06
Jackson	-	-	10	68.90	1	12.67	-	-	-	-	11	81.57
Jefferson	7	0.82	7	0.75	11	1.39	-	-	6	0.53	31	3.49
Jessamine	1	2.68	-	-	-	-	-	-	1	2.68	2	5.35
Johnson	-	-	46	150.02	5	22.79	-	-	3	9.33	54	182.14
Kenton	1	0.81	12	6.92	2	1.38	-	-	-	-	14	8.71
Knott	-	-	51	237.97	-	-	-	-	4	17.72	55	255.69
Knox	-	-	73	200.30	-	-	-	-	17	42.59	90	242.89
Laurel	1	1.36	33	58.34	-	-	-	-	9	14.79	43	74.50
Lawrence	-	-	11	57.94	1	7.39	-	-	-	-	12	65.33
Lee	-	-	4	20.68	1	5.17	-	-	-	-	5	25.85
Leslie	-	-	18	146.56	-	-	-	-	9	64.13	27	210.69
Letcher	-	-	131	418.13	-	-	-	-	15	43.18	146	461.31
Lewis	-	-	3	19.44	1	7.79	-	-	1	7.79	5	35.03
Lincoln	-	-	4	11.86	1	4.86	-	-	1	2.33	6	19.05
Logan	-	-	1	3.82	-	-	-	-	-	-	1	3.82
McCracken	1	0.63	4	2.51	-	-	-	-	1	1.44	6	4.57
McCreary	-	-	13	67.99	-	-	-	-	1	3.94	14	71.93
McLean	-	-	2	13.67	-	-	-	-	-	-	2	13.67
Madison	-	-	8	15.02	1	2.33	-	-	1	1.12	10	18.47
Magoffin	3	30.85	6	48.69	1	11.49	-	-	1	11.49	11	102.52
Martin	-	-	9	91.15	2	17.99	-	-	2	16.84	13	125.98
Meade	-	-	1	7.15	1	7.15	-	-	-	-	2	14.29
Mercer	-	-	1	4.83	-	-	-	-	-	-	1	4.83
Metcalfe	1	9.83	2	9.03	1	9.83	-	-	-	-	4	28.69
Montgomery	-	-	1	2.57	-	-	-	-	-	-	1	2.57
Morgan	-	-	3	17.41	-	-	-	-	1	4.19	4	21.60
Muhlenberg	-	-	85	185.73	1	3.00	-	-	27	52.37	113	241.10
Ohio	-	-	16	45.55	-	-	-	-	4	10.08	20	55.63

See footnotes at end of table.

Table KY-3 (page 3 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Kentucky residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Owen	-	-	1	**10.00**	-	-	-	-	-	-	1	**10.00**
Owsley	-	-	1	**18.71**	-	-	-	-	-	-	1	**18.71**
Pendleton	1	**13.13**	1	**9.13**	-	-	-	-	-	-	2	**22.26**
Perry	1	**3.86**	29	**96.27**	-	-	-	-	7	**22.27**	36	**118.54**
Pike	-	-	112	**141.46**	1	**0.93**	-	-	29	**37.36**	142	**179.75**
Powell	-	-	2	**16.01**	-	-	-	-	1	**5.28**	3	**21.29**
Pulaski	1	**0.96**	6	**9.51**	1	**1.90**	-	-	3	**3.81**	11	**16.17**
Rockcastle	-	-	3	**17.08**	-	-	-	-	-	-	3	**17.08**
Rowan	-	-	1	**3.25**	-	-	-	-	-	-	1	**3.25**
Russell	-	-	-	-	-	-	-	-	2	**12.92**	2	**12.92**
Scott	-	-	3	**12.88**	-	-	-	-	-	-	3	**12.88**
Shelby	-	-	1	**4.32**	1	**1.93**	-	-	-	-	2	**6.25**
Trimble	-	-	-	-	1	**16.64**	-	-	-	-	1	**16.64**
Union	-	-	8	**43.47**	-	-	-	-	-	-	8	**43.47**
Warren	-	-	2	**2.65**	-	-	-	-	2	**3.12**	4	**5.77**
Wayne	-	-	3	**10.99**	-	-	-	-	-	-	3	**10.99**
Webster	-	-	8	**19.20**	-	-	-	-	-	-	8	**19.20**
Whitley	1	**3.17**	51	**104.00**	1	**3.17**	-	-	14	**33.76**	67	**144.10**
Wolfe	-	-	4	**62.31**	-	-	-	-	-	-	4	**62.31**
Woodford	-	-	1	**3.25**	-	-	-	-	-	-	1	**3.25**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Louisiana: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	123	23
Crude mortality rate (per 1,000,000 population)	7.73	29
Age-adjusted mortality rate (per 1,000,000 population)	5.41	25
Total years of potential life lost to life expectancy	1,751	21
Years of potential life lost to life expectancy (per death)	14.2	4

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	86	69.9
Coal workers' pneumoconiosis	7	5.7
Silicosis	18	14.6
Byssinosis	1	0.8
Unspecified/Other pneumoconiosis	12	9.8

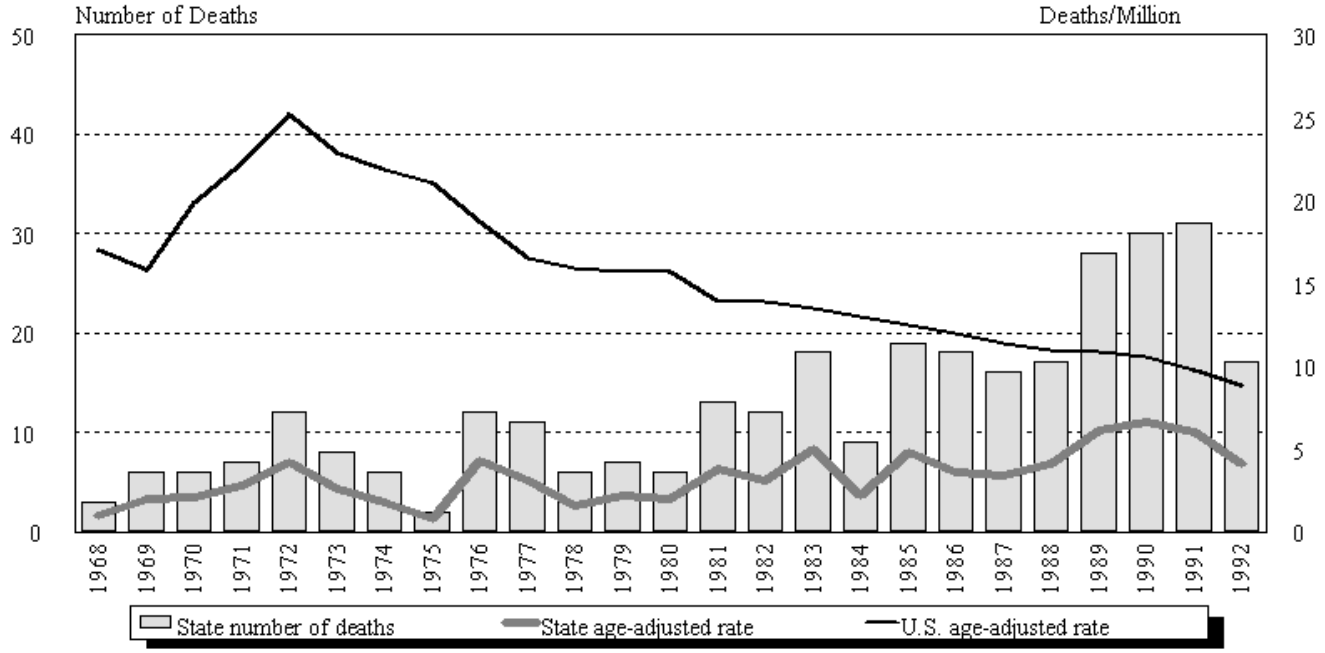
* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.

** Percentages may total more than 100% due to deaths with multiple pneumoconioses.

NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure LA-1. All pneumoconioses: Louisiana and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Louisiana

Table LA-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Louisiana residents age 15 and over, 1968-1992

Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	1	0.27	-	-	1	0.50			1	0.18	3	0.95
1969	1	0.35	1	0.27	1	0.32			3	1.02	6	1.97
1970	-	-	1	0.35	3	0.99			2	0.70	6	2.05
1971	1	0.35	-	-	6	2.47			-	-	7	2.82
1972	2	0.82	-	-	8	2.71			2	0.68	12	4.21
1973	2	0.59	-	-	3	1.12			3	0.83	8	2.54
1974	-	-	-	-	3	1.00			3	0.80	6	1.80
1975	-	-	1	0.33	-	-			1	0.40	2	0.73
1976	3	1.12	1	0.33	3	1.15			5	1.66	12	4.25
1977	1	0.32	1	0.21	4	1.27			5	1.25	11	3.06
1978	2	0.58	-	-	2	0.44			2	0.52	6	1.54
1979	2	0.51	-	-	4	1.39	-	-	1	0.26	7	2.16
1980	3	0.91	-	-	2	0.70	-	-	1	0.40	6	2.02
1981	5	1.28	-	-	6	1.83	1	0.30	2	0.58	13	3.74
1982	9	2.35	-	-	2	0.58	-	-	1	0.18	12	3.11
1983	9	2.15	3	0.74	5	1.66	-	-	1	0.40	18	4.95
1984	4	0.86	2	0.63	2	0.45	-	-	1	0.24	9	2.18
1985	11	2.86	2	0.33	5	1.38	-	-	4	1.09	19	4.80
1986	11	2.46	1	0.16	3	0.61	-	-	4	0.57	18	3.57
1987	7	1.68	2	0.39	5	1.09	-	-	2	0.25	16	3.40
1988	12	2.73	-	-	3	1.00	-	-	2	0.39	17	4.12
1989	20	3.92	3	0.71	2	0.62	-	-	3	0.85	28	6.10
1990	20	4.10	1	0.31	6	1.48	-	-	3	0.70	30	6.59
1991	20	3.94	3	0.32	5	1.15	-	-	4	0.77	31	6.03
1992	14	3.16	-	-	2	0.59	1	0.32	-	-	17	4.07

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure LA-2. All pneumoconioses: Distribution of deaths by sex and race, Louisiana residents age 15 and over, 1968-1992

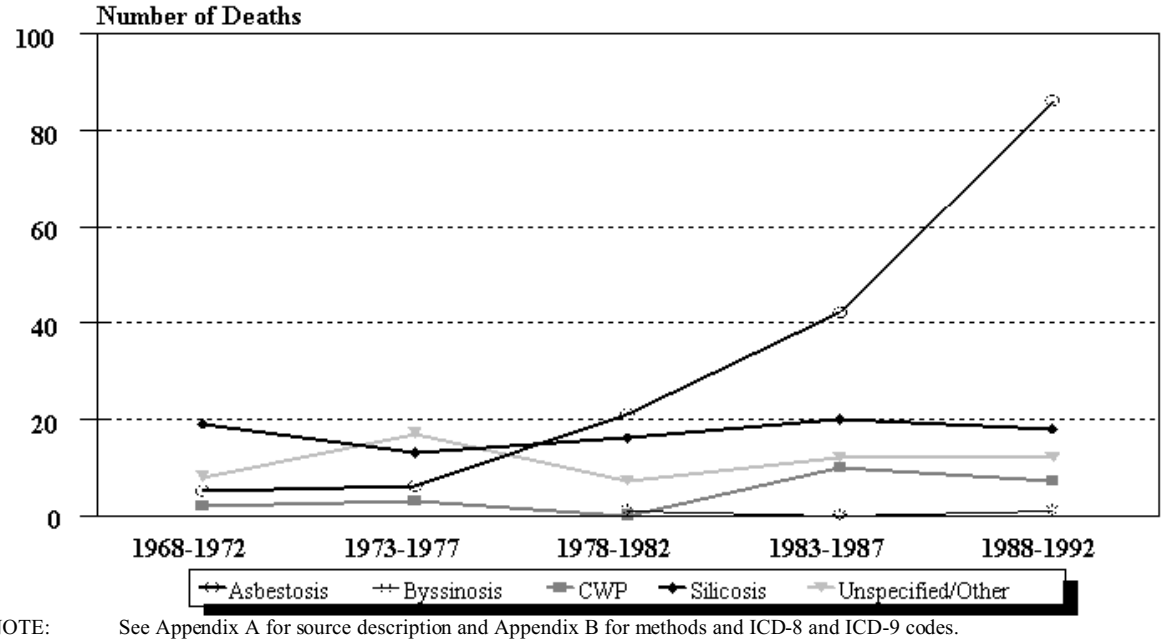
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table LA-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Louisiana residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		320	100.0	123	100.0
Sex	Male	301	94.1	115	93.5
	Female	19	5.9	8	6.5
Race	White	213	66.6	89	72.4
	Black	106	33.1	33	26.8
	Other	1	0.3	1	0.8
Age	15-24	0	0.0	0	0.0
	25-34	4	1.3	1	0.8
	35-44	13	4.1	2	1.6
	45-54	30	9.4	7	5.7
	55-64	80	25.0	22	17.9
	65-74	103	32.2	43	35.0
	75-84	67	20.9	34	27.6
	85+	23	7.2	14	11.4
	Mean age	66.7		70.6	
	Range for age	26-94		26-94	

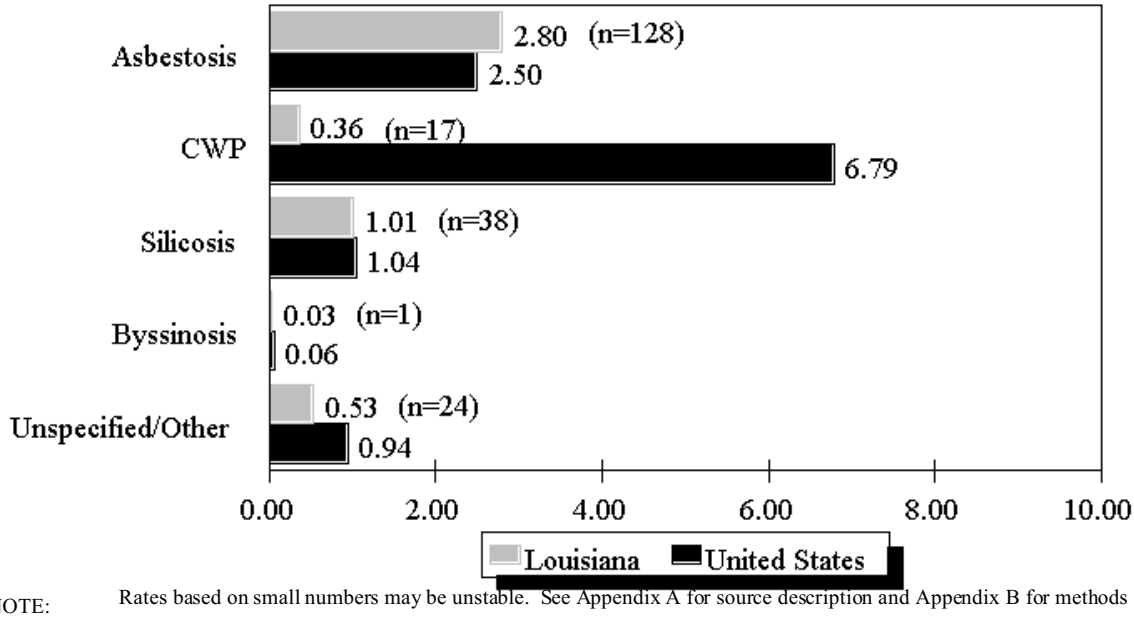
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure LA-3. Pneumoconiosis deaths by condition, Louisiana residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure LA-4. Louisiana and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table LA-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Louisiana residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Acadia	2	**3.86**	-	**-**	-	**-**	-	**-**	-	**-**	2	**3.86**
Ascension	1	**2.55**	1	**2.52**	-	**-**	-	**-**	-	**-**	2	**5.07**
Beauregard	1	**1.99**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.99**
Bossier	-	**-**	2	**1.85**	-	**-**	-	**-**	-	**-**	2	**1.85**
Caddo	6	**1.76**	-	**-**	-	**-**	-	**-**	-	**-**	6	**1.76**
Calcasieu	10	**6.07**	1	**0.66**	1	**0.66**	-	**-**	-	**-**	12	**7.39**
Cameron	1	**11.67**	-	**-**	-	**-**	-	**-**	-	**-**	1	**11.67**
Catahoula	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.03**	1	**4.03**
East Baton Rouge	7	**2.32**	1	**0.21**	-	**-**	-	**-**	1	**0.21**	9	**2.74**
East Feliciana	1	**6.29**	-	**-**	-	**-**	-	**-**	-	**-**	1	**6.29**
Grant	-	**-**	-	**-**	-	**-**	1	**8.62**	-	**-**	1	**8.62**
Iberia	3	**5.22**	-	**-**	-	**-**	-	**-**	-	**-**	3	**5.22**
Iberville	1	**3.70**	-	**-**	2	**7.41**	-	**-**	-	**-**	3	**11.11**
Jefferson	34	**7.95**	-	**-**	8	**2.06**	-	**-**	13	**2.96**	53	**12.54**
Jefferson Davis	2	**6.52**	-	**-**	-	**-**	-	**-**	-	**-**	2	**6.52**
Lafayette	3	**1.85**	-	**-**	1	**0.84**	-	**-**	-	**-**	4	**2.68**
Lafourche	1	**0.93**	1	**1.77**	1	**1.47**	-	**-**	-	**-**	3	**4.17**
Lincoln	1	**1.34**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.34**
Livingston	1	**1.97**	1	**1.33**	3	**5.28**	-	**-**	-	**-**	5	**8.58**
Morehouse	1	**1.32**	2	**6.31**	-	**-**	-	**-**	-	**-**	3	**7.63**
Orleans	21	**3.69**	1	**0.30**	6	**1.24**	-	**-**	3	**0.51**	29	**5.33**
Ouachita	2	**0.81**	1	**0.41**	1	**0.41**	-	**-**	1	**0.82**	5	**2.44**
Plaquemines	-	**-**	-	**-**	1	**5.85**	-	**-**	-	**-**	1	**5.85**
Rapides	2	**0.83**	-	**-**	-	**-**	-	**-**	1	**0.42**	3	**1.25**
Red River	1	**4.13**	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.13**
Richland	2	**3.56**	-	**-**	-	**-**	-	**-**	1	**4.45**	3	**8.01**
Sabine	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.54**	1	**3.54**
St Bernard	6	**7.98**	2	**2.66**	1	**1.52**	-	**-**	-	**-**	9	**12.16**
St Charles	2	**6.66**	-	**-**	-	**-**	-	**-**	1	**3.33**	2	**6.66**
St John the Baptist	-	**-**	-	**-**	1	**4.18**	-	**-**	-	**-**	1	**4.18**

See footnotes at end of table.

Table LA-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Louisiana residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
St Landry	2	**3.85**	-	**-**	-	**-**	-	**-**	-	**-**	2	**3.85**
St Mary	1	**1.22**	-	**-**	3	**5.51**	-	**-**	-	**-**	4	**6.73**
St Tammany	4	**3.31**	1	**0.61**	4	**3.02**	-	**-**	-	**-**	9	**6.94**
Tangipahoa	-	**-**	-	**-**	1	**1.56**	-	**-**	-	**-**	1	**1.56**
Terrebonne	2	**2.82**	-	**-**	1	**1.41**	-	**-**	-	**-**	3	**4.23**
Vernon	2	**6.44**	1	**3.22**	-	**-**	-	**-**	-	**-**	3	**9.66**
Washington	2	**4.27**	1	**1.09**	2	**4.27**	-	**-**	1	**1.09**	6	**10.73**
West Baton Rouge	1	**6.46**	-	**-**	1	**7.48**	-	**-**	-	**-**	2	**13.94**
West Carroll	1	**3.27**	1	**3.27**	-	**-**	-	**-**	-	**-**	2	**6.53**
West Feliciana	1	**7.44**	-	**-**	-	**-**	-	**-**	-	**-**	1	**7.44**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

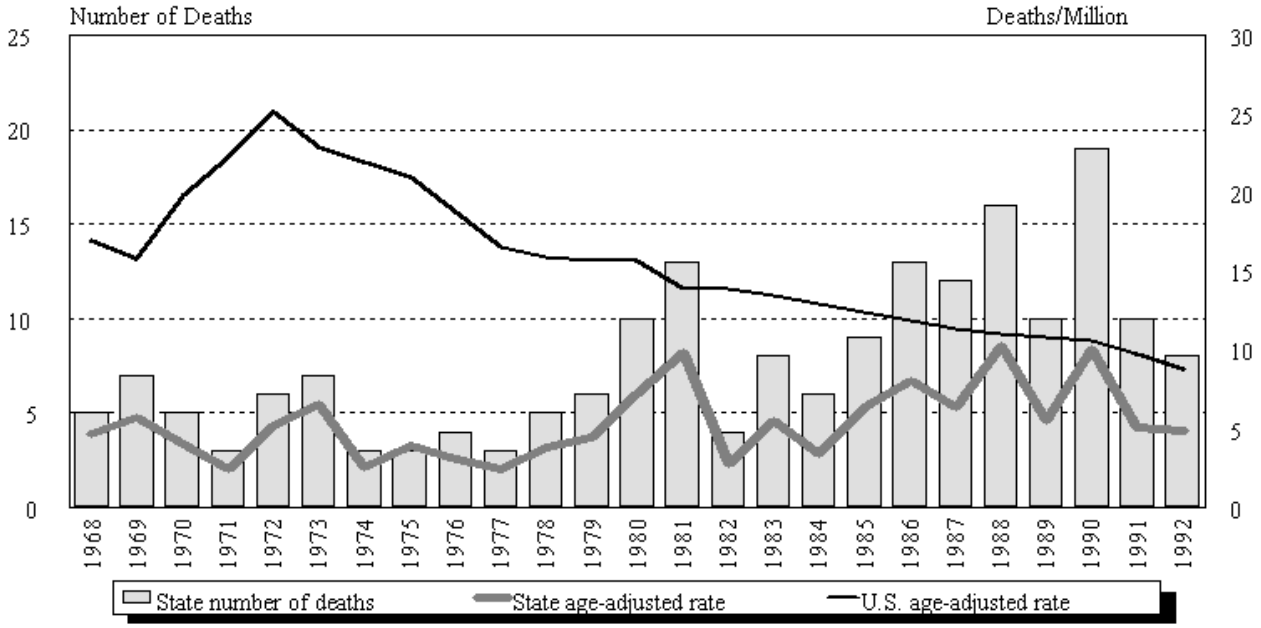
Maine: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	63	36
Crude mortality rate (per 1,000,000 population)	13.00	13
Age-adjusted mortality rate (per 1,000,000 population)	7.11	15
Total years of potential life lost to life expectancy	725	34
Years of potential life lost to life expectancy (per death)	11.5	34

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	53	84.1
Coal workers' pneumoconiosis	1	1.6
Silicosis	5	7.9
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	4	6.3

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure ME-1. All pneumoconioses: Maine and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Maine

Table ME-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Maine residents age 15 and over, 1968-1992

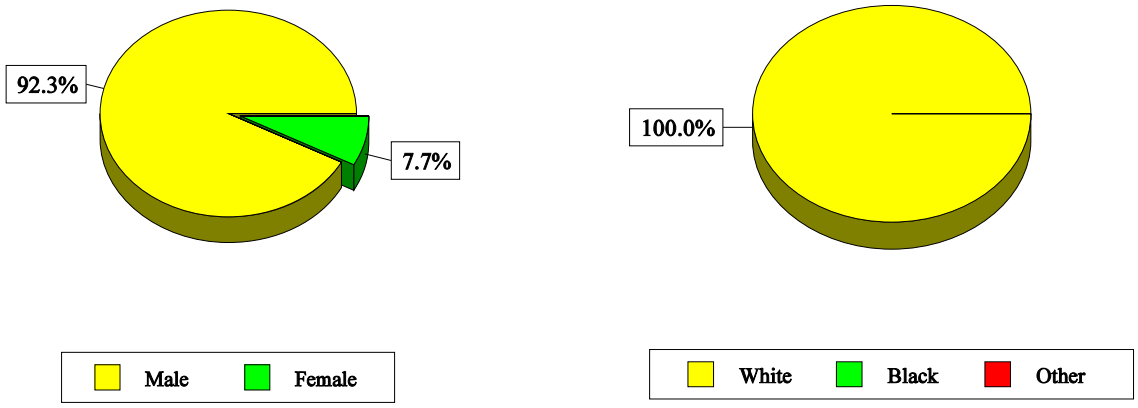
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	2	2.36			3	2.27	5	4.63
1969	1	0.94	-	-	4	3.04			2	1.76	7	5.74
1970	1	1.13	-	-	3	2.27			2	1.57	5	4.03
1971	1	0.62	-	-	2	1.84			-	-	3	2.46
1972	-	-	-	-	2	1.22			4	4.00	6	5.22
1973	1	1.10	1	0.60	3	2.38			2	2.48	7	6.55
1974	1	1.09	-	-	2	1.46			-	-	3	2.54
1975	1	1.37	-	-	1	0.85			1	1.70	3	3.93
1976	2	1.68	-	-	1	0.56			1	0.84	4	3.08
1977	-	-	-	-	2	1.37			1	1.03	3	2.40
1978	1	1.37	-	-	2	1.35			2	1.10	5	3.82
1979	3	2.32	-	-	1	0.80	-	-	2	1.32	6	4.44
1980	6	4.64	-	-	3	1.81	-	-	1	0.78	10	7.24
1981	11	8.59	-	-	1	0.78	-	-	1	0.51	13	9.88
1982	3	1.79	-	-	1	0.98	-	-	-	-	4	2.78
1983	8	5.53	-	-	-	-	-	-	-	-	8	5.53
1984	3	2.21	-	-	1	0.49	-	-	2	0.72	6	3.42
1985	7	5.42	1	0.48	1	0.48	-	-	-	-	9	6.38
1986	11	7.32	-	-	1	0.47	-	-	1	0.23	13	8.02
1987	9	4.69	-	-	3	1.66	-	-	-	-	12	6.35
1988	12	7.68	-	-	1	0.98	-	-	3	1.62	16	10.28
1989	8	4.05	1	0.71	-	-	-	-	1	0.71	10	5.47
1990	17	8.90	-	-	2	1.13	-	-	-	-	19	10.04
1991	8	4.51	-	-	2	0.62	-	-	-	-	10	5.13
1992	8	4.85	-	-	-	-	-	-	-	-	8	4.85

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure ME-2. All pneumoconioses: Distribution of deaths by sex and race, Maine residents age 15 and over, 1968-1992



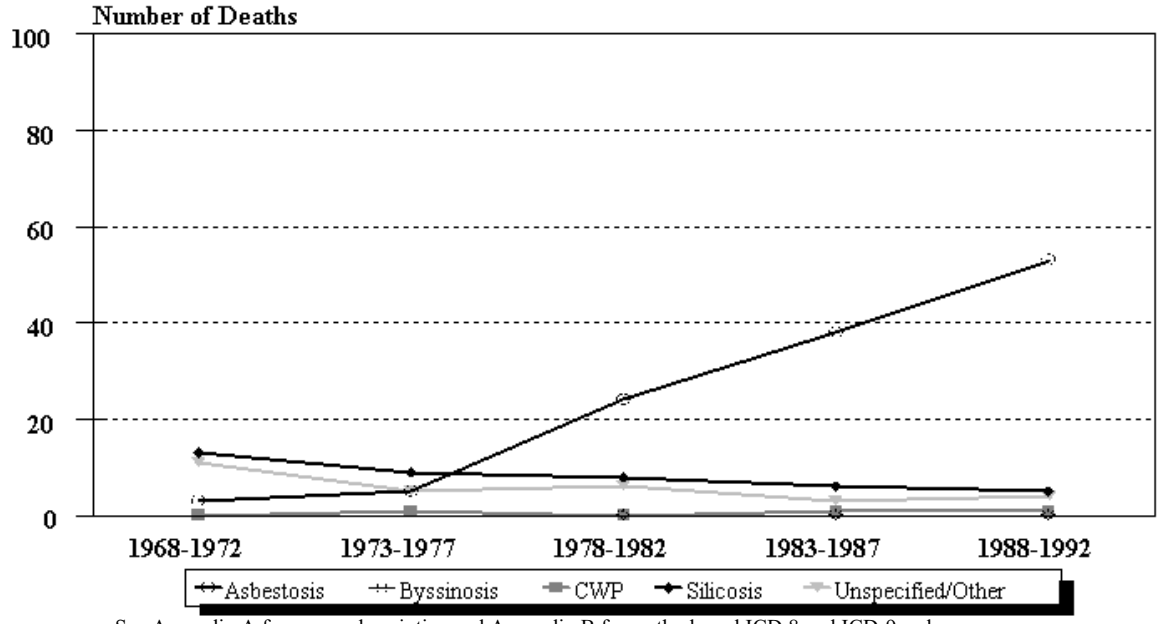
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table ME-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Maine residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		195	100.0	63	100.0
Sex	Male	180	92.3	60	95.2
	Female	15	7.7	3	4.8
Race	White	195	100.0	63	100.0
	Black	0	0.0	0	0.0
	Other	0	0.0	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	0	0.0	0	0.0
	35-44	1	0.5	0	0.0
	45-54	7	3.6	1	1.6
	55-64	29	14.9	8	12.7
	65-74	68	34.9	18	28.6
	75-84	74	37.9	28	44.4
	85+	16	8.2	8	12.7
	Mean age	72.4		74.5	
	Range for age	37-97		45-97	

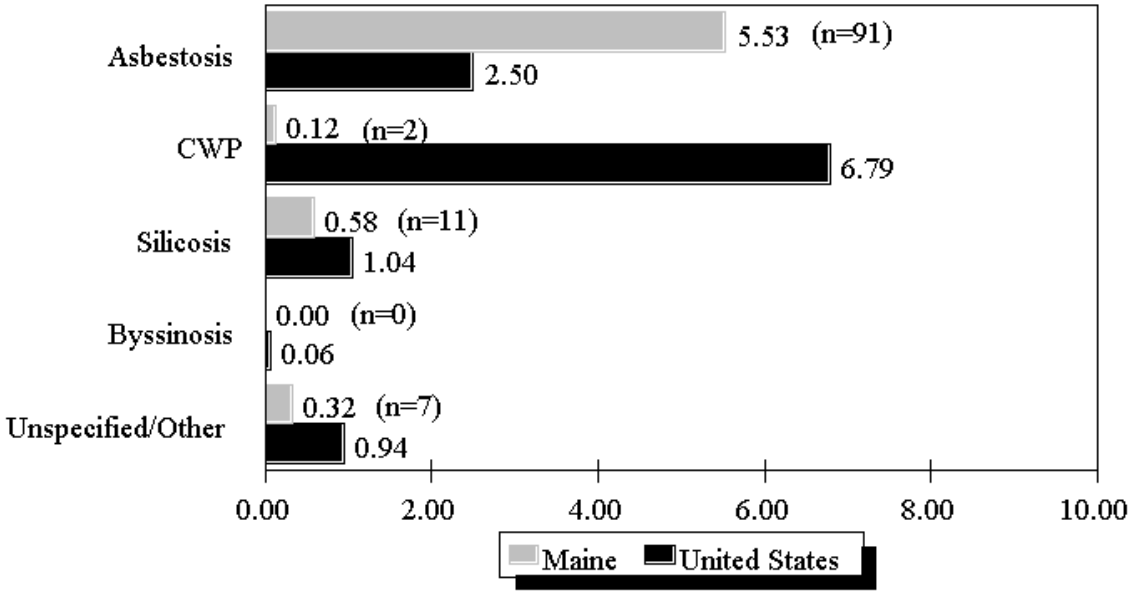
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure ME-3. Pneumoconiosis deaths by condition, Maine residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure ME-4. Maine and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table ME-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Maine residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Androscoggin	5	**2.80**	-	**-**	2	**2.04**	-	**-**	1	**0.44**	8	**5.28**
Cumberland	27	**7.71**	-	**-**	-	**-**	-	**-**	1	**0.20**	28	**7.91**
Franklin	1	**1.74**	-	**-**	1	**1.74**	-	**-**	-	**-**	2	**3.47**
Hancock	3	**3.80**	-	**-**	2	**2.94**	-	**-**	2	**1.71**	7	**8.46**
Kennebec	10	**8.13**	-	**-**	-	**-**	-	**-**	-	**-**	10	**8.13**
Knox	5	**8.04**	-	**-**	-	**-**	-	**-**	-	**-**	5	**8.04**
Lincoln	5	**13.19**	1	**2.99**	-	**-**	-	**-**	2	**4.29**	8	**20.48**
Oxford	1	**0.82**	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.82**
Penobscot	3	**1.95**	-	**-**	1	**0.39**	-	**-**	-	**-**	4	**2.34**
Piscataquis	1	**2.14**	1	**2.14**	4	**8.58**	-	**-**	-	**-**	6	**12.86**
Sagadahoc	22	**62.55**	-	**-**	-	**-**	-	**-**	1	**3.78**	23	**66.33**
Somerset	1	**2.12**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.12**
Washington	1	**1.11**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.11**
York	6	**3.67**	-	**-**	1	**0.32**	-	**-**	-	**-**	7	**3.99**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

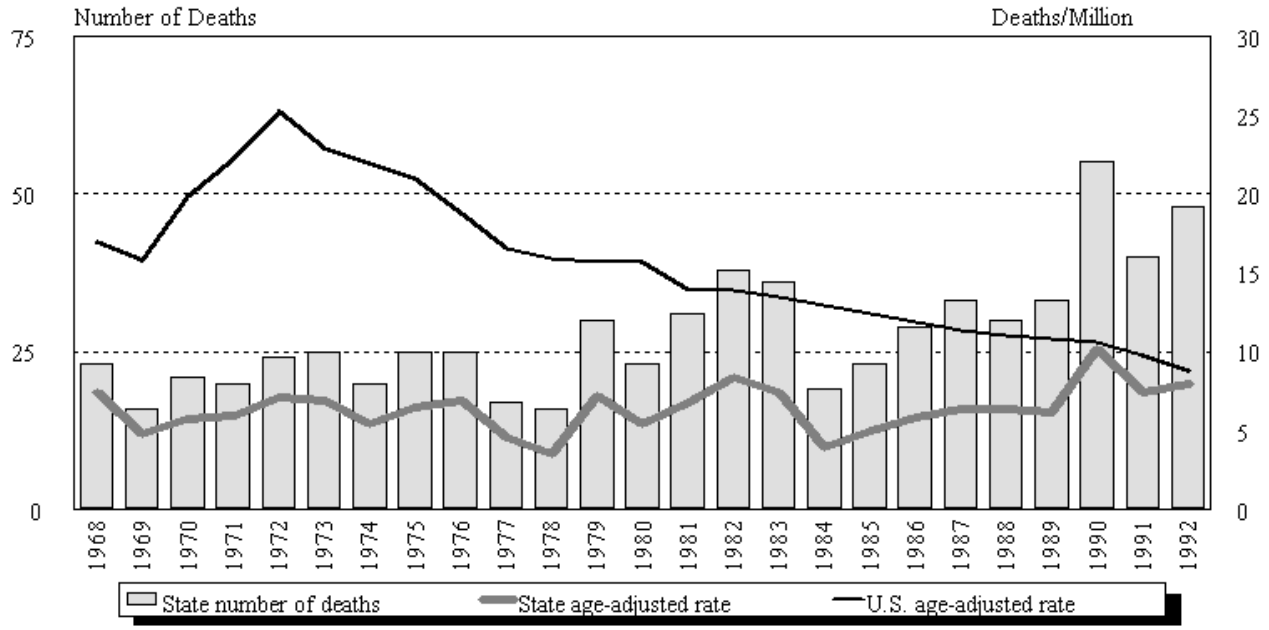
Maryland: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	206	18
Crude mortality rate (per 1,000,000 population)	10.84	20
Age-adjusted mortality rate (per 1,000,000 population)	7.65	13
Total years of potential life lost to life expectancy	2,642	17
Years of potential life lost to life expectancy (per death)	12.8	10

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	136	66.0
Coal workers' pneumoconiosis	41	19.9
Silicosis	10	4.9
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	19	9.2

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure MD-1. All pneumoconioses: Maryland and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Maryland

Table MD-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Maryland residents age 15 and over, 1968-1992

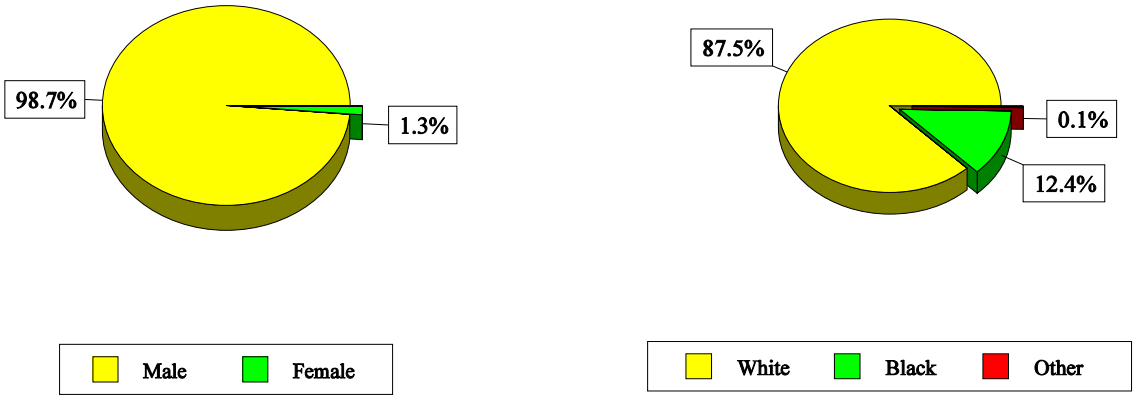
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	4	1.27	14	4.45			5	1.68	23	7.40
1969	1	0.34	5	1.46	9	2.66			3	0.92	16	4.79
1970	-	-	6	1.51	13	3.69			4	0.90	21	5.72
1971	2	0.64	5	1.63	7	2.03			7	1.97	20	5.95
1972	-	-	12	3.48	6	1.89			6	1.75	24	7.12
1973	4	1.18	6	1.64	8	2.24			7	1.81	25	6.87
1974	1	0.30	6	1.59	7	1.85			7	1.88	20	5.39
1975	-	-	8	2.08	7	2.02			11	2.58	25	6.45
1976	5	1.28	3	0.79	6	1.73			13	3.59	25	6.89
1977	4	1.23	4	0.97	6	1.58			4	0.96	17	4.61
1978	2	0.48	6	1.21	4	0.79			4	1.03	16	3.52
1979	8	1.94	9	2.06	8	2.03	1	0.12	7	1.80	30	7.22
1980	2	0.52	8	1.87	6	1.50	-	-	7	1.49	23	5.39
1981	7	1.61	13	2.74	6	1.48	-	-	6	1.27	31	6.84
1982	11	2.50	19	3.97	3	0.86	-	-	5	1.01	38	8.34
1983	12	2.57	19	3.63	4	0.80	-	-	3	0.79	36	7.42
1984	9	1.96	3	0.60	2	0.36	-	-	5	1.00	19	3.92
1985	13	2.80	5	1.08	3	0.67	-	-	2	0.41	23	4.96
1986	16	3.40	8	1.43	2	0.39	1	0.23	2	0.43	29	5.88
1987	18	3.80	8	1.28	2	0.36	-	-	5	0.97	33	6.41
1988	16	3.59	6	1.22	2	0.54	-	-	6	1.04	30	6.38
1989	24	4.54	5	1.05	-	-	-	-	4	0.59	33	6.17
1990	36	7.14	12	2.05	3	0.43	-	-	4	0.59	55	10.22
1991	27	5.19	5	0.71	4	0.70	-	-	4	0.86	40	7.45
1992	33	5.97	13	1.82	1	0.14	-	-	1	0.07	48	8.00

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure MD-2. All pneumoconioses: Distribution of deaths by sex and race, Maryland residents age 15 and over, 1968-1992



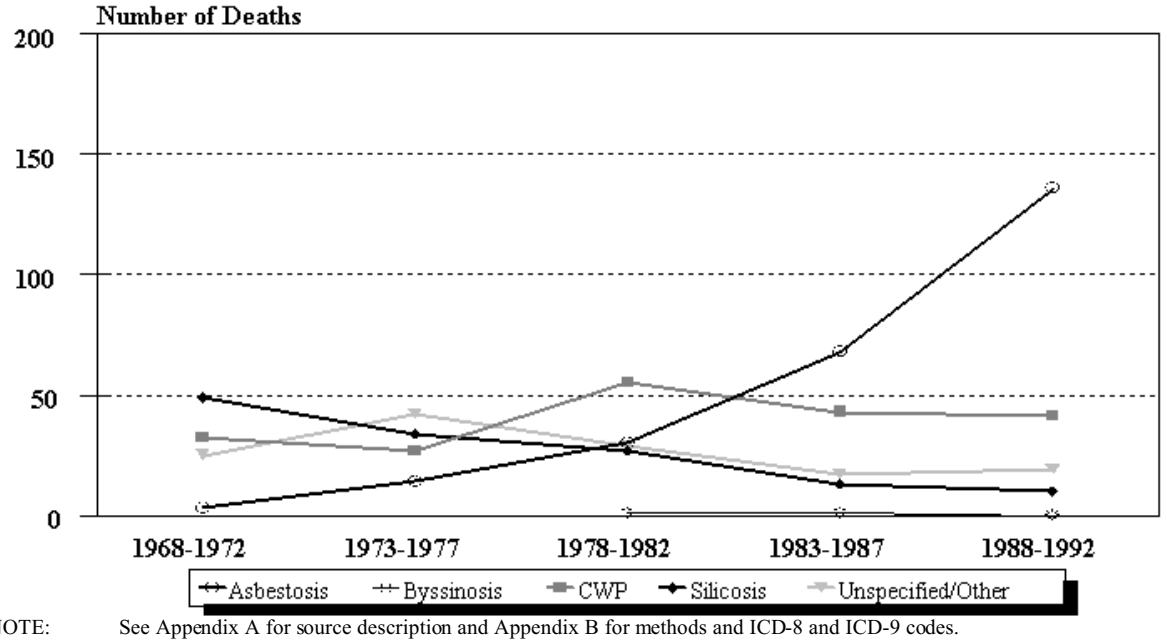
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table MD-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Maryland residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		700	100.0	206	100.0
Sex	Male	691	98.7	205	99.5
	Female	9	1.3	1	0.5
Race	White	612	87.5	168	81.6
	Black	87	12.4	37	18.0
	Other	1	0.1	1	0.5
Age	15-24	0	0.0	0	0.0
	25-34	1	0.1	1	0.5
	35-44	4	0.6	0	0.0
	45-54	26	3.7	6	2.9
	55-64	122	17.4	29	14.1
	65-74	262	37.4	80	38.8
	75-84	216	30.9	70	34.0
	85+	69	9.9	20	9.7
	Mean age	72.0		73.2	
	Range for age	32-102		32-102	

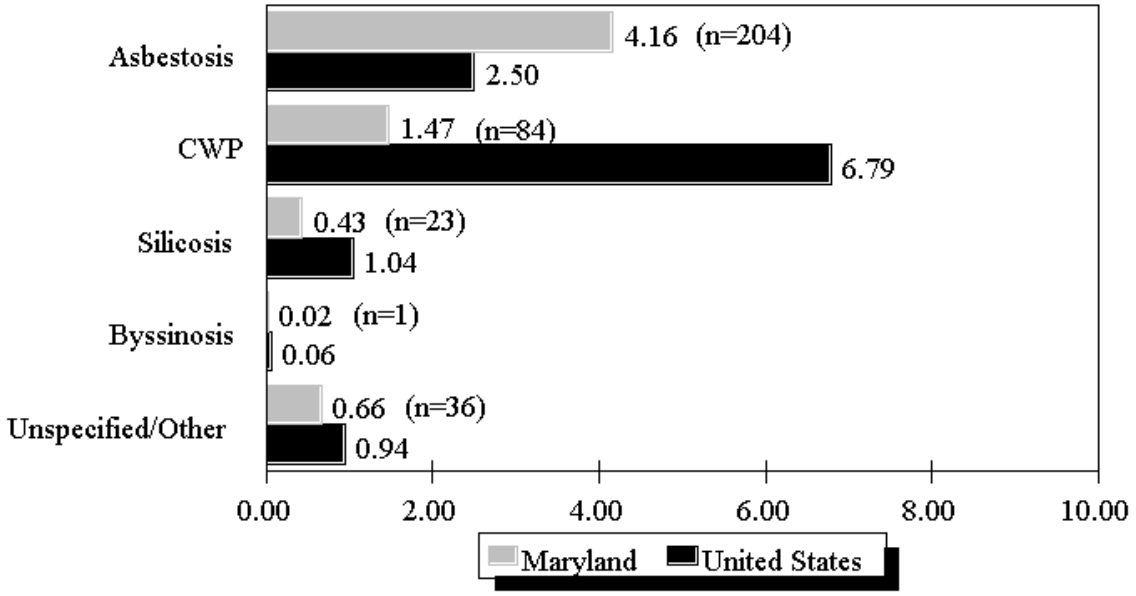
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure MD-3. Pneumoconiosis deaths by condition, Maryland residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure MD-4. Maryland and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table MD-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Maryland residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Allegany	14	**10.10**	10	**5.92**	3	**3.14**	-	**-**	5	**2.96**	32	**22.11**
Anne Arundel	20	**5.44**	4	**1.04**	4	**1.12**	-	**-**	2	**0.52**	30	**8.13**
Baltimore	63	**7.67**	8	**0.80**	2	**0.21**	1	**0.14**	4	**0.37**	78	**9.20**
Calvert	1	**2.65**	-	**-**	-	**-**	-	**-**	2	**4.47**	3	**7.12**
Carroll	3	**2.70**	5	**3.80**	1	**0.55**	-	**-**	-	**-**	9	**7.04**
Cecil	2	**2.72**	4	**4.86**	-	**-**	-	**-**	-	**-**	6	**7.58**
Charles	1	**1.74**	1	**1.27**	-	**-**	-	**-**	-	**-**	2	**3.00**
Dorchester	1	**1.28**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.28**
Frederick	2	**1.44**	4	**2.87**	2	**1.44**	-	**-**	2	**1.44**	10	**7.18**
Garrett	1	**1.76**	10	**26.86**	-	**-**	-	**-**	4	**8.88**	15	**37.50**
Harford	6	**4.04**	4	**2.49**	1	**0.57**	-	**-**	1	**0.77**	12	**7.88**
Howard	4	**3.17**	2	**1.71**	1	**0.73**	-	**-**	1	**0.73**	7	**5.61**
Kent	1	**2.34**	1	**4.60**	-	**-**	-	**-**	-	**-**	2	**6.94**
Montgomery	8	**1.18**	11	**1.33**	1	**0.10**	-	**-**	2	**0.19**	21	**2.70**
Prince Georges	4	**0.84**	11	**2.06**	1	**0.16**	-	**-**	3	**0.56**	19	**3.62**
Queen Annes	1	**1.83**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.83**
St. Marys	1	**1.25**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.25**
Somerset	1	**1.93**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.93**
Talbot	2	**3.66**	-	**-**	-	**-**	-	**-**	-	**-**	2	**3.66**
Washington	1	**0.41**	2	**1.23**	-	**-**	-	**-**	1	**0.41**	4	**2.05**
Wicomico	3	**3.60**	1	**0.72**	-	**-**	-	**-**	1	**1.91**	5	**6.23**
Worcester	2	**4.46**	-	**-**	-	**-**	-	**-**	-	**-**	2	**4.46**
Independent city:												
Baltimore	62	**6.94**	6	**0.46**	7	**0.67**	-	**-**	8	**0.87**	83	**8.94**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

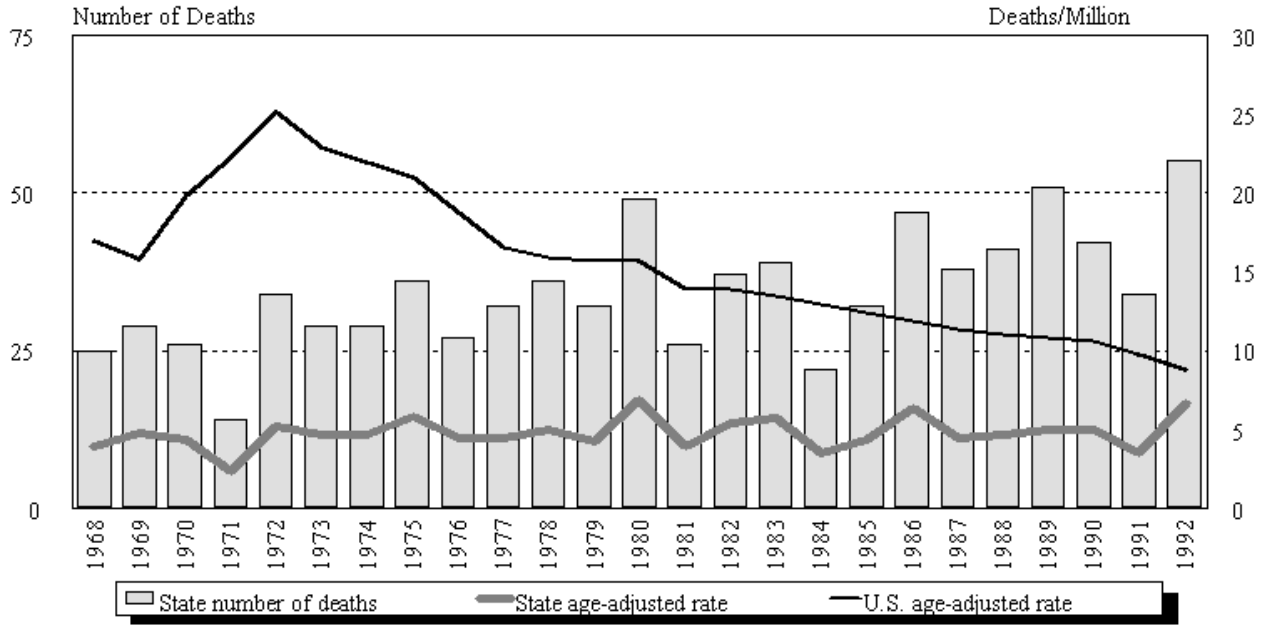
Massachusetts: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	223	17
Crude mortality rate (per 1,000,000 population)	9.16	26
Age-adjusted mortality rate (per 1,000,000 population)	4.94	27
Total years of potential life lost to life expectancy	2,514	18
Years of potential life lost to life expectancy (per death)	11.3	39

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	184	82.5
Coal workers' pneumoconiosis	9	4.0
Silicosis	17	7.6
Byssinosis	2	0.9
Unspecified/Other pneumoconiosis	12	5.4

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure MA-1. All pneumoconioses: Massachusetts and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Massachusetts

Table MA-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Massachusetts residents age 15 and over, 1968-1992

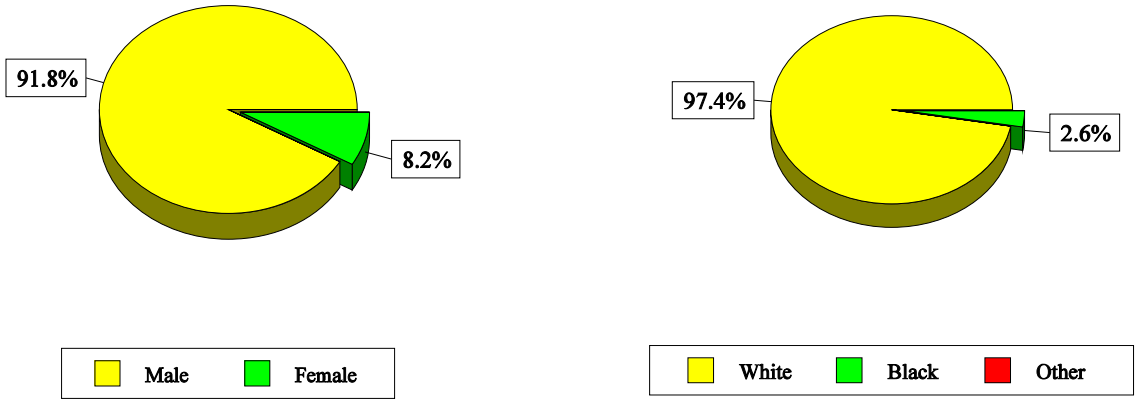
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	4	0.61	1	0.11	14	2.17			7	1.15	25	3.87
1969	6	1.19	1	0.11	14	1.86			11	2.15	29	4.81
1970	4	0.80	4	0.74	10	1.37			8	1.39	26	4.31
1971	3	0.50	-	-	2	0.36			9	1.44	14	2.30
1972	16	2.72	8	1.16	4	0.44			6	0.89	34	5.20
1973	11	1.94	4	0.68	11	1.48			4	0.62	29	4.61
1974	8	1.52	1	0.06	9	1.35			11	1.75	29	4.68
1975	14	2.43	2	0.35	13	1.85			8	1.25	36	5.78
1976	10	1.65	-	-	9	1.44			8	1.37	27	4.47
1977	13	1.92	1	0.10	11	1.43			7	1.01	32	4.46
1978	15	2.29	4	0.42	9	1.06			9	1.36	36	5.02
1979	21	2.96	2	0.26	8	0.92	-	-	2	0.28	32	4.27
1980	33	4.56	3	0.52	8	1.17	1	0.05	6	0.87	49	6.84
1981	14	2.07	1	0.15	5	0.96	-	-	6	0.79	26	3.97
1982	26	4.08	2	0.25	4	0.53	1	0.05	4	0.48	37	5.39
1983	29	4.63	-	-	2	0.25	2	0.09	6	0.76	39	5.73
1984	16	2.54	-	-	2	0.24	-	-	4	0.67	22	3.45
1985	24	3.20	-	-	3	0.57	1	0.09	4	0.47	32	4.34
1986	37	5.13	1	0.15	5	0.46	-	-	4	0.62	47	6.36
1987	31	3.47	-	-	5	0.66	-	-	2	0.34	38	4.47
1988	30	3.25	2	0.24	5	0.72	-	-	4	0.41	41	4.62
1989	43	4.27	1	0.04	4	0.37	-	-	3	0.27	51	4.95
1990	36	4.41	2	0.18	4	0.41	1	0.14	-	-	42	5.00
1991	27	2.78	2	0.17	3	0.21	-	-	2	0.28	34	3.44
1992	48	5.57	2	0.39	1	0.04	1	0.14	3	0.53	55	6.66

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure MA-2. All pneumoconioses: Distribution of deaths by sex and race, Massachusetts residents age 15 and over, 1968-1992



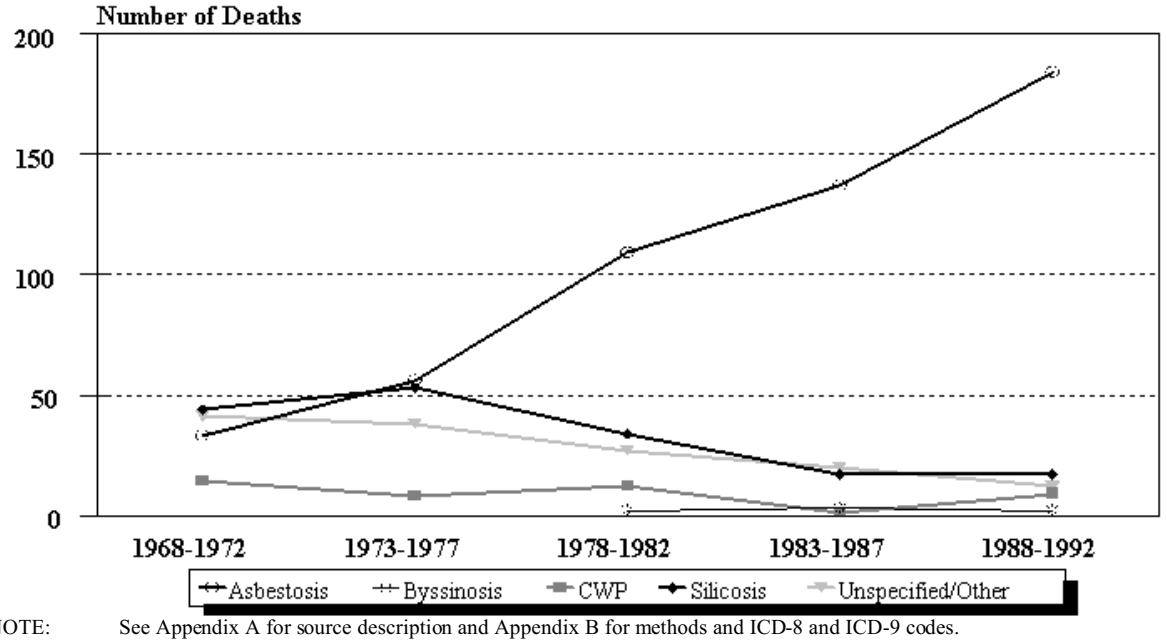
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table MA-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Massachusetts residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		862	100.0	223	100.0
Sex	Male	791	91.8	202	90.6
	Female	71	8.2	21	9.4
Race	White	840	97.4	216	96.9
	Black	22	2.6	7	3.1
	Other	0	0.0	0	0.0
Age	15-24	1	0.1	0	0.0
	25-34	1	0.1	0	0.0
	35-44	6	0.7	0	0.0
	45-54	30	3.5	4	1.8
	55-64	173	20.1	18	8.1
	65-74	303	35.2	78	35.0
	75-84	269	31.2	85	38.1
	85+	79	9.2	38	17.0
	Mean age	71.4		75.7	
	Range for age	16-96		47-96	

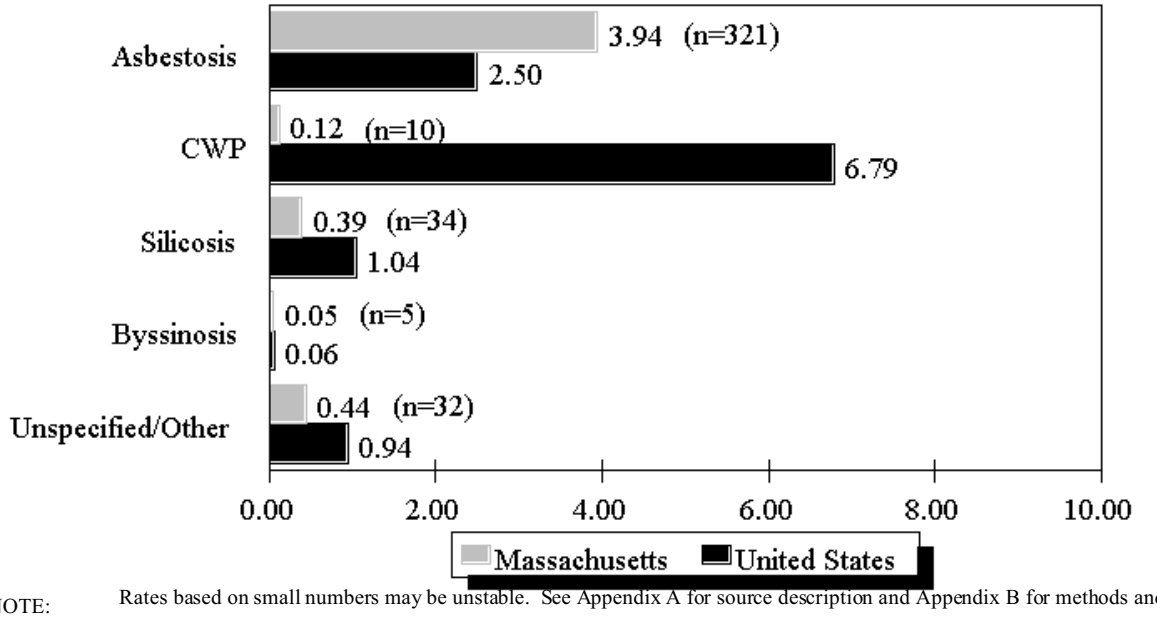
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure MA-3. Pneumoconiosis deaths by condition, Massachusetts residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure MA-4. Massachusetts and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table MA-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Massachusetts residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Barnstable	17	**5.22**	-	**-**	1	**0.41**	1	**0.16**	1	**0.41**	20	**6.20**
Berkshire	3	**0.79**	1	**0.26**	2	**0.53**	-	**-**	-	**-**	6	**1.58**
Bristol	17	**2.48**	1	**0.20**	3	**0.27**	1	**0.09**	1	**0.20**	23	**3.24**
Essex	30	**3.24**	-	**-**	2	**0.13**	-	**-**	11	**1.56**	43	**4.93**
Franklin	-	**-**	-	**-**	1	**0.64**	-	**-**	-	**-**	1	**0.64**
Hampden	15	**2.50**	2	**0.43**	3	**0.52**	-	**-**	1	**0.10**	21	**3.56**
Hampshire	1	**0.40**	2	**1.24**	1	**0.40**	-	**-**	-	**-**	4	**2.04**
Middlesex	75	**4.31**	2	**0.11**	1	**0.08**	2	**0.15**	9	**0.47**	89	**5.12**
Norfolk	68	**7.95**	-	**-**	4	**0.46**	-	**-**	1	**0.16**	73	**8.58**
Plymouth	33	**6.91**	-	**-**	-	**-**	-	**-**	1	**0.27**	34	**7.18**
Suffolk	34	**4.22**	1	**0.07**	2	**0.35**	1	**0.07**	2	**0.15**	40	**4.87**
Worcester	28	**3.63**	1	**0.15**	14	**1.41**	-	**-**	5	**0.73**	47	**5.78**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

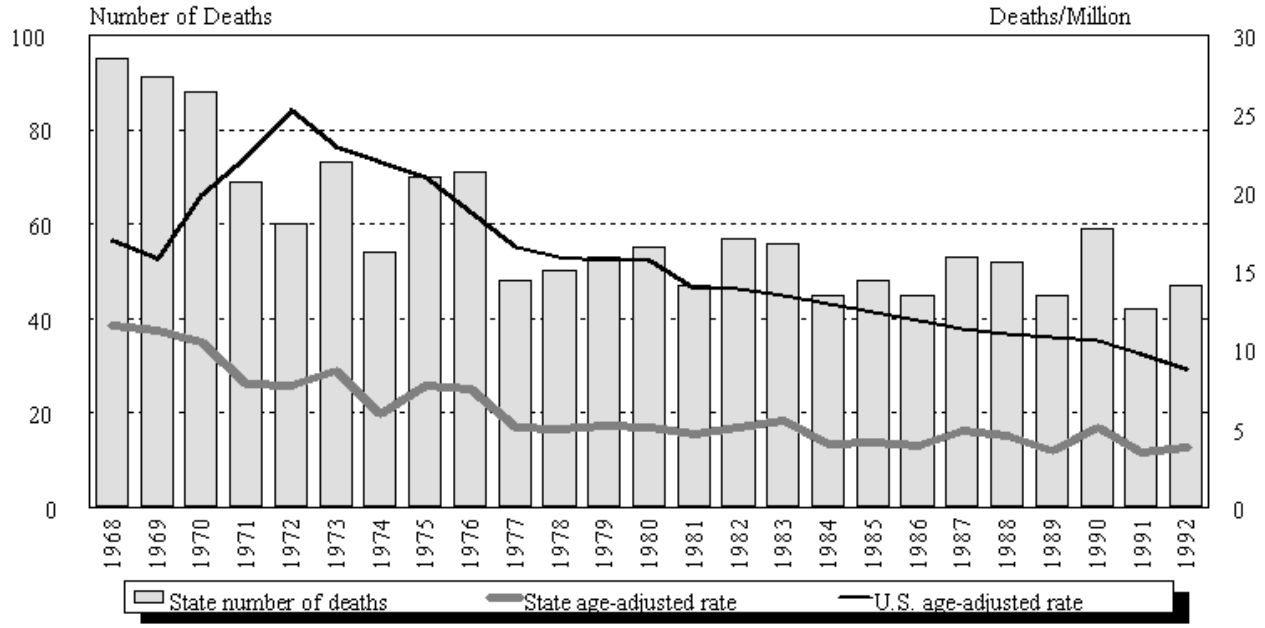
Michigan: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	245	14
Crude mortality rate (per 1,000,000 population)	6.78	31
Age-adjusted mortality rate (per 1,000,000 population)	4.12	33
Total years of potential life lost to life expectancy	3,029	15
Years of potential life lost to life expectancy (per death)	12.4	19

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	66	26.9
Coal workers' pneumoconiosis	80	32.7
Silicosis	64	26.1
Byssinosis	1	0.4
Unspecified/Other pneumoconiosis	35	14.3

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure MI-1. All pneumoconioses: Michigan and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Michigan

Table MI-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Michigan residents age 15 and over, 1968-1992

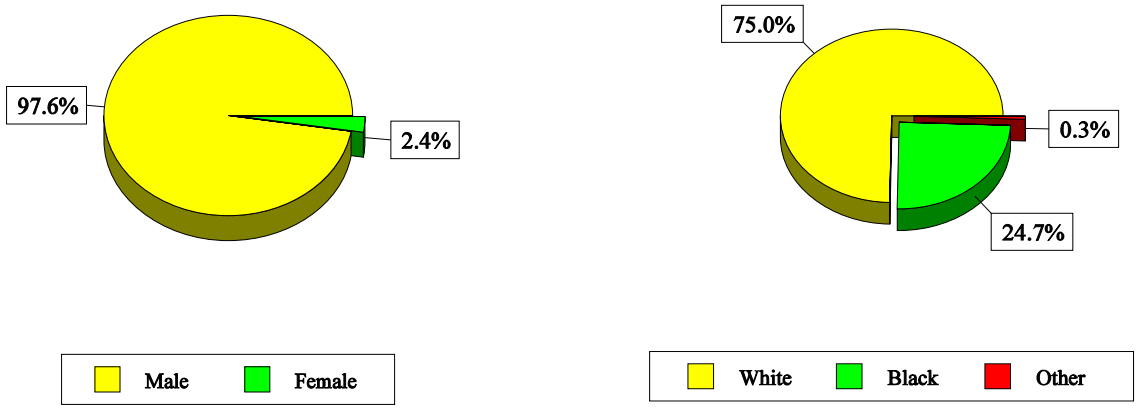
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	1	0.14	7	0.87	55	6.65			32	3.87	95	11.53
1969	-	-	9	1.13	52	6.42			32	3.96	91	11.27
1970	2	0.28	17	2.11	43	5.30			26	2.85	88	10.54
1971	1	0.15	16	1.64	34	4.23			23	2.48	69	7.89
1972	-	-	12	1.67	32	4.18			18	2.15	60	7.73
1973	2	0.27	10	1.14	38	4.47			23	2.84	73	8.72
1974	-	-	9	0.99	25	2.64			23	2.71	54	5.94
1975	2	0.27	12	1.36	35	3.69			22	2.47	70	7.72
1976	3	0.42	22	2.28	24	2.62			24	2.44	71	7.54
1977	4	0.50	11	1.28	20	2.05			13	1.26	48	5.09
1978	4	0.54	10	1.14	20	1.95			16	1.38	50	5.01
1979	3	0.36	12	1.15	19	1.86	-	-	19	1.78	53	5.16
1980	4	0.47	15	1.34	23	2.06	-	-	14	1.25	55	5.07
1981	4	0.49	19	1.99	15	1.41	-	-	11	1.00	47	4.66
1982	5	0.61	23	1.86	21	1.77	-	-	9	0.92	57	5.11
1983	8	0.93	24	2.12	17	1.60	-	-	8	0.86	56	5.47
1984	3	0.32	14	1.09	12	1.15	-	-	16	1.43	45	3.99
1985	6	0.57	17	1.46	15	1.20	-	-	10	0.94	48	4.17
1986	6	0.62	16	1.35	14	1.17	-	-	9	0.76	45	3.90
1987	11	1.29	21	1.83	16	1.23	-	-	5	0.51	53	4.86
1988	7	0.74	20	1.62	15	1.21	-	-	10	0.96	52	4.52
1989	11	1.21	14	1.02	14	1.09	-	-	7	0.44	45	3.66
1990	17	1.80	21	1.37	12	1.16	1	0.03	8	0.77	59	5.14
1991	15	1.44	15	1.13	9	0.68	-	-	3	0.30	42	3.55
1992	16	1.40	10	0.74	14	1.04	-	-	7	0.62	47	3.80

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure MI-2. All pneumoconioses: Distribution of deaths by sex and race, Michigan residents age 15 and over, 1968-1992



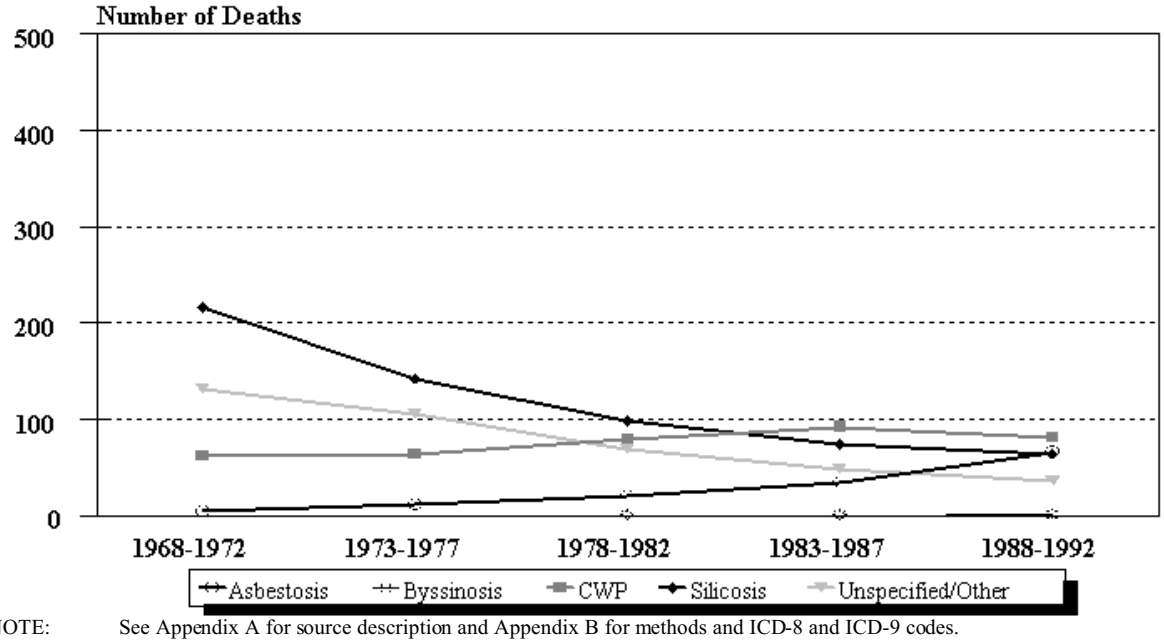
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table MI-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Michigan residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		1,473	100.0	245	100.0
Sex	Male	1,437	97.6	234	95.5
	Female	36	2.4	11	4.5
Race	White	1,104	75.0	179	73.1
	Black	364	24.7	63	25.7
	Other	5	0.3	3	1.2
Age	15-24	1	0.1	0	0.0
	25-34	7	0.5	1	0.4
	35-44	16	1.1	6	2.4
	45-54	47	3.2	1	0.4
	55-64	204	13.8	26	10.6
	65-74	508	34.5	89	36.3
	75-84	509	34.6	93	38.0
	85+	181	12.3	29	11.8
	Mean age	72.8		73.7	
	Range for age	17-102		33-102	

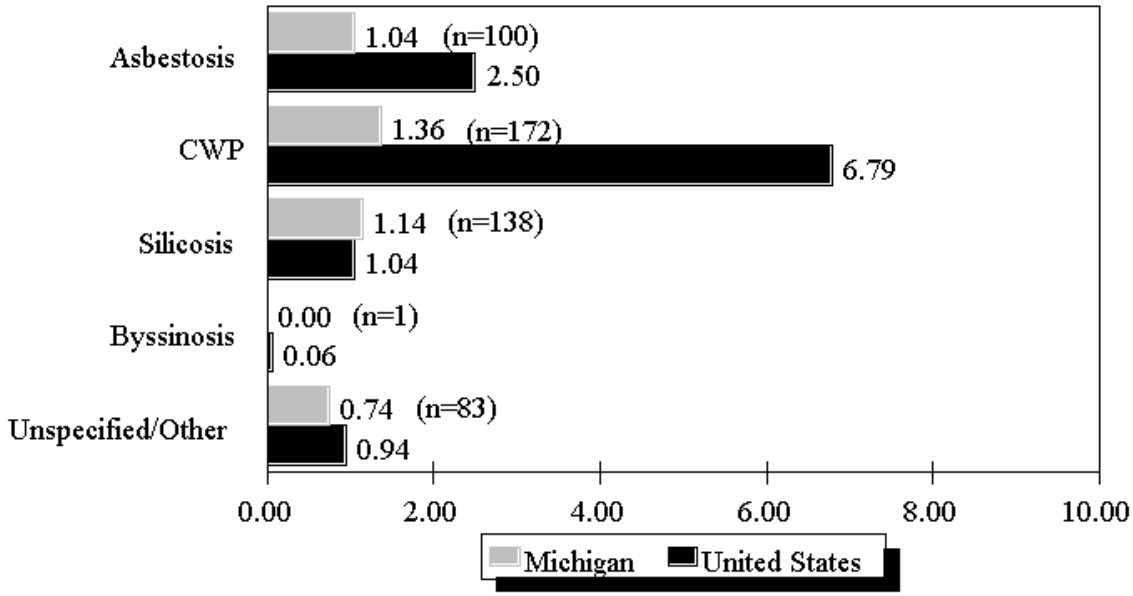
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure MI-3. Pneumoconiosis deaths by condition, Michigan residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure MI-4. Michigan and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table MI-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Michigan residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Alcona	-	-	-	-	-	-	-	-	1	20.66	1	20.66
Allegan	-	-	-	-	1	0.65	-	-	-	-	1	0.65
Alpena	-	-	-	-	-	-	-	-	1	3.01	1	3.01
Arenac	1	5.53	-	-	-	-	-	-	-	-	1	5.53
Baraga	1	11.00	-	-	-	-	-	-	-	-	1	11.00
Bay	6	4.58	-	-	-	-	-	-	-	-	6	4.58
Berrien	-	-	2	0.62	4	1.55	-	-	4	1.86	10	4.03
Branch	1	2.48	-	-	-	-	-	-	1	1.23	2	3.71
Calhoun	2	1.47	2	0.74	1	0.73	-	-	-	-	5	2.94
Charlevoix	-	-	1	2.29	-	-	-	-	-	-	1	2.29
Clare	2	6.17	1	1.75	-	-	-	-	-	-	3	7.92
Clinton	1	1.30	3	4.89	-	-	-	-	-	-	4	6.19
Crawford	-	-	1	4.18	-	-	-	-	-	-	1	4.18
Delta	1	2.46	-	-	-	-	-	-	-	-	1	2.46
Dickinson	-	-	-	-	1	1.24	-	-	-	-	1	1.24
Eaton	2	2.81	2	1.48	-	-	-	-	-	-	4	4.29
Emmet	1	4.23	2	6.05	1	4.23	-	-	-	-	3	10.28
Genesee	2	0.60	6	1.41	1	0.16	-	-	3	0.82	12	2.98
Gladwin	-	-	-	-	1	2.09	-	-	-	-	1	2.09
Grand Traver	-	-	-	-	1	0.85	-	-	-	-	1	0.85
Gratiot	1	2.78	-	-	-	-	-	-	-	-	1	2.78
Hillsdale	1	1.12	-	-	1	2.43	-	-	-	-	2	3.55
Houghton	-	-	1	0.93	-	-	-	-	-	-	1	0.93
Huron	2	4.66	-	-	1	1.04	-	-	1	1.04	4	6.74
Ingram	5	2.44	2	0.81	2	0.54	-	-	-	-	9	3.79
Iosco	1	2.96	-	-	-	-	-	-	-	-	1	2.96
Isabella	1	1.55	-	-	-	-	-	-	-	-	1	1.55
Jackson	2	1.68	-	-	2	1.10	-	-	1	0.37	5	3.15
Kalamazoo	3	1.42	-	-	3	1.13	-	-	-	-	6	2.55
Kent	2	0.24	-	-	4	0.75	-	-	1	0.26	7	1.25
Lapeer	-	-	-	-	1	1.13	-	-	-	-	1	1.13
Lenawee	2	1.84	2	2.44	1	0.62	-	-	-	-	5	4.91

See footnotes at end of table.

Table MI-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Michigan residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Livingston	2	**2.55**	-	**-**	-	**-**	-	**-**	1	**1.28**	3	**3.83**
Mackinac	1	**14.27**	-	**-**	-	**-**	-	**-**	-	**-**	1	**14.27**
Macomb	4	**0.58**	21	**2.32**	6	**0.65**	-	**-**	5	**0.56**	36	**4.11**
Manistee	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.66**	1	**1.66**
Marquette	2	**3.60**	-	**-**	1	**1.80**	-	**-**	-	**-**	3	**5.40**
Mason	3	**12.51**	-	**-**	-	**-**	-	**-**	1	**3.37**	4	**15.88**
Mecosta	-	**-**	-	**-**	1	**1.72**	-	**-**	-	**-**	1	**1.72**
Menominee	1	**3.54**	1	**1.48**	1	**3.54**	-	**-**	1	**3.54**	4	**12.09**
Midland	7	**10.86**	1	**1.65**	-	**-**	-	**-**	-	**-**	8	**12.51**
Missaukee	-	**-**	1	**4.18**	-	**-**	-	**-**	-	**-**	1	**4.18**
Monroe	5	**3.72**	9	**5.89**	2	**1.01**	-	**-**	-	**-**	16	**10.62**
Muskigon	1	**0.66**	7	**3.01**	35	**16.28**	-	**-**	6	**3.31**	48	**22.92**
Newaygo	-	**-**	1	**1.35**	1	**1.35**	-	**-**	-	**-**	2	**2.70**
Oakland	4	**0.33**	14	**0.99**	7	**0.52**	1	**0.06**	6	**0.55**	32	**2.45**
Oceana	-	**-**	-	**-**	1	**4.39**	-	**-**	1	**2.31**	2	**6.69**
Ogemaw	-	**-**	1	**2.32**	-	**-**	-	**-**	-	**-**	1	**2.32**
Osceola	-	**-**	1	**2.54**	-	**-**	-	**-**	-	**-**	1	**2.54**
Oscoda	-	**-**	1	**8.74**	-	**-**	-	**-**	-	**-**	1	**8.74**
Ottawa	1	**0.75**	3	**1.49**	1	**0.37**	-	**-**	-	**-**	5	**2.61**
Roscommon	1	**2.92**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.92**
Saginaw	4	**2.09**	4	**1.98**	3	**1.05**	-	**-**	6	**2.10**	17	**7.22**
St Clair	1	**0.39**	1	**0.39**	2	**0.78**	-	**-**	-	**-**	4	**1.56**
St Joseph	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.79**	1	**1.79**
Shiawassee	1	**1.71**	1	**1.71**	1	**1.71**	-	**-**	-	**-**	3	**5.13**
Tuscola	-	**-**	-	**-**	1	**2.05**	-	**-**	-	**-**	1	**2.05**
Van Buren	-	**-**	-	**-**	2	**1.45**	-	**-**	1	**1.55**	3	**3.00**
Washtenaw	1	**0.32**	2	**1.18**	1	**0.59**	-	**-**	1	**0.59**	5	**2.69**
Wayne	21	**0.88**	78	**2.80**	46	**1.76**	-	**-**	38	**1.46**	183	**6.89**
Wexford	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.84**	1	**1.84**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

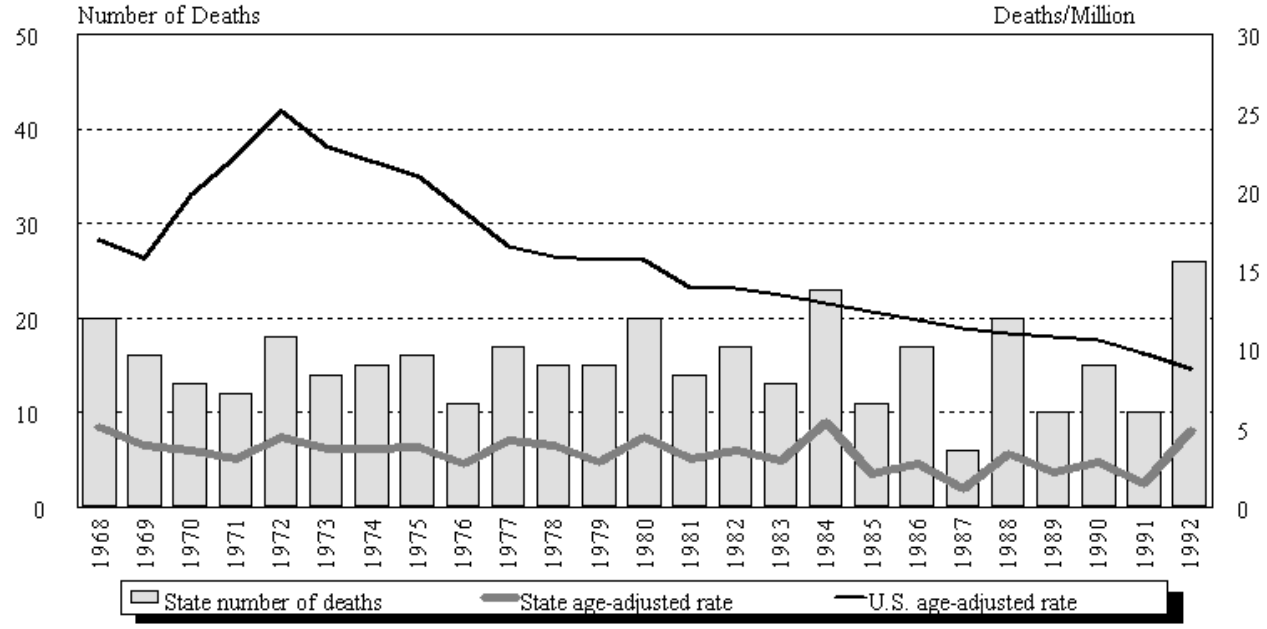
Minnesota: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	81	30
Crude mortality rate (per 1,000,000 population)	4.79	41
Age-adjusted mortality rate (per 1,000,000 population)	2.98	43
Total years of potential life lost to life expectancy	1,023	30
Years of potential life lost to life expectancy (per death)	12.6	12

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	47	58.0
Coal workers' pneumoconiosis	0	0.0
Silicosis	28	34.6
Byssinosis	1	1.2
Unspecified/Other pneumoconiosis	6	7.4

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure MN-1. All pneumoconioses: Minnesota and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Minnesota

Table MN-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Minnesota residents age 15 and over, 1968-1992

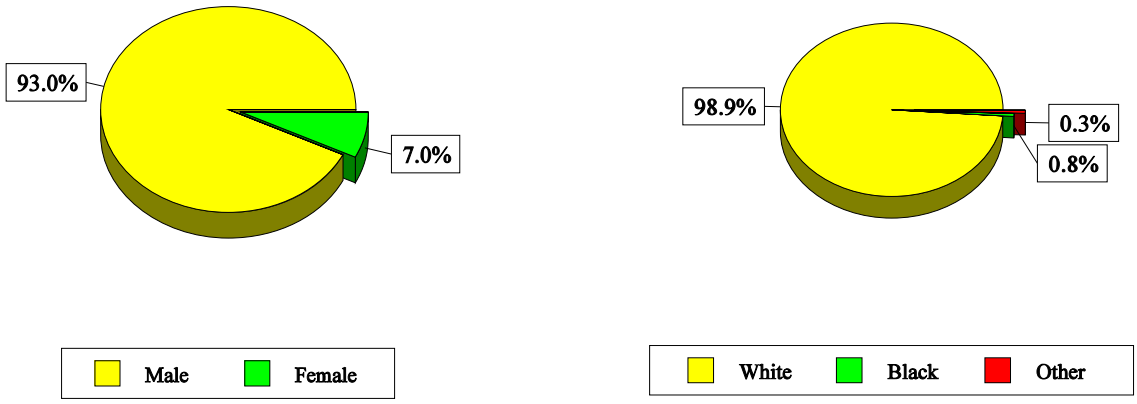
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	1	0.32	2	0.59	18	4.61			1	0.17	20	5.10
1969	-	-	-	-	13	3.07			3	0.83	16	3.90
1970	2	0.54	-	-	6	1.41			5	1.64	13	3.59
1971	1	0.32	1	0.27	5	1.34			5	1.16	12	3.08
1972	-	-	2	0.33	12	2.98			4	1.12	18	4.43
1973	1	0.31	1	0.26	3	0.48			9	2.65	14	3.71
1974	2	0.57	1	0.40	9	2.28			4	0.74	15	3.73
1975	-	-	-	-	11	2.68			5	1.12	16	3.80
1976	1	0.31	-	-	6	1.52			4	0.97	11	2.80
1977	1	0.25	1	0.45	6	1.16			9	2.41	17	4.27
1978	2	0.65	1	0.15	8	1.83			5	1.41	15	3.90
1979	5	1.01	1	0.07	6	0.99	-	-	3	0.79	15	2.86
1980	6	1.84	1	0.07	10	1.93	-	-	3	0.60	20	4.45
1981	2	0.56	-	-	11	2.22	-	-	1	0.24	14	3.02
1982	4	0.77	4	0.74	9	2.13	-	-	1	0.29	17	3.64
1983	9	2.07	1	0.42	3	0.42	-	-	-	-	13	2.92
1984	8	2.21	1	0.30	13	2.78	-	-	2	0.37	23	5.36
1985	1	0.42	-	-	9	1.44	-	-	1	0.23	11	2.09
1986	5	0.95	-	-	11	1.93	-	-	3	0.42	17	2.77
1987	4	0.87	-	-	2	0.27	-	-	-	-	6	1.14
1988	11	2.08	-	-	8	1.09	-	-	1	0.22	20	3.39
1989	5	1.28	-	-	3	0.48	-	-	2	0.44	10	2.19
1990	8	1.23	-	-	5	1.15	1	0.31	1	0.13	15	2.82
1991	6	1.02	-	-	3	0.46	-	-	1	0.05	10	1.53
1992	17	3.26	-	-	9	1.64	-	-	1	0.34	26	4.92

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure MN-2. All pneumoconioses: Distribution of deaths by sex and race, Minnesota residents age 15 and over, 1968-1992



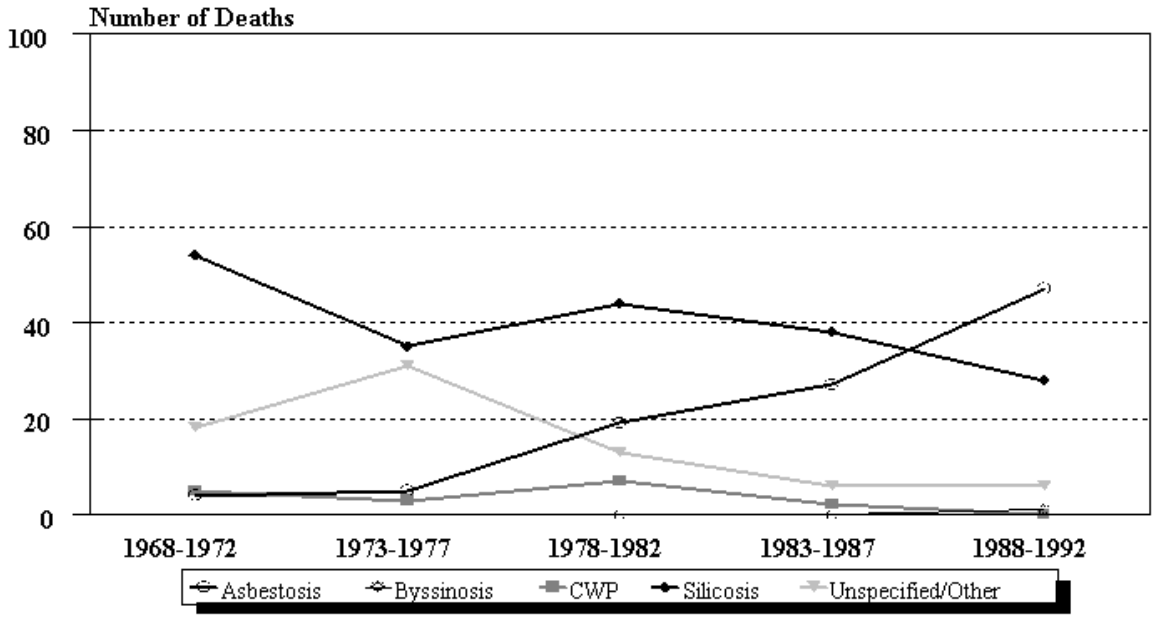
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table MN-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Minnesota residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		384	100.0	81	100.0
Sex	Male	357	93.0	81	100.0
	Female	27	7.0	0	0.0
Race	White	380	98.9	81	100.0
	Black	3	0.8	0	0.0
	Other	1	0.3	0	0.0
Age	15-24	1	0.3	0	0.0
	25-34	1	0.3	0	0.0
	35-44	6	1.6	1	1.2
	45-54	27	7.0	2	2.5
	55-64	67	17.4	11	13.6
	65-74	125	32.6	29	35.8
	75-84	126	32.8	29	35.8
	85+	31	8.1	9	11.1
	Mean age	70.7		73.4	
	Range for age	15-96		39-96	

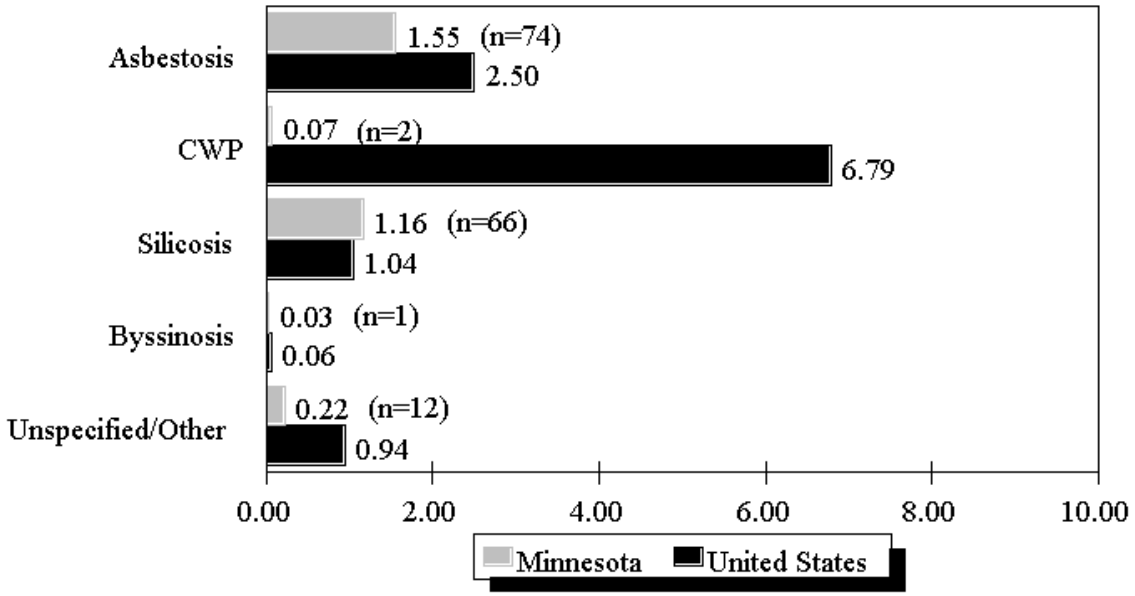
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure MN-3. Pneumoconiosis deaths by condition, Minnesota residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure MN-4. Minnesota and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table MN-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Minnesota residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Anoka	1	**0.61**	-	**-**	3	**2.16**	-	**-**	1	**0.77**	5	**3.54**
Benton	1	**1.61**	-	**-**	2	**3.22**	-	**-**	-	**-**	3	**4.84**
Big Stone	1	**11.52**	-	**-**	1	**3.41**	-	**-**	1	**11.52**	3	**26.46**
Carlton	1	**3.23**	-	**-**	1	**1.44**	-	**-**	-	**-**	2	**4.68**
Carver	-	**-**	-	**-**	2	**3.16**	-	**-**	-	**-**	2	**3.16**
Chippewa	-	**-**	-	**-**	1	**1.95**	-	**-**	-	**-**	1	**1.95**
Chisago	1	**4.18**	-	**-**	1	**1.65**	-	**-**	-	**-**	2	**5.83**
Clay	1	**2.48**	-	**-**	2	**4.96**	-	**-**	-	**-**	2	**4.96**
Crow Wing	1	**1.97**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.97**
Dakota	1	**0.70**	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.70**
Douglas	1	**1.12**	-	**-**	1	**1.12**	-	**-**	-	**-**	2	**2.24**
Fillmore	1	**1.30**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.30**
Freeborn	-	**-**	-	**-**	1	**4.42**	-	**-**	-	**-**	1	**4.42**
Goodhue	1	**0.84**	-	**-**	-	**-**	-	**-**	1	**0.84**	2	**1.68**
Hennepin	18	**1.56**	2	**0.26**	9	**0.85**	-	**-**	1	**0.12**	29	**2.66**
Hubbard	1	**9.83**	-	**-**	-	**-**	-	**-**	-	**-**	1	**9.83**
Itasca	4	**7.65**	-	**-**	1	**2.20**	-	**-**	-	**-**	4	**7.65**
Lake	1	**7.15**	-	**-**	-	**-**	-	**-**	-	**-**	1	**7.15**
Le Sueur	1	**4.38**	-	**-**	2	**6.04**	-	**-**	-	**-**	3	**10.41**
McLeod	-	**-**	-	**-**	1	**1.23**	-	**-**	-	**-**	1	**1.23**
Marshall	-	**-**	-	**-**	-	**-**	-	**-**	1	**13.43**	1	**13.43**
Martin	1	**1.22**	-	**-**	1	**1.22**	-	**-**	-	**-**	2	**2.43**
Mille Lacs	-	**-**	-	**-**	1	**1.76**	-	**-**	1	**1.76**	2	**3.52**
Morrison	-	**-**	-	**-**	2	**2.66**	-	**-**	-	**-**	2	**2.66**
Mower	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.81**	1	**0.81**
Nicollet	-	**-**	-	**-**	1	**4.70**	-	**-**	-	**-**	1	**4.70**
Nobles	1	**4.33**	-	**-**	1	**4.33**	-	**-**	-	**-**	1	**4.33**
Olmsted	1	**1.35**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.35**
Pine	1	**1.87**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.87**
Polk	1	**2.87**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.87**
Ramsey	14	**2.71**	-	**-**	8	**1.10**	-	**-**	1	**0.24**	23	**4.05**
St Louis	12	**4.98**	-	**-**	2	**0.37**	-	**-**	3	**0.83**	17	**6.19**

See footnotes at end of table.

Table MN-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Minnesota residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Scott	-	-	-	-	1	**3.17**	-	-	-	-	1	**3.17**
Sherburne	1	**4.55**	-	-	1	**2.12**	-	-	-	-	2	**6.68**
Sibley	-	-	-	-	1	**6.08**	-	-	-	-	1	**6.08**
Stearns	2	**1.65**	-	-	12	**8.05**	-	-	1	**0.52**	15	**10.22**
Steele	-	-	-	-	2	**4.95**	-	-	-	-	2	**4.95**
Waseca	-	-	-	-	1	**5.74**	-	-	-	-	1	**5.74**
Washington	3	**3.64**	-	-	2	**1.53**	-	-	-	-	5	**5.17**
Wright	1	**2.19**	-	-	2	**4.37**	1	**2.19**	-	-	4	**8.74**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

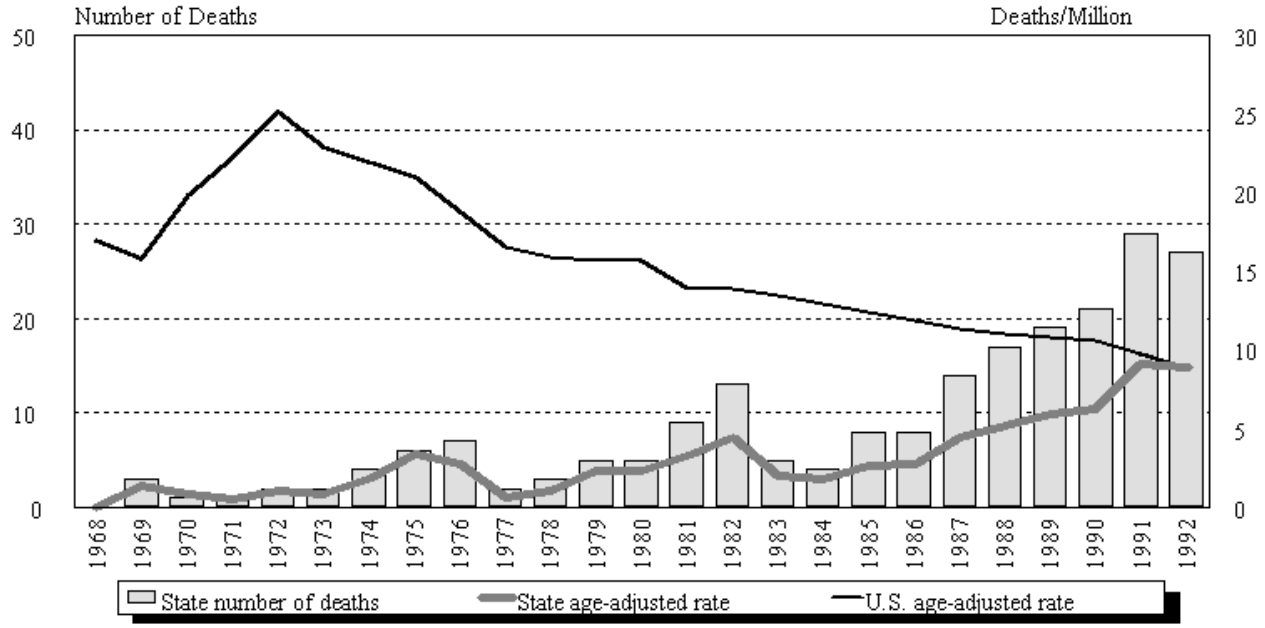
Mississippi: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	113	24
Crude mortality rate (per 1,000,000 population)	11.59	17
Age-adjusted mortality rate (per 1,000,000 population)	7.10	16
Total years of potential life lost to life expectancy	1,423	25
Years of potential life lost to life expectancy (per death)	12.6	13

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	98	86.7
Coal workers' pneumoconiosis	8	7.1
Silicosis	6	5.3
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	1	0.9

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure MS-1. All pneumoconioses: Mississippi and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Mississippi

Table MS-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Mississippi residents age 15 and over, 1968-1992

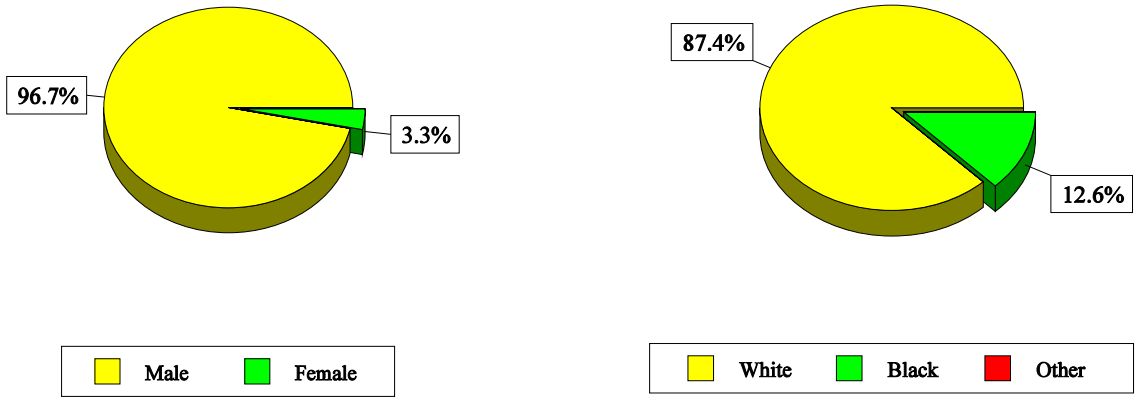
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	-	-			-	-	-	-
1969	-	-	2	0.98	1	0.36			-	-	3	1.34
1970	-	-	-	-	1	0.83			-	-	1	0.83
1971	-	-	-	-	1	0.52			-	-	1	0.52
1972	-	-	-	-	-	-			2	1.04	2	1.04
1973	-	-	-	-	2	0.82			-	-	2	0.82
1974	-	-	-	-	3	1.23			1	0.52	4	1.75
1975	-	-	2	1.03	4	2.40			-	-	6	3.43
1976	1	0.30	2	0.76	1	0.38			3	1.27	7	2.71
1977	-	-	1	0.29	1	0.37			-	-	2	0.67
1978	1	0.37	-	-	-	-			2	0.73	3	1.10
1979	2	0.77	1	0.36	1	0.50	-	-	1	0.68	5	2.30
1980	2	0.71	-	-	3	1.67	-	-	-	-	5	2.38
1981	5	1.75	2	0.72	2	0.84	-	-	-	-	9	3.31
1982	10	3.62	2	0.61	1	0.25	-	-	-	-	13	4.48
1983	4	1.49	-	-	1	0.48	-	-	-	-	5	1.97
1984	1	0.35	1	0.24	1	0.69	-	-	1	0.54	4	1.82
1985	5	1.52	1	0.13	2	1.04	-	-	-	-	8	2.69
1986	8	2.79	-	-	-	-	-	-	-	-	8	2.79
1987	12	3.98	1	0.22	1	0.22	-	-	-	-	14	4.42
1988	15	4.73	2	0.44	-	-	-	-	-	-	17	5.16
1989	17	5.36	-	-	1	0.22	-	-	1	0.36	19	5.94
1990	16	4.47	2	0.57	3	1.22	-	-	-	-	21	6.26
1991	25	8.09	3	0.77	1	0.21	-	-	-	-	29	9.07
1992	25	8.30	1	0.11	1	0.51	-	-	-	-	27	8.92

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure MS-2. All pneumoconioses: Distribution of deaths by sex and race, Mississippi residents age 15 and over, 1968-1992



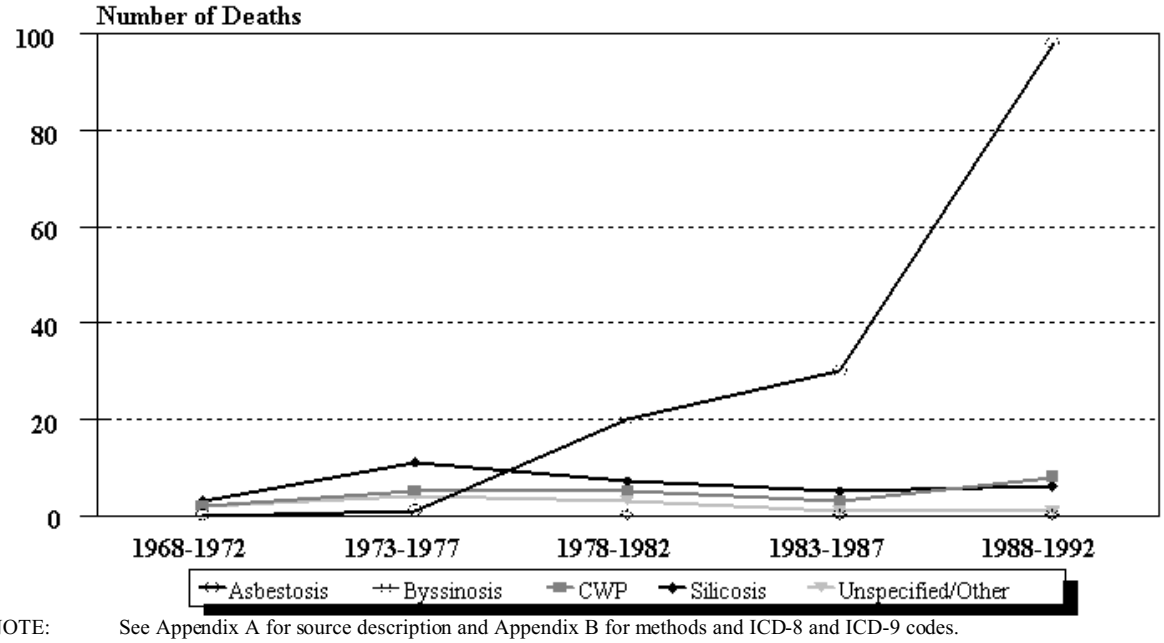
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table MS-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Mississippi residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		215	100.0	113	100.0
Sex	Male	208	96.7	111	98.2
	Female	7	3.3	2	1.8
Race	White	188	87.4	105	92.9
	Black	27	12.6	8	7.1
	Other	0	0.0	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	1	0.5	0	0.0
	35-44	3	1.4	0	0.0
	45-54	7	3.3	1	0.9
	55-64	46	21.4	20	17.7
	65-74	78	36.3	40	35.4
	75-84	70	32.6	46	40.7
	85+	10	4.7	6	5.3
	Mean age	70.4		72.9	
	Range for age	27-92		45-90	

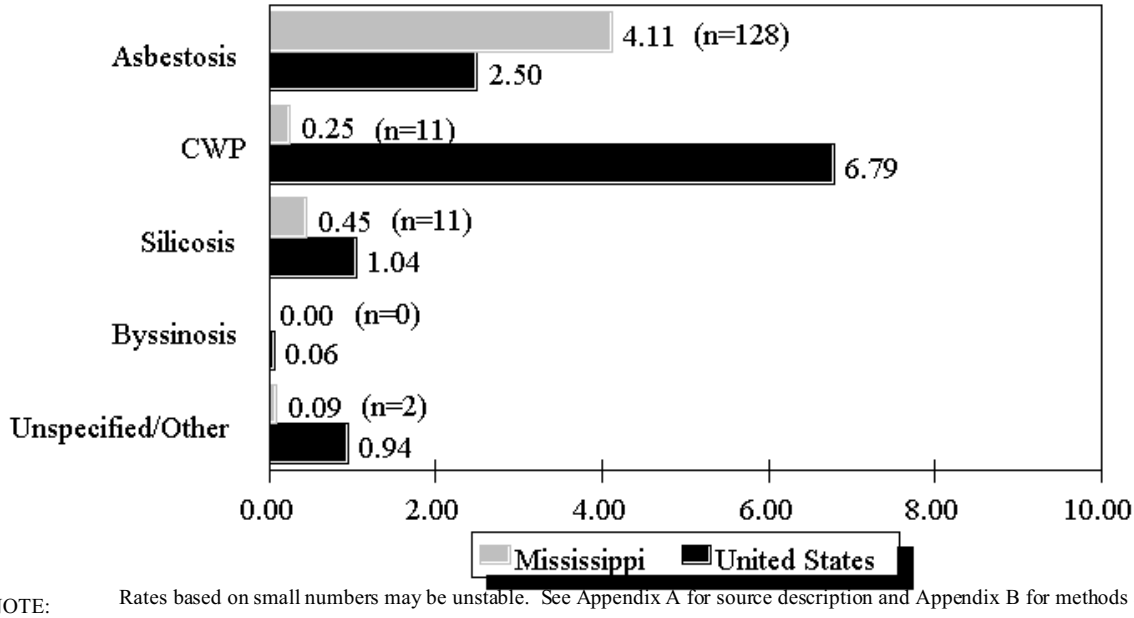
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure MS-3. Pneumoconiosis deaths by condition, Mississippi residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure MS-4. Mississippi and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table MS-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Mississippi residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Adams	-	-	1	1.30	-	-	-	-	-	-	1	1.30
Attala	2	9.09	1	4.55	1	4.55	-	-	-	-	4	18.19
Choctaw	1	11.04	-	-	-	-	-	-	-	-	1	11.04
Coahoma	-	-	1	1.27	-	-	-	-	-	-	1	1.27
Copiah	1	3.93	-	-	-	-	-	-	-	-	1	3.93
Covington	1	6.48	-	-	1	9.54	-	-	-	-	2	16.02
De Soto	1	2.07	-	-	-	-	-	-	-	-	1	2.07
Forrest	1	0.78	1	0.78	-	-	-	-	-	-	2	1.56
George	8	41.86	-	-	-	-	-	-	-	-	8	41.86
Greene	3	28.02	-	-	-	-	-	-	-	-	3	28.02
Hancock	3	5.67	-	-	-	-	-	-	-	-	3	5.67
Harrison	17	10.24	1	0.69	-	-	-	-	-	-	18	10.93
Hinds	1	0.47	1	0.23	1	0.23	-	-	-	-	3	0.92
Humphreys	1	3.48	-	-	-	-	-	-	-	-	1	3.48
Itawamba	2	9.18	-	-	-	-	-	-	-	-	2	9.18
Jackson	54	46.36	1	0.74	1	1.04	-	-	1	1.04	57	49.17
Jasper	1	5.94	-	-	-	-	-	-	-	-	1	5.94
Jones	5	7.73	-	-	-	-	-	-	-	-	5	7.73
Lauderdale	3	4.11	-	-	-	-	-	-	-	-	3	4.11
Lawrence	-	-	-	-	1	3.76	-	-	-	-	1	3.76
Lee	1	0.86	1	0.86	-	-	-	-	-	-	2	1.72
Lowndes	-	-	3	3.21	2	4.79	-	-	-	-	5	8.00
Marion	-	-	-	-	1	3.74	-	-	-	-	1	3.74
Marshall	-	-	-	-	-	-	-	-	1	4.44	1	4.44
Montgomery	1	7.12	-	-	-	-	-	-	-	-	1	7.12
Neshoba	1	6.32	-	-	1	1.72	-	-	-	-	2	8.05
Newton	1	4.58	-	-	-	-	-	-	-	-	1	4.58
Panola	2	5.13	-	-	-	-	-	-	-	-	2	5.13
Perry	1	5.30	-	-	-	-	-	-	-	-	1	5.30
Pike	3	6.44	-	-	1	2.64	-	-	-	-	4	9.07
Prentiss	1	4.15	-	-	-	-	-	-	-	-	1	4.15

See footnotes at end of table.

Table MS-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Mississippi residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Rankin	3	**3.93**	-	**-**	-	**-**	-	**-**	-	**-**	3	**3.93**
Tishomingo	3	**14.42**	-	**-**	-	**-**	-	**-**	-	**-**	3	**14.42**
Union	-	**-**	-	**-**	1	**4.31**	-	**-**	-	**-**	1	**4.31**
Wayne	4	**17.27**	-	**-**	-	**-**	-	**-**	-	**-**	4	**17.27**
Webster	1	**8.52**	-	**-**	-	**-**	-	**-**	-	**-**	1	**8.52**
Yazoo	1	**3.85**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.85**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

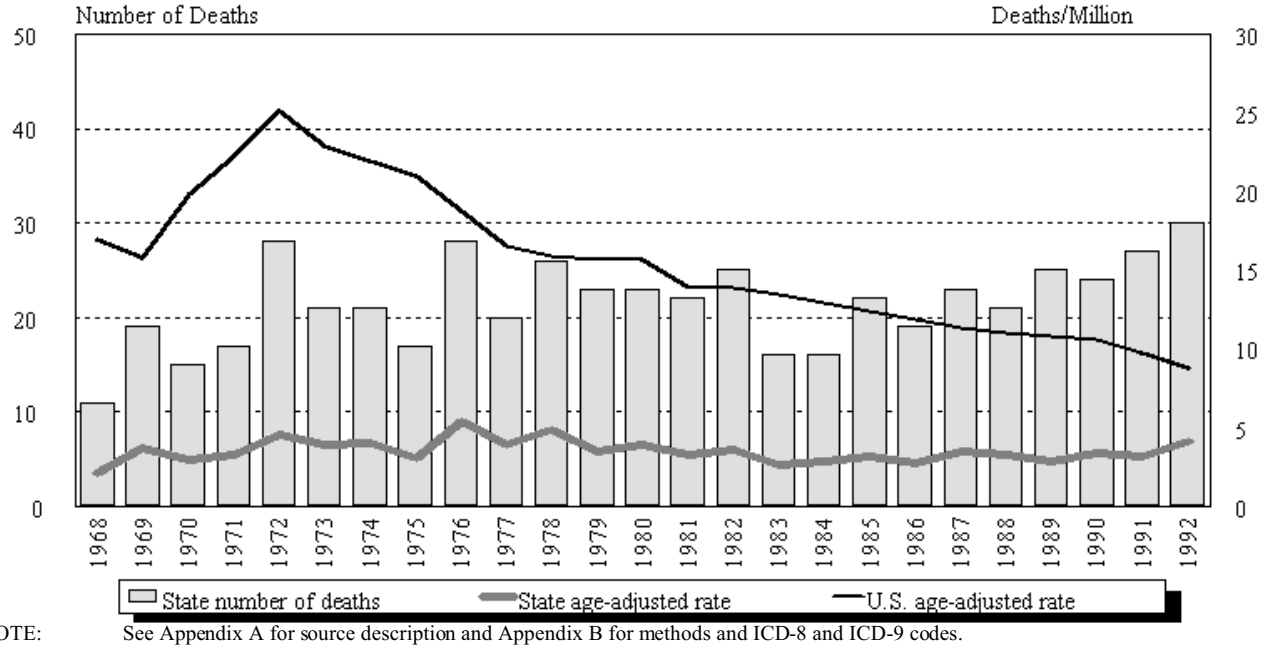
Missouri: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	127	21
Crude mortality rate (per 1,000,000 population)	6.34	34
Age-adjusted mortality rate (per 1,000,000 population)	3.36	38
Total years of potential life lost to life expectancy	1,560	22
Years of potential life lost to life expectancy (per death)	12.3	21

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	52	40.9
Coal workers' pneumoconiosis	36	28.3
Silicosis	26	20.5
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	13	10.2

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure MO-1. All pneumoconioses: Missouri and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Missouri

Table MO-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Missouri residents age 15 and over, 1968-1992

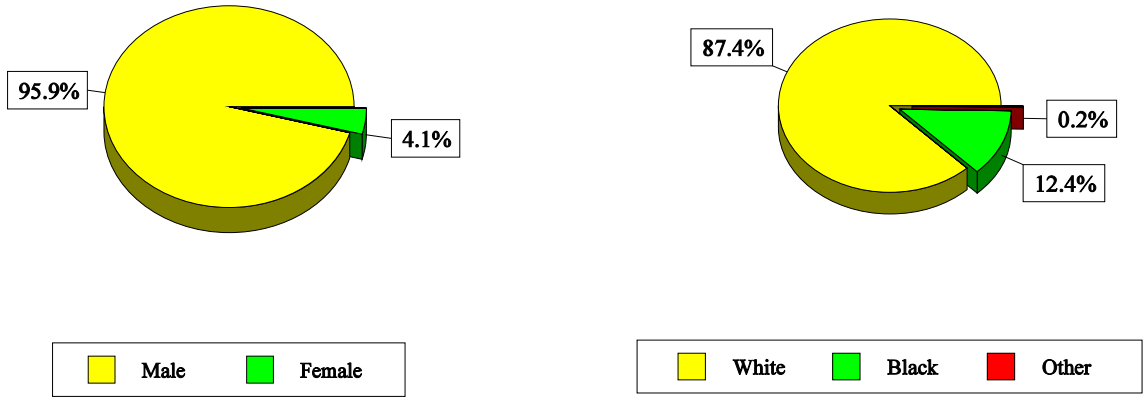
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	2	0.38	7	1.40			2	0.32	11	2.09
1969	1	0.19	1	0.30	14	2.63			3	0.61	19	3.74
1970	-	-	3	0.41	5	1.07			7	1.46	15	2.94
1971	1	0.23	2	0.21	8	1.69			6	1.20	17	3.33
1972	2	0.46	2	0.25	16	2.49			8	1.33	28	4.53
1973	-	-	3	0.54	12	2.30			6	1.04	21	3.88
1974	3	0.71	5	0.79	10	2.01			3	0.55	21	4.06
1975	4	0.89	2	0.30	7	1.26			4	0.65	17	3.10
1976	5	0.93	1	0.17	13	2.28			9	1.98	28	5.36
1977	2	0.46	3	0.52	9	1.90			6	1.01	20	3.89
1978	5	0.91	1	0.17	11	2.11			10	1.80	26	4.82
1979	5	1.11	9	1.08	6	0.80	-	-	3	0.54	23	3.53
1980	2	0.39	5	0.79	9	1.57	-	-	7	1.16	23	3.91
1981	5	0.78	9	1.28	6	0.96	-	-	2	0.28	22	3.30
1982	8	1.34	10	1.34	5	0.72	-	-	2	0.23	25	3.62
1983	6	1.11	5	0.77	2	0.34	-	-	3	0.44	16	2.66
1984	3	0.57	2	0.27	9	1.73	-	-	2	0.27	16	2.85
1985	9	1.41	5	0.66	7	0.93	-	-	1	0.17	22	3.16
1986	12	1.97	4	0.42	2	0.33	-	-	1	0.05	19	2.77
1987	7	1.24	7	0.85	7	1.24	-	-	2	0.15	23	3.48
1988	11	1.87	8	1.03	2	0.33	-	-	-	-	21	3.23
1989	7	0.71	7	0.60	8	0.99	-	-	3	0.56	25	2.86
1990	9	1.27	4	0.59	5	0.82	-	-	6	0.75	24	3.43
1991	11	1.42	6	0.53	7	0.89	-	-	3	0.30	27	3.14
1992	14	1.88	11	1.21	4	0.68	-	-	1	0.35	30	4.13

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure MO-2. All pneumoconioses: Distribution of deaths by sex and race, Missouri residents age 15 and over, 1968-1992



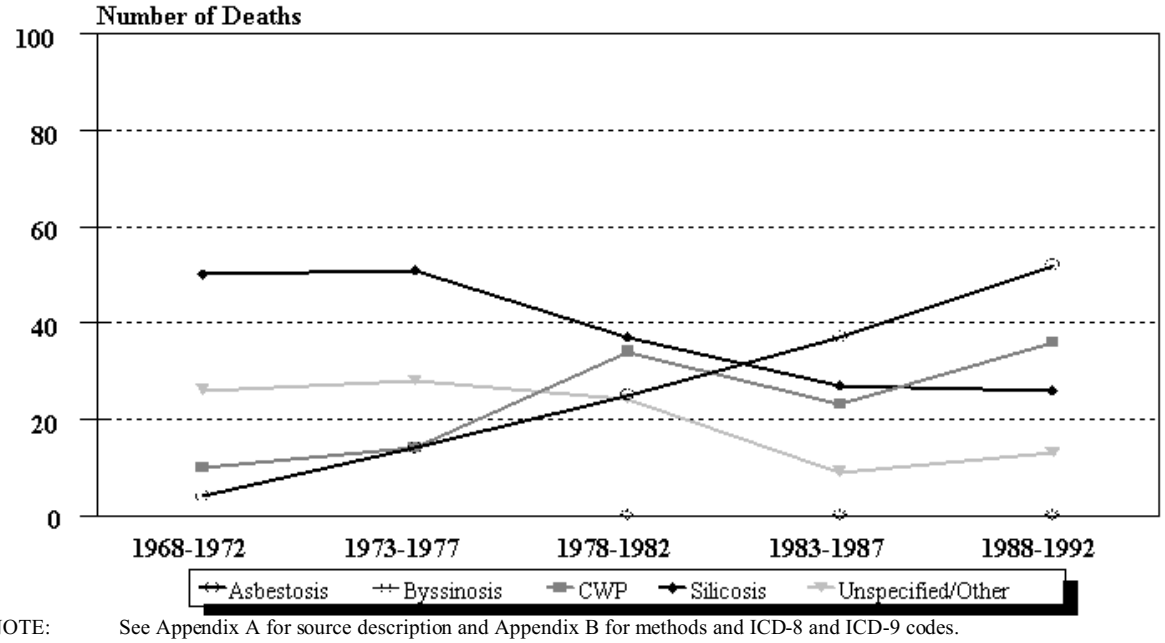
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table MO-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Missouri residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		539	100.0	127	100.0
Sex	Male	517	95.9	123	96.9
	Female	22	4.1	4	3.1
Race	White	471	87.4	117	92.1
	Black	67	12.4	9	7.1
	Other	1	0.2	1	0.8
Age	15-24	2	0.4	1	0.8
	25-34	0	0.0	0	0.0
	35-44	6	1.1	1	0.8
	45-54	28	5.2	2	1.6
	55-64	96	17.8	18	14.2
	65-74	203	37.7	38	29.9
	75-84	154	28.6	43	33.9
	85+	50	9.3	24	18.9
	Mean age	70.8		74.0	
	Range for age	21-97		21-97	

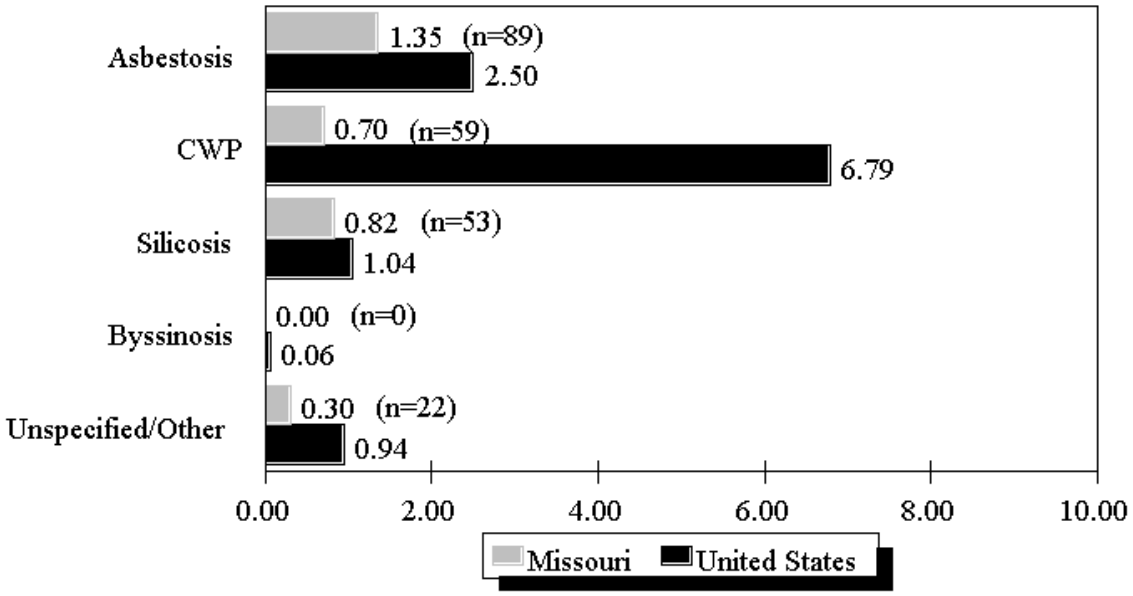
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure MO-3. Pneumoconiosis deaths by condition, Missouri residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure MO-4. Missouri and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table MO-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Missouri residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Adair	-	-	2	3.46	-	-	-	-	-	-	2	3.46
Andrew	1	6.73	-	-	-	-	-	-	-	-	1	6.73
Audrain	1	3.45	-	-	6	16.48	-	-	-	-	7	19.93
Barton	1	7.38	-	-	-	-	-	-	-	-	1	7.38
Bates	-	-	3	5.56	-	-	-	-	-	-	3	5.56
Benton	1	2.24	-	-	-	-	-	-	-	-	1	2.24
Boone	1	1.49	-	-	-	-	-	-	-	-	1	1.49
Callaway	-	-	-	-	1	3.46	-	-	-	-	1	3.46
Cape Girardeau	1	1.78	-	-	-	-	-	-	-	-	1	1.78
Cass	2	2.98	-	-	-	-	-	-	-	-	2	2.98
Christian	-	-	1	3.95	1	1.85	-	-	-	-	2	5.80
Clark	-	-	1	11.83	-	-	-	-	-	-	1	11.83
Clay	5	3.00	-	-	-	-	-	-	-	-	5	3.00
Crawford	2	6.42	-	-	1	4.54	-	-	-	-	3	10.97
Douglas	1	7.19	-	-	1	2.91	-	-	-	-	2	10.10
Dunklin	1	4.53	-	-	-	-	-	-	-	-	1	4.53
Franklin	2	2.05	-	-	1	1.39	-	-	-	-	3	3.44
Gasconade	1	5.56	-	-	-	-	-	-	-	-	1	5.56
Greene	2	1.07	1	0.54	1	0.23	-	-	1	0.63	5	2.46
Harrison	-	-	1	2.51	-	-	-	-	-	-	1	2.51
Henry	1	4.03	4	13.44	-	-	-	-	-	-	5	17.47
Hickory	-	-	-	-	-	-	-	-	1	7.03	1	7.03
Jackson	10	1.22	3	0.47	5	0.90	-	-	4	0.49	22	3.08
Jasper	2	1.50	1	0.43	4	2.37	-	-	-	-	7	4.30
Jefferson	4	2.71	1	0.51	1	0.84	-	-	-	-	6	4.06
Johnson	1	3.62	-	-	-	-	-	-	-	-	1	3.62
Lafayette	-	-	5	5.30	-	-	-	-	-	-	5	5.30
Lincoln	1	4.14	-	-	-	-	-	-	1	1.84	2	5.98
Linn	1	5.25	1	5.25	-	-	-	-	-	-	2	10.49
Livingston	1	1.91	-	-	-	-	-	-	-	-	1	1.91

See footnotes at end of table.

Table MO-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Missouri residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
McDonald	-	-	1	2.63	-	-	-	-	-	-	1	2.63
Macon	-	-	8	16.80	-	-	-	-	3	8.41	11	25.21
Marion	1	1.10	1	1.10	-	-	-	-	1	3.33	3	5.52
Miller	-	-	-	-	-	-	-	-	1	1.81	1	1.81
Monroe	-	-	-	-	2	12.80	-	-	-	-	2	12.80
Morgan	1	4.25	-	-	-	-	-	-	-	-	1	4.25
Newton	-	-	-	-	1	1.00	-	-	1	1.00	2	1.99
Nodaway	1	1.65	-	-	-	-	-	-	-	-	1	1.65
Oregon	-	-	2	18.30	-	-	-	-	-	-	2	18.30
Pettis	-	-	-	-	1	2.56	-	-	-	-	1	2.56
Phelps	1	3.00	-	-	-	-	-	-	1	1.33	2	4.33
Putnam	-	-	2	17.75	-	-	-	-	-	-	2	17.75
Randolph	-	-	3	6.65	-	-	-	-	-	-	3	6.65
Ray	-	-	3	8.81	-	-	-	-	5	18.25	8	27.06
St Charles	3	2.43	-	-	1	0.81	-	-	1	0.52	5	3.77
St Clair	-	-	1	7.97	-	-	-	-	-	-	1	7.97
Ste Genevieve	1	2.82	-	-	-	-	-	-	-	-	1	2.82
St Francois	-	-	-	-	-	-	-	-	1	1.90	1	1.90
St Louis	26	2.28	4	0.31	8	0.72	-	-	1	0.10	39	3.41
Scott	-	-	2	5.24	-	-	-	-	-	-	2	5.24
Sullivan	-	-	1	11.02	-	-	-	-	-	-	1	11.02
Taney	-	-	2	3.94	-	-	-	-	-	-	2	3.94
Vernon	-	-	-	-	1	1.77	-	-	-	-	1	1.77
Warren	1	5.29	-	-	-	-	-	-	-	-	1	5.29
Washington	-	-	1	2.89	-	-	-	-	-	-	1	2.89
Wayne	1	2.80	1	2.80	-	-	-	-	-	-	2	5.60
Independent city:												
St Louis	10	1.10	3	0.54	17	3.44	-	-	-	-	30	5.08

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

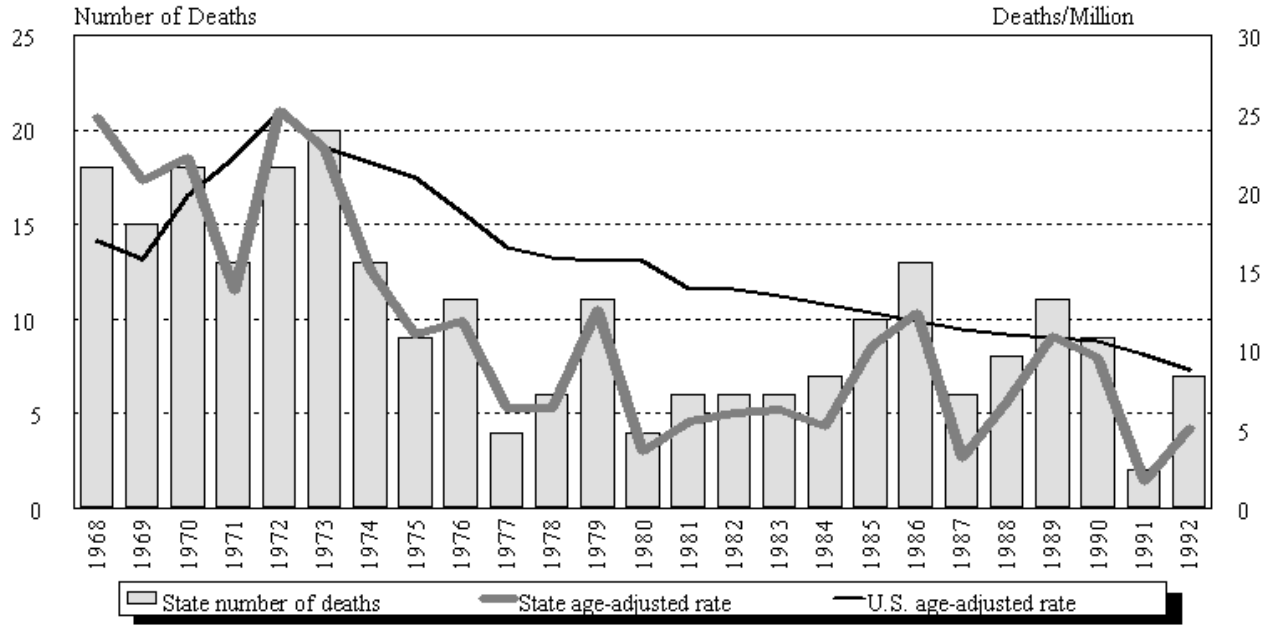
Montana: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	37	40
Crude mortality rate (per 1,000,000 population)	12.10	16
Age-adjusted mortality rate (per 1,000,000 population)	6.79	17
Total years of potential life lost to life expectancy	454	39
Years of potential life lost to life expectancy (per death)	12.3	22

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	22	59.5
Coal workers' pneumoconiosis	0	0.0
Silicosis	14	37.8
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	1	2.7

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure MT-1. All pneumoconioses: Montana and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Montana

Table MT-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Montana residents age 15 and over, 1968-1992

Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	17	23.13			1	1.69	18	24.82
1969	-	-	2	3.34	13	17.42			-	-	15	20.76
1970	-	-	-	-	18	22.26			-	-	18	22.26
1971	-	-	-	-	13	13.73			-	-	13	13.73
1972	-	-	4	6.42	10	12.46			4	6.32	18	25.20
1973	-	-	1	1.00	17	18.68			3	4.70	20	22.77
1974	2	3.09	1	1.50	10	10.57			-	-	13	15.15
1975	1	2.04	2	2.92	6	6.02			-	-	9	10.98
1976	-	-	2	2.02	9	9.85			-	-	11	11.87
1977	-	-	-	-	3	4.29			1	2.05	4	6.34
1978	-	-	-	-	4	3.90			2	2.48	6	6.38
1979	-	-	2	2.25	10	11.65	-	-	-	-	11	12.62
1980	-	-	-	-	3	3.15	-	-	1	0.41	4	3.57
1981	2	2.96	2	0.81	2	1.80	-	-	-	-	6	5.57
1982	2	2.92	-	-	4	3.15	-	-	-	-	6	6.07
1983	2	2.30	-	-	4	3.93	-	-	-	-	6	6.23
1984	2	2.55	1	0.37	2	1.56	-	-	2	0.74	7	5.22
1985	3	2.96	2	2.53	5	5.49	-	-	1	0.75	10	10.31
1986	2	2.56	3	3.29	5	4.39	-	-	3	2.20	13	12.43
1987	1	0.36	1	0.72	3	1.79	-	-	1	0.36	6	3.23
1988	2	1.06	-	-	6	5.78	-	-	-	-	8	6.84
1989	8	9.54	-	-	3	1.39	-	-	-	-	11	10.92
1990	6	7.44	-	-	2	1.72	-	-	1	0.35	9	9.51
1991	2	1.70	-	-	-	-	-	-	-	-	2	1.70
1992	4	3.20	-	-	3	1.90	-	-	-	-	7	5.10

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure MT-2. All pneumoconioses: Distribution of deaths by sex and race, Montana residents age 15 and over, 1968-1992

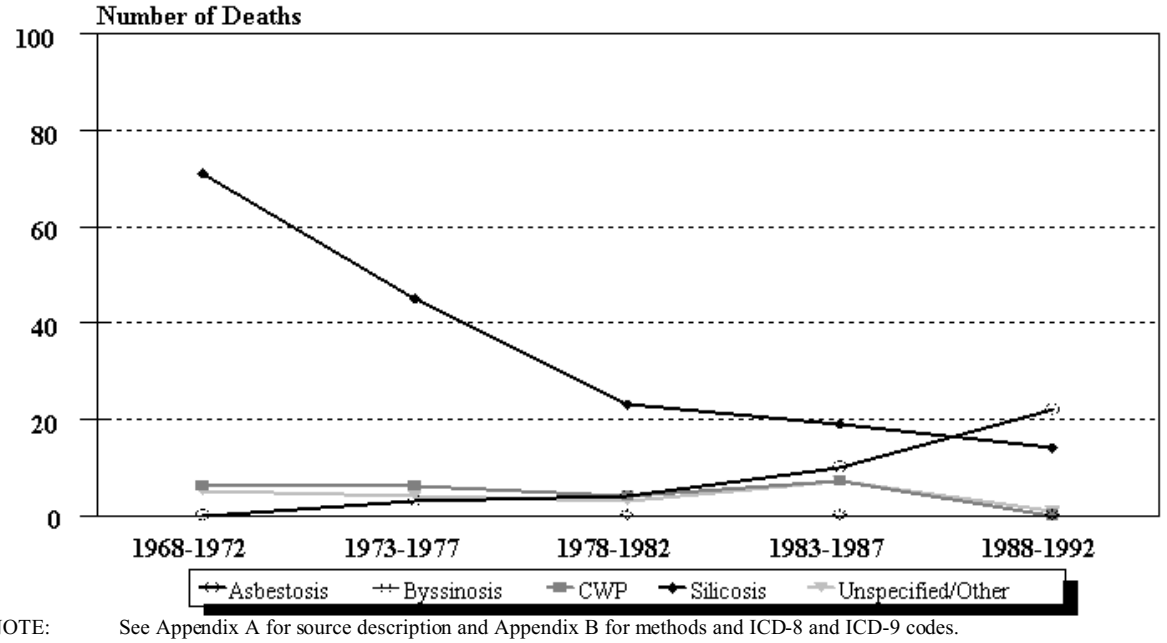
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table MT-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Montana residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		251	100.0	37	100.0
Sex	Male	247	98.4	36	97.3
	Female	4	1.6	1	2.7
Race	White	249	99.2	37	100.0
	Black	0	0.0	0	0.0
	Other	2	0.8	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	0	0.0	0	0.0
	35-44	1	0.4	0	0.0
	45-54	6	2.4	2	5.4
	55-64	39	15.5	5	13.5
	65-74	73	29.1	10	27.0
	75-84	96	38.2	15	40.5
	85+	36	14.3	5	13.5
	Mean age	74.2		73.9	
	Range for age	42-95		49-90	

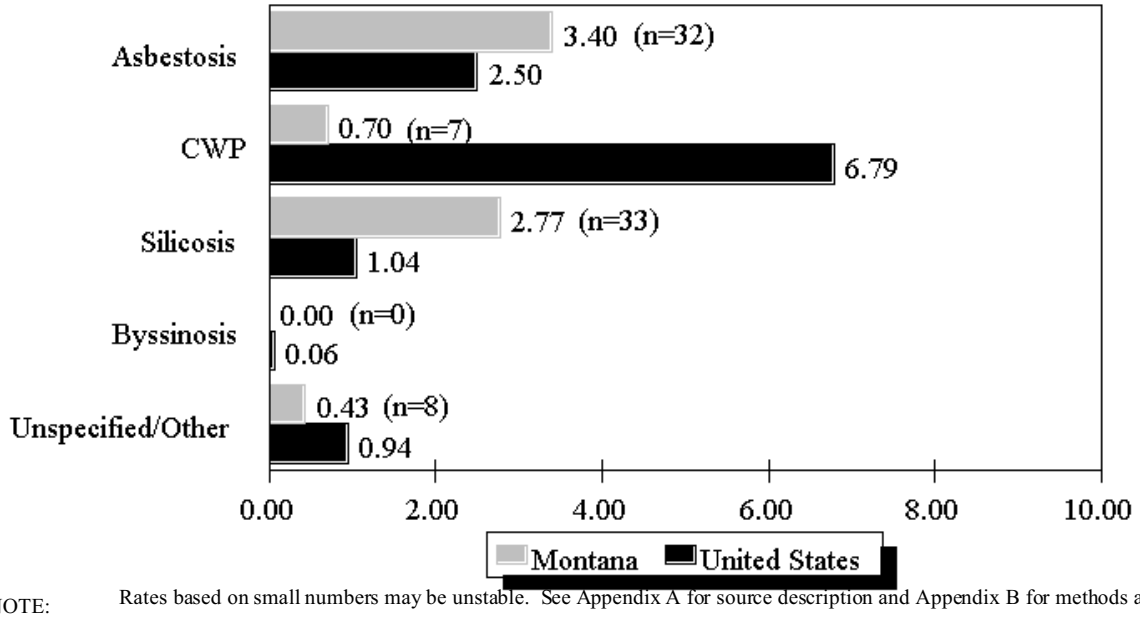
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure MT-3. Pneumoconiosis deaths by condition, Montana residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure MT-4. Montana and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table MT-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Montana residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Beaverhead	-	-	-	-	1	5.67	-	-	-	-	1	5.67
Broadwater	-	-	-	-	2	39.15	-	-	-	-	2	39.15
Cascade	3	2.75	2	1.35	2	2.07	-	-	3	2.03	10	8.20
Custer	-	-	1	3.05	-	-	-	-	-	-	1	3.05
Dawson	1	9.44	-	-	-	-	-	-	-	-	1	9.44
Deer Lodge	1	7.17	-	-	1	3.41	-	-	-	-	2	10.58
Fergus	-	-	-	-	-	-	-	-	1	2.45	1	2.45
Flathead	1	1.82	-	-	-	-	-	-	-	-	1	1.82
Gallatin	-	-	-	-	-	-	-	-	1	1.57	1	1.57
Jefferson	1	8.67	-	-	-	-	-	-	-	-	1	8.67
Lake	-	-	-	-	1	4.49	-	-	-	-	1	4.49
Lewis and Clark	2	4.96	-	-	2	2.48	-	-	-	-	4	7.43
Liberty	-	-	1	40.98	-	-	-	-	-	-	1	40.98
Lincoln	11	60.23	-	-	1	5.96	-	-	-	-	12	66.19
Madison	1	5.99	-	-	1	5.99	-	-	-	-	2	11.98
Missoula	2	3.49	-	-	-	-	-	-	-	-	2	3.49
Musselshell	-	-	2	35.33	-	-	-	-	1	7.67	3	43.01
Park	2	9.28	-	-	-	-	-	-	-	-	2	9.28
Powell	-	-	-	-	1	6.78	-	-	-	-	1	6.78
Sanders	-	-	-	-	1	4.62	-	-	-	-	1	4.62
Silver Bow	1	1.08	1	2.56	20	34.92	-	-	2	3.64	23	39.64
Toole	1	8.58	-	-	-	-	-	-	-	-	1	8.58
Yellowstone	5	4.57	-	-	-	-	-	-	-	-	5	4.57

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

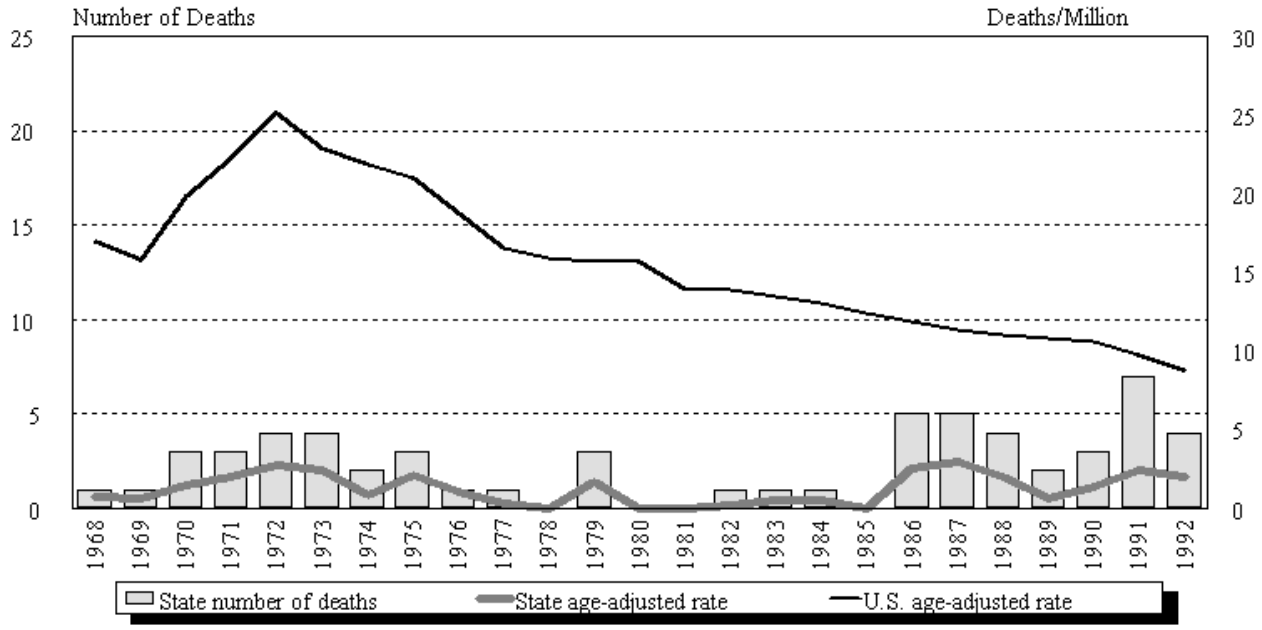
Nebraska: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	20	46
Crude mortality rate (per 1,000,000 population)	3.29	48
Age-adjusted mortality rate (per 1,000,000 population)	1.68	50
Total years of potential life lost to life expectancy	225	47
Years of potential life lost to life expectancy (per death)	11.3	41

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	12	60.0
Coal workers' pneumoconiosis	0	0.0
Silicosis	4	20.0
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	4	20.0

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure NE-1. All pneumoconioses: Nebraska and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Nebraska

Table NE-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Nebraska residents age 15 and over, 1968-1992

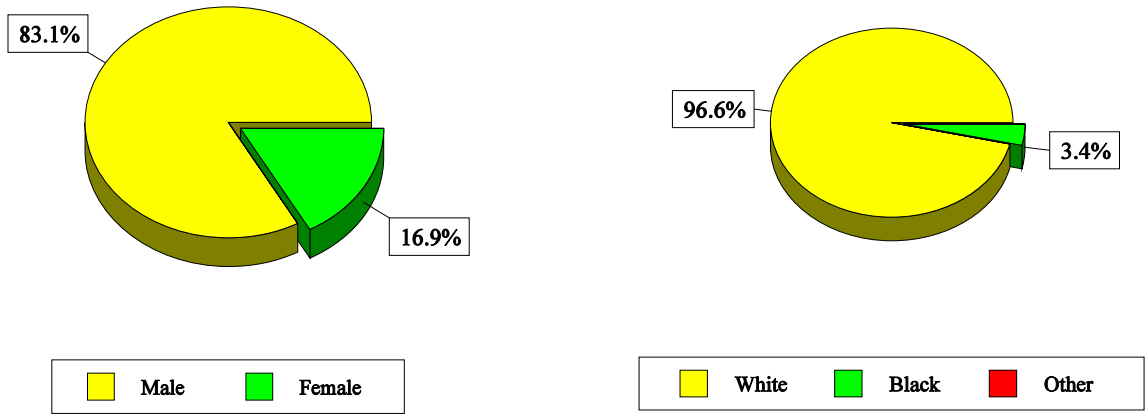
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	1	0.77			-	-	1	0.77
1969	-	-	-	-	1	0.61			-	-	1	0.61
1970	-	-	2	0.85	1	0.61			-	-	3	1.46
1971	-	-	1	0.77	1	0.77			2	1.22	3	1.99
1972	2	1.54	-	-	2	1.21			-	-	4	2.75
1973	-	-	-	-	-	-			4	2.40	4	2.40
1974	-	-	-	-	2	0.80			-	-	2	0.80
1975	-	-	1	0.77	1	0.77			1	0.60	3	2.14
1976	-	-	-	-	-	-			1	1.00	1	1.00
1977	-	-	-	-	-	-			1	0.35	1	0.35
1978	-	-	-	-	-	-			-	-	-	-
1979	3	1.67	-	-	-	-	-	-	-	-	3	1.67
1980	-	-	-	-	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	1	0.15	-	-	-	-	-	-	1	0.15
1983	-	-	-	-	-	-	-	-	1	0.56	1	0.56
1984	1	0.55	-	-	-	-	-	-	-	-	1	0.55
1985	-	-	-	-	-	-	-	-	-	-	-	-
1986	4	1.94	-	-	-	-	-	-	1	0.55	5	2.49
1987	5	2.98	-	-	-	-	-	-	-	-	5	2.98
1988	2	0.86	-	-	-	-	-	-	2	1.11	4	1.97
1989	2	0.61	-	-	-	-	-	-	-	-	2	0.61
1990	3	1.40	-	-	-	-	-	-	-	-	3	1.40
1991	3	0.89	-	-	3	0.97	-	-	1	0.55	7	2.40
1992	2	0.93	-	-	1	0.54	-	-	1	0.54	4	2.02

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure NE-2. All pneumoconioses: Distribution of deaths by sex and race, Nebraska residents age 15 and over, 1968-1992



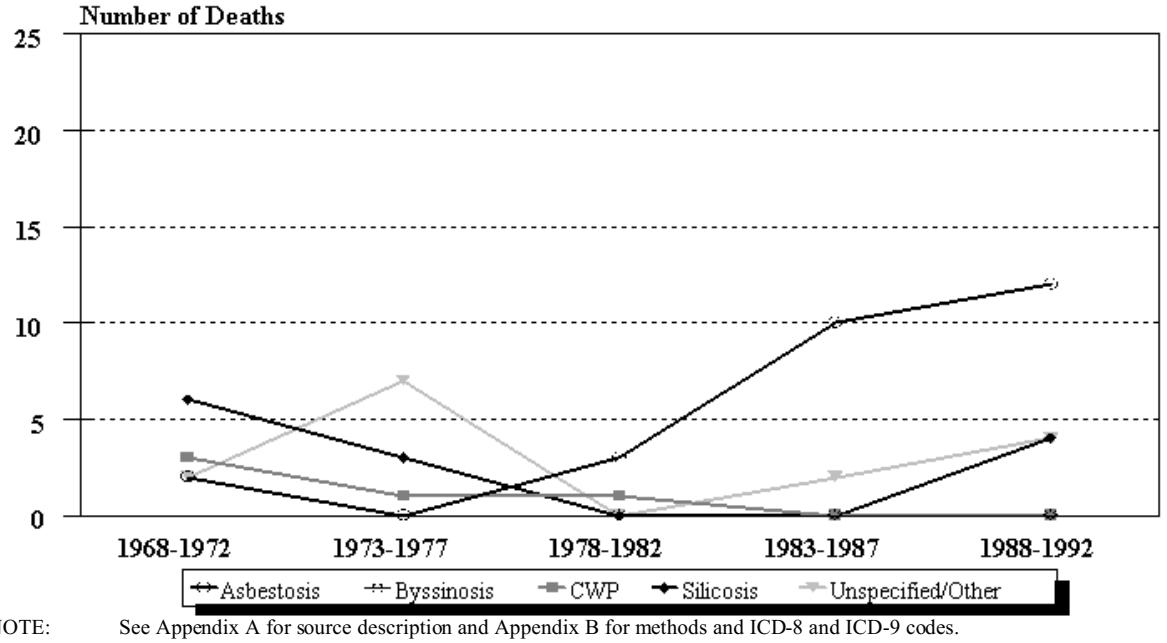
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table NE-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Nebraska residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		59	100.0	20	100.0
Sex	Male	49	83.1	19	95.0
	Female	10	16.9	1	5.0
Race	White	57	96.6	20	100.0
	Black	2	3.4	0	0.0
	Other	0	0.0	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	0	0.0	0	0.0
	35-44	0	0.0	0	0.0
	45-54	2	3.4	0	0.0
	55-64	10	16.9	1	5.0
	65-74	29	49.2	9	45.0
	75-84	12	20.3	8	40.0
	85+	6	10.2	2	10.0
	Mean age	71.0		74.6	
	Range for age	46-88		60-88	

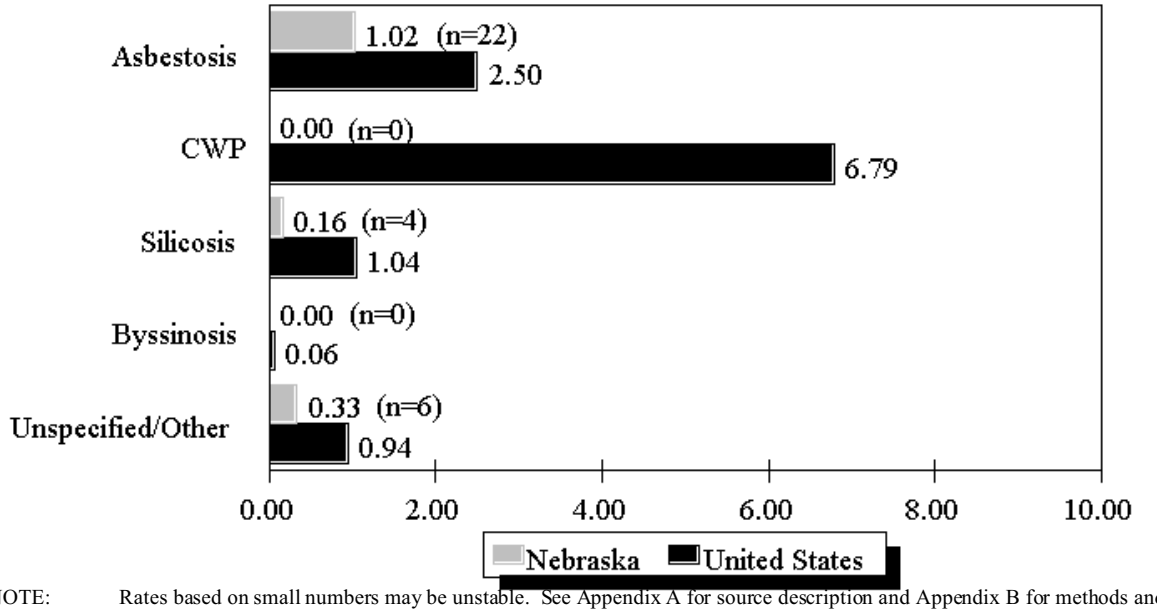
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure NE-3. Pneumoconiosis deaths by condition, Nebraska residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure NE-4. Nebraska and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table NE-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Nebraska residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Boone	1	**12.08**	-	**-**	-	**-**	-	**-**	-	**-**	1	**12.08**
Cass	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.96**	1	**4.96**
Custer	-	**-**	-	**-**	-	**-**	-	**-**	1	**6.24**	1	**6.24**
Dawson	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.57**	1	**4.57**
Deuel	-	**-**	-	**-**	1	**10.71**	-	**-**	-	**-**	1	**10.71**
Douglas	18	**3.80**	-	**-**	2	**0.57**	-	**-**	2	**0.57**	22	**4.93**
Hall	-	**-**	-	**-**	1	**0.87**	-	**-**	-	**-**	1	**0.87**
Lancaster	1	**0.27**	-	**-**	-	**-**	-	**-**	1	**0.62**	2	**0.89**
Sarpy	2	**4.14**	-	**-**	-	**-**	-	**-**	-	**-**	2	**4.14**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

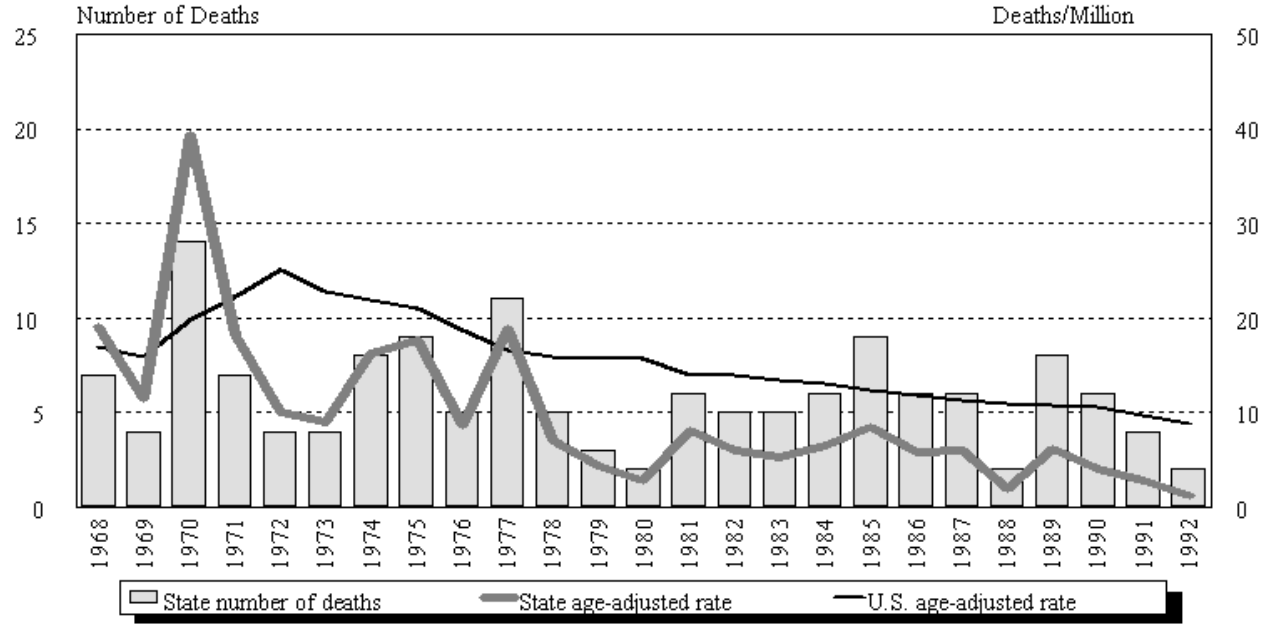
Nevada: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	22	45
Crude mortality rate (per 1,000,000 population)	4.59	42
Age-adjusted mortality rate (per 1,000,000 population)	3.15	40
Total years of potential life lost to life expectancy	259	45
Years of potential life lost to life expectancy (per death)	11.8	30

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	7	31.8
Coal workers' pneumoconiosis	4	18.2
Silicosis	10	45.5
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	1	4.5

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure NV-1. All pneumoconioses: Nevada and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Nevada

Table NV-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Nevada residents age 15 and over, 1968-1992

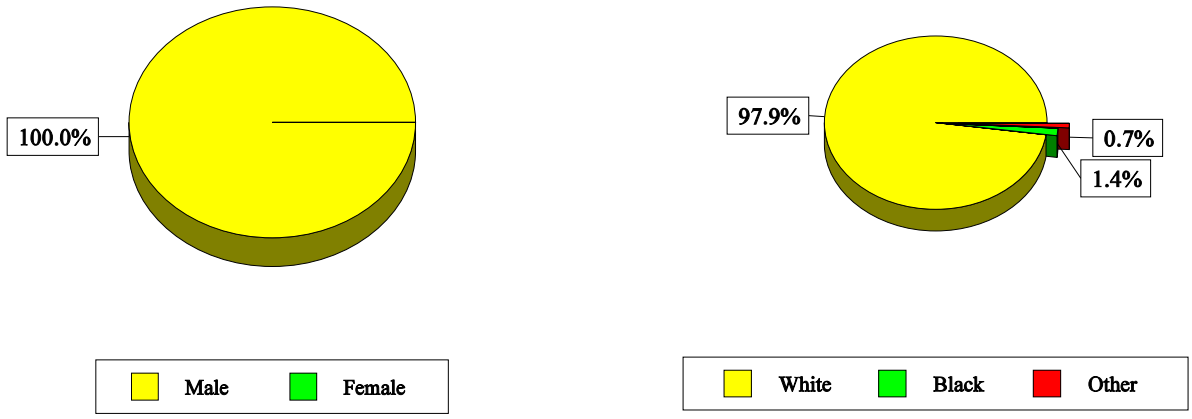
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	7	19.02			-	-	7	19.02
1969	1	3.02	-	-	3	8.41			-	-	4	11.43
1970	-	-	1	2.95	11	30.58			2	5.83	14	39.35
1971	1	2.78	-	-	6	15.45			-	-	7	18.22
1972	-	-	-	-	4	10.06			-	-	4	10.06
1973	-	-	-	-	4	9.08			-	-	4	9.08
1974	-	-	-	-	4	7.96			4	8.21	8	16.17
1975	-	-	1	1.46	8	16.26			1	2.07	9	17.72
1976	-	-	-	-	5	8.72			-	-	5	8.72
1977	1	1.67	-	-	7	12.14			3	5.09	11	18.90
1978	-	-	2	3.17	2	2.77			1	1.16	5	7.09
1979	-	-	1	1.49	2	2.94	-	-	-	-	3	4.43
1980	1	1.39	-	-	1	1.42	-	-	-	-	2	2.81
1981	2	3.04	1	1.27	1	1.30	-	-	2	2.54	6	8.16
1982	1	1.16	2	2.45	2	2.45	-	-	-	-	5	6.06
1983	1	1.23	1	1.09	2	1.92	-	-	1	1.13	5	5.37
1984	1	1.20	3	3.14	2	2.29	-	-	-	-	6	6.62
1985	3	3.03	2	1.73	4	3.73	-	-	-	-	9	8.49
1986	4	4.02	-	-	2	1.81	-	-	-	-	6	5.83
1987	3	3.31	-	-	3	2.68	-	-	-	-	6	5.99
1988	1	1.08	-	-	1	0.78	-	-	-	-	2	1.87
1989	-	-	1	0.54	6	4.92	-	-	1	0.73	8	6.18
1990	2	1.50	1	0.67	3	1.91	-	-	-	-	6	4.07
1991	3	2.04	1	0.71	-	-	-	-	-	-	4	2.76
1992	1	0.58	1	0.68	-	-	-	-	-	-	2	1.27

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure NV-2. All pneumoconioses: Distribution of deaths by sex and race, Nevada residents age 15 and over, 1968-1992



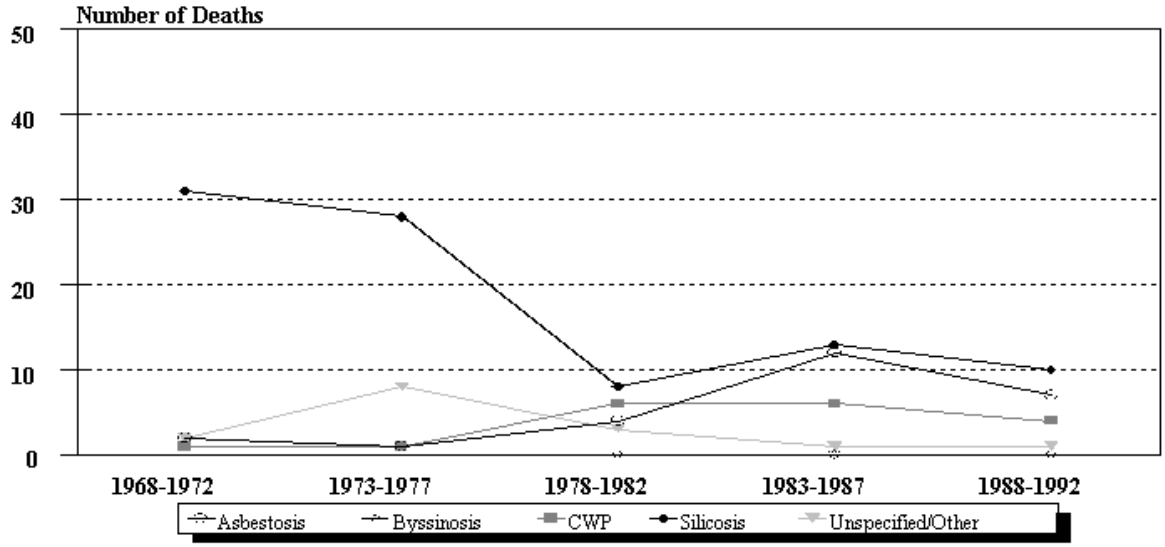
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table NV-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Nevada residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		148	100.0	22	100.0
Sex	Male	148	100.0	22	100.0
	Female	0	0.0	0	0.0
Race	White	145	97.9	21	95.5
	Black	2	1.4	0	0.0
	Other	1	0.7	1	4.5
Age	15-24	0	0.0	0	0.0
	25-34	1	0.7	0	0.0
	35-44	2	1.4	0	0.0
	45-54	4	2.7	0	0.0
	55-64	31	20.9	2	9.1
	65-74	59	39.9	10	45.5
	75-84	39	26.4	8	36.4
	85+	12	8.1	2	9.1
	Mean age	70.5		73.6	
	Range for age	34-96		57-94	

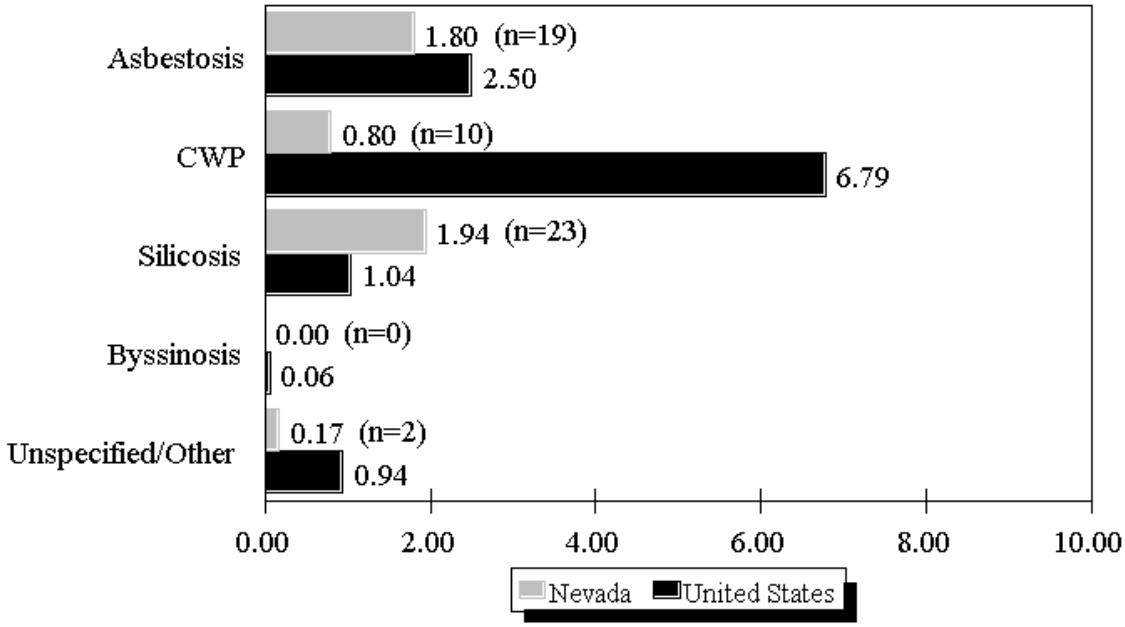
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure NV-3. Pneumoconiosis deaths by condition, Nevada residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure NV-4. Nevada and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table NV-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Nevada residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Churchill	1	**3.34**	-	**-**	4	**22.11**	-	**-**	-	**-**	5	**25.45**
Clark	14	**2.27**	7	**1.04**	6	**0.94**	-	**-**	-	**-**	27	**4.25**
Douglas	1	**3.33**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.33**
Humboldt	-	**-**	-	**-**	1	**10.18**	-	**-**	1	**12.09**	2	**22.28**
Lincoln	-	**-**	-	**-**	1	**24.64**	-	**-**	-	**-**	1	**24.64**
Lyon	-	**-**	-	**-**	2	**7.92**	-	**-**	-	**-**	2	**7.92**
Mineral	1	**23.70**	-	**-**	-	**-**	-	**-**	-	**-**	1	**23.70**
Washoe	2	**0.97**	3	**1.16**	4	**1.50**	-	**-**	1	**0.34**	10	**3.97**
White Pine	-	**-**	-	**-**	3	**25.99**	-	**-**	-	**-**	3	**25.99**
Independent city:												
Carson City	-	**-**	-	**-**	2	**3.84**	-	**-**	-	**-**	2	**3.84**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

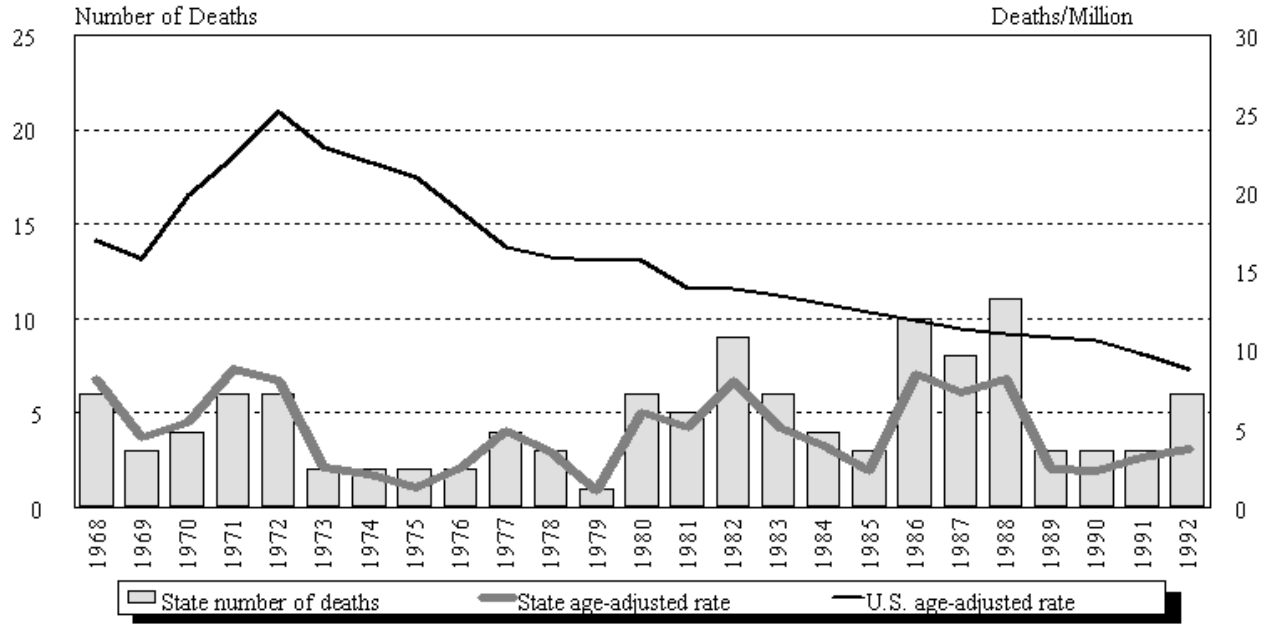
New Hampshire: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	26	44
Crude mortality rate (per 1,000,000 population)	5.96	36
Age-adjusted mortality rate (per 1,000,000 population)	3.96	35
Total years of potential life lost to life expectancy	321	43
Years of potential life lost to life expectancy (per death)	12.3	20

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	17	65.4
Coal workers' pneumoconiosis	1	3.8
Silicosis	7	26.9
Byssinosis	1	3.8
Unspecified/Other pneumoconiosis	1	3.8

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure NH-1. All pneumoconioses: New Hampshire and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

New Hampshire

Table NH-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, New Hampshire residents age 15 and over, 1968-1992

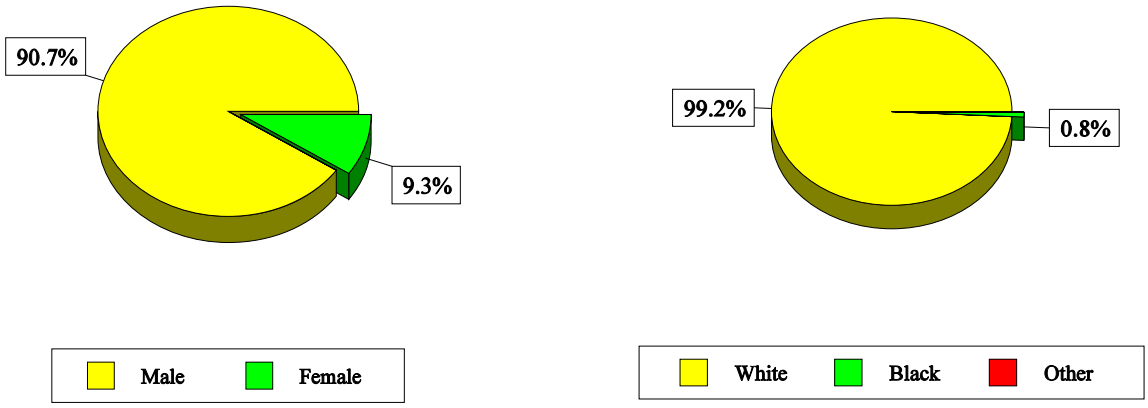
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	3	4.28			3	3.87	6	8.15
1969	-	-	-	-	1	1.58			2	2.86	3	4.45
1970	-	-	-	-	2	2.86			2	2.52	4	5.38
1971	1	1.32	1	1.55	4	5.97			-	-	6	8.84
1972	-	-	2	3.71	2	2.57			2	1.78	6	8.06
1973	-	-	1	1.25	-	-			1	1.25	2	2.51
1974	-	-	-	-	1	0.85			1	1.22	2	2.07
1975	-	-	1	0.83	1	0.47			-	-	2	1.30
1976	1	1.41	-	-	1	1.15			-	-	2	2.56
1977	2	2.72	2	2.14	-	-			-	-	4	4.86
1978	1	1.32	-	-	2	2.19			-	-	3	3.51
1979	1	1.07	-	-	-	-	-	-	-	-	1	1.07
1980	5	5.02	-	-	-	-	-	-	1	1.04	6	6.06
1981	5	5.13	-	-	-	-	-	-	-	-	5	5.13
1982	3	3.08	-	-	3	1.77	-	-	3	3.20	9	8.05
1983	5	4.35	-	-	1	0.69	-	-	-	-	6	5.04
1984	1	1.01	-	-	1	1.01	1	0.68	1	1.23	4	3.92
1985	1	0.99	-	-	1	0.99	-	-	1	0.33	3	2.31
1986	9	7.22	-	-	1	1.21	-	-	-	-	10	8.43
1987	6	5.20	-	-	1	0.94	-	-	1	1.21	8	7.34
1988	8	6.37	1	1.20	2	0.59	-	-	-	-	11	8.16
1989	2	1.49	-	-	1	0.91	-	-	-	-	3	2.39
1990	2	1.79	-	-	1	0.57	-	-	-	-	3	2.36
1991	1	1.24	-	-	2	1.80	1	1.39	-	-	3	3.19
1992	4	2.90	-	-	1	0.55	-	-	1	0.26	6	3.71

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure NH-2. All pneumoconioses: Distribution of deaths by sex and race, New Hampshire residents age 15 and over, 1968-1992



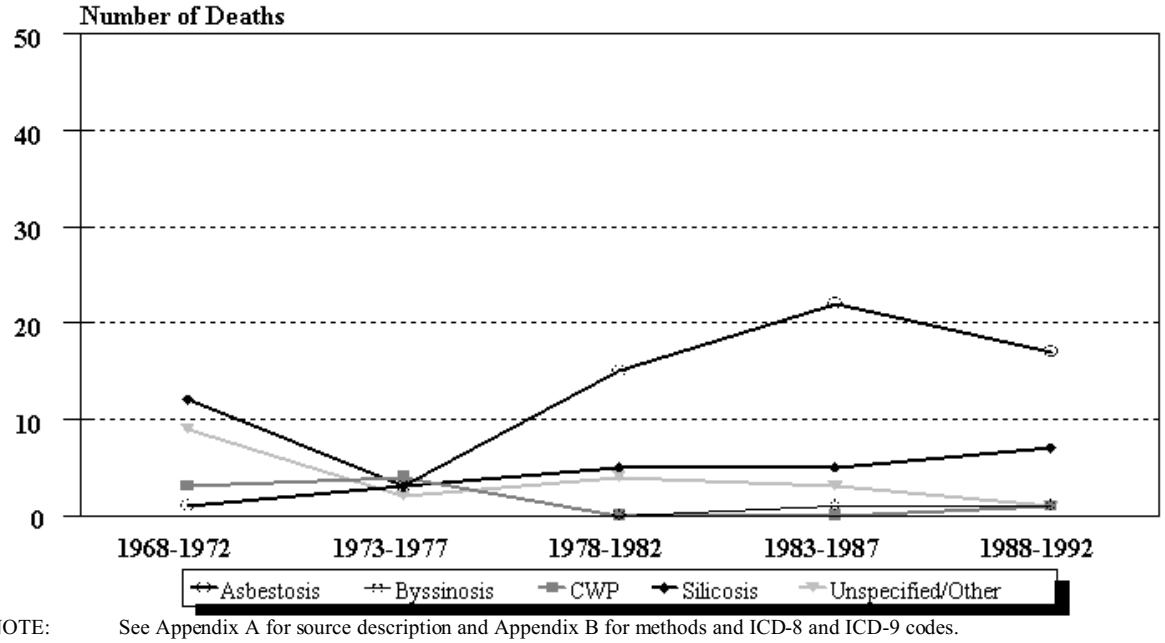
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table NH-2. All pneumoconioses: Distribution of deaths by sex, race, and age, New Hampshire residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		118	100.0	26	100.0
Sex	Male	107	90.7	24	92.3
	Female	11	9.3	2	7.7
Race	White	117	99.2	26	100.0
	Black	1	0.8	0	0.0
	Other	0	0.0	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	0	0.0	0	0.0
	35-44	0	0.0	0	0.0
	45-54	6	5.1	1	3.8
	55-64	30	25.4	4	15.4
	65-74	36	30.5	8	30.8
	75-84	38	32.2	9	34.6
	85+	8	6.8	4	15.4
	Mean age	70.9		74.2	
	Range for age	46-97		53-97	

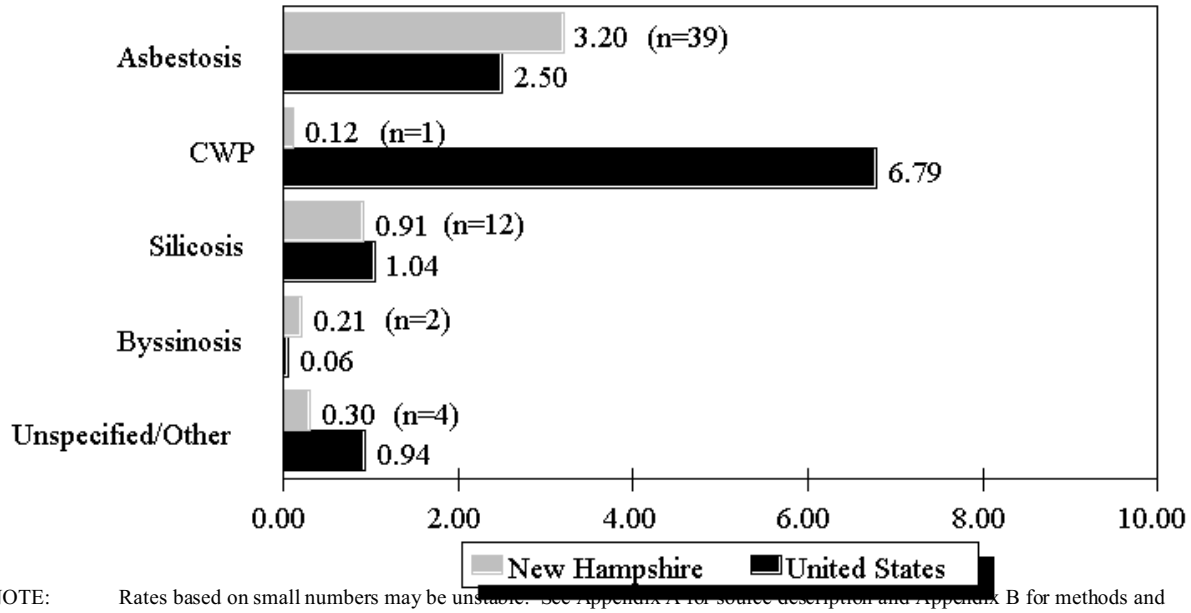
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure NH-3. Pneumoconiosis deaths by condition, New Hampshire residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure NH-4. New Hampshire and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table NH-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, New Hampshire residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Belknap	5	**9.10**	-	**-**	2	**3.04**	1	**1.02**	-	**-**	8	**13.17**
Cheshire	3	**3.78**	1	**1.53**	1	**0.71**	-	**-**	-	**-**	5	**6.02**
Coos	2	**3.59**	-	**-**	-	**-**	-	**-**	1	**2.45**	3	**6.04**
Grafton	3	**2.90**	-	**-**	2	**2.21**	-	**-**	1	**0.70**	6	**5.81**
Hillsborough	7	**1.73**	-	**-**	-	**-**	1	**0.42**	1	**0.19**	9	**2.34**
Merrimack	2	**1.42**	-	**-**	2	**1.42**	-	**-**	-	**-**	4	**2.83**
Rockingham	11	**4.65**	-	**-**	2	**1.13**	-	**-**	-	**-**	12	**5.21**
Strafford	6	**6.07**	-	**-**	1	**0.61**	-	**-**	1	**1.21**	8	**7.89**
Sullivan	-	**-**	-	**-**	2	**3.67**	-	**-**	-	**-**	2	**3.67**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

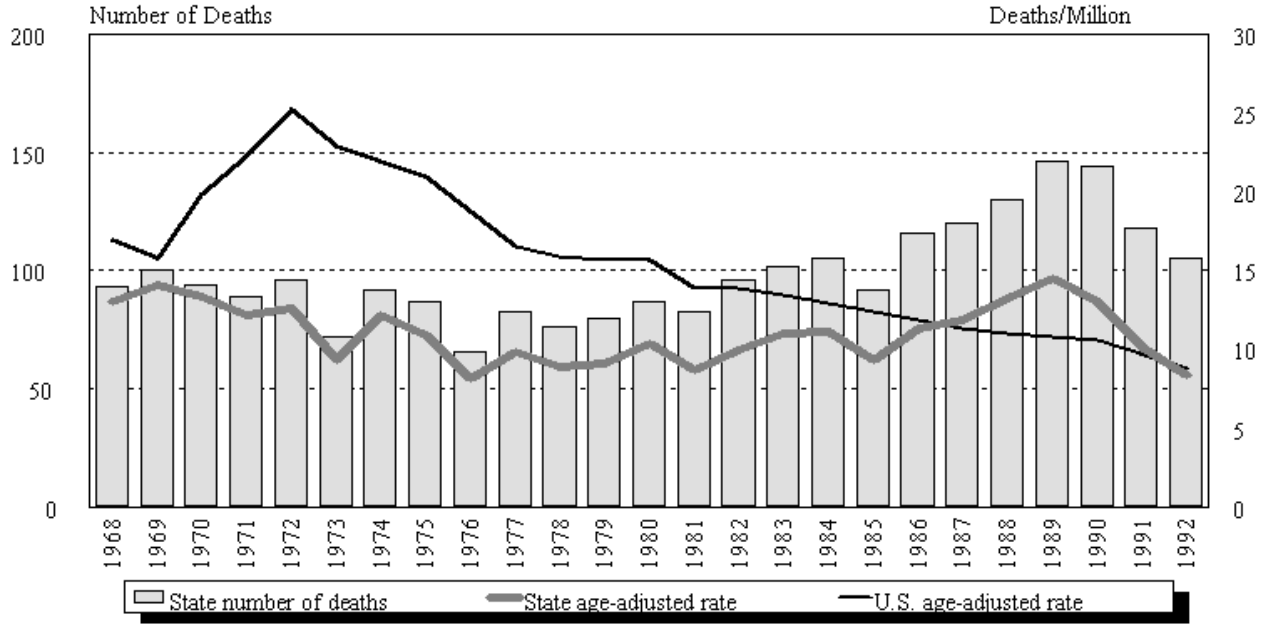
New Jersey: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	643	7
Crude mortality rate (per 1,000,000 population)	20.68	7
Age-adjusted mortality rate (per 1,000,000 population)	11.88	7
Total years of potential life lost to life expectancy	7,801	7
Years of potential life lost to life expectancy (per death)	12.1	25

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	473	73.6
Coal workers' pneumoconiosis	79	12.3
Silicosis	50	7.8
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	46	7.2

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure NJ-1. All pneumoconioses: New Jersey and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

New Jersey

Table NJ-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, New Jersey residents age 15 and over, 1968-1992

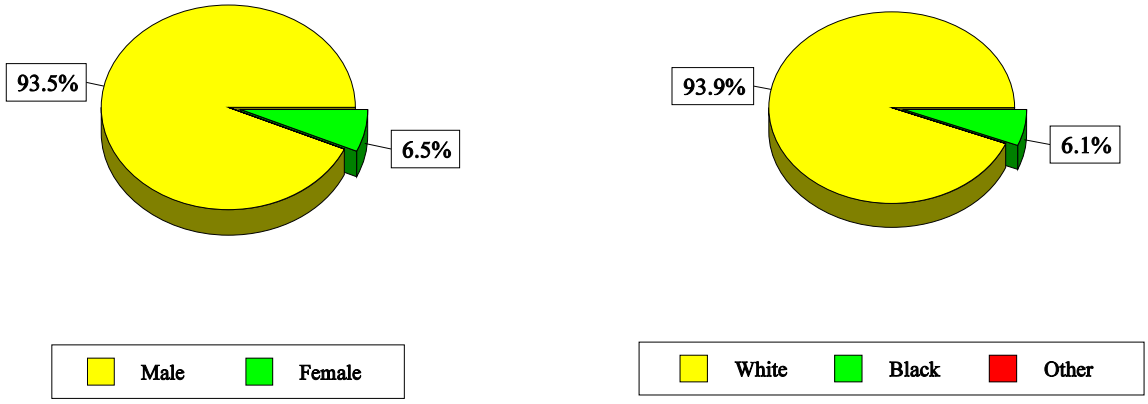
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	18	2.81	24	3.34	32	4.41			24	3.20	93	13.00
1969	18	2.67	19	2.63	32	4.50			36	4.86	100	14.05
1970	17	2.60	23	2.98	31	4.30			26	3.90	94	13.35
1971	15	2.18	25	3.13	29	3.99			21	3.03	89	12.20
1972	28	4.00	22	2.92	28	3.50			20	2.48	96	12.61
1973	14	1.98	15	2.00	26	3.22			19	2.43	72	9.38
1974	24	3.32	29	3.98	23	2.96			19	2.20	92	12.16
1975	18	2.21	20	2.67	22	2.64			29	3.67	87	10.91
1976	21	2.75	18	1.94	14	1.84			15	1.93	66	8.19
1977	26	3.21	15	1.92	18	2.09			24	2.65	83	9.87
1978	33	4.10	19	2.02	7	0.91			19	2.13	76	8.90
1979	34	4.11	23	2.62	8	0.79	-	-	16	1.72	80	9.14
1980	46	5.60	17	1.98	13	1.47	-	-	11	1.28	87	10.34
1981	43	4.82	15	1.38	13	1.25	-	-	13	1.37	83	8.71
1982	52	5.82	18	1.59	10	1.06	1	0.05	15	1.42	96	9.94
1983	51	5.67	21	2.14	10	1.17	-	-	20	2.09	102	11.07
1984	49	5.53	22	2.16	17	1.72	-	-	18	1.85	105	11.14
1985	63	6.69	11	0.98	8	0.70	1	0.11	9	0.80	92	9.29
1986	82	8.36	12	0.82	9	0.86	-	-	14	1.34	116	11.31
1987	80	8.63	18	1.36	12	1.00	-	-	11	0.96	120	11.91
1988	83	8.47	24	2.55	12	0.95	-	-	12	1.37	130	13.27
1989	102	10.56	22	1.97	12	0.95	-	-	11	1.09	146	14.50
1990	115	10.25	11	1.05	10	0.83	-	-	9	0.97	144	13.03
1991	93	8.28	8	0.50	11	0.89	-	-	7	0.50	118	10.13
1992	80	6.75	14	0.84	5	0.43	-	-	7	0.50	105	8.37

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure NJ-2. All pneumoconioses: Distribution of deaths by sex and race, New Jersey residents age 15 and over, 1968-1992



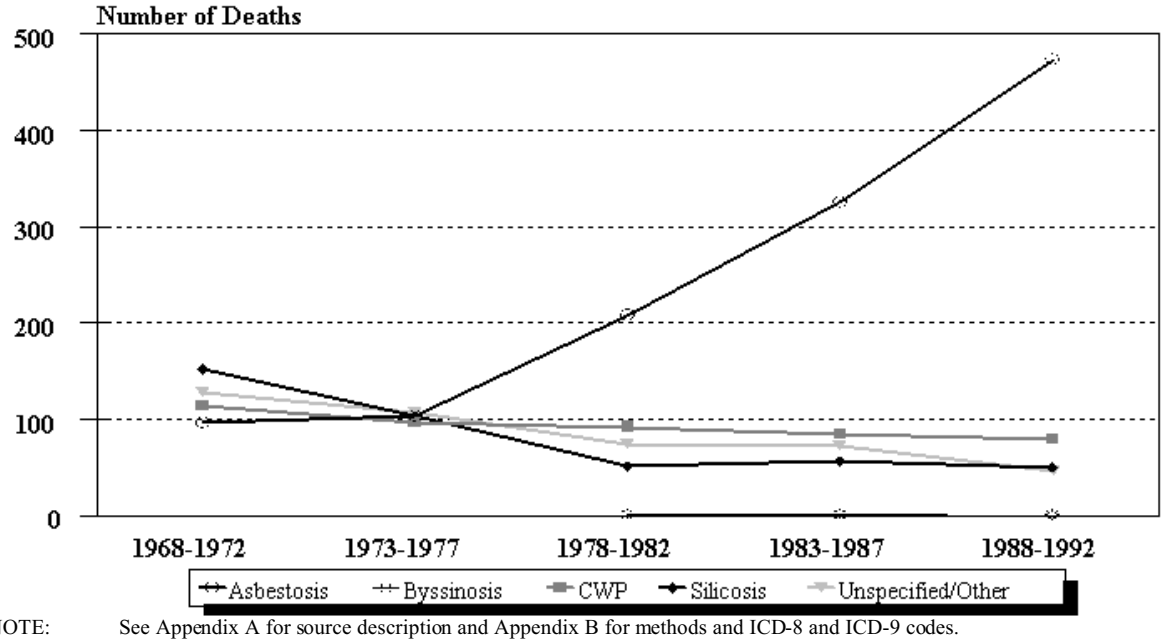
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table NJ-2. All pneumoconioses: Distribution of deaths by sex, race, and age, New Jersey residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		2,472	100.0	643	100.0
Sex	Male	2,311	93.5	610	94.9
	Female	161	6.5	33	5.1
Race	White	2,321	93.9	595	92.5
	Black	150	6.1	48	7.5
	Other	1	0.0	0	0.0
Age	15-24	1	0.0	0	0.0
	25-34	5	0.2	0	0.0
	35-44	12	0.5	2	0.3
	45-54	104	4.2	16	2.5
	55-64	478	19.3	73	11.4
	65-74	929	37.6	238	37.0
	75-84	743	30.1	240	37.3
	85+	200	8.1	74	11.5
	Mean age	71.2		74.1	
	Range for age	19-102		43-102	

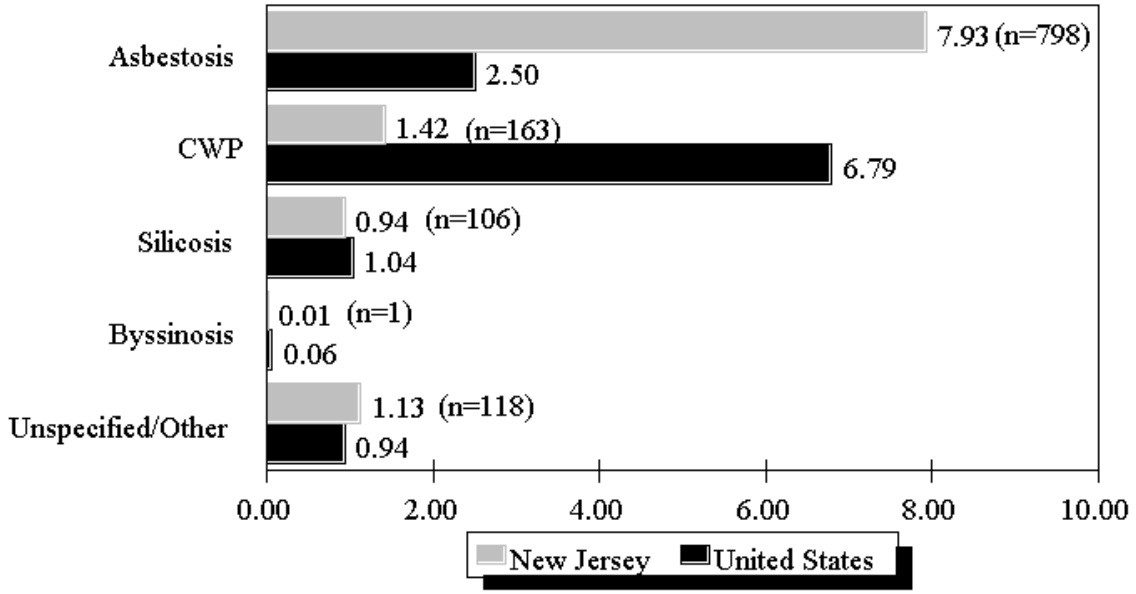
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure NJ-3. Pneumoconiosis deaths by condition, New Jersey residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure NJ-4. New Jersey and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table NJ-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, New Jersey residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Atlantic	21	**5.58**	3	**0.83**	2	**0.63**	-	**-**	4	**1.74**	29	**8.58**
Bergen	25	**2.01**	11	**0.69**	4	**0.26**	-	**-**	8	**0.53**	48	**3.49**
Burlington	41	**10.55**	6	**1.31**	3	**0.55**	-	**-**	5	**1.03**	55	**13.45**
Camden	188	**33.75**	6	**0.98**	5	**0.77**	-	**-**	4	**0.66**	202	**35.96**
Cape May	13	**7.67**	3	**1.50**	1	**0.35**	-	**-**	-	**-**	17	**9.51**
Cumberland	11	**7.64**	3	**1.47**	4	**2.56**	-	**-**	-	**-**	18	**11.66**
Essex	17	**1.87**	17	**1.96**	8	**0.71**	-	**-**	8	**0.96**	50	**5.51**
Gloucester	65	**28.45**	1	**0.32**	-	**-**	-	**-**	1	**0.32**	67	**29.08**
Hudson	16	**2.42**	13	**2.14**	6	**0.82**	-	**-**	4	**0.38**	39	**5.76**
Hunterdon	10	**9.67**	1	**0.67**	1	**1.16**	-	**-**	2	**1.35**	14	**12.86**
Mercer	10	**2.39**	14	**2.91**	15	**2.80**	-	**-**	10	**2.39**	48	**10.32**
Middlesex	66	**8.96**	23	**2.99**	12	**1.61**	-	**-**	24	**3.21**	123	**16.51**
Monmouth	16	**2.59**	10	**1.03**	1	**0.19**	-	**-**	3	**0.38**	30	**4.18**
Morris	19	**4.21**	11	**2.11**	4	**0.61**	-	**-**	4	**0.96**	37	**7.73**
Ocean	29	**3.41**	8	**0.65**	8	**1.11**	-	**-**	5	**0.57**	50	**5.74**
Passaic	21	**3.77**	7	**1.23**	8	**1.56**	1	**0.22**	5	**0.78**	42	**7.56**
Salem	6	**7.24**	1	**0.74**	-	**-**	-	**-**	-	**-**	7	**7.98**
Somerset	180	**71.40**	11	**4.16**	10	**3.54**	-	**-**	14	**5.84**	213	**84.36**
Sussex	2	**1.66**	-	**-**	1	**0.55**	-	**-**	-	**-**	3	**2.22**
Union	40	**4.93**	9	**0.92**	7	**0.89**	-	**-**	12	**1.44**	68	**8.17**
Warren	2	**2.62**	5	**4.50**	6	**5.06**	-	**-**	5	**5.07**	18	**17.25**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

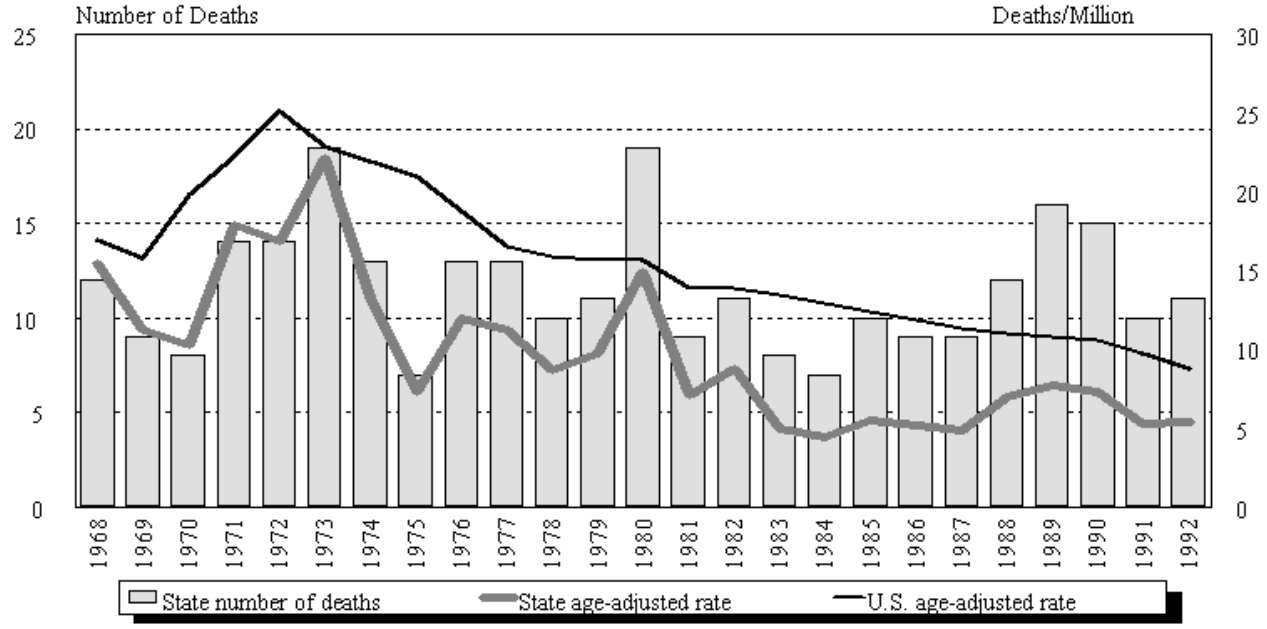
New Mexico: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	64	34
Crude mortality rate (per 1,000,000 population)	11.25	19
Age-adjusted mortality rate (per 1,000,000 population)	6.52	19
Total years of potential life lost to life expectancy	678	37
Years of potential life lost to life expectancy (per death)	10.6	45

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	13	20.3
Coal workers' pneumoconiosis	16	25.0
Silicosis	21	32.8
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	14	21.9

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure NM-1. All pneumoconioses: New Mexico and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

New Mexico

Table NM-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, New Mexico residents age 15 and over, 1968-1992

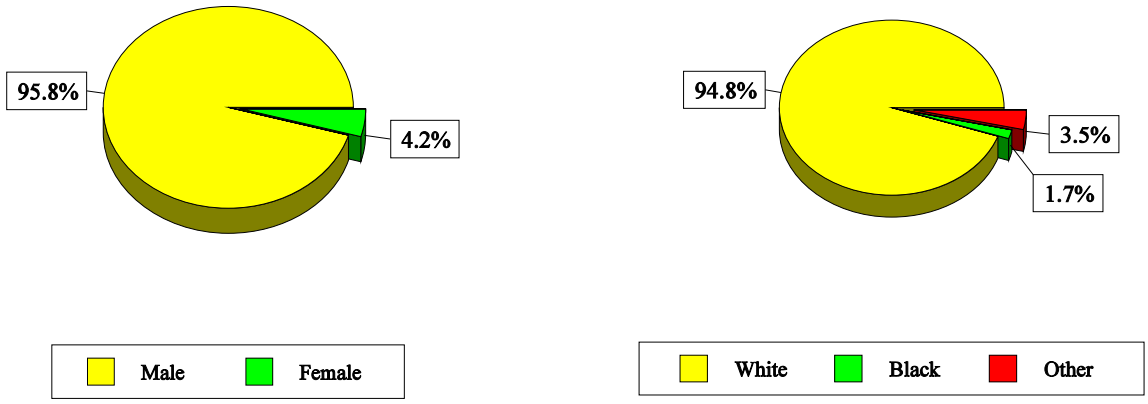
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	6	7.29			6	8.15	12	15.44
1969	-	-	-	-	7	8.67			2	2.53	9	11.20
1970	-	-	1	1.11	4	5.76			3	3.44	8	10.31
1971	-	-	3	3.73	7	9.34			4	4.79	14	17.86
1972	-	-	2	2.52	8	9.76			4	4.54	14	16.82
1973	1	1.43	3	3.20	6	6.41			9	11.12	19	22.16
1974	-	-	4	4.21	5	5.00			4	4.18	13	13.39
1975	-	-	1	1.08	3	3.04			4	4.22	7	7.26
1976	-	-	4	3.76	5	5.07			4	3.11	13	11.95
1977	-	-	3	2.41	3	2.77			7	6.03	13	11.22
1978	3	2.64	2	1.71	3	2.77			2	1.56	10	8.67
1979	-	-	6	5.44	3	2.81	-	-	2	1.46	11	9.70
1980	1	0.71	2	1.57	10	8.25	-	-	7	5.25	19	14.92
1981	1	0.67	2	1.64	4	3.76	-	-	2	1.06	9	7.12
1982	1	0.94	4	3.00	3	3.02	-	-	3	1.80	11	8.76
1983	1	0.59	6	3.75	1	0.59	-	-	-	-	8	4.94
1984	-	-	4	2.45	2	1.46	-	-	1	0.57	7	4.48
1985	1	0.89	5	2.90	2	1.08	-	-	2	0.63	10	5.49
1986	1	0.52	4	2.26	2	1.39	-	-	2	1.03	9	5.20
1987	4	2.57	2	0.79	1	0.70	-	-	2	0.79	9	4.84
1988	2	1.57	2	0.96	2	0.97	-	-	6	3.49	12	6.99
1989	5	2.57	4	2.28	4	1.49	-	-	3	1.39	16	7.73
1990	2	1.11	3	1.16	6	2.57	-	-	4	2.44	15	7.28
1991	3	1.96	3	1.12	4	2.17	-	-	-	-	10	5.25
1992	1	0.64	4	1.96	5	2.33	-	-	1	0.42	11	5.35

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure NM-2. All pneumoconioses: Distribution of deaths by sex and race, New Mexico residents age 15 and over, 1968-1992



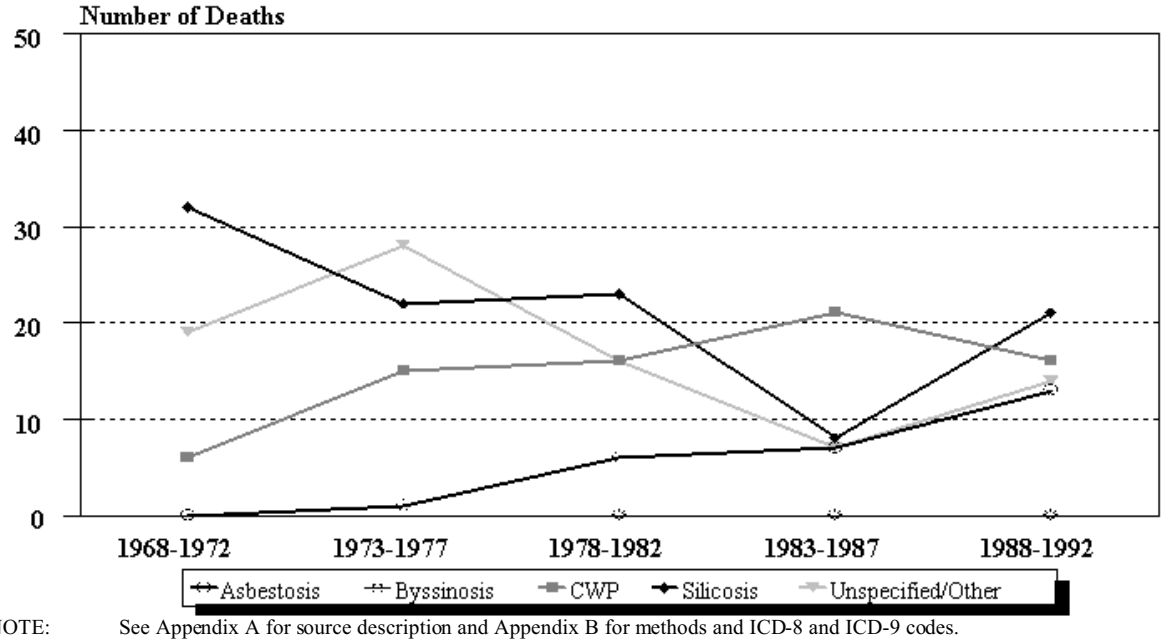
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table NM-2. All pneumoconioses: Distribution of deaths by sex, race, and age, New Mexico residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		289	100.0	64	100.0
Sex	Male	277	95.8	61	95.3
	Female	12	4.2	3	4.7
Race	White	274	94.8	60	93.8
	Black	5	1.7	1	1.6
	Other	10	3.5	3	4.7
Age	15-24	0	0.0	0	0.0
	25-34	2	0.7	0	0.0
	35-44	1	0.3	0	0.0
	45-54	9	3.1	0	0.0
	55-64	44	15.2	7	10.9
	65-74	86	29.8	16	25.0
	75-84	114	39.4	27	42.2
	85+	33	11.4	14	21.9
	Mean age	73.5		77.6	
	Range for age	28-96		56-96	

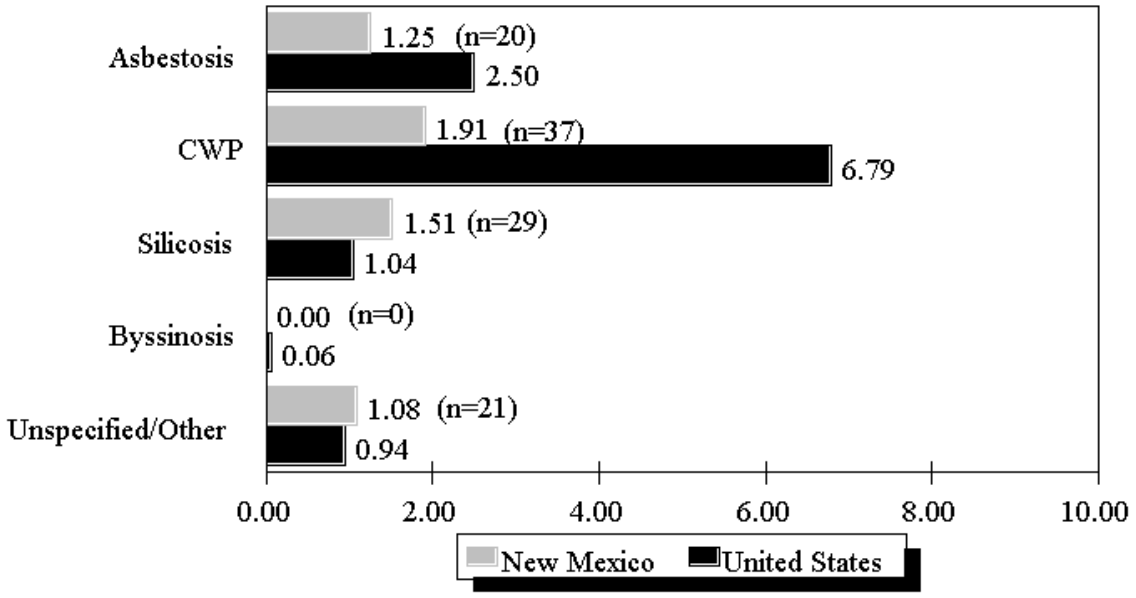
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure NM-3. Pneumoconiosis deaths by condition, New Mexico residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure NM-4. New Mexico and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table NM-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, New Mexico residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Bernalillo	5	**1.18**	9	**1.56**	6	**1.11**	-	**-**	1	**0.15**	21	**4.00**
Catron	1	**32.58**	-	**-**	-	**-**	-	**-**	-	**-**	1	**32.58**
Chaves	-	**-**	1	**0.78**	1	**1.70**	-	**-**	-	**-**	2	**2.49**
Cibola	1	**3.60**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.60**
Colfax	-	**-**	7	**28.32**	1	**2.96**	-	**-**	3	**8.89**	11	**40.17**
Curry	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.99**	1	**2.99**
Dona Ana	1	**0.64**	-	**-**	2	**1.28**	-	**-**	3	**2.68**	6	**4.60**
Eddy	4	**4.45**	5	**5.29**	-	**-**	-	**-**	1	**0.84**	10	**10.58**
Grant	-	**-**	-	**-**	3	**5.65**	-	**-**	1	**1.88**	4	**7.53**
Lea	-	**-**	-	**-**	1	**1.18**	-	**-**	1	**1.18**	2	**2.37**
Luna	1	**4.03**	-	**-**	3	**8.12**	-	**-**	-	**-**	4	**12.16**
McKinley	-	**-**	3	**6.76**	-	**-**	-	**-**	-	**-**	3	**6.76**
Mora	-	**-**	1	**9.36**	-	**-**	-	**-**	-	**-**	1	**9.36**
Otero	-	**-**	-	**-**	1	**2.50**	-	**-**	-	**-**	1	**2.50**
Rio Arriba	-	**-**	-	**-**	3	**7.97**	-	**-**	-	**-**	3	**7.97**
Sandoval	1	**2.25**	1	**1.36**	-	**-**	-	**-**	-	**-**	2	**3.61**
San Juan	1	**1.60**	3	**3.77**	3	**3.77**	-	**-**	-	**-**	7	**9.14**
San Miguel	1	**2.07**	1	**4.75**	-	**-**	-	**-**	1	**2.07**	3	**8.90**
Santa Fe	1	**1.30**	5	**4.26**	2	**1.48**	-	**-**	8	**7.04**	16	**14.08**
Sierra	1	**5.44**	-	**-**	-	**-**	-	**-**	-	**-**	1	**5.44**
Socorro	1	**8.48**	-	**-**	1	**4.63**	-	**-**	-	**-**	2	**13.11**
Union	-	**-**	1	**7.20**	1	**19.06**	-	**-**	-	**-**	2	**26.26**
Valencia	1	**1.83**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.83**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

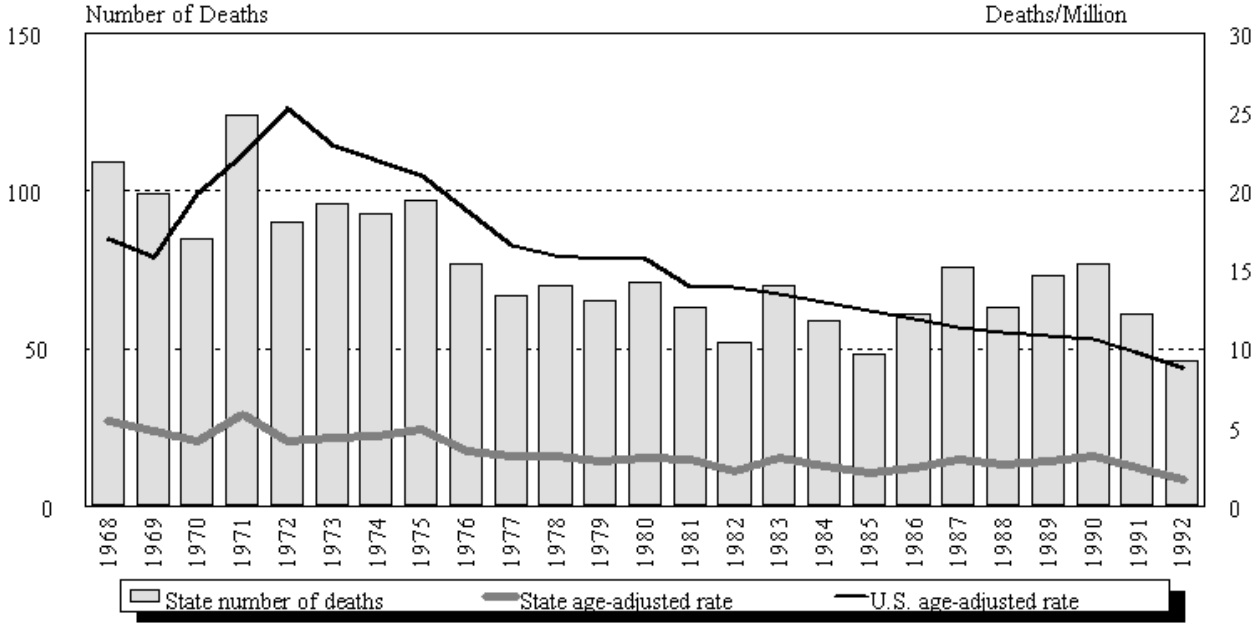
New York: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	320	11
Crude mortality rate (per 1,000,000 population)	4.45	44
Age-adjusted mortality rate (per 1,000,000 population)	2.56	46
Total years of potential life lost to life expectancy	3,913	11
Years of potential life lost to life expectancy (per death)	12.2	23

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	172	53.8
Coal workers' pneumoconiosis	41	12.8
Silicosis	67	20.9
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	43	13.4

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure NY-1. All pneumoconioses: New York and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

New York

Table NY-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, New York residents age 15 and over, 1968-1992

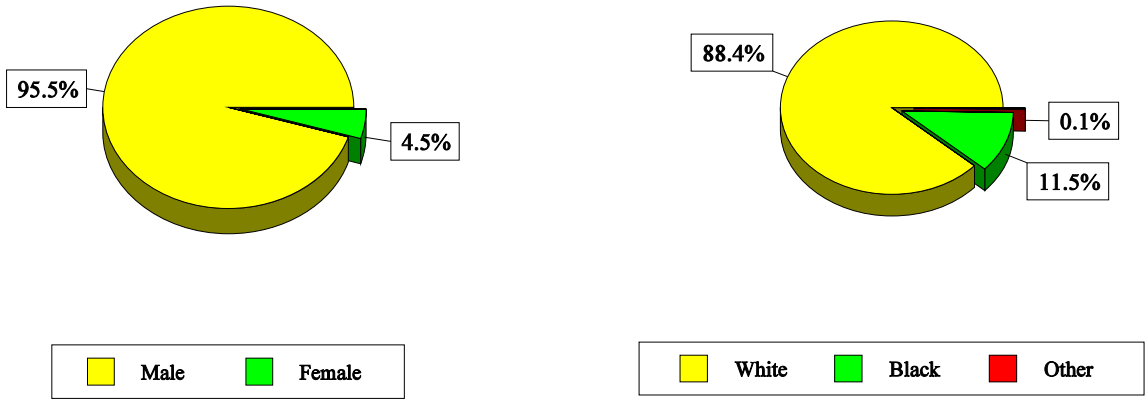
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	8	0.44	18	0.85	59	2.91			27	1.31	109	5.39
1969	4	0.22	12	0.58	56	2.63			31	1.50	99	4.73
1970	7	0.35	17	0.82	44	2.13			20	0.95	85	4.13
1971	14	0.78	17	0.78	57	2.63			37	1.75	124	5.88
1972	4	0.18	22	1.02	42	1.94			24	1.06	90	4.13
1973	8	0.40	9	0.42	46	2.11			37	1.68	96	4.39
1974	6	0.28	18	0.80	38	1.83			35	1.68	93	4.44
1975	9	0.46	18	0.93	27	1.25			43	2.24	97	4.89
1976	11	0.53	17	0.83	21	0.87			30	1.37	77	3.51
1977	6	0.37	10	0.45	31	1.41			22	1.05	67	3.19
1978	14	0.71	9	0.39	26	1.18			21	0.94	70	3.23
1979	12	0.61	16	0.75	23	0.94	-	-	15	0.56	65	2.83
1980	13	0.64	24	0.93	17	0.84	-	-	18	0.77	71	3.12
1981	12	0.69	16	0.67	20	0.99	-	-	15	0.61	63	2.96
1982	16	0.71	15	0.63	11	0.43	-	-	10	0.42	52	2.19
1983	25	1.18	15	0.64	22	0.91	-	-	8	0.35	70	3.09
1984	24	1.13	6	0.23	17	0.74	-	-	12	0.50	59	2.60
1985	10	0.49	11	0.46	16	0.72	-	-	11	0.45	48	2.11
1986	25	1.02	16	0.59	9	0.38	1	0.03	10	0.37	61	2.39
1987	30	1.24	13	0.48	27	0.99	-	-	9	0.39	76	3.00
1988	29	1.24	13	0.46	12	0.59	-	-	9	0.37	63	2.65
1989	32	1.32	13	0.36	16	0.69	-	-	12	0.49	73	2.86
1990	44	1.98	9	0.30	15	0.60	-	-	10	0.36	77	3.21
1991	37	1.50	4	0.12	18	0.69	-	-	3	0.16	61	2.40
1992	30	1.07	2	0.04	6	0.26	-	-	9	0.35	46	1.67

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure NY-2. All pneumoconioses: Distribution of deaths by sex and race, New York residents age 15 and over, 1968-1992



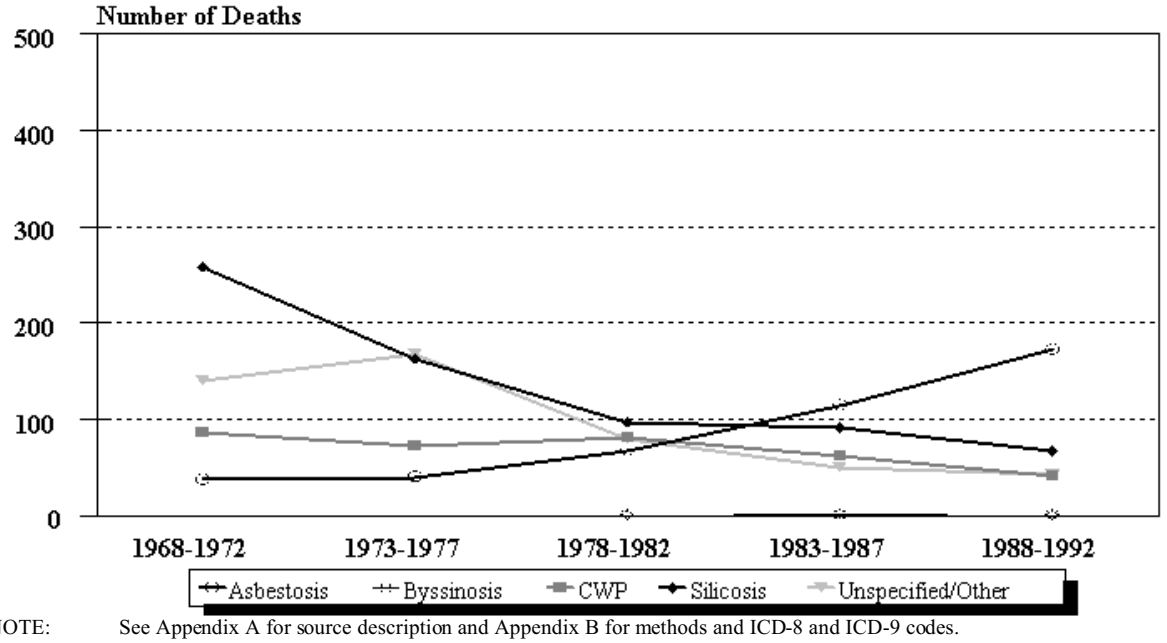
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table NY-2. All pneumoconioses: Distribution of deaths by sex, race, and age, New York residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		1892	100.0	320	100.0
Sex	Male	1,807	95.5	306	95.6
	Female	85	4.5	14	4.4
Race	White	1,672	88.4	276	86.3
	Black	218	11.5	44	13.8
	Other	2	0.1	0	0.0
Age	15-24	2	0.1	1	0.3
	25-34	2	0.1	0	0.0
	35-44	9	0.5	0	0.0
	45-54	73	3.9	16	5.0
	55-64	328	17.3	43	13.4
	65-74	634	33.5	81	25.3
	75-84	654	34.6	128	40.0
	85+	190	10.0	51	15.9
	Mean age	72.2		74.3	
	Range for age	19-102		19-95	

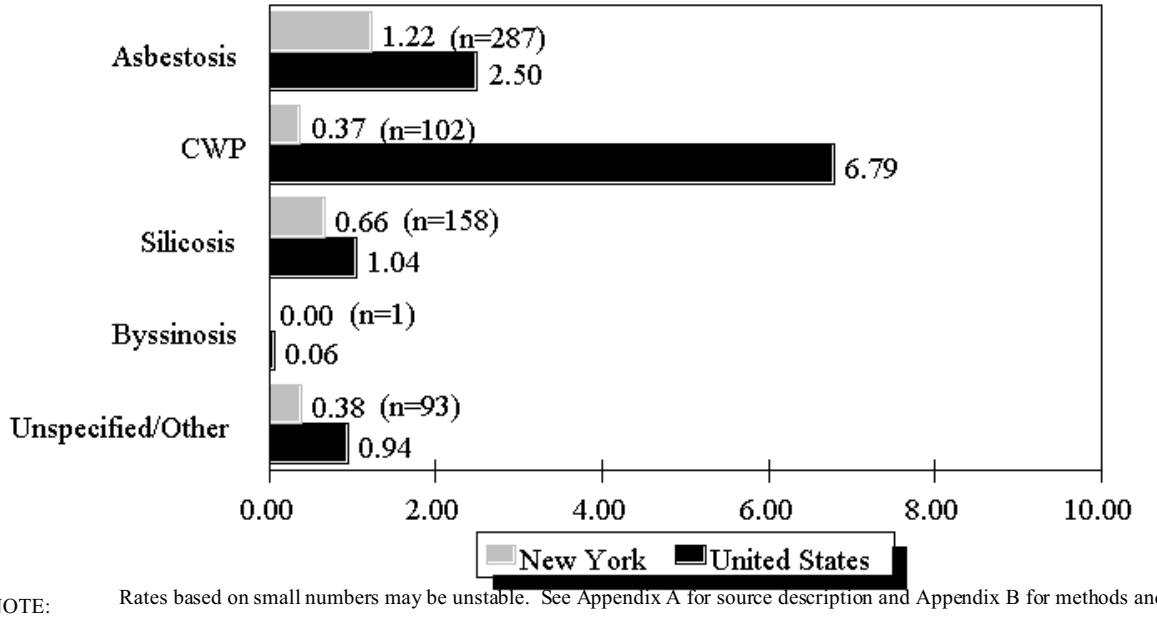
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure NY-3. Pneumoconiosis deaths by condition, New York residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure NY-4. New York and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table NY-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, New York residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Albany	10	**3.00**	1	**0.34**	2	**0.29**	-	**-**	3	**0.63**	16	**4.26**
Allegany	1	**0.92**	1	**0.92**	1	**0.92**	-	**-**	-	**-**	3	**2.76**
Bronx	13	**0.87**	5	**0.37**	7	**0.60**	-	**-**	5	**0.32**	30	**2.17**
Broome	3	**1.35**	12	**3.63**	-	**-**	-	**-**	7	**2.14**	22	**7.12**
Cattaraugus	-	**-**	1	**0.55**	2	**1.70**	-	**-**	1	**1.15**	4	**3.39**
Cayuga	-	**-**	-	**-**	2	**1.79**	-	**-**	2	**2.47**	3	**3.03**
Chautauqua	1	**0.65**	3	**0.82**	1	**0.65**	-	**-**	1	**0.27**	6	**2.39**
Chemung	2	**1.46**	2	**0.94**	1	**0.47**	-	**-**	2	**1.99**	7	**4.85**
Chenango	1	**1.99**	2	**1.78**	-	**-**	-	**-**	-	**-**	3	**3.77**
Clinton	-	**-**	-	**-**	1	**0.79**	-	**-**	-	**-**	1	**0.79**
Columbia	4	**3.26**	1	**1.45**	-	**-**	-	**-**	-	**-**	5	**4.71**
Cortland	1	**1.06**	-	**-**	1	**3.24**	-	**-**	-	**-**	2	**4.30**
Delaware	-	**-**	1	**0.83**	-	**-**	-	**-**	-	**-**	1	**0.83**
Dutchess	1	**0.44**	1	**0.44**	1	**0.44**	-	**-**	1	**0.22**	4	**1.54**
Erie	18	**1.62**	17	**1.17**	22	**1.53**	-	**-**	5	**0.28**	60	**4.47**
Essex	1	**2.52**	-	**-**	7	**13.56**	-	**-**	-	**-**	8	**16.08**
Fulton	1	**0.71**	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.71**
Genesee	2	**2.49**	1	**1.70**	2	**1.58**	-	**-**	-	**-**	5	**5.77**
Greene	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.06**	1	**2.06**
Herkimer	-	**-**	-	**-**	-	**-**	-	**-**	3	**3.29**	3	**3.29**
Jefferson	3	**3.57**	-	**-**	2	**2.38**	-	**-**	1	**1.19**	6	**7.14**
Kings	26	**0.90**	2	**0.09**	7	**0.23**	-	**-**	2	**0.05**	37	**1.27**
Lewis	-	**-**	-	**-**	1	**2.00**	-	**-**	1	**2.00**	2	**4.00**
Madison	-	**-**	-	**-**	1	**0.86**	-	**-**	-	**-**	1	**0.86**
Monroe	9	**1.11**	8	**0.66**	9	**0.81**	-	**-**	5	**0.44**	31	**3.02**
Montgomery	1	**1.55**	1	**0.63**	-	**-**	-	**-**	-	**-**	2	**2.18**
Nassau	31	**1.69**	2	**0.08**	4	**0.21**	1	**0.04**	4	**0.17**	41	**2.16**
New York	9	**0.37**	6	**0.26**	4	**0.16**	-	**-**	3	**0.09**	22	**0.88**
Niagara	9	**2.70**	2	**0.42**	2	**0.62**	-	**-**	5	**2.06**	18	**5.81**
Oneida	1	**0.37**	-	**-**	5	**1.04**	-	**-**	1	**0.17**	7	**1.58**
Onondaga	5	**0.98**	1	**0.11**	7	**1.11**	-	**-**	2	**0.33**	15	**2.53**

See footnotes at end of table.

Table NY-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, New York residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Ontario	4	**3.86**	-	**-**	3	**3.09**	-	**-**	1	**1.11**	8	**8.05**
Orange	8	**1.85**	2	**0.62**	1	**0.21**	-	**-**	3	**1.25**	14	**3.94**
Oswego	2	**1.52**	-	**-**	-	**-**	-	**-**	-	**-**	2	**1.52**
Otsego	-	**-**	-	**-**	1	**1.65**	-	**-**	-	**-**	1	**1.65**
Putnam	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.84**	1	**0.84**
Queens	30	**1.16**	11	**0.34**	14	**0.56**	-	**-**	11	**0.39**	65	**2.40**
Rensselaer	3	**1.66**	-	**-**	3	**1.66**	-	**-**	2	**1.64**	8	**4.96**
Richmond	5	**0.95**	-	**-**	1	**0.16**	-	**-**	2	**0.53**	8	**1.65**
Rockland	4	**1.33**	1	**0.42**	1	**0.42**	-	**-**	-	**-**	6	**2.17**
St. Lawrence	3	**2.43**	3	**2.43**	14	**11.65**	-	**-**	9	**7.28**	28	**23.31**
Saratoga	2	**1.39**	-	**-**	-	**-**	-	**-**	-	**-**	2	**1.39**
Schenectady	1	**0.26**	1	**0.26**	2	**0.51**	-	**-**	-	**-**	4	**1.03**
Schoharie	1	**1.44**	1	**1.44**	-	**-**	-	**-**	-	**-**	2	**2.88**
Schuyler	-	**-**	-	**-**	1	**7.46**	-	**-**	-	**-**	1	**7.46**
Seneca	1	**2.81**	-	**-**	1	**2.81**	-	**-**	-	**-**	2	**5.63**
Steuben	3	**2.86**	1	**0.95**	6	**5.77**	-	**-**	2	**1.91**	12	**11.50**
Suffolk	40	**2.74**	3	**0.18**	-	**-**	-	**-**	2	**0.13**	45	**3.06**
Sullivan	2	**2.02**	-	**-**	1	**1.35**	-	**-**	1	**1.35**	4	**4.73**
Tioga	-	**-**	1	**1.20**	2	**4.31**	-	**-**	-	**-**	3	**5.51**
Tompkins	-	**-**	-	**-**	1	**1.64**	-	**-**	1	**0.75**	2	**2.40**
Ulster	5	**1.81**	1	**0.63**	4	**1.84**	-	**-**	-	**-**	10	**4.28**
Warren	1	**0.76**	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.76**
Washington	1	**1.77**	-	**-**	5	**7.02**	-	**-**	2	**1.70**	8	**10.49**
Wayne	3	**3.47**	1	**1.29**	1	**0.63**	-	**-**	-	**-**	5	**5.39**
Westchester	14	**1.09**	6	**0.47**	4	**0.31**	-	**-**	1	**0.11**	25	**1.97**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

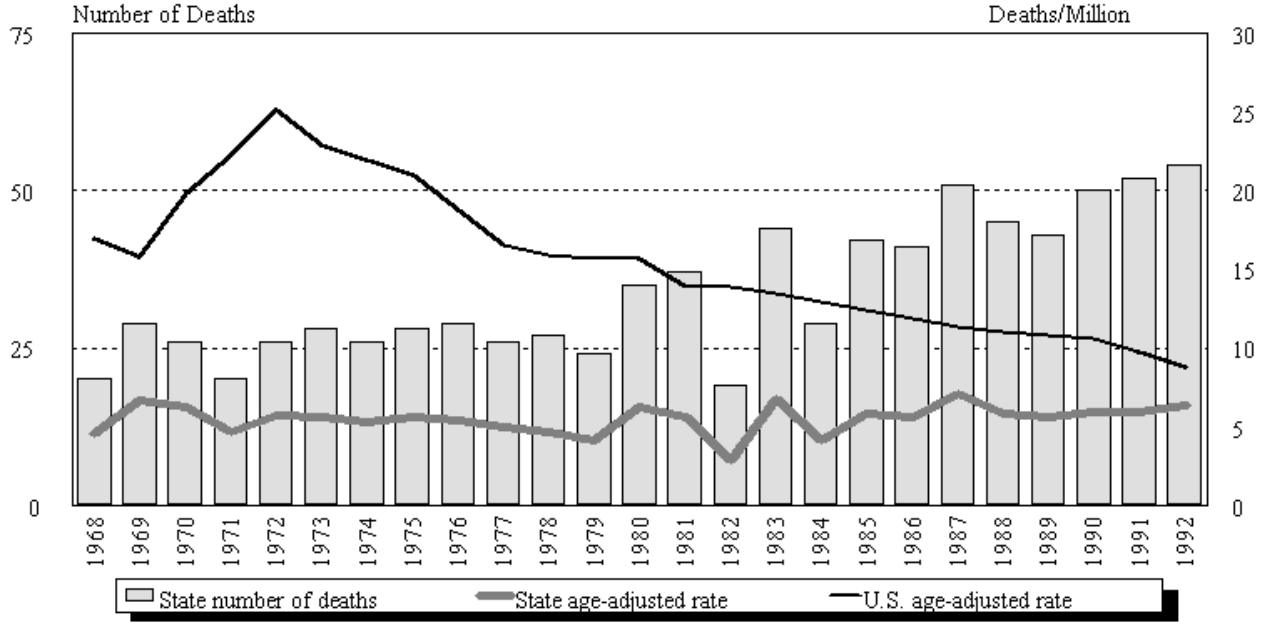
North Carolina: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	244	15
Crude mortality rate (per 1,000,000 population)	9.21	25
Age-adjusted mortality rate (per 1,000,000 population)	5.92	21
Total years of potential life lost to life expectancy	3,113	14
Years of potential life lost to life expectancy (per death)	12.8	11

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	100	41.0
Coal workers' pneumoconiosis	52	21.3
Silicosis	43	17.6
Byssinosis	29	11.9
Unspecified/Other pneumoconiosis	22	9.0

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure NC-1. All pneumoconioses: North Carolina and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

North Carolina

Table NC-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, North Carolina residents age 15 and over, 1968-1992

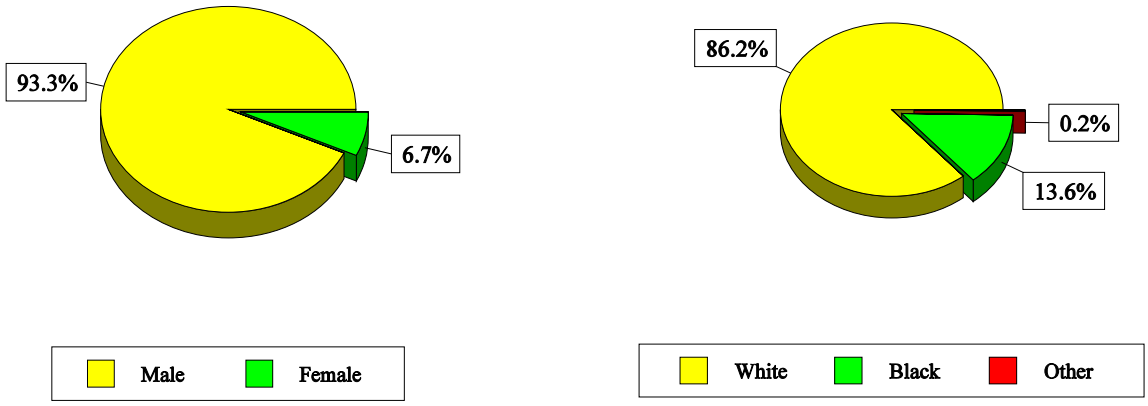
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	2	0.48	2	0.38	13	3.02			3	0.72	20	4.60
1969	4	1.00	3	0.63	19	4.37			4	0.96	29	6.72
1970	5	1.31	3	0.76	18	4.26			2	0.44	26	6.26
1971	1	0.24	1	0.23	15	3.44			3	0.73	20	4.64
1972	-	-	-	-	24	5.32			2	0.36	26	5.68
1973	3	0.67	4	0.83	11	2.07			10	2.10	28	5.66
1974	3	0.75	2	0.44	13	2.65			8	1.49	26	5.32
1975	1	0.22	4	0.87	13	2.57			11	2.19	28	5.64
1976	2	0.35	4	0.66	16	3.04			7	1.32	29	5.36
1977	1	0.26	3	0.45	11	2.00			11	2.32	26	5.03
1978	2	0.35	4	0.65	11	1.93			10	1.72	27	4.65
1979	4	0.71	2	0.34	11	1.80	3	0.57	4	0.74	24	4.17
1980	8	1.47	12	1.97	8	1.48	3	0.47	5	0.97	35	6.20
1981	4	0.53	9	1.45	9	1.45	7	1.10	9	1.31	37	5.65
1982	6	0.90	8	1.14	4	0.70	-	-	1	0.07	19	2.81
1983	9	1.36	15	2.22	11	1.67	7	1.29	2	0.19	44	6.73
1984	10	1.43	4	0.60	11	1.58	4	0.53	-	-	29	4.15
1985	15	2.23	7	0.86	12	1.57	7	1.10	1	0.11	42	5.87
1986	13	1.92	10	1.13	9	0.98	7	1.31	2	0.24	41	5.57
1987	17	2.57	12	1.37	12	1.71	9	1.28	1	0.14	51	7.07
1988	12	1.59	6	0.81	9	1.01	10	1.31	8	1.13	45	5.86
1989	17	2.29	11	1.29	7	0.97	4	0.59	4	0.51	43	5.65
1990	25	3.04	12	1.28	5	0.60	5	0.59	4	0.54	50	5.92
1991	21	2.54	13	1.31	14	1.64	2	0.14	2	0.26	52	5.90
1992	25	3.06	10	0.93	8	0.88	8	1.05	4	0.53	54	6.32

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure NC-2. All pneumoconioses: Distribution of deaths by sex and race, North Carolina residents age 15 and over, 1968-1992



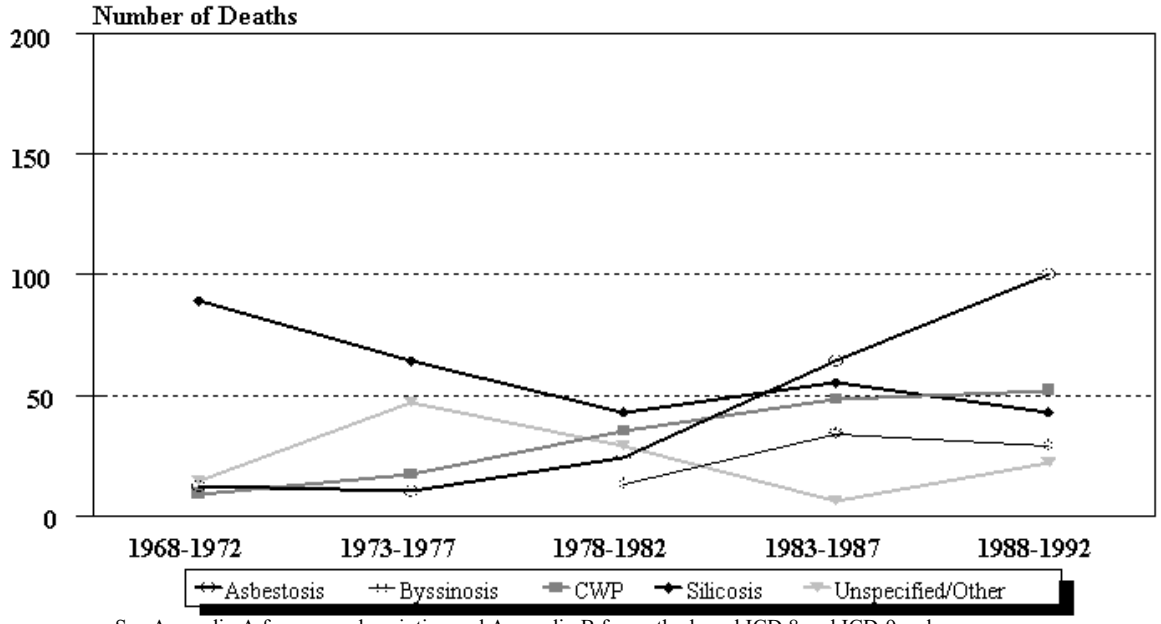
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table NC-2. All pneumoconioses: Distribution of deaths by sex, race, and age, North Carolina residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		851	100.0	244	100.0
Sex	Male	794	93.3	226	92.6
	Female	57	6.7	18	7.4
Race	White	733	86.2	223	91.4
	Black	116	13.6	20	8.2
	Other	2	0.2	1	0.4
Age	15-24	0	0.0	0	0.0
	25-34	1	0.1	0	0.0
	35-44	7	0.8	3	1.2
	45-54	47	5.5	4	1.6
	55-64	174	20.4	31	12.7
	65-74	341	40.1	101	41.4
	75-84	224	26.3	88	36.1
	85+	57	6.7	17	7.0
	Mean age	70.0		72.4	
	Range for age	25-95		40-94	

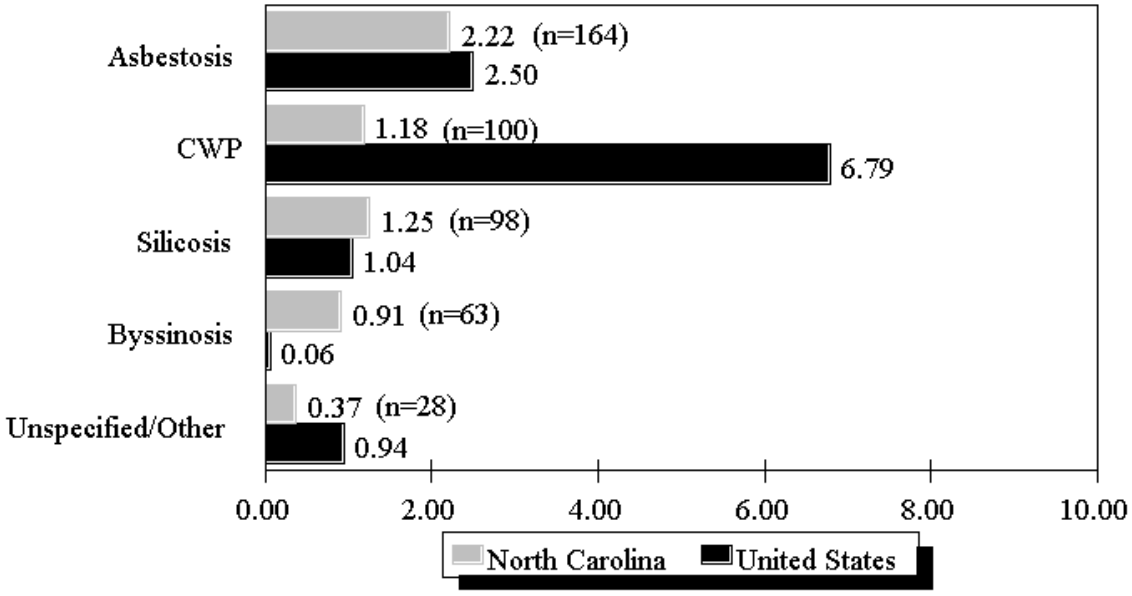
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure NC-3. Pneumoconiosis deaths by condition, North Carolina residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure NC-4. North Carolina and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table NC-3 (page 1 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, North Carolina residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Alamance	3	**2.16**	-	**-**	-	**-**	-	**-**	-	**-**	3	**2.16**
Alexander	1	**4.09**	1	**4.09**	1	**2.36**	-	**-**	-	**-**	3	**10.54**
Anson	3	**9.59**	-	**-**	-	**-**	-	**-**	-	**-**	3	**9.59**
Ashe	1	**5.98**	6	**14.21**	-	**-**	-	**-**	1	**1.66**	8	**21.85**
Avery	-	**-**	3	**16.14**	5	**19.56**	-	**-**	2	**9.71**	10	**45.41**
Beaufort	4	**7.41**	-	**-**	-	**-**	-	**-**	-	**-**	4	**7.41**
Bertie	1	**2.33**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.33**
Bladen	-	**-**	-	**-**	-	**-**	4	**13.02**	-	**-**	4	**13.02**
Brunswick	2	**2.94**	3	**4.81**	-	**-**	-	**-**	1	**1.60**	6	**9.36**
Buncombe	2	**0.76**	4	**1.52**	2	**1.04**	-	**-**	-	**-**	8	**3.31**
Burke	2	**1.50**	1	**0.75**	3	**2.25**	2	**2.06**	-	**-**	8	**6.56**
Cabarrus	4	**3.15**	-	**-**	1	**0.55**	1	**1.02**	-	**-**	6	**4.73**
Caldwell	2	**2.93**	2	**2.93**	1	**0.87**	2	**2.33**	-	**-**	7	**9.06**
Carteret	3	**4.44**	1	**1.09**	-	**-**	-	**-**	1	**1.67**	5	**7.20**
Caswell	-	**-**	-	**-**	1	**2.42**	-	**-**	-	**-**	1	**2.42**
Catawba	2	**1.78**	2	**1.07**	1	**0.54**	1	**0.54**	-	**-**	6	**3.92**
Cherokee	1	**1.89**	-	**-**	2	**5.78**	-	**-**	-	**-**	3	**7.67**
Chowan	1	**6.17**	1	**6.17**	-	**-**	-	**-**	-	**-**	2	**12.34**
Cleveland	1	**1.16**	-	**-**	2	**1.78**	1	**1.16**	-	**-**	4	**4.09**
Columbus	1	**1.91**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.91**
Craven	1	**1.41**	-	**-**	4	**5.62**	-	**-**	-	**-**	5	**7.03**
Cumberland	1	**0.62**	2	**1.24**	3	**1.86**	2	**1.03**	1	**0.62**	8	**4.75**
Currituck	1	**7.16**	-	**-**	-	**-**	-	**-**	-	**-**	1	**7.16**
Dare	1	**4.39**	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.39**
Davidson	1	**0.83**	3	**1.82**	2	**1.33**	-	**-**	-	**-**	6	**3.98**
Davie	2	**6.87**	1	**3.44**	-	**-**	1	**3.44**	1	**1.88**	5	**15.63**
Duplin	-	**-**	1	**2.33**	-	**-**	-	**-**	1	**1.26**	2	**3.60**
Durham	6	**2.82**	-	**-**	-	**-**	-	**-**	-	**-**	6	**2.82**
Edgecombe	1	**1.87**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.87**
Forsyth	4	**1.23**	5	**1.25**	1	**0.21**	-	**-**	2	**0.61**	12	**3.29**
Franklin	2	**6.90**	2	**2.81**	-	**-**	1	**1.40**	-	**-**	5	**11.12**

See footnotes at end of table.

Table NC-3 (page 2 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, North Carolina residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Gaston	4	**2.14**	-	**-**	1	**0.60**	4	**2.60**	-	**-**	9	**5.34**
Graham	1	**11.84**	-	**-**	-	**-**	-	**-**	-	**-**	1	**11.84**
Granville	-	**-**	-	**-**	1	**3.63**	-	**-**	-	**-**	1	**3.63**
Greene	1	**6.44**	1	**6.44**	1	**3.94**	-	**-**	-	**-**	3	**16.82**
Guilford	-	**-**	6	**1.17**	2	**0.49**	8	**2.33**	1	**0.32**	17	**4.30**
Halifax	2	**3.40**	-	**-**	-	**-**	1	**1.70**	-	**-**	3	**5.11**
Harnett	1	**1.65**	3	**4.23**	-	**-**	-	**-**	1	**1.65**	5	**7.54**
Haywood	4	**4.94**	-	**-**	-	**-**	-	**-**	-	**-**	4	**4.94**
Henderson	2	**1.54**	2	**2.62**	-	**-**	-	**-**	-	**-**	4	**4.16**
Hertford	2	**10.82**	-	**-**	-	**-**	-	**-**	-	**-**	2	**10.82**
Hoke	-	**-**	1	**3.62**	-	**-**	2	**9.25**	1	**3.62**	4	**16.50**
Iredell	2	**1.65**	7	**5.05**	1	**1.07**	1	**1.07**	2	**2.14**	13	**10.99**
Jackson	-	**-**	-	**-**	1	**3.86**	-	**-**	-	**-**	1	**3.86**
Johnston	1	**1.27**	1	**0.74**	1	**1.27**	1	**1.27**	1	**0.74**	5	**5.29**
Lee	-	**-**	2	**3.84**	-	**-**	-	**-**	1	**2.38**	3	**6.22**
Lenoir	3	**4.23**	-	**-**	1	**0.95**	-	**-**	-	**-**	4	**5.18**
Lincoln	1	**2.18**	-	**-**	-	**-**	1	**1.33**	-	**-**	2	**3.52**
McDonwell	-	**-**	-	**-**	3	**5.31**	-	**-**	-	**-**	3	**5.31**
Macon	1	**1.31**	-	**-**	3	**5.54**	-	**-**	1	**2.91**	5	**9.77**
Madison	1	**5.17**	-	**-**	-	**-**	-	**-**	-	**-**	1	**5.17**
Martin	1	**3.61**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.61**
Mecklenberg	22	**4.71**	1	**0.16**	2	**0.42**	2	**0.43**	2	**0.42**	29	**6.14**
Mitchell	-	**-**	1	**2.54**	17	**76.64**	-	**-**	2	**15.08**	20	**94.25**
Montgomery	-	**-**	1	**2.21**	-	**-**	-	**-**	-	**-**	1	**2.21**
Moore	1	**1.25**	1	**0.69**	-	**-**	-	**-**	-	**-**	2	**1.94**
Nash	-	**-**	-	**-**	3	**3.99**	-	**-**	-	**-**	3	**3.99**
New Hanover	15	**11.63**	2	**1.38**	1	**0.51**	-	**-**	-	**-**	18	**13.52**
Onslow	-	**-**	1	**1.63**	-	**-**	-	**-**	1	**1.29**	2	**2.92**
Orange	1	**0.88**	1	**0.88**	-	**-**	3	**4.26**	1	**0.88**	6	**6.91**
Pasquotank	1	**3.30**	-	**-**	-	**-**	1	**3.30**	-	**-**	2	**6.60**
Perquimans	1	**7.41**	-	**-**	-	**-**	-	**-**	-	**-**	1	**7.41**
Person	-	**-**	1	**1.64**	-	**-**	-	**-**	-	**-**	1	**1.64**

See footnotes at end of table.

Table NC-3 (page 3 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, North Carolina residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Pitt	1	**1.52**	-	**-**	1	**1.23**	-	**-**	-	**-**	2	**2.75**
Randolph	1	**1.00**	5	**4.59**	-	**-**	1	**1.00**	-	**-**	7	**6.59**
Richmond	3	**6.20**	3	**5.31**	-	**-**	8	**16.86**	-	**-**	13	**26.31**
Rockingham	2	**1.16**	2	**1.67**	-	**-**	2	**2.18**	1	**1.09**	7	**6.10**
Rowan	8	**5.40**	3	**2.08**	2	**0.83**	5	**4.15**	-	**-**	18	**12.45**
Rutherford	2	**3.17**	-	**-**	-	**-**	1	**1.59**	-	**-**	3	**4.76**
Sampson	2	**3.01**	-	**-**	1	**2.99**	-	**-**	-	**-**	3	**6.00**
Scotland	1	**3.46**	-	**-**	-	**-**	3	**7.52**	-	**-**	4	**10.98**
Stanly	2	**2.75**	1	**1.79**	-	**-**	2	**3.57**	-	**-**	5	**8.10**
Stokes	1	**3.06**	2	**4.66**	1	**1.60**	-	**-**	-	**-**	4	**9.32**
Surry	1	**0.74**	4	**5.18**	7	**7.41**	-	**-**	-	**-**	12	**13.33**
Swain	-	**-**	-	**-**	1	**3.67**	-	**-**	-	**-**	1	**3.67**
Tyrrell	1	**21.33**	-	**-**	-	**-**	-	**-**	-	**-**	1	**21.33**
Union	8	**10.89**	2	**2.43**	-	**-**	2	**2.43**	-	**-**	12	**15.76**
Vance	-	**-**	-	**-**	2	**5.21**	-	**-**	-	**-**	2	**5.21**
Wake	7	**2.03**	3	**0.97**	3	**0.83**	-	**-**	-	**-**	13	**3.83**
Watauga	-	**-**	1	**1.76**	-	**-**	-	**-**	-	**-**	1	**1.76**
Wayne	2	**2.23**	2	**1.84**	1	**1.12**	-	**-**	1	**1.12**	6	**6.30**
Wilkes	-	**-**	-	**-**	-	**-**	-	**-**	2	**2.58**	2	**2.58**
Wilson	-	**-**	-	**-**	4	**6.73**	-	**-**	-	**-**	4	**6.73**
Yadkin	-	**-**	2	**3.02**	-	**-**	-	**-**	-	**-**	2	**3.02**
Yancey	-	**-**	-	**-**	8	**37.71**	-	**-**	-	**-**	8	**37.71**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

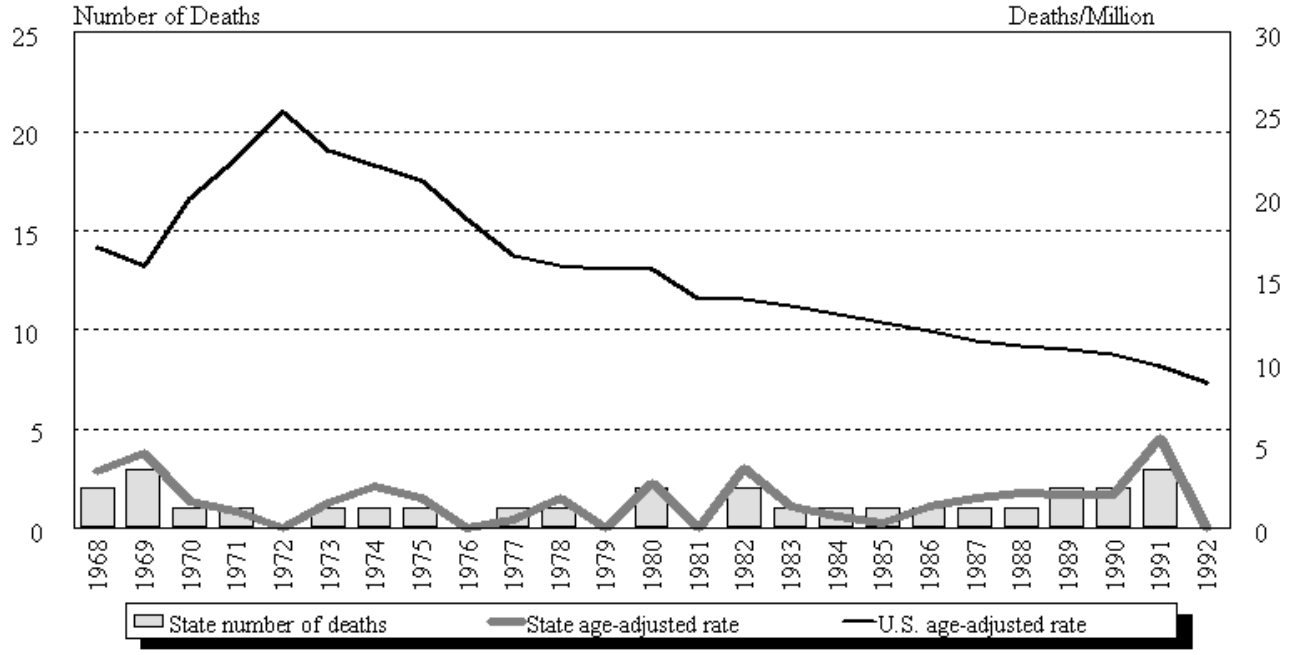
North Dakota: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	8	48
Crude mortality rate (per 1,000,000 population)	3.27	49
Age-adjusted mortality rate (per 1,000,000 population)	2.33	47
Total years of potential life lost to life expectancy	155	48
Years of potential life lost to life expectancy (per death)	19.4	2

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	4	50.0
Coal workers' pneumoconiosis	2	25.0
Silicosis	1	12.5
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	1	12.5

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure ND-1. All pneumoconioses: North Dakota and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

North Dakota

Table ND-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, North Dakota residents age 15 and over, 1968-1992

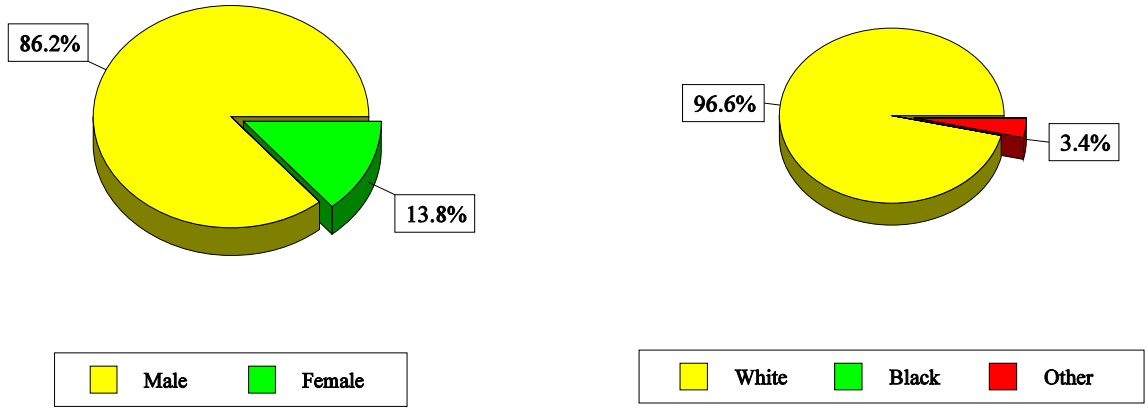
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	1	1.83			2	3.48	2	3.48
1969	-	-	1	1.07	2	3.48			-	-	3	4.55
1970	-	-	-	-	-	-			1	1.64	1	1.64
1971	-	-	-	-	-	-			1	1.06	1	1.06
1972	-	-	-	-	-	-			-	-	-	-
1973	-	-	-	-	-	-			1	1.54	1	1.54
1974	-	-	-	-	-	-			1	2.51	1	2.51
1975	-	-	-	-	1	1.84			-	-	1	1.84
1976	-	-	-	-	-	-			-	-	-	-
1977	-	-	-	-	1	0.50			-	-	1	0.50
1978	-	-	-	-	-	-			1	1.85	1	1.85
1979	-	-	-	-	-	-	-	-	-	-	-	-
1980	2	2.79	-	-	-	-	-	-	-	-	2	2.79
1981	-	-	-	-	-	-	-	-	-	-	-	-
1982	2	3.62	-	-	-	-	-	-	-	-	2	3.62
1983	1	1.31	-	-	-	-	-	-	-	-	1	1.31
1984	-	-	-	-	1	0.78	-	-	-	-	1	0.78
1985	-	-	-	-	1	0.36	-	-	-	-	1	0.36
1986	-	-	1	1.31	-	-	-	-	-	-	1	1.31
1987	-	-	1	1.87	-	-	-	-	-	-	1	1.87
1988	-	-	-	-	1	2.13	-	-	-	-	1	2.13
1989	1	1.34	1	0.72	-	-	-	-	-	-	2	2.06
1990	-	-	1	0.71	-	-	-	-	1	1.36	2	2.07
1991	3	5.43	-	-	-	-	-	-	-	-	3	5.43
1992	-	-	-	-	-	-	-	-	-	-	-	-

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure ND-2. All pneumoconioses: Distribution of deaths by sex and race, North Dakota residents age 15 and over, 1968-1992



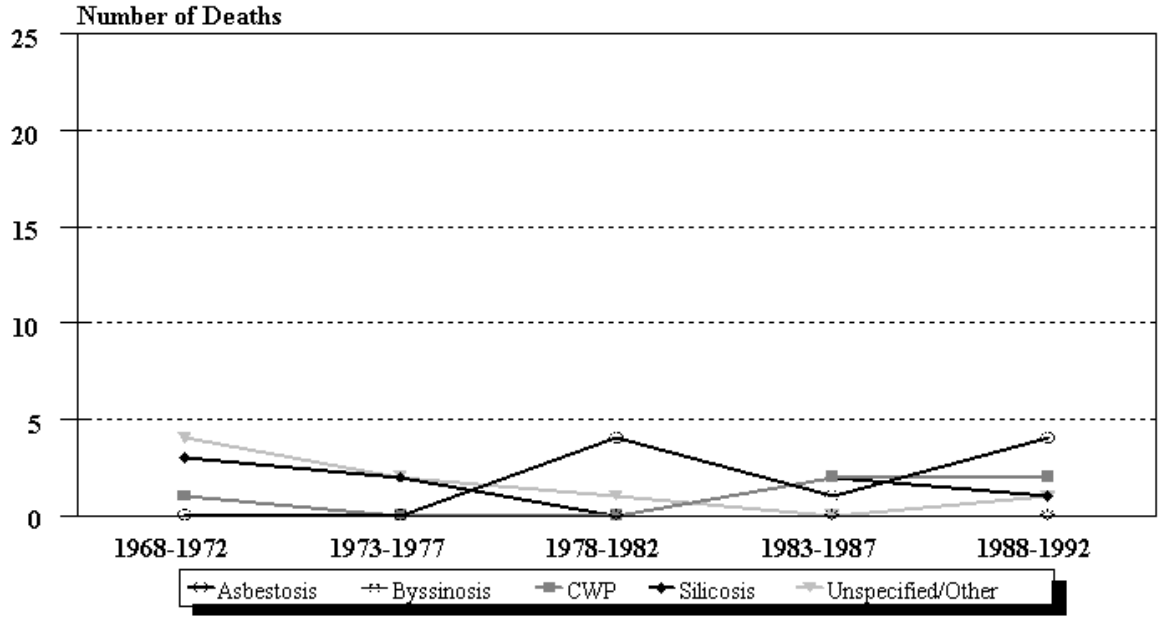
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table ND-2. All pneumoconioses: Distribution of deaths by sex, race, and age, North Dakota residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		29	100.0	8	100.0
Sex	Male	25	86.2	8	100.0
	Female	4	13.8	0	0.0
Race	White	28	96.6	8	100.0
	Black	0	0.0	0	0.0
	Other	1	3.4	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	0	0.0	0	0.0
	35-44	2	6.9	2	25.0
	45-54	1	3.4	0	0.0
	55-64	9	31.0	1	12.5
	65-74	9	31.0	3	37.5
	75-84	6	20.7	2	25.0
	85+	2	6.9	0	0.0
	Mean age	66.9		64.3	
	Range for age	38-85		38-82	

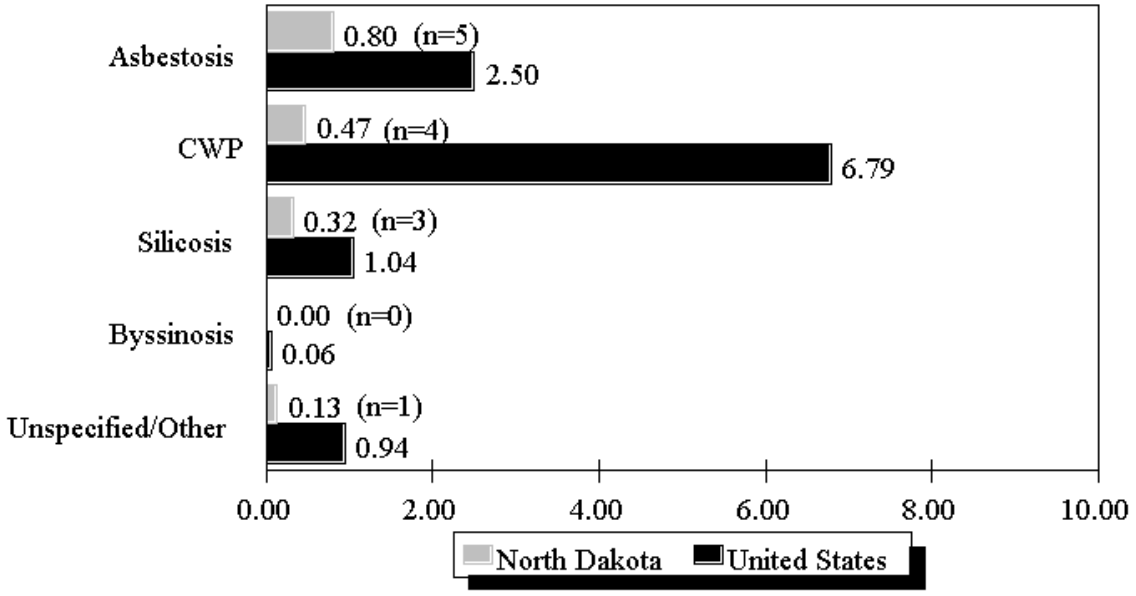
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure ND-3. Pneumoconiosis deaths by condition, North Dakota residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure ND-4. North Dakota and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table ND-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, North Dakota residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Bottineau	1	**9.98**	-	**-**	-	**-**	-	**-**	-	**-**	1	**9.98**
Burleigh	-	**-**	1	**2.08**	-	**-**	-	**-**	-	**-**	1	**2.08**
Cass	2	**2.89**	-	**-**	1	**1.51**	-	**-**	-	**-**	3	**4.41**
Emmons	-	**-**	-	**-**	1	**5.78**	-	**-**	-	**-**	1	**5.78**
Grand Forks	-	**-**	1	**2.33**	-	**-**	-	**-**	-	**-**	1	**2.33**
Griggs	-	**-**	-	**-**	-	**-**	-	**-**	1	**20.59**	1	**20.59**
La Moure	1	**12.96**	-	**-**	-	**-**	-	**-**	-	**-**	1	**12.96**
McHenry	-	**-**	1	**4.09**	-	**-**	-	**-**	-	**-**	1	**4.09**
Morton	1	**4.30**	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.30**
Stutsman	-	**-**	-	**-**	1	**1.63**	-	**-**	-	**-**	1	**1.63**
Traill	-	**-**	1	**2.85**	-	**-**	-	**-**	-	**-**	1	**2.85**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

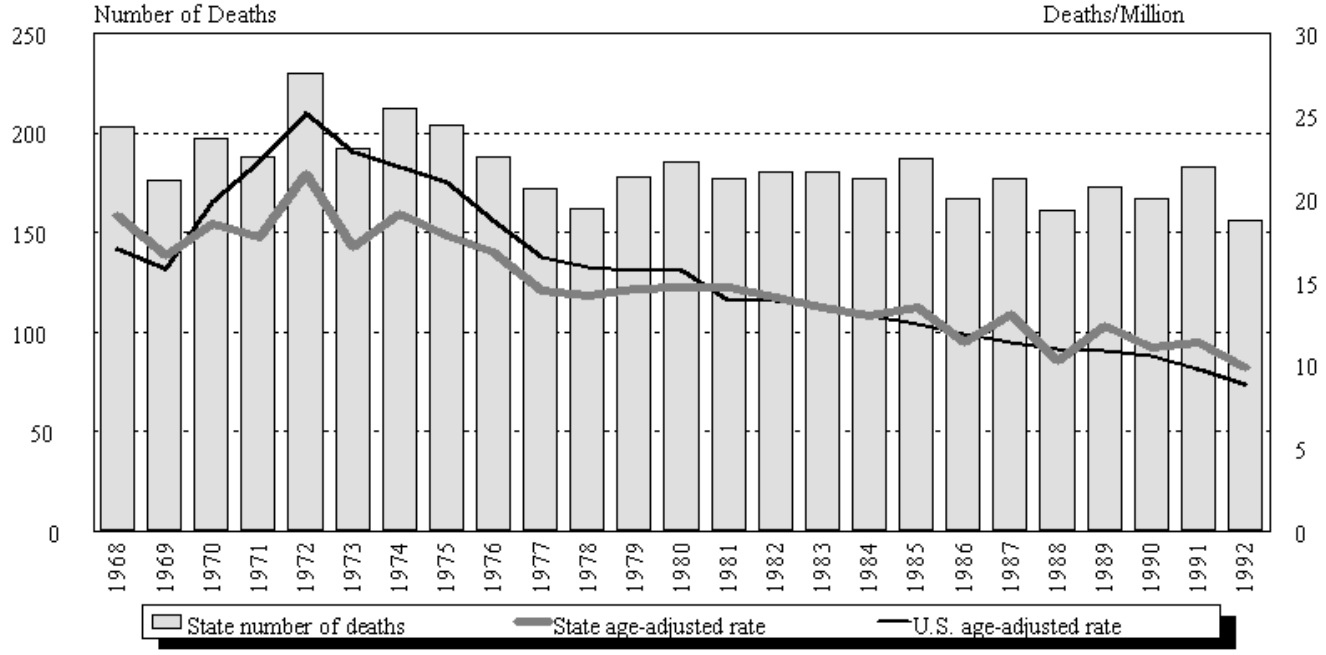
Ohio: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	840	5
Crude mortality rate (per 1,000,000 population)	19.77	8
Age-adjusted mortality rate (per 1,000,000 population)	10.96	9
Total years of potential life lost to life expectancy	9,882	5
Years of potential life lost to life expectancy (per death)	11.8	31

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	118	14.0
Coal workers' pneumoconiosis	428	51.0
Silicosis	153	18.2
Byssinosis	3	0.4
Unspecified/Other pneumoconiosis	145	17.3

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure OH-1. All pneumoconioses: Ohio and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Ohio

Table OH-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Ohio residents age 15 and over, 1968-1992

Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	2	0.23	24	2.26	143	13.44			39	3.63	203	19.06
1969	-	-	16	1.52	124	11.69			39	3.65	176	16.60
1970	5	0.62	28	2.52	132	12.36			33	3.12	197	18.54
1971	3	0.32	30	2.91	103	9.79			54	4.93	188	17.74
1972	6	0.64	28	2.46	126	12.25			70	6.17	230	21.53
1973	1	0.11	35	3.43	83	7.11			78	6.91	192	17.15
1974	1	0.10	48	4.52	86	7.81			82	7.15	212	19.08
1975	3	0.33	56	5.08	66	5.72			80	6.74	204	17.78
1976	1	0.11	50	4.82	62	5.48			77	6.66	188	16.83
1977	4	0.36	61	5.26	54	4.63			56	4.49	172	14.53
1978	6	0.61	41	3.55	57	5.13			64	5.43	162	14.19
1979	7	0.68	68	5.66	52	4.22	1	0.09	50	3.93	178	14.59
1980	9	0.82	92	7.34	42	3.35	-	-	46	3.58	185	14.74
1981	8	0.74	105	8.87	38	3.15	-	-	30	2.34	177	14.74
1982	10	1.10	86	6.26	50	3.98	-	-	34	2.71	180	14.04
1983	9	0.87	105	7.53	32	2.64	-	-	36	2.60	180	13.52
1984	10	0.82	93	6.83	47	3.65	-	-	28	1.81	177	13.01
1985	17	1.50	105	7.29	31	2.35	-	-	36	2.54	187	13.51
1986	14	1.24	92	6.11	41	2.72	-	-	22	1.48	167	11.40
1987	21	1.97	91	6.08	29	2.59	-	-	36	2.41	177	13.06
1988	12	0.98	102	5.91	26	1.89	2	0.13	20	1.37	161	10.23
1989	23	1.93	90	6.30	35	2.37	-	-	27	1.90	173	12.37
1990	27	2.12	79	4.82	33	2.20	1	0.11	29	1.93	167	11.04
1991	24	1.91	83	4.91	35	2.11	-	-	42	2.55	183	11.40
1992	32	2.48	74	3.89	24	1.80	-	-	27	1.79	156	9.86

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure OH-2. All pneumoconioses: Distribution of deaths by sex and race, Ohio residents age 15 and over, 1968-1992

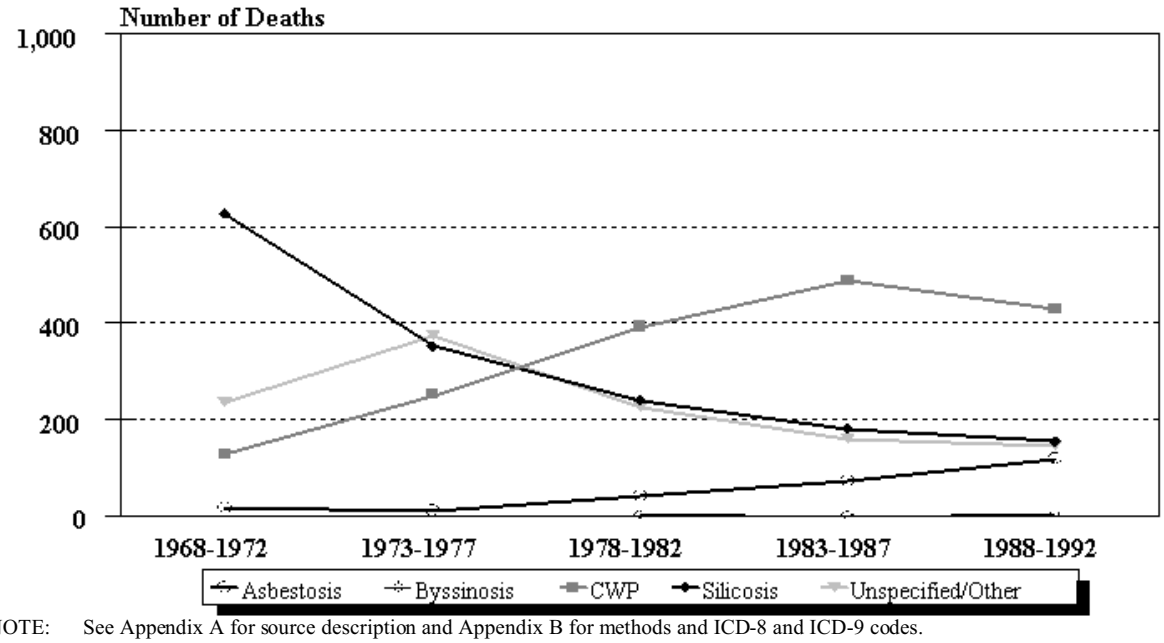
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table OH-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Ohio residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		4,572	100.0	840	100.0
Sex	Male	4,422	96.7	815	97.0
	Female	150	3.3	25	3.0
Race	White	3,933	86.0	743	88.5
	Black	629	13.8	93	11.1
	Other	10	0.2	4	0.5
Age	15-24	3	0.1	0	0.0
	25-34	4	0.1	2	0.2
	35-44	17	0.4	2	0.2
	45-54	164	3.6	14	1.7
	55-64	763	16.7	90	10.7
	65-74	1,679	36.7	293	34.9
	75-84	1,429	31.3	309	36.8
	85+	513	11.2	130	15.5
	Mean age	72.3		74.9	
	Range for age	16-101		31-99	

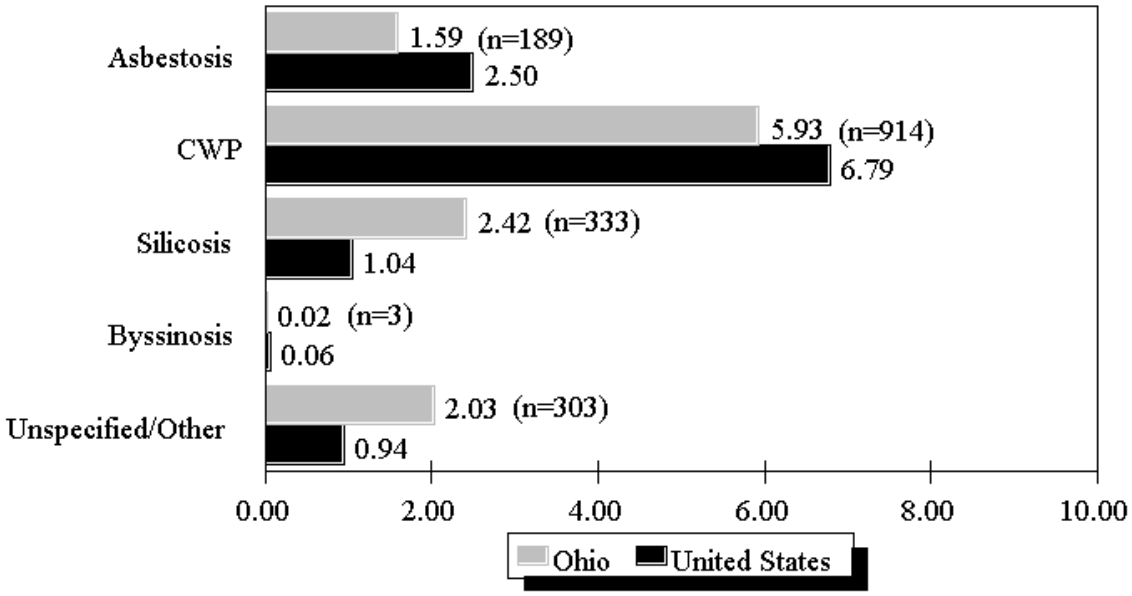
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure OH-3. Pneumoconiosis deaths by condition, Ohio residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure OH-4. Ohio and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table OH-3 (page 1 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Ohio residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Adams	-	-	3	7.89	-	-	-	-	2	3.85	5	11.73
Allen	2	1.87	4	2.29	1	0.45	-	-	1	0.94	8	5.55
Ashland	1	2.17	6	8.32	3	5.34	-	-	1	1.00	11	16.83
Ashtabula	6	4.70	6	2.78	1	0.46	-	-	1	0.94	14	8.89
Athens	-	-	27	45.81	-	-	-	-	8	11.27	35	57.08
Avglaize	-	-	6	7.76	3	7.09	-	-	-	-	9	14.84
Belmont	2	1.00	64	44.17	1	0.50	-	-	25	20.94	91	66.11
Brown	1	3.08	1	1.43	-	-	-	-	-	-	2	4.51
Butler	4	1.49	22	7.03	13	4.34	-	-	3	0.89	40	12.92
Carroll	1	3.69	6	15.31	2	7.38	-	-	-	-	9	26.39
Champaign	-	-	4	10.52	1	1.44	-	-	-	-	5	11.95
Clark	-	-	7	2.65	4	2.68	-	-	2	1.35	13	6.67
Clermont	2	1.51	2	1.51	-	-	-	-	4	2.66	8	5.67
Clinton	-	-	4	10.52	-	-	-	-	-	-	4	10.52
Columbiana	3	2.98	17	10.27	24	14.63	-	-	10	5.60	52	32.21
Coshocton	-	-	12	25.09	4	10.62	-	-	1	1.31	17	37.01
Crawford	-	-	4	5.88	1	0.93	-	-	4	6.96	9	13.78
Cuyahoga	17	0.98	75	3.19	57	2.59	-	-	39	1.76	187	8.45
Darke	-	-	4	3.18	-	-	-	-	1	0.80	5	3.98
Defiance	1	1.47	1	1.47	-	-	-	-	2	5.83	4	8.76
Delaware	2	4.01	3	4.26	2	4.01	-	-	1	1.13	8	13.40
Erie	2	1.94	5	4.59	4	4.42	-	-	-	-	10	9.71
Fairfield	1	1.13	4	2.86	2	1.71	-	-	-	-	7	5.70
Franklin	10	1.20	61	6.68	18	1.85	-	-	19	1.80	108	11.53
Fulton	-	-	-	-	-	-	-	-	1	1.31	1	1.31
Gallia	3	10.11	4	10.04	2	3.30	-	-	6	13.34	15	36.79
Geauga	1	1.43	4	4.69	2	2.86	-	-	2	2.35	9	11.33
Greene	4	3.33	13	9.71	-	-	-	-	3	2.35	20	15.40
Guernsey	-	-	14	24.32	2	3.47	-	-	8	11.29	24	39.08
Hamilton	22	2.22	51	4.40	20	1.68	-	-	12	0.85	104	9.10
Hancock	-	-	-	-	2	2.41	-	-	1	0.76	3	3.17

See footnotes at end of table.

Table OH-3 (page 2 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Ohio residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Hardin	-	-	2	4.89	1	3.41	-	-	-	-	3	8.30
Harrison	-	-	10	49.86	-	-	-	-	3	12.69	13	62.55
Henry	1	1.55	1	3.57	-	-	-	-	1	3.57	3	8.70
Highland	-	-	2	3.88	-	-	-	-	1	2.66	3	6.54
Hocking	1	5.55	3	9.82	1	1.97	-	-	1	1.97	6	19.32
Holmes	-	-	2	7.08	1	1.76	-	-	-	-	3	8.84
Huron	-	-	2	2.02	2	2.02	-	-	1	1.01	5	5.06
Jackson	1	3.17	10	21.82	8	23.73	-	-	10	25.12	28	70.68
Jefferson	3	3.19	29	21.66	3	3.63	-	-	9	6.87	44	35.35
Knox	1	2.04	1	0.94	7	13.16	-	-	-	-	9	16.14
Lake	1	0.31	11	4.07	4	1.88	-	-	3	1.44	19	7.70
Lawrence	3	4.67	10	12.08	1	0.86	-	-	10	14.17	24	31.78
Licking	-	-	2	0.90	2	1.30	-	-	1	0.45	5	2.65
Logan	-	-	-	-	1	2.28	-	-	-	-	1	2.28
Lorain	6	2.38	14	4.50	8	3.36	1	0.41	11	3.90	40	14.56
Lucas	14	2.94	14	2.59	9	2.11	-	-	5	1.02	42	8.65
Madison	-	-	3	7.19	-	-	-	-	-	-	3	7.19
Mahoning	6	1.68	15	3.00	6	1.11	-	-	6	1.26	33	7.05
Marion	-	-	4	4.14	8	9.60	-	-	2	3.00	14	16.74
Medina	-	-	17	13.65	2	1.23	-	-	4	3.83	22	18.09
Meigs	-	-	10	31.72	1	4.01	-	-	12	31.37	23	67.10
Mercer	-	-	1	2.63	-	-	-	-	-	-	1	2.63
Miami	1	0.59	2	1.72	1	0.59	-	-	1	1.13	4	3.44
Monroe	-	-	1	2.50	-	-	-	-	1	5.80	2	8.30
Montgomery	8	1.35	51	6.52	14	2.09	-	-	8	1.20	81	11.16
Morgan	-	-	5	14.67	2	5.87	-	-	-	-	7	20.53
Morrow	-	-	6	19.11	1	4.17	-	-	1	4.17	8	27.46
Muskingum	1	1.21	29	27.87	14	9.83	-	-	3	2.34	47	41.24
Noble	-	-	1	3.42	1	8.22	-	-	2	6.85	4	18.49
Ottawa	-	-	1	1.20	-	-	-	-	1	2.16	2	3.35
Paulding	-	-	4	20.80	-	-	-	-	-	-	4	20.80
Perry	-	-	38	97.51	8	17.80	-	-	1	3.34	47	118.65

See footnotes at end of table.

Table OH-3 (page 3 of 3). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Ohio residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Pickaway	5	**12.47**	7	**13.56**	3	**7.75**	-	**-**	1	**2.49**	16	**36.27**
Pike	1	**6.25**	4	**14.63**	-	**-**	-	**-**	1	**4.25**	6	**25.12**
Portage	4	**3.76**	13	**9.05**	-	**-**	-	**-**	3	**2.04**	20	**14.84**
Preble	-	**-**	4	**9.22**	-	**-**	-	**-**	-	**-**	4	**9.22**
Putnam	-	**-**	1	**3.42**	1	**3.42**	-	**-**	-	**-**	2	**6.84**
Richland	-	**-**	11	**7.18**	3	**2.30**	-	**-**	2	**0.86**	16	**10.34**
Ross	1	**1.51**	1	**0.80**	-	**-**	-	**-**	-	**-**	2	**2.32**
Sandusky	1	**1.66**	3	**3.27**	-	**-**	-	**-**	-	**-**	4	**4.92**
Scioto	1	**1.16**	4	**4.02**	7	**5.60**	-	**-**	2	**2.37**	14	**13.16**
Seneca	-	**-**	1	**1.73**	2	**3.45**	-	**-**	-	**-**	3	**5.18**
Shelby	-	**-**	6	**10.22**	1	**2.57**	-	**-**	1	**1.27**	8	**14.05**
Stark	4	**1.03**	14	**2.73**	20	**4.14**	-	**-**	6	**1.17**	44	**9.06**
Summit	26	**4.08**	32	**4.16**	8	**1.50**	-	**-**	8	**1.15**	73	**10.70**
Trumbull	2	**0.79**	20	**6.25**	6	**2.04**	2	**0.63**	6	**1.55**	34	**10.63**
Tuscarawas	-	**-**	33	**26.63**	1	**1.11**	-	**-**	7	**6.00**	41	**33.74**
Union	1	**4.37**	3	**7.41**	-	**-**	-	**-**	-	**-**	4	**11.78**
Van Wert	-	**-**	1	**3.21**	-	**-**	-	**-**	-	**-**	1	**3.21**
Vinton	2	**17.78**	1	**4.22**	-	**-**	-	**-**	2	**17.78**	5	**39.78**
Warren	2	**1.87**	4	**3.29**	2	**2.33**	-	**-**	5	**5.83**	13	**13.32**
Washington	1	**1.59**	4	**3.87**	1	**0.76**	-	**-**	-	**-**	6	**6.22**
Wayne	1	**1.15**	7	**6.02**	1	**1.15**	-	**-**	3	**2.87**	12	**11.19**
Williams	2	**4.12**	-	**-**	-	**-**	-	**-**	-	**-**	2	**4.12**
Wood	3	**3.14**	4	**4.62**	1	**0.59**	-	**-**	1	**0.59**	9	**8.94**
Wyandot	-	**-**	1	**4.35**	1	**6.62**	-	**-**	-	**-**	2	**10.97**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

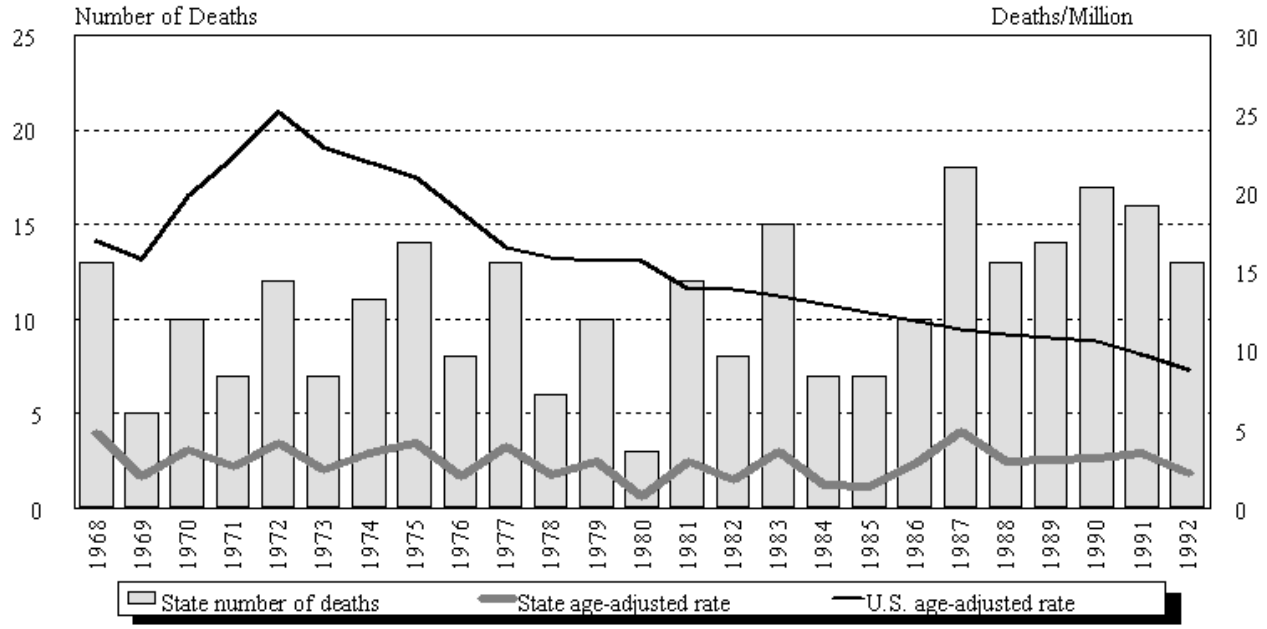
Oklahoma: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	73	32
Crude mortality rate (per 1,000,000 population)	5.98	35
Age-adjusted mortality rate (per 1,000,000 population)	3.00	42
Total years of potential life lost to life expectancy	839	33
Years of potential life lost to life expectancy (per death)	11.5	35

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	30	41.1
Coal workers' pneumoconiosis	17	23.3
Silicosis	14	19.2
Byssinosis	1	1.4
Unspecified/Other pneumoconiosis	11	15.1

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure OK-1. All pneumoconioses: Oklahoma and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Oklahoma

Table OK-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Oklahoma residents age 15 and over, 1968-1992

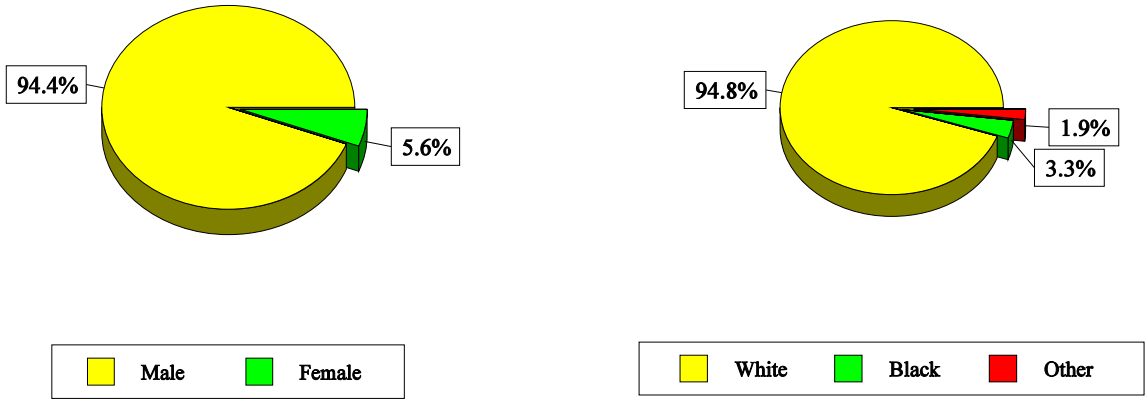
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	10	3.59			3	1.19	13	4.78
1969	-	-	-	-	4	1.61			1	0.42	5	2.03
1970	-	-	-	-	7	2.77			3	0.95	10	3.72
1971	-	-	1	0.24	5	1.97			2	0.84	7	2.63
1972	-	-	4	1.31	6	2.14			4	1.50	12	4.11
1973	-	-	1	0.14	2	0.91			4	1.42	7	2.46
1974	-	-	1	0.13	8	2.77			3	0.77	11	3.45
1975	1	0.31	3	0.97	5	1.20			5	1.60	14	4.09
1976	-	-	2	0.34	1	0.30			5	1.39	8	2.04
1977	-	-	4	1.21	3	1.04			7	2.01	13	3.96
1978	2	0.82	3	0.79	-	-			1	0.53	6	2.15
1979	1	0.39	3	0.97	3	0.97	-	-	3	0.60	10	2.92
1980	-	-	2	0.48	1	0.29	-	-	-	-	3	0.77
1981	-	-	10	2.27	-	-	-	-	2	0.74	12	3.01
1982	4	1.38	4	0.38	-	-	-	-	-	-	8	1.77
1983	6	1.73	6	0.96	2	0.69	-	-	1	0.26	15	3.65
1984	-	-	3	0.70	2	0.44	-	-	2	0.34	7	1.47
1985	2	0.61	4	0.61	-	-	-	-	1	0.17	7	1.38
1986	2	0.43	5	1.31	3	1.13	-	-	-	-	10	2.87
1987	5	1.63	8	1.55	4	1.46	-	-	1	0.27	18	4.90
1988	5	1.67	4	0.66	-	-	-	-	4	0.63	13	2.95
1989	8	1.77	3	0.52	1	0.16	-	-	2	0.58	14	3.04
1990	6	1.30	5	0.68	4	0.91	-	-	2	0.24	17	3.13
1991	6	1.21	4	0.90	4	0.86	1	0.16	1	0.39	16	3.53
1992	5	1.13	1	0.08	5	0.81	-	-	2	0.23	13	2.24

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure OK-2. All pneumoconioses: Distribution of deaths by sex and race, Oklahoma residents age 15 and over, 1968-1992



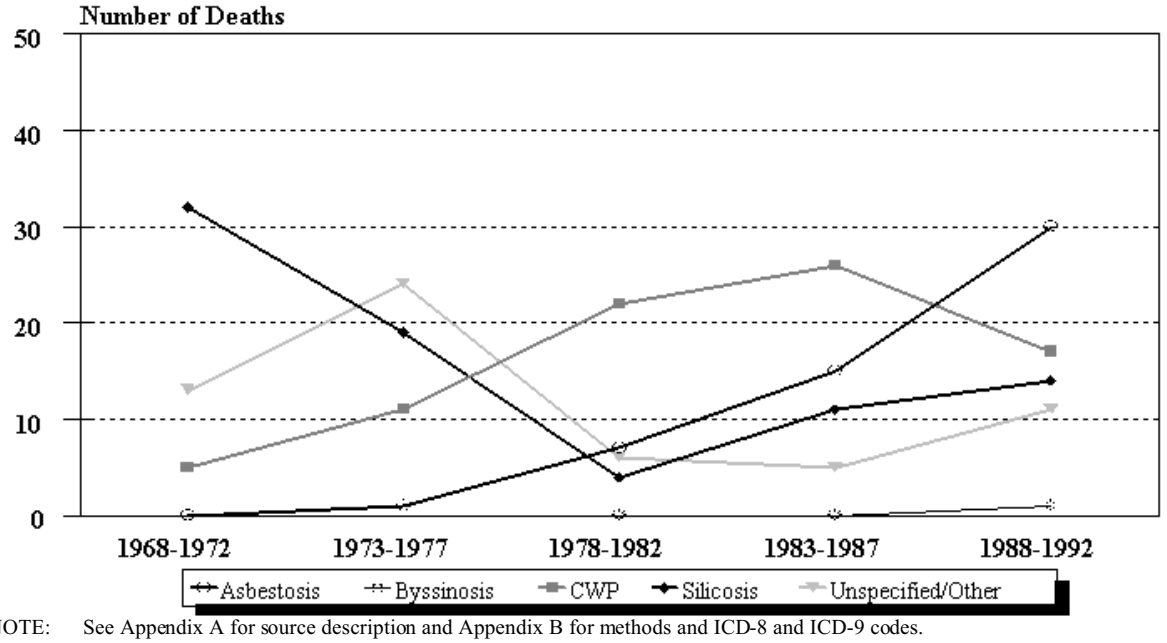
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table OK-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Oklahoma residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		269	100.0	73	100.0
Sex	Male	254	94.4	71	97.3
	Female	15	5.6	2	2.7
Race	White	255	94.8	67	91.8
	Black	9	3.3	4	5.5
	Other	5	1.9	2	2.7
Age	15-24	1	0.4	0	0.0
	25-34	0	0.0	0	0.0
	35-44	4	1.5	2	2.7
	45-54	17	6.3	0	0.0
	55-64	55	20.4	8	11.0
	65-74	74	27.5	19	26.0
	75-84	76	28.3	29	39.7
	85+	42	15.6	15	20.5
	Mean age	71.7		76.2	
	Range for age	19-101		39-101	

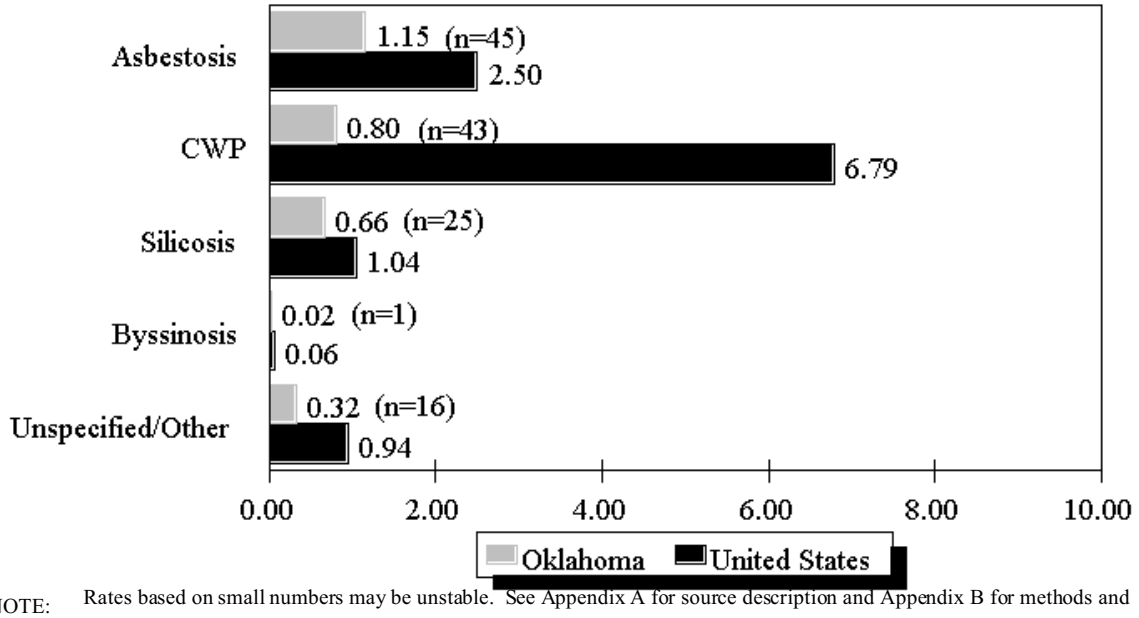
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure OK-3. Pneumoconiosis deaths by condition, Oklahoma residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure OK-4. Oklahoma and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table OK-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Oklahoma residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Adair	1	**5.53**	-	**-**	-	**-**	-	**-**	-	**-**	1	**5.53**
Bryan	3	**6.64**	-	**-**	-	**-**	-	**-**	-	**-**	3	**6.64**
Canadian	-	**-**	1	**2.01**	-	**-**	-	**-**	-	**-**	1	**2.01**
Carter	1	**0.80**	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.80**
Choctaw	1	**2.09**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.09**
Cleveland	-	**-**	2	**1.60**	1	**0.97**	-	**-**	-	**-**	3	**2.57**
Creek	3	**4.93**	-	**-**	-	**-**	-	**-**	-	**-**	3	**4.93**
Delaware	-	**-**	1	**1.29**	1	**1.29**	-	**-**	-	**-**	2	**2.59**
Garfield	1	**0.65**	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.65**
Grady	2	**4.98**	-	**-**	-	**-**	-	**-**	-	**-**	2	**4.98**
Grant	-	**-**	1	**3.93**	-	**-**	-	**-**	-	**-**	1	**3.93**
Hughes	1	**5.47**	-	**-**	-	**-**	-	**-**	-	**-**	1	**5.47**
Jackson	1	**4.17**	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.17**
Jefferson	-	**-**	-	**-**	2	**13.92**	-	**-**	-	**-**	2	**13.92**
Kiowa	-	**-**	-	**-**	2	**8.72**	1	**2.01**	-	**-**	3	**10.73**
Latimer	-	**-**	7	**30.10**	-	**-**	-	**-**	1	**3.60**	8	**33.70**
Le Flore	-	**-**	9	**9.61**	1	**2.26**	-	**-**	1	**0.92**	11	**12.79**
Lincoln	1	**1.37**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.37**
McCurtain	1	**2.95**	2	**4.24**	-	**-**	-	**-**	-	**-**	3	**7.20**
Major	1	**3.49**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.49**
Marshall	1	**14.68**	-	**-**	-	**-**	-	**-**	-	**-**	1	**14.68**
Mayes	-	**-**	-	**-**	1	**4.31**	-	**-**	1	**4.31**	2	**8.61**
Murray	1	**2.46**	-	**-**	1	**6.44**	-	**-**	-	**-**	2	**8.91**
Muskogee	-	**-**	-	**-**	1	**1.35**	-	**-**	2	**1.92**	3	**3.27**
Noble	1	**2.85**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.85**
Nowata	-	**-**	-	**-**	-	**-**	-	**-**	2	**5.96**	2	**5.96**
Oklahoma	8	**1.25**	3	**0.60**	4	**0.69**	-	**-**	1	**0.09**	16	**2.63**
Okmulgee	2	**4.70**	6	**6.91**	-	**-**	-	**-**	-	**-**	8	**11.61**
Osage	1	**2.32**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.32**
Ottawa	1	**2.54**	-	**-**	6	**11.21**	-	**-**	-	**-**	7	**13.74**
Payne	1	**0.87**	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.87**
Pittsburg	1	**1.95**	3	**3.59**	-	**-**	-	**-**	2	**2.77**	6	**8.31**

See footnotes at end of table.

Table OK-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Oklahoma residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Pontotoc	1	**2.70**	1	**1.00**	-	**-**	-	**-**	-	**-**	2	**3.69**
Pushmataha	-	**-**	-	**-**	-	**-**	-	**-**	1	**7.03**	1	**7.03**
Rogers	2	**3.50**	-	**-**	-	**-**	-	**-**	-	**-**	2	**3.50**
Seminole	-	**-**	1	**1.19**	-	**-**	-	**-**	-	**-**	1	**1.19**
Sequoyah	-	**-**	2	**4.45**	-	**-**	-	**-**	-	**-**	2	**4.45**
Stephens	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.79**	1	**0.79**
Texas	-	**-**	1	**5.99**	-	**-**	-	**-**	-	**-**	1	**5.99**
Tillman	-	**-**	-	**-**	1	**2.59**	-	**-**	-	**-**	1	**2.59**
Tulsa	6	**0.91**	2	**0.34**	3	**0.62**	-	**-**	4	**0.62**	15	**2.49**
Wagoner	-	**-**	1	**1.50**	-	**-**	-	**-**	-	**-**	1	**1.50**
Washington	1	**0.88**	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.88**
Washita	1	**6.67**	-	**-**	-	**-**	-	**-**	-	**-**	1	**6.67**
Woodward	-	**-**	-	**-**	1	**2.35**	-	**-**	-	**-**	1	**2.35**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

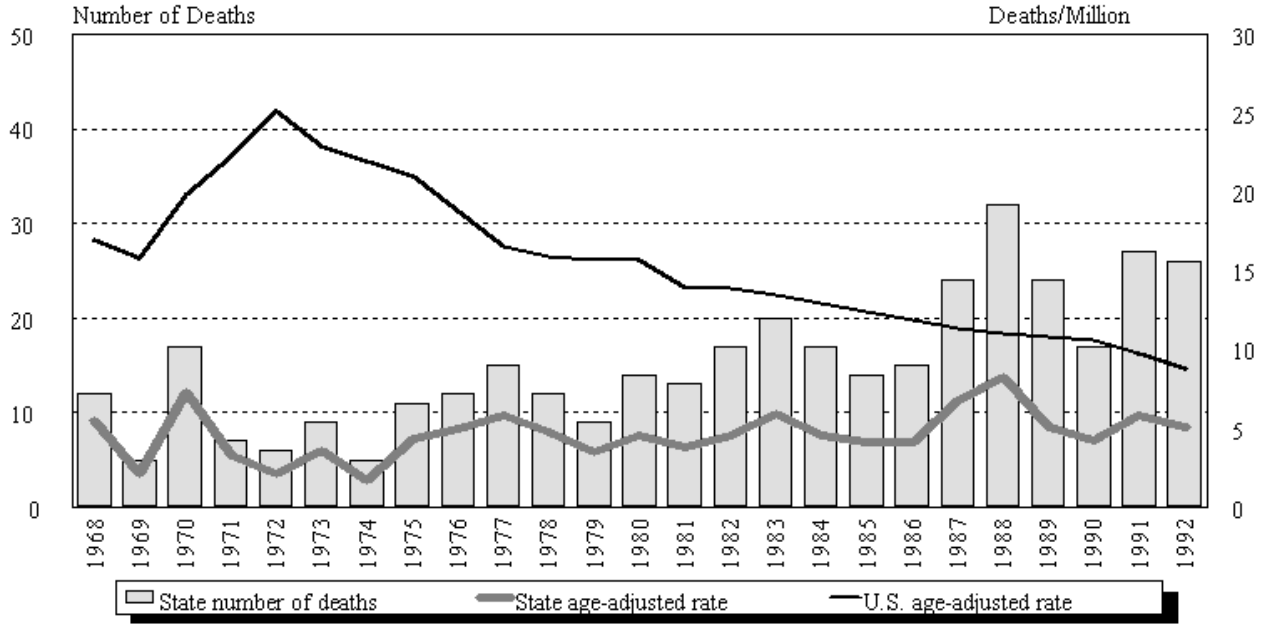
Oregon: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	126	22
Crude mortality rate (per 1,000,000 population)	11.27	18
Age-adjusted mortality rate (per 1,000,000 population)	5.65	22
Total years of potential life lost to life expectancy	1,400	26
Years of potential life lost to life expectancy (per death)	11.1	43

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	94	74.6
Coal workers' pneumoconiosis	12	9.5
Silicosis	16	12.7
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	5	4.0

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure OR-1. All pneumoconioses: Oregon and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Oregon

Table OR-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Oregon residents age 15 and over, 1968-1992

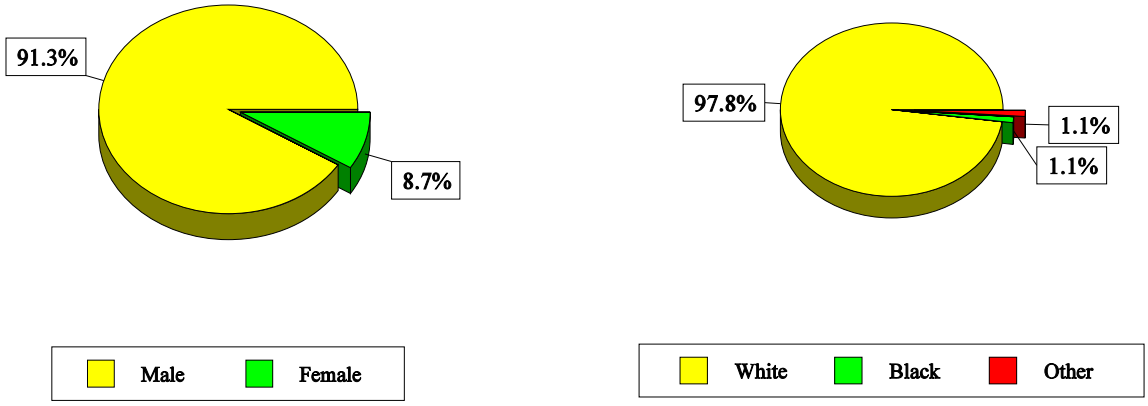
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	1	0.64	-	-	8	3.47			3	1.42	12	5.54
1969	-	-	-	-	5	2.10			-	-	5	2.10
1970	2	0.99	-	-	13	5.56			2	0.79	17	7.34
1971	1	0.51	1	0.64	3	1.38			2	0.77	7	3.30
1972	2	0.38	2	0.90	2	0.90			-	-	6	2.17
1973	2	0.73	-	-	5	2.04			2	0.87	9	3.65
1974	1	0.29	1	0.29	3	1.14			-	-	5	1.72
1975	2	0.82	2	0.89	6	2.39			2	0.77	11	4.39
1976	3	1.27	2	0.68	5	2.23			3	1.19	12	4.98
1977	4	1.84	3	1.12	3	1.04			5	1.81	15	5.81
1978	7	2.58	-	-	1	0.37			4	1.86	12	4.81
1979	5	1.86	-	-	3	1.24	-	-	1	0.36	9	3.46
1980	6	1.71	3	1.43	5	1.42	-	-	-	-	14	4.56
1981	9	2.95	1	0.24	3	0.59	-	-	-	-	13	3.78
1982	8	2.60	4	0.81	4	0.93	-	-	1	0.24	17	4.58
1983	13	3.59	3	1.21	3	0.90	-	-	1	0.23	20	5.93
1984	13	3.63	2	0.55	2	0.34	-	-	-	-	17	4.52
1985	10	3.13	-	-	1	0.22	-	-	3	0.81	14	4.16
1986	12	3.65	2	0.32	-	-	-	-	1	0.11	15	4.08
1987	18	4.61	3	0.93	2	1.06	-	-	1	0.20	24	6.81
1988	21	5.76	7	1.49	2	0.39	-	-	2	0.61	32	8.25
1989	17	3.33	2	0.48	5	0.96	-	-	1	0.46	24	5.04
1990	12	3.16	1	0.39	3	0.54	-	-	1	0.18	17	4.26
1991	22	5.09	1	0.17	3	0.44	-	-	1	0.09	27	5.79
1992	22	4.32	1	0.28	3	0.53	-	-	-	-	26	5.13

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure OR-2. All pneumoconioses: Distribution of deaths by sex and race, Oregon residents age 15 and over, 1968-1992



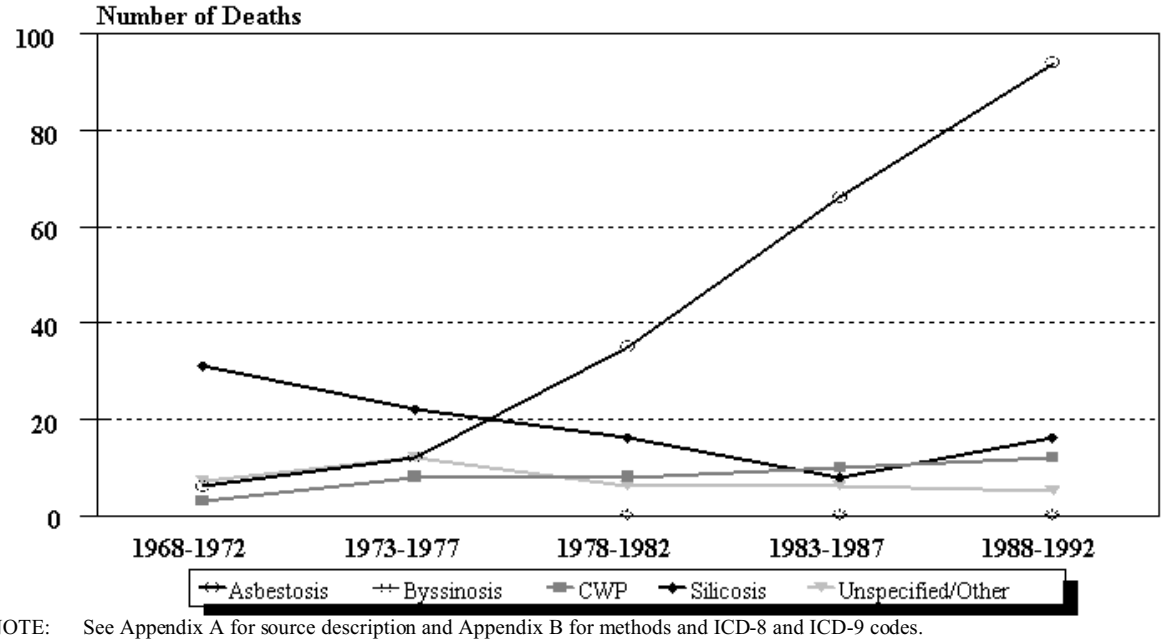
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table OR-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Oregon residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		380	100.0	126	100.0
Sex	Male	347	91.3	113	89.7
	Female	33	8.7	13	10.3
Race	White	372	97.8	123	97.6
	Black	4	1.1	1	0.8
	Other	4	1.1	2	1.6
Age	15-24	0	0.0	0	0.0
	25-34	0	0.0	0	0.0
	35-44	4	1.1	2	1.6
	45-54	13	3.4	1	0.8
	55-64	46	12.1	10	7.9
	65-74	139	36.6	34	27.0
	75-84	140	36.8	61	48.4
	85+	38	10.0	18	14.3
	Mean age	73.1		75.8	
	Range for age	35-94		35-92	

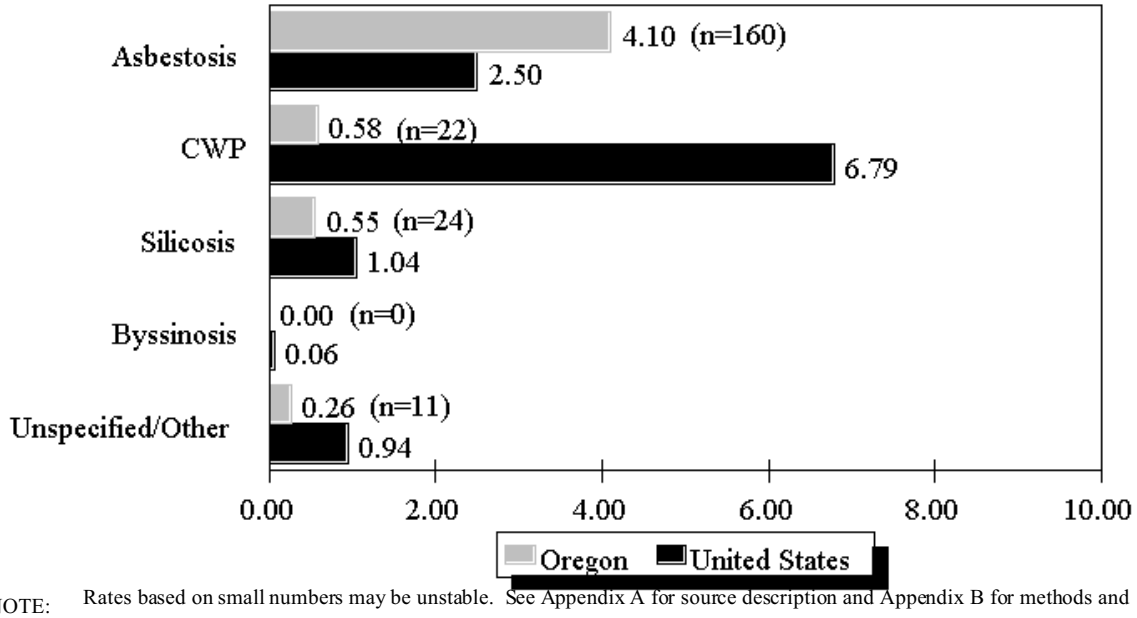
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure OR-3. Pneumoconiosis deaths by condition, Oregon residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure OR-4. Oregon and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table OR-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Oregon residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Clackamas	10	**2.90**	3	**1.10**	-	**-**	-	**-**	2	**0.45**	15	**4.45**
Clatsop	1	**2.81**	2	**2.49**	1	**1.25**	-	**-**	-	**-**	4	**6.55**
Columbia	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.52**	1	**1.52**
Coos	2	**2.14**	3	**5.18**	1	**0.72**	-	**-**	1	**1.42**	7	**9.45**
Curry	8	**24.03**	-	**-**	-	**-**	-	**-**	-	**-**	8	**24.03**
Deschutes	5	**5.11**	1	**1.37**	1	**0.79**	-	**-**	-	**-**	7	**7.27**
Douglas	1	**0.98**	2	**1.50**	-	**-**	-	**-**	1	**0.52**	4	**3.00**
Hood River	5	**24.45**	-	**-**	-	**-**	-	**-**	-	**-**	5	**24.45**
Jackson	10	**4.10**	1	**0.65**	2	**0.96**	-	**-**	-	**-**	13	**5.71**
Josephine	6	**4.79**	1	**0.57**	-	**-**	-	**-**	1	**0.57**	8	**5.94**
Klamath	2	**3.36**	1	**0.91**	-	**-**	-	**-**	-	**-**	3	**4.28**
Lake	-	**-**	1	**12.58**	-	**-**	-	**-**	-	**-**	1	**12.58**
Lane	8	**2.52**	1	**0.20**	1	**0.41**	-	**-**	-	**-**	10	**3.12**
Lincoln	2	**2.95**	1	**1.90**	1	**1.05**	-	**-**	-	**-**	4	**5.89**
Linn	8	**6.01**	1	**0.53**	-	**-**	-	**-**	-	**-**	9	**6.54**
Malheur	1	**5.92**	-	**-**	-	**-**	-	**-**	-	**-**	1	**5.92**
Marion	19	**6.11**	-	**-**	1	**0.20**	-	**-**	1	**0.20**	20	**6.31**
Multnomah	55	**7.27**	2	**0.32**	12	**1.44**	-	**-**	3	**0.46**	72	**9.50**
Polk	3	**4.83**	-	**-**	-	**-**	-	**-**	-	**-**	3	**4.83**
Tillamook	2	**3.51**	-	**-**	2	**3.51**	-	**-**	-	**-**	4	**7.01**
Umatilla	1	**0.83**	1	**0.83**	-	**-**	-	**-**	1	**2.48**	3	**4.15**
Wasco	1	**4.16**	-	**-**	1	**1.72**	-	**-**	-	**-**	2	**5.87**
Washington	8	**2.29**	1	**0.22**	1	**0.22**	-	**-**	-	**-**	10	**2.74**
Yamhill	2	**3.63**	-	**-**	-	**-**	-	**-**	-	**-**	2	**3.63**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

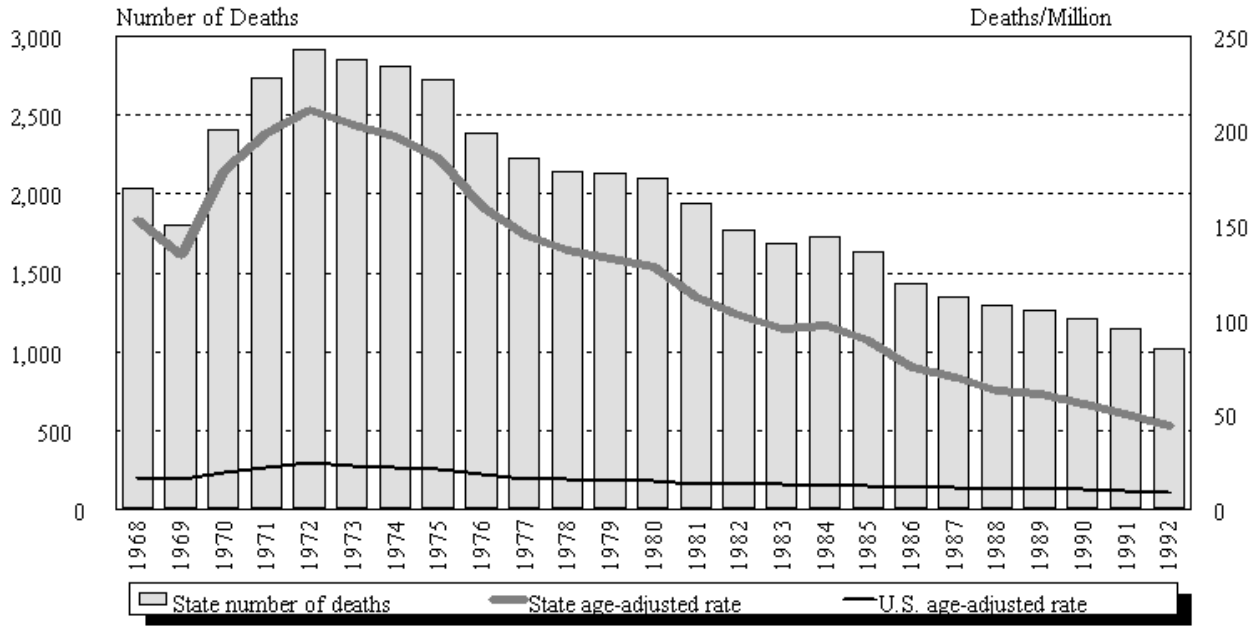
Pennsylvania: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	5,926	1
Crude mortality rate (per 1,000,000 population)	124.28	2
Age-adjusted mortality rate (per 1,000,000 population)	54.98	2
Total years of potential life lost to life expectancy	62,129	1
Years of potential life lost to life expectancy (per death)	10.5	46

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	430	7.3
Coal workers' pneumoconiosis	5,062	85.4
Silicosis	259	4.4
Byssinosis	2	0.0
Unspecified/Other pneumoconiosis	195	3.3

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure PA-1. All pneumoconioses: Pennsylvania and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Pennsylvania

Table PA-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Pennsylvania residents age 15 and over, 1968-1992

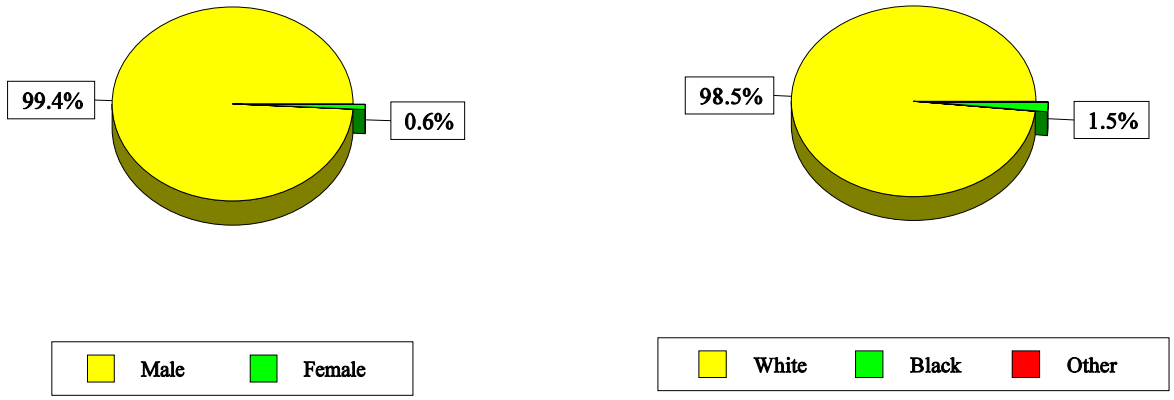
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	6	0.53	1,589	119.86	284	21.73			176	12.51	2,030	152.72
1969	9	0.75	1,347	100.42	278	20.96			179	13.02	1,800	134.21
1970	11	0.88	1,878	140.13	291	21.71			266	19.35	2,410	179.30
1971	11	0.91	2,087	153.44	270	19.53			402	28.12	2,729	198.85
1972	22	1.87	2,274	166.34	240	17.05			418	28.90	2,910	210.78
1973	20	1.52	2,136	153.34	227	16.10			494	34.35	2,852	203.32
1974	17	1.33	2,158	152.45	212	14.59			451	30.70	2,809	197.03
1975	18	1.35	2,088	142.74	200	13.39			439	29.24	2,723	185.17
1976	11	0.77	1,879	126.69	186	12.47			326	21.20	2,381	159.70
1977	15	1.00	1,785	116.65	143	9.33			305	19.00	2,230	144.92
1978	25	2.02	1,744	111.50	152	10.10			240	14.80	2,143	137.32
1979	24	1.72	1,753	109.62	85	5.45	1	0.08	266	16.05	2,126	132.77
1980	35	2.45	1,719	105.98	94	5.52	1	0.05	252	14.55	2,094	128.12
1981	32	2.09	1,602	93.30	75	4.30	3	0.21	228	12.58	1,937	112.27
1982	33	2.29	1,594	91.70	64	3.65	-	-	84	5.23	1,770	102.60
1983	36	2.35	1,515	86.08	68	3.95	1	0.07	65	3.63	1,681	95.82
1984	60	3.85	1,552	86.80	60	3.37	-	-	64	3.67	1,731	97.39
1985	54	3.47	1,480	79.70	55	3.18	1	0.08	49	2.82	1,634	88.99
1986	54	3.46	1,303	67.77	49	2.87	-	-	36	1.88	1,435	75.44
1987	65	4.01	1,211	61.71	52	2.83	-	-	33	1.70	1,351	69.69
1988	79	4.67	1,153	55.34	45	2.25	-	-	26	1.31	1,295	63.15
1989	101	6.04	1,082	50.89	47	2.52	-	-	36	1.75	1,264	61.05
1990	67	3.85	1,030	46.70	61	3.08	1	0.04	51	2.53	1,206	56.00
1991	83	4.48	961	41.42	53	2.90	1	0.02	49	2.28	1,143	50.87
1992	100	5.16	836	35.26	53	2.82	-	-	33	1.53	1,018	44.56

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure PA-2. All pneumoconioses: Distribution of deaths by sex and race, Pennsylvania residents age 15 and over, 1968-1992



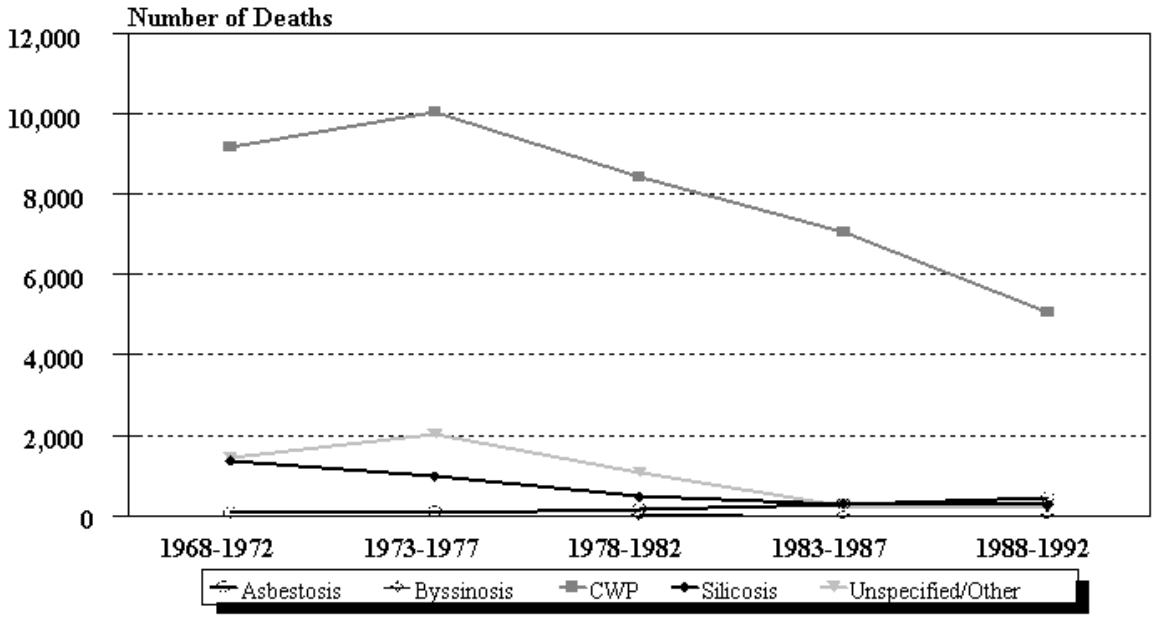
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table PA-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Pennsylvania residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		48,702	100.0	5,926	100.0
Sex	Male	48,402	99.4	5,878	99.2
	Female	300	0.6	48	0.8
Race	White	47,993	98.5	5,831	98.4
	Black	708	1.5	95	1.6
	Other	1	0.0	0	0.0
Age	15-24	6	0.0	0	0.0
	25-34	20	0.0	2	0.0
	35-44	90	0.2	7	0.1
	45-54	1,204	2.5	37	0.6
	55-64	7,801	16.0	333	5.6
	65-74	17,934	36.8	1,771	29.9
	75-84	16,684	34.3	2,803	47.3
	85+	4,963	10.2	973	16.4
	Mean age	72.8		76.8	
	Range for age	15-105		30-104	

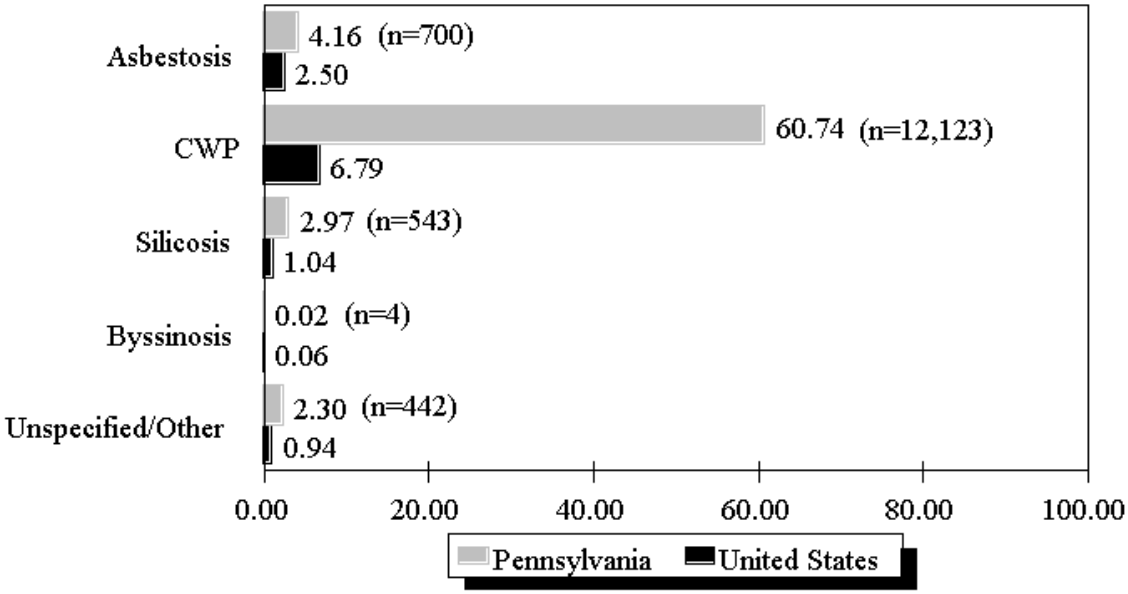
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure PA-3. Pneumoconiosis deaths by condition, Pennsylvania residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure PA-4. Pennsylvania and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table PA-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Pennsylvania residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Adams	1	**1.37**	1	**1.37**	2	**2.01**	-	**-**	-	**-**	4	**4.74**
Allegheny	31	**1.69**	288	**11.27**	47	**2.36**	-	**-**	23	**0.93**	387	**16.12**
Armstrong	1	**1.11**	69	**51.70**	12	**10.34**	-	**-**	11	**8.65**	92	**70.70**
Beaver	4	**1.49**	17	**6.56**	8	**3.33**	-	**-**	3	**1.08**	30	**11.63**
Bedford	3	**4.63**	33	**44.93**	6	**10.13**	-	**-**	6	**9.57**	48	**69.26**
Berks	17	**3.88**	18	**2.85**	32	**6.37**	-	**-**	20	**4.13**	86	**17.10**
Blair	18	**7.82**	17	**10.07**	9	**4.78**	-	**-**	7	**3.48**	51	**26.15**
Bradford	1	**0.73**	1	**0.73**	2	**1.47**	-	**-**	-	**-**	4	**2.93**
Bucks	25	**4.60**	31	**5.14**	6	**1.10**	-	**-**	7	**1.39**	69	**12.23**
Butler	1	**0.68**	22	**9.41**	2	**1.01**	-	**-**	-	**-**	25	**11.10**
Cambria	9	**3.49**	924	**323.29**	42	**13.97**	-	**-**	44	**14.67**	1,008	**351.46**
Cameron	-	**-**	1	**6.53**	-	**-**	-	**-**	-	**-**	1	**6.53**
Carbon	5	**9.47**	310	**291.00**	11	**11.67**	-	**-**	11	**12.53**	336	**323.31**
Centre	2	**1.80**	14	**11.29**	3	**2.97**	-	**-**	6	**3.80**	25	**19.87**
Chester	5	**1.43**	9	**2.17**	2	**0.63**	-	**-**	-	**-**	16	**4.23**
Clarion	-	**-**	45	**74.68**	-	**-**	-	**-**	5	**6.87**	50	**81.56**
Clearfield	1	**1.09**	115	**94.95**	6	**4.30**	-	**-**	13	**10.26**	135	**110.60**
Clinton	1	**1.20**	4	**7.04**	-	**-**	-	**-**	-	**-**	5	**8.25**
Columbia	3	**4.57**	88	**93.83**	2	**1.39**	-	**-**	6	**4.91**	99	**104.71**
Crawford	2	**1.57**	1	**0.49**	3	**2.06**	-	**-**	-	**-**	6	**4.12**
Cumberland	-	**-**	7	**2.36**	-	**-**	-	**-**	1	**0.52**	8	**2.88**
Dauphin	3	**1.00**	55	**14.61**	3	**0.60**	-	**-**	2	**0.60**	63	**16.81**
Delaware	130	**17.77**	28	**3.00**	17	**2.13**	-	**-**	2	**0.24**	175	**22.89**
Elk	-	**-**	9	**13.57**	-	**-**	-	**-**	1	**1.26**	10	**14.83**
Erie	3	**0.73**	12	**2.93**	11	**3.07**	-	**-**	3	**0.57**	29	**7.30**
Fayette	6	**2.14**	642	**251.31**	7	**3.22**	-	**-**	13	**6.17**	667	**262.57**
Forest	-	**-**	1	**7.61**	-	**-**	-	**-**	-	**-**	1	**7.61**
Franklin	2	**1.58**	2	**1.18**	2	**1.18**	-	**-**	1	**0.79**	7	**4.74**
Fulton	-	**-**	2	**11.03**	1	**10.36**	-	**-**	2	**11.03**	5	**32.42**
Greene	1	**1.00**	117	**204.61**	2	**4.53**	-	**-**	4	**7.80**	123	**215.68**
Huntingdon	2	**2.22**	26	**44.28**	16	**25.51**	-	**-**	3	**4.44**	47	**76.44**
Indiana	1	**0.55**	192	**153.95**	20	**16.30**	-	**-**	14	**14.81**	226	**185.06**
Jefferson	2	**3.67**	40	**47.56**	1	**1.83**	-	**-**	8	**9.87**	51	**62.94**
Juniata	-	**-**	1	**4.70**	2	**6.88**	-	**-**	2	**4.36**	5	**15.94**

See footnotes at end of table.

Table PA-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Pennsylvania residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Lackawanna	9	**2.90**	1172	**258.11**	25	**5.60**	-	**-**	31	**6.72**	1,237	**273.33**
Lancaster	33	**5.88**	13	**2.26**	8	**1.66**	-	**-**	6	**1.00**	60	**10.81**
Lawrence	1	**0.80**	3	**1.99**	2	**1.59**	-	**-**	2	**0.80**	8	**5.18**
Lebanon	4	**2.87**	4	**2.43**	2	**1.22**	-	**-**	-	**-**	10	**6.51**
Lehigh	5	**1.25**	21	**4.17**	13	**2.96**	-	**-**	6	**0.91**	43	**8.83**
Luzerne	25	**4.48**	3,506	**540.04**	24	**3.62**	-	**-**	53	**9.37**	3,602	**556.63**
Lycoming	1	**0.79**	2	**0.74**	1	**0.37**	-	**-**	-	**-**	4	**1.90**
McKean	8	**13.76**	1	**0.76**	2	**2.59**	-	**-**	-	**-**	11	**17.11**
Mercer	1	**0.68**	12	**6.39**	4	**2.20**	1	**0.33**	7	**2.64**	25	**12.23**
Mifflin	-	**-**	6	**9.46**	11	**16.03**	-	**-**	1	**0.92**	18	**26.40**
Monroe	3	**3.33**	12	**11.40**	3	**2.85**	-	**-**	1	**1.11**	18	**17.58**
Montgomery	110	**11.62**	31	**3.10**	14	**1.56**	-	**-**	8	**0.74**	162	**16.88**
Montour	-	**-**	5	**13.41**	-	**-**	-	**-**	-	**-**	5	**13.41**
Northampton	2	**0.75**	10	**2.87**	6	**2.08**	-	**-**	5	**0.99**	23	**6.69**
North-umberland	6	**3.93**	663	**386.78**	6	**3.04**	2	**1.16**	3	**1.52**	680	**396.43**
Perry	-	**-**	4	**8.74**	-	**-**	-	**-**	-	**-**	4	**8.74**
Philadelphia	146	**7.18**	36	**1.47**	27	**1.11**	-	**-**	10	**0.49**	217	**10.14**
Pike	1	**3.15**	4	**7.86**	-	**-**	-	**-**	-	**-**	5	**11.01**
Potter	2	**7.56**	2	**7.56**	1	**2.42**	-	**-**	-	**-**	5	**17.54**
Schuylkill	19	**8.72**	2,387	**834.68**	39	**13.45**	1	**0.47**	27	**9.29**	2,463	**862.64**
Snyder	1	**2.91**	6	**11.99**	2	**3.08**	-	**-**	-	**-**	9	**17.98**
Somerset	6	**7.16**	358	**281.03**	17	**17.12**	-	**-**	14	**9.51**	393	**312.69**
Sullivan	-	**-**	4	**19.44**	1	**4.86**	-	**-**	-	**-**	5	**24.30**
Susquehanna	2	**3.45**	40	**55.28**	2	**5.95**	-	**-**	7	**12.70**	51	**77.38**
Tioga	1	**1.10**	4	**6.85**	1	**3.63**	-	**-**	-	**-**	6	**11.59**
Union	-	**-**	1	**1.38**	-	**-**	-	**-**	-	**-**	1	**1.38**
Venango	3	**4.39**	10	**11.08**	1	**1.46**	-	**-**	3	**3.68**	17	**20.61**
Warren	1	**1.93**	4	**5.70**	2	**2.85**	-	**-**	-	**-**	6	**9.55**
Washington	7	**2.63**	332	**92.41**	10	**2.57**	-	**-**	15	**4.98**	361	**101.80**
Wayne	5	**8.93**	18	**23.90**	1	**2.19**	-	**-**	-	**-**	24	**35.03**
Westmoreland	10	**1.66**	283	**43.39**	35	**6.26**	-	**-**	19	**3.10**	346	**54.20**
Wyoming	3	**9.75**	21	**54.58**	-	**-**	-	**-**	1	**1.95**	25	**66.28**
York	4	**1.07**	6	**1.38**	6	**1.78**	-	**-**	5	**1.07**	20	**5.00**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

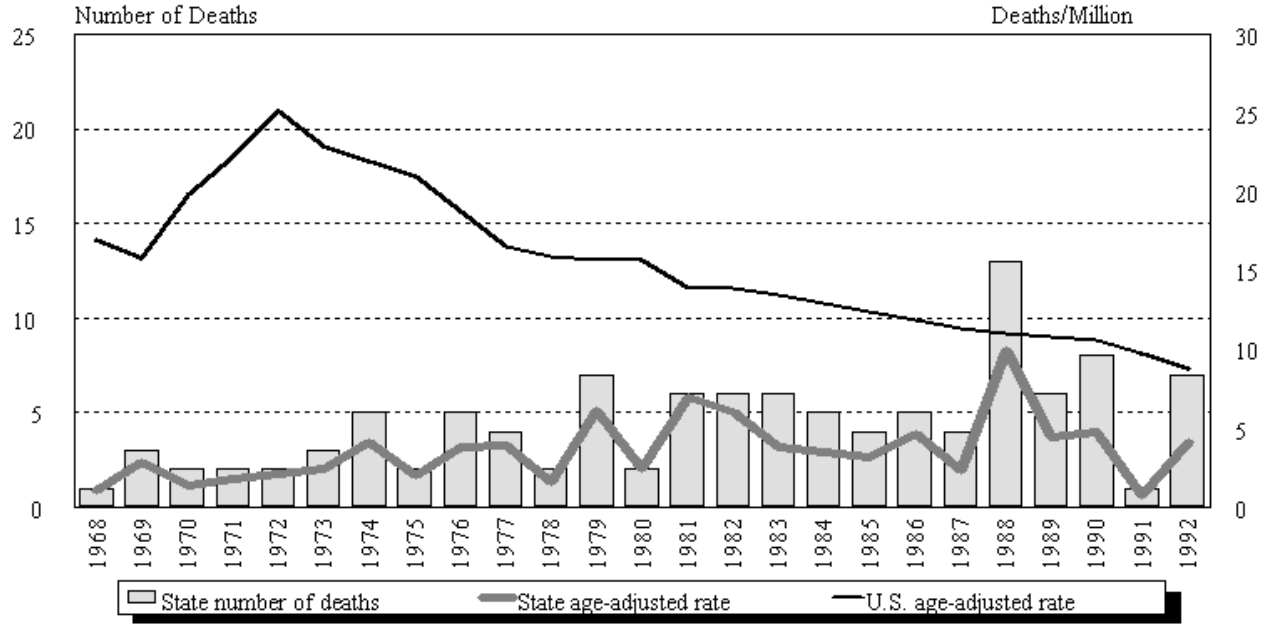
Rhode Island: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	35	42
Crude mortality rate (per 1,000,000 population)	8.61	27
Age-adjusted mortality rate (per 1,000,000 population)	4.78	30
Total years of potential life lost to life expectancy	435	40
Years of potential life lost to life expectancy (per death)	12.4	18

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	29	82.9
Coal workers' pneumoconiosis	1	2.9
Silicosis	3	8.6
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	2	5.7

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure RI-1. All pneumoconioses: Rhode Island and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Rhode Island

Table RI-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Rhode Island residents age 15 and over, 1968-1992

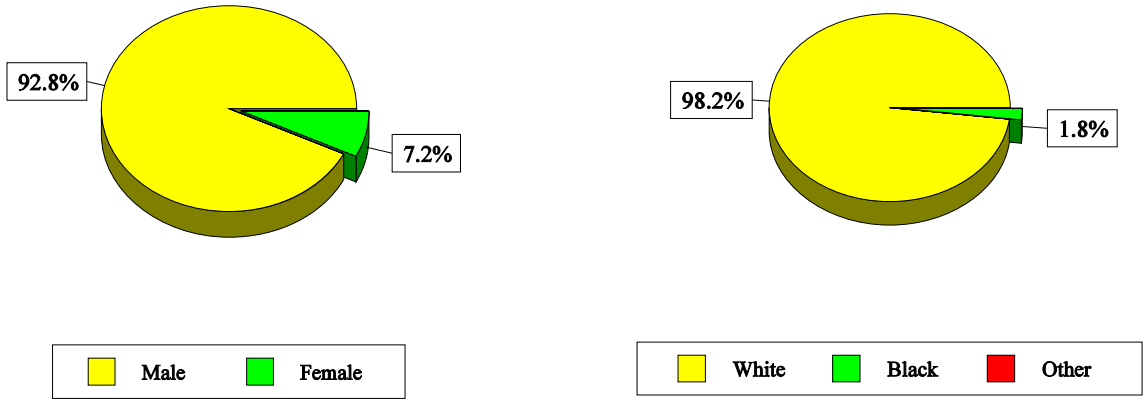
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	1	1.01			-	-	1	1.01
1969	-	-	-	-	1	0.71			2	2.14	3	2.85
1970	-	-	1	0.71	1	0.71			1	0.71	2	1.42
1971	1	1.11	-	-	-	-			1	0.69	2	1.80
1972	-	-	-	-	-	-			2	2.17	2	2.17
1973	-	-	2	1.73	-	-			1	0.66	3	2.39
1974	1	0.95	2	1.60	1	0.95			1	0.65	5	4.14
1975	-	-	-	-	2	2.04			-	-	2	2.04
1976	-	-	-	-	3	2.32			3	2.07	5	3.76
1977	2	1.52	-	-	1	1.47			2	2.36	4	3.88
1978	1	0.61	-	-	-	-			1	1.03	2	1.63
1979	2	1.46	1	1.02	4	3.65	-	-	-	-	7	6.13
1980	1	1.62	-	-	1	0.85	-	-	-	-	2	2.47
1981	6	7.04	-	-	-	-	-	-	-	-	6	7.04
1982	4	5.46	-	-	4	2.66	-	-	-	-	6	6.04
1983	4	2.44	-	-	1	0.55	1	0.83	-	-	6	3.82
1984	3	2.15	-	-	1	0.27	1	1.06	-	-	5	3.48
1985	2	1.61	-	-	1	1.08	-	-	1	0.53	4	3.21
1986	3	3.07	-	-	1	0.79	-	-	1	0.79	5	4.65
1987	-	-	-	-	1	0.25	-	-	3	2.12	4	2.37
1988	11	8.72	1	0.77	-	-	-	-	1	0.49	13	9.98
1989	5	3.24	-	-	-	-	-	-	1	1.18	6	4.42
1990	7	4.49	-	-	1	0.23	-	-	-	-	8	4.72
1991	1	0.76	-	-	-	-	-	-	-	-	1	0.76
1992	5	2.11	-	-	2	1.99	-	-	-	-	7	4.10

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure RI-2. All pneumoconioses: Distribution of deaths by sex and race, Rhode Island residents age 15 and over, 1968-1992



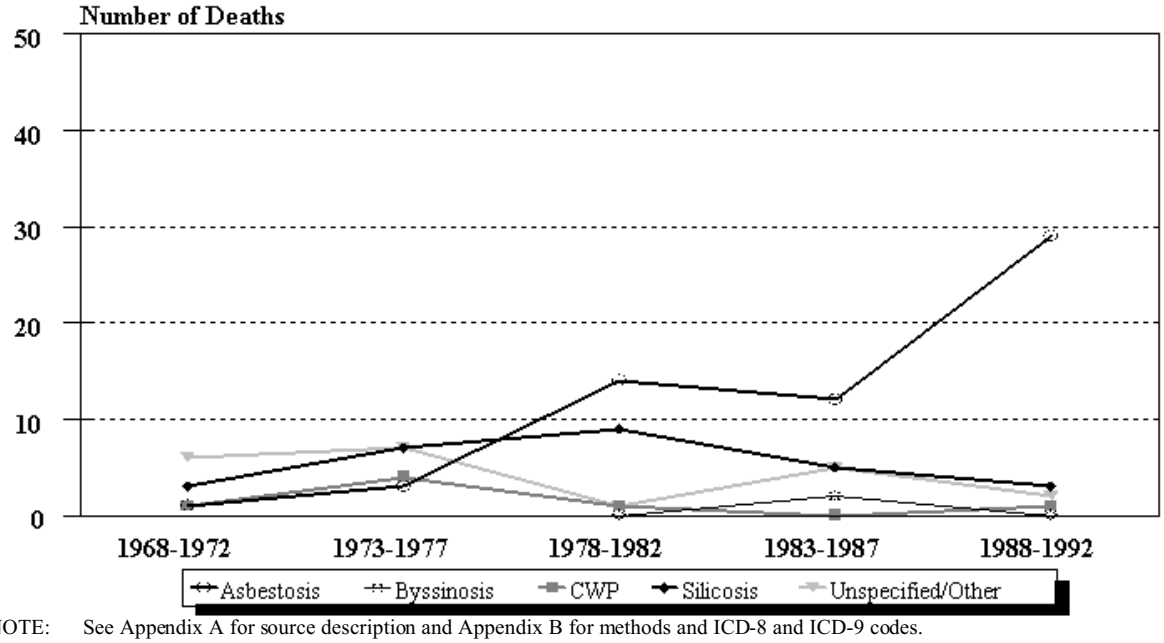
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table RI-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Rhode Island residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		111	100.0	35	100.0
Sex	Male	103	92.8	31	88.6
	Female	8	7.2	4	11.4
Race	White	109	98.2	35	100.0
	Black	2	1.8	0	0.0
	Other	0	0.0	0	0.0
Age	15-24	1	0.9	0	0.0
	25-34	0	0.0	0	0.0
	35-44	0	0.0	0	0.0
	45-54	10	9.0	2	5.7
	55-64	24	21.6	5	14.3
	65-74	27	24.3	10	28.6
	75-84	37	33.3	12	34.3
	85+	12	10.8	6	17.1
	Mean age	70.2		72.7	
	Range for age	21-92		49-88	

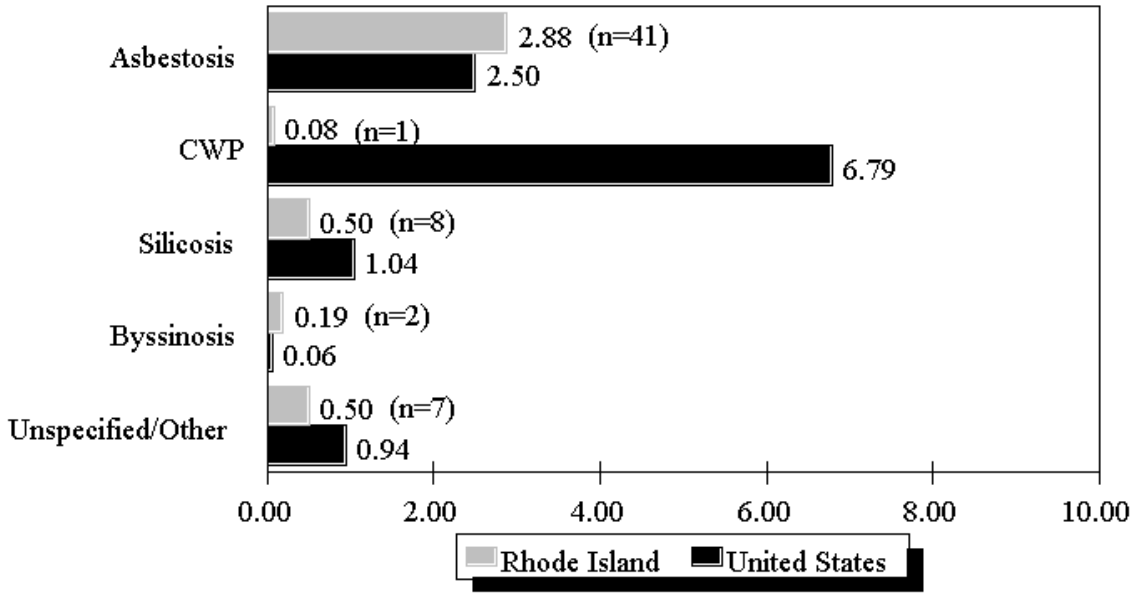
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure RI-3. Pneumoconiosis deaths by condition, Rhode Island residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure RI-4. Rhode Island and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table RI-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Rhode Island residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Bristol	-	**-**	-	**-**	1	**1.79**	-	**-**	3	**4.51**	4	**6.30**
Kent	3	**0.88**	-	**-**	-	**-**	-	**-**	1	**0.29**	4	**1.17**
Newport	2	**1.82**	-	**-**	-	**-**	-	**-**	-	**-**	2	**1.82**
Providence	30	**3.23**	1	**0.16**	6	**0.58**	2	**0.32**	2	**0.13**	41	**4.42**
Washington	6	**6.64**	-	**-**	1	**1.06**	-	**-**	1	**1.06**	8	**8.76**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

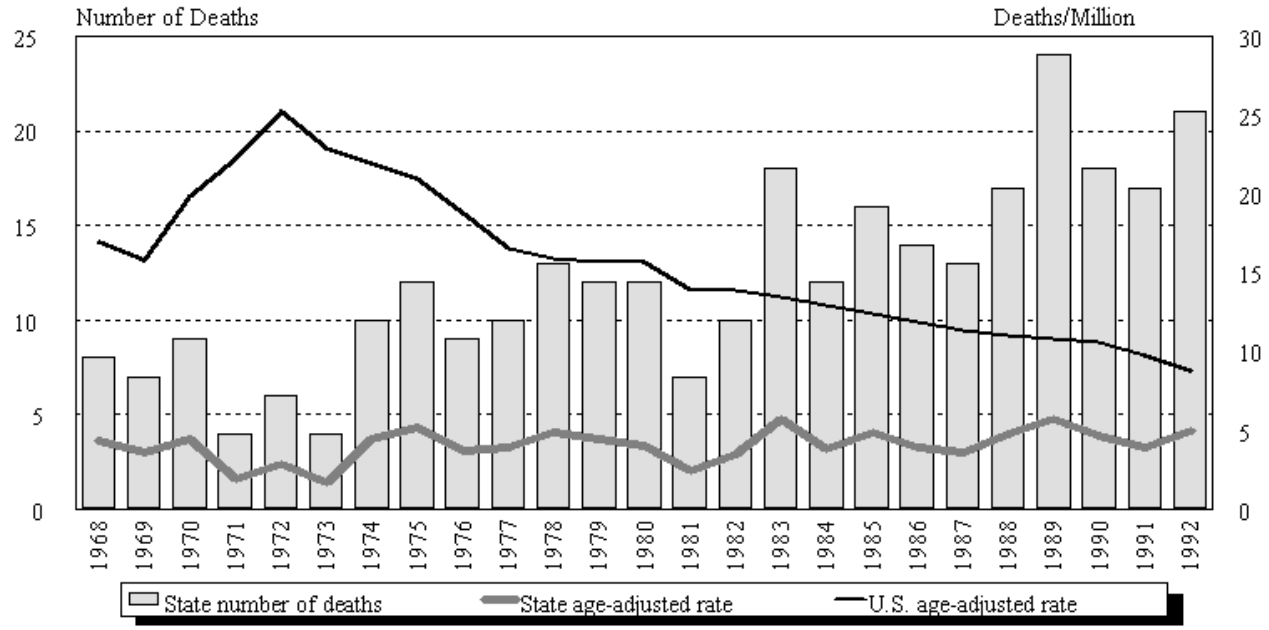
South Carolina: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	97	29
Crude mortality rate (per 1,000,000 population)	7.12	30
Age-adjusted mortality rate (per 1,000,000 population)	4.81	28
Total years of potential life lost to life expectancy	1,285	27
Years of potential life lost to life expectancy (per death)	13.2	8

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	64	66.0
Coal workers' pneumoconiosis	10	10.3
Silicosis	14	14.4
Byssinosis	6	6.2
Unspecified/Other pneumoconiosis	3	3.1

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure SC-1. All pneumoconioses: South Carolina and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

South Carolina

Table SC-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, South Carolina residents age 15 and over, 1968-1992

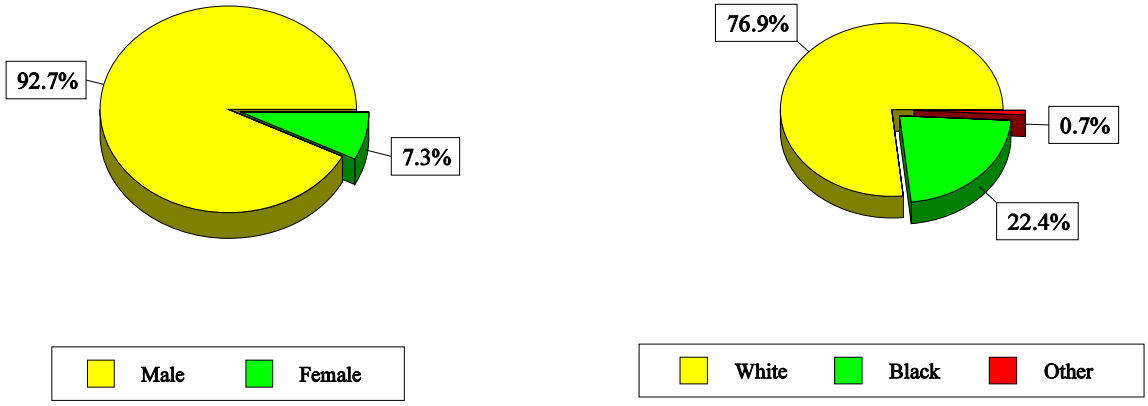
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	3	1.58	-	-	5	2.72			-	-	8	4.31
1969	5	2.55	-	-	2	1.02			-	-	7	3.57
1970	3	1.53	2	0.87	4	2.08			1	0.43	9	4.47
1971	1	0.49	1	0.49	-	-			2	0.98	4	1.96
1972	2	0.95	-	-	-	-			4	1.91	6	2.86
1973	2	0.91	-	-	2	0.84			-	-	4	1.74
1974	3	1.43	1	0.43	6	2.76			1	0.37	10	4.46
1975	3	1.24	2	0.79	4	1.84			3	1.35	12	5.22
1976	2	0.85	2	0.85	2	0.82			3	1.20	9	3.72
1977	5	2.22	1	0.38	3	0.93			1	0.38	10	3.90
1978	8	3.09	2	0.72	2	0.72			2	0.68	13	4.90
1979	7	2.61	-	-	5	1.85	-	-	1	0.39	12	4.42
1980	4	1.44	4	1.15	2	0.72	1	0.34	1	0.34	12	3.99
1981	2	0.61	1	0.28	4	1.59	-	-	-	-	7	2.48
1982	4	1.74	1	0.48	4	0.96	-	-	1	0.27	10	3.45
1983	8	2.93	2	0.57	3	0.67	2	0.68	3	0.94	18	5.78
1984	6	1.92	1	0.30	1	0.37	4	1.22	-	-	12	3.80
1985	9	2.61	2	0.53	3	1.09	-	-	2	0.66	16	4.89
1986	9	2.48	1	0.22	3	0.67	1	0.50	-	-	14	3.88
1987	8	2.28	2	0.58	2	0.53	1	0.28	-	-	13	3.66
1988	14	3.80	1	0.13	2	0.84	-	-	-	-	17	4.77
1989	18	4.47	3	0.60	3	0.69	-	-	-	-	24	5.75
1990	11	2.40	1	0.19	5	1.71	1	0.37	-	-	18	4.66
1991	8	1.78	-	-	3	0.88	3	0.78	3	0.49	17	3.93
1992	13	3.20	5	1.05	1	0.11	2	0.62	-	-	21	4.99

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure SC-2. All pneumoconioses: Distribution of deaths by sex and race, South Carolina residents age 15 and over, 1968-1992



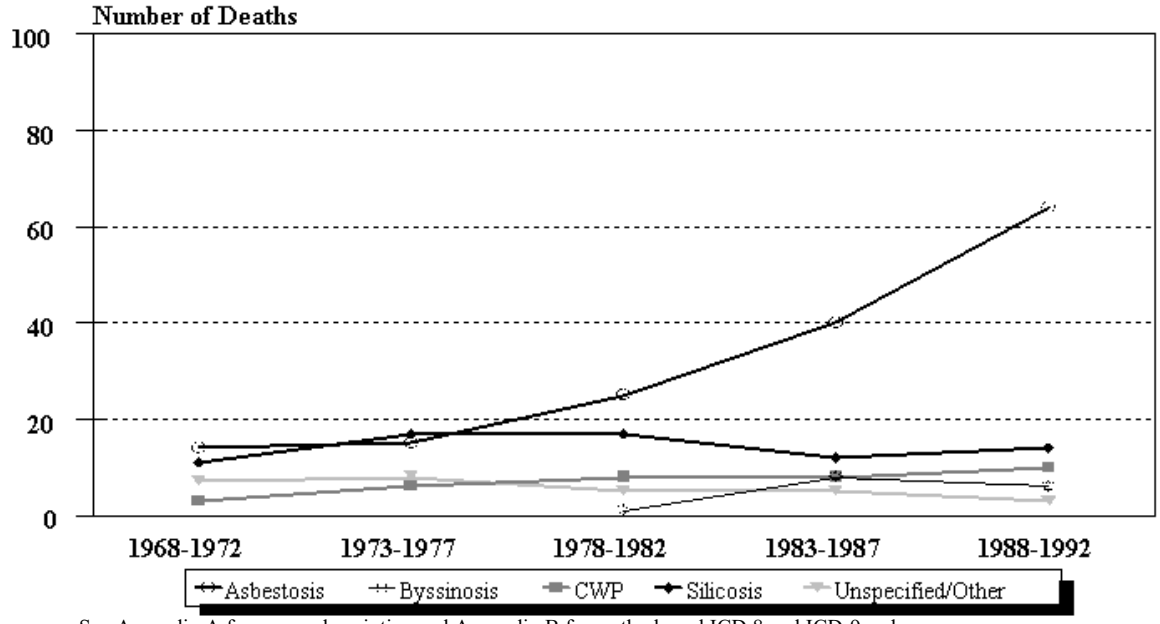
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table SC-2. All pneumoconioses: Distribution of deaths by sex, race, and age, South Carolina residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		303	100.0	97	100.0
Sex	Male	281	92.7	90	92.8
	Female	22	7.3	7	7.2
Race	White	233	76.9	73	75.3
	Black	68	22.4	24	24.7
	Other	2	0.7	0	0.0
Age	15-24	1	0.3	1	1.0
	25-34	1	0.3	0	0.0
	35-44	6	2.0	1	1.0
	45-54	21	6.9	3	3.1
	55-64	75	24.8	13	13.4
	65-74	106	35.0	34	35.1
	75-84	80	26.4	39	40.2
	85+	13	4.3	6	6.2
	Mean age	68.4		72.0	
	Range for age	18-98		18-98	

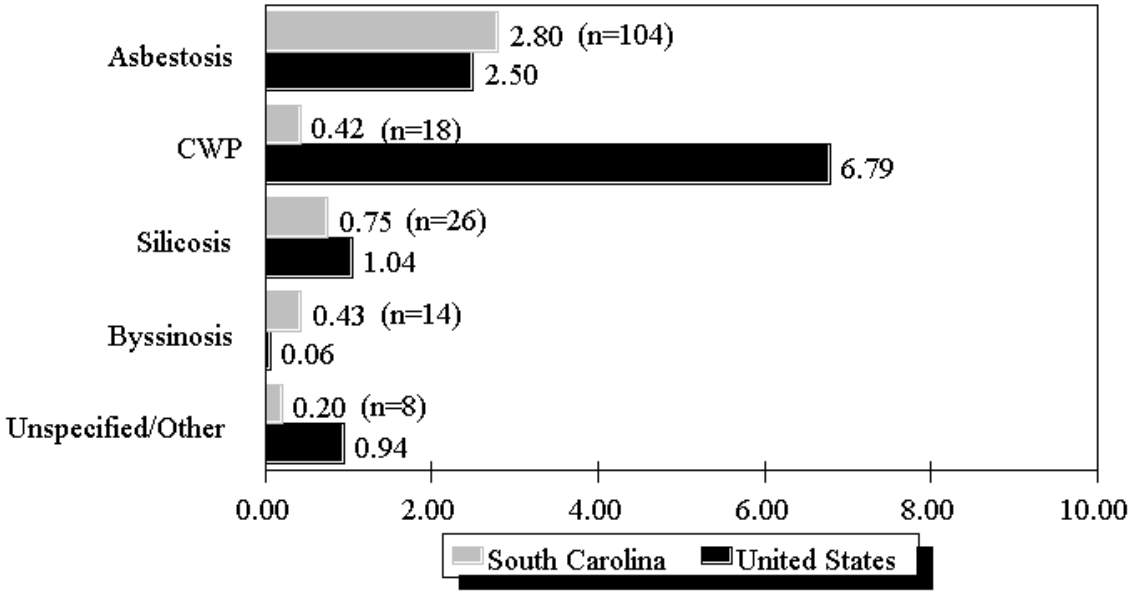
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure SC-3. Pneumoconiosis deaths by condition, South Carolina residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure SC-4. South Carolina and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table SC-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, South Carolina residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Abbeville	-	-	1	1.89	-	-	-	-	-	-	1	1.89
Aiken	1	0.58	-	-	-	-	2	1.77	1	0.58	4	2.93
Anderson	1	0.38	1	0.38	2	1.06	1	0.68	-	-	5	2.50
Bamberg	1	3.34	-	-	-	-	-	-	-	-	1	3.34
Barnwell	1	5.34	-	-	-	-	-	-	-	-	1	5.34
Beaufort	2	1.80	-	-	-	-	-	-	-	-	2	1.80
Berkeley	7	9.12	-	-	1	1.41	-	-	-	-	8	10.53
Charleston	44	15.98	1	0.43	2	0.55	-	-	-	-	47	16.95
Cherokee	2	4.68	-	-	-	-	-	-	-	-	2	4.68
Chester	-	-	1	1.68	1	1.68	1	3.13	-	-	3	6.49
Clarendon	1	3.53	-	-	2	10.75	-	-	1	3.53	4	17.81
Colleton	5	10.98	2	4.64	-	-	-	-	-	-	7	15.62
Darlington	1	2.27	1	1.00	1	2.27	-	-	-	-	3	5.55
Dillon	-	-	-	-	1	5.29	-	-	-	-	1	5.29
Dorchester	7	11.99	-	-	-	-	-	-	-	-	7	11.99
Fairfield	-	-	-	-	1	4.72	-	-	1	4.72	2	9.44
Florence	2	1.99	-	-	-	-	-	-	-	-	2	1.99
Georgetown	-	-	1	2.16	-	-	-	-	-	-	1	2.16
Greenville	4	1.23	-	-	2	0.40	1	0.44	-	-	7	2.07
Greenwood	-	-	-	-	1	2.46	-	-	-	-	1	2.46
Horry	-	-	2	1.07	1	0.54	-	-	2	1.07	5	2.69
Kershaw	3	7.16	-	-	1	2.39	-	-	-	-	4	9.55
Lancaster	-	-	1	1.92	-	-	2	3.84	-	-	3	5.76
Laurens	-	-	2	2.63	-	-	-	-	-	-	2	2.63
Lexington	-	-	-	-	2	1.55	-	-	1	0.55	3	2.09
McCormick	-	-	1	6.07	-	-	-	-	-	-	1	6.07
Marion	1	3.12	-	-	-	-	1	1.80	-	-	2	4.92
Marlboro	1	3.50	-	-	1	3.50	2	7.00	-	-	4	14.01
Newberry	1	2.84	-	-	1	2.84	-	-	-	-	2	5.68
Oconee	1	1.65	-	-	-	-	2	4.12	-	-	3	5.77
Orangeburg	2	2.53	1	1.27	-	-	-	-	-	-	3	3.80

See footnotes at end of table.

Table SC-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, South Carolina residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Pickens	-	**-**	-	**-**	2	**1.38**	-	**-**	-	**-**	2	**1.38**
Richland	6	**2.46**	-	**-**	1	**0.29**	-	**-**	1	**0.47**	8	**3.22**
Spartanburg	5	**2.26**	1	**0.26**	2	**0.87**	1	**0.46**	-	**-**	9	**3.86**
Sumter	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.33**	1	**1.33**
York	5	**3.85**	2	**1.14**	1	**0.90**	1	**0.90**	-	**-**	9	**6.79**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

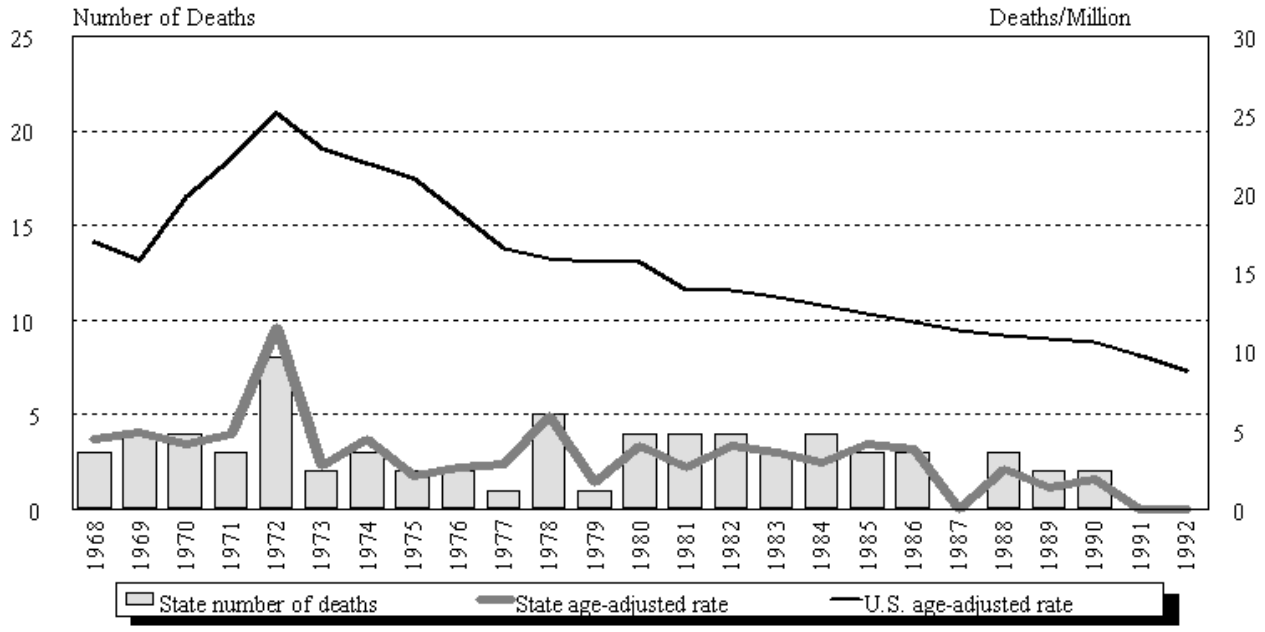
South Dakota: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	7	49
Crude mortality rate (per 1,000,000 population)	2.66	50
Age-adjusted mortality rate (per 1,000,000 population)	1.14	51
Total years of potential life lost to life expectancy	69	51
Years of potential life lost to life expectancy (per death)	9.9	49

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	0	0.0
Coal workers' pneumoconiosis	3	42.9
Silicosis	3	42.9
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	1	14.3

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure SD-1. All pneumoconioses: South Dakota and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

South Dakota

Table SD-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, South Dakota residents age 15 and over, 1968-1992

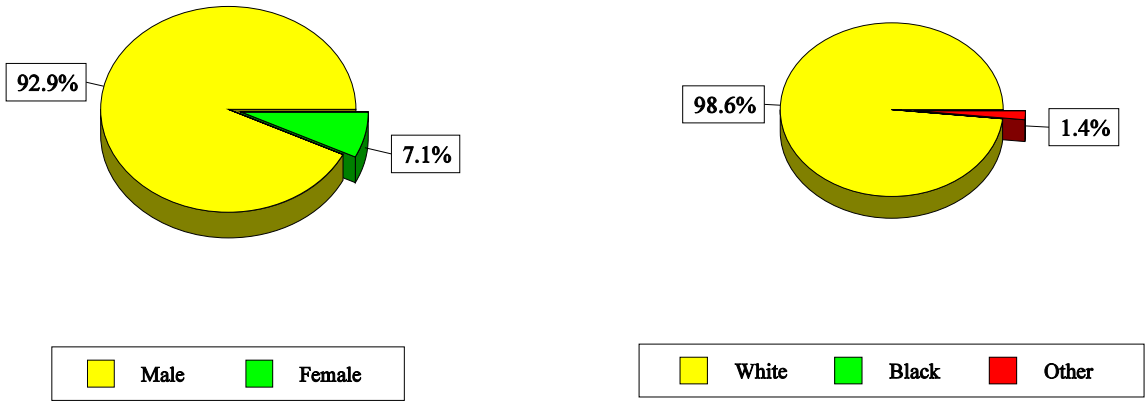
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	3	4.48			-	-	3	4.48
1969	-	-	-	-	3	3.44			1	1.38	4	4.82
1970	-	-	-	-	3	2.81			1	1.38	4	4.18
1971	-	-	1	1.72	1	0.84			1	2.20	3	4.77
1972	-	-	-	-	6	7.14			2	4.39	8	11.53
1973	-	-	-	-	1	1.36			1	1.36	2	2.73
1974	-	-	-	-	3	4.41			-	-	3	4.41
1975	-	-	-	-	1	1.35			1	0.80	2	2.15
1976	-	-	-	-	1	1.33			1	1.33	2	2.66
1977	-	-	-	-	-	-			1	2.90	1	2.90
1978	1	1.67	2	1.68	1	1.30			1	1.30	5	5.95
1979	-	-	-	-	-	-	-	-	1	1.67	1	1.67
1980	-	-	1	1.66	2	1.63	-	-	1	0.77	4	4.05
1981	-	-	2	1.10	2	1.52	-	-	-	-	4	2.62
1982	-	-	1	0.75	3	3.26	-	-	-	-	4	4.01
1983	1	1.24	1	1.65	1	0.74	-	-	-	-	3	3.63
1984	-	-	1	0.31	1	0.72	-	-	2	1.95	4	2.99
1985	1	1.65	-	-	2	2.44	-	-	-	-	3	4.09
1986	-	-	1	1.21	2	2.65	-	-	-	-	3	3.86
1987	-	-	-	-	-	-	-	-	-	-	-	-
1988	-	-	2	1.37	1	1.19	-	-	-	-	3	2.56
1989	-	-	1	0.68	1	0.68	-	-	-	-	2	1.35
1990	-	-	-	-	1	1.19	-	-	1	0.67	2	1.85
1991	-	-	-	-	-	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	-	-	-	-

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure SD-2. All pneumoconioses: Distribution of deaths by sex and race, South Dakota residents age 15 and over, 1968-1992



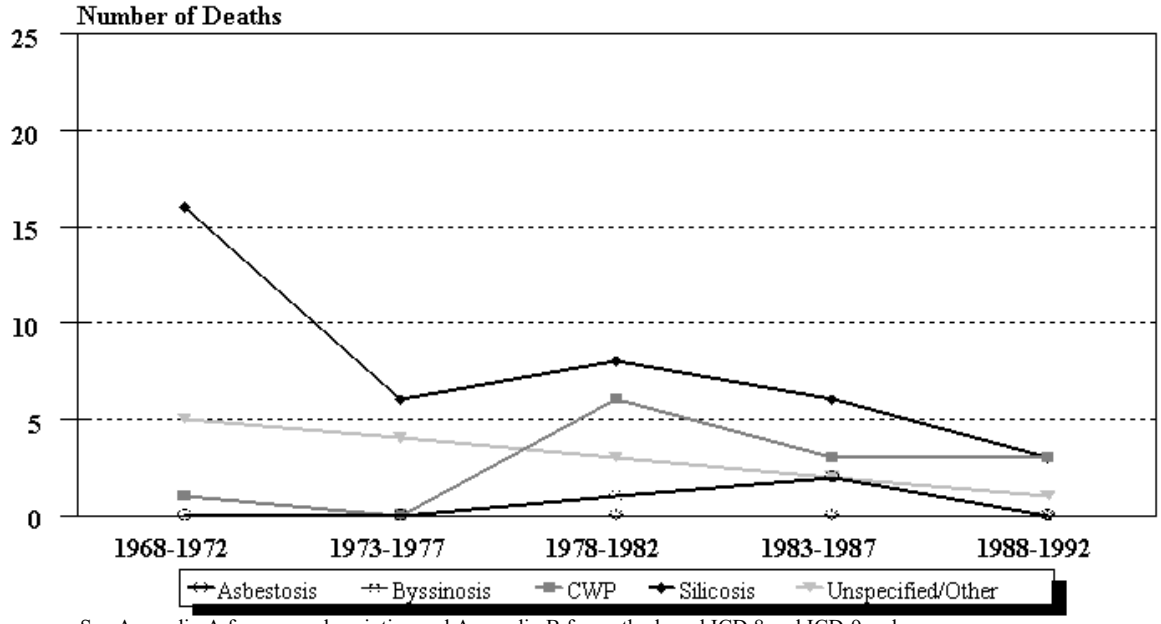
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table SD-2. All pneumoconioses: Distribution of deaths by sex, race, and age, South Dakota residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		70	100.0	7	100.0
Sex	Male	65	92.9	7	100.0
	Female	5	7.1	0	0.0
Race	White	69	98.6	7	100.0
	Black	0	0.0	0	0.0
	Other	1	1.4	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	1	1.4	0	0.0
	35-44	1	1.4	0	0.0
	45-54	3	4.3	0	0.0
	55-64	9	12.9	0	0.0
	65-74	29	41.4	2	28.6
	75-84	22	31.4	5	71.4
	85+	5	7.1	0	0.0
	Mean age	71.4		76.1	
	Range for age	30-96		67-82	

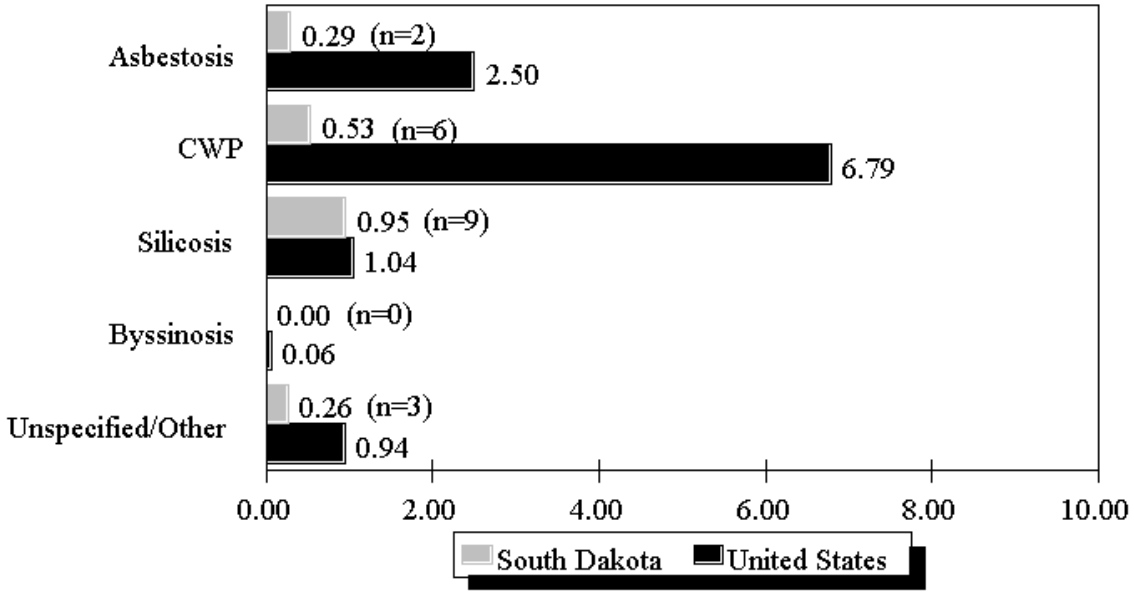
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure SD-3. Pneumoconiosis deaths by condition, South Dakota residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure SD-4. South Dakota and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table SD-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, South Dakota residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Brown	1	**2.88**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.88**
Butte	-	**-**	1	**11.24**	-	**-**	-	**-**	-	**-**	1	**11.24**
Custer	-	**-**	-	**-**	1	**14.53**	-	**-**	-	**-**	1	**14.53**
Fall River	1	**9.32**	-	**-**	-	**-**	-	**-**	-	**-**	1	**9.32**
Grant	-	**-**	-	**-**	2	**7.45**	-	**-**	1	**10.72**	3	**18.17**
Kingsbury	-	**-**	-	**-**	1	**12.15**	-	**-**	-	**-**	1	**12.15**
Lawrence	-	**-**	1	**5.16**	3	**12.45**	-	**-**	-	**-**	4	**17.61**
Meade	-	**-**	2	**6.17**	1	**3.09**	-	**-**	1	**3.09**	4	**12.34**
Miner	-	**-**	1	**6.63**	-	**-**	-	**-**	-	**-**	1	**6.63**
Minnehaha	-	**-**	1	**0.43**	-	**-**	-	**-**	-	**-**	1	**0.43**
Pennington	-	**-**	-	**-**	1	**1.64**	-	**-**	1	**0.84**	2	**2.48**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

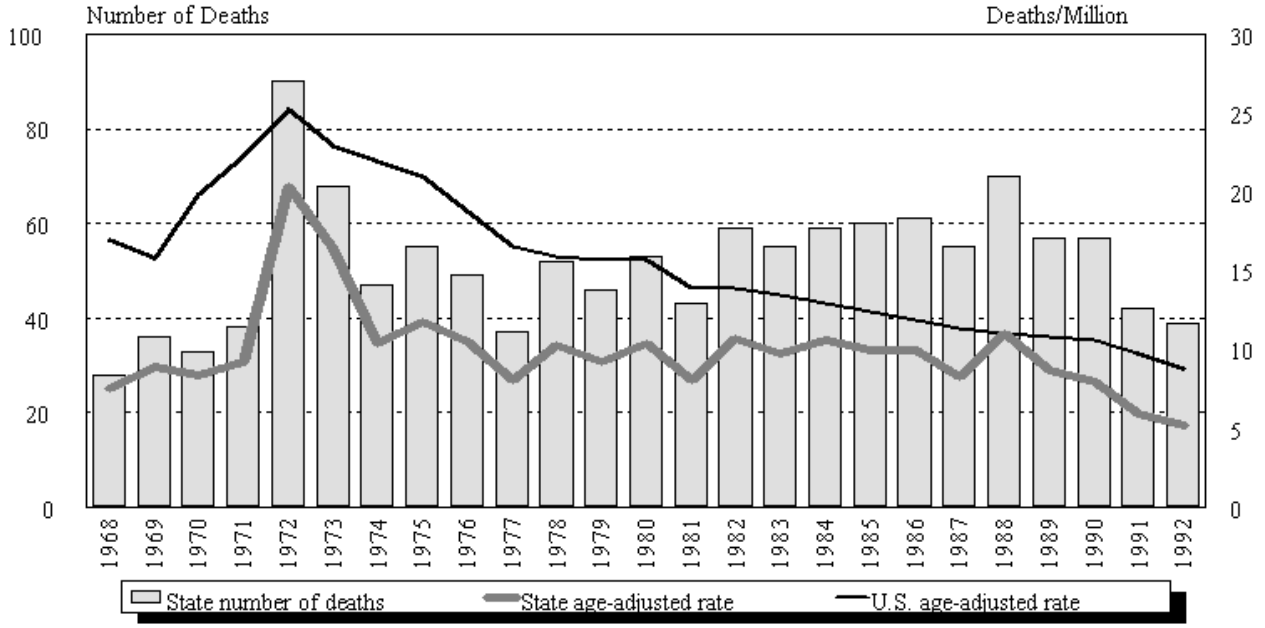
Tennessee: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	265	13
Crude mortality rate (per 1,000,000 population)	13.69	11
Age-adjusted mortality rate (per 1,000,000 population)	7.76	12
Total years of potential life lost to life expectancy	3,129	13
Years of potential life lost to life expectancy (per death)	11.8	29

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	35	13.2
Coal workers' pneumoconiosis	168	63.4
Silicosis	19	7.2
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	44	16.6

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure TN-1. All pneumoconioses: Tennessee and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Tennessee

Table TN-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Tennessee residents age 15 and over, 1968-1992

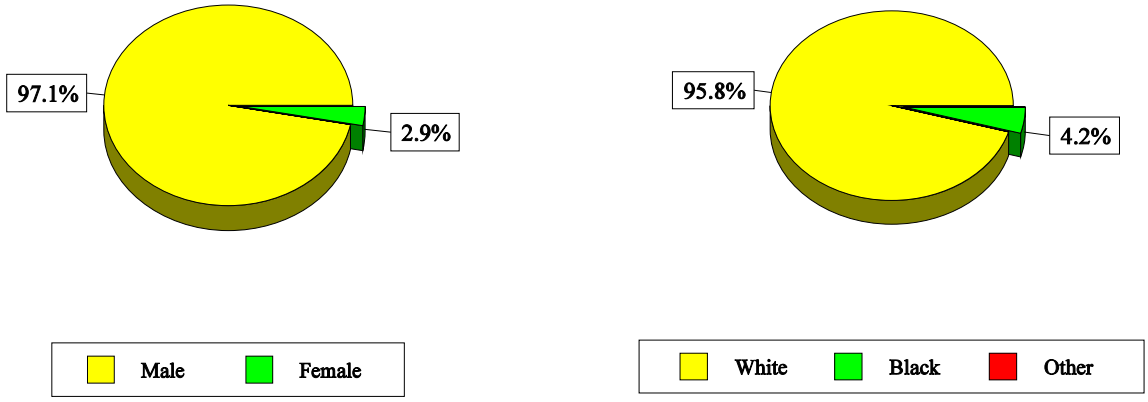
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	1	0.36	-	-	18	4.79			9	2.43	28	7.57
1969	-	-	4	0.87	22	5.44			11	2.69	36	8.86
1970	-	-	6	1.50	9	2.43			18	4.43	33	8.37
1971	-	-	8	1.90	9	2.31			21	5.03	38	9.24
1972	4	1.00	20	4.23	16	3.77			50	11.33	90	20.32
1973	-	-	17	4.27	10	2.78			42	9.56	68	16.33
1974	-	-	17	3.70	4	0.99			26	5.70	47	10.39
1975	1	0.23	19	4.01	13	3.07			24	4.94	55	11.80
1976	-	-	13	3.11	10	2.42			28	5.44	49	10.48
1977	5	1.36	14	2.80	6	1.45			13	2.57	37	8.02
1978	1	0.16	22	4.28	7	1.46			25	5.01	52	10.24
1979	5	1.35	16	2.95	9	1.93	-	-	17	3.29	46	9.27
1980	3	0.60	25	4.74	8	1.53	-	-	17	3.51	53	10.38
1981	-	-	35	6.46	6	1.27	-	-	2	0.29	43	8.02
1982	10	1.84	33	5.80	4	0.78	-	-	12	2.32	59	10.74
1983	5	1.37	37	5.77	11	2.30	-	-	4	0.77	55	9.77
1984	5	1.21	41	7.08	9	1.83	-	-	5	0.73	59	10.62
1985	8	1.29	40	6.62	5	1.04	-	-	7	1.07	60	10.02
1986	10	1.89	39	6.10	5	0.87	1	0.13	6	1.01	61	9.99
1987	4	0.79	39	5.72	6	0.75	-	-	6	0.98	55	8.24
1988	12	2.08	45	6.96	5	0.79	-	-	9	1.33	70	11.06
1989	5	0.91	33	4.65	6	1.23	-	-	13	1.94	57	8.73
1990	6	1.02	37	4.82	3	0.61	-	-	11	1.52	57	7.97
1991	8	1.50	23	2.77	3	0.49	-	-	8	1.20	42	5.96
1992	4	0.78	30	3.65	2	0.36	-	-	3	0.46	39	5.25

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure TN-2. All pneumoconioses: Distribution of deaths by sex and race, Tennessee residents age 15 and over, 1968-1992



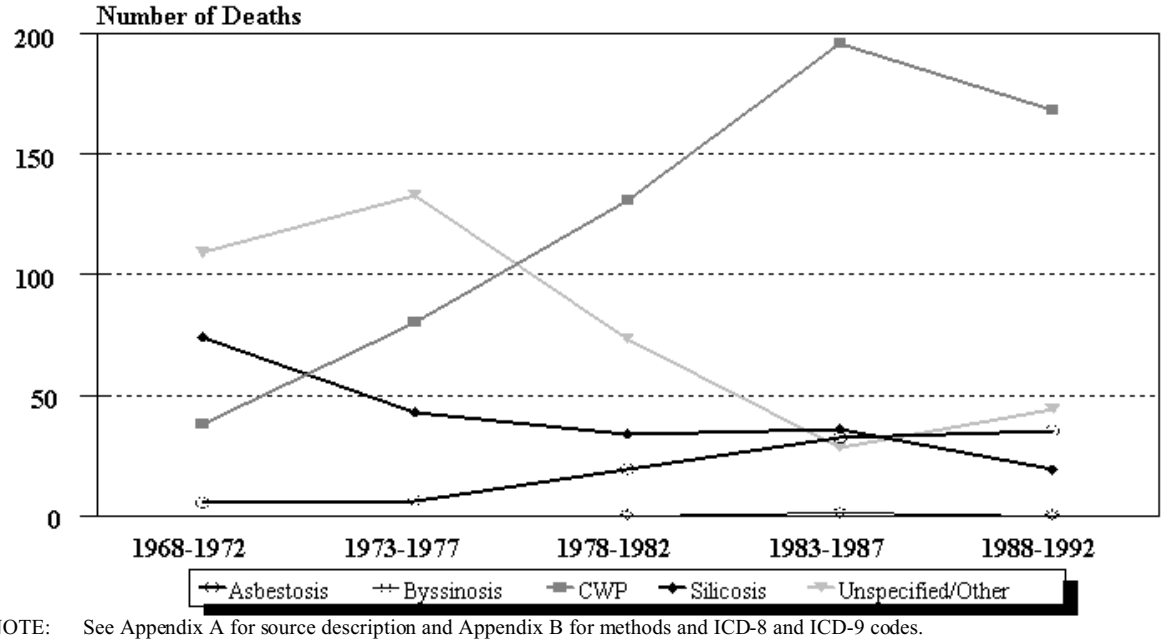
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table TN-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Tennessee residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		1,289	100.0	265	100.0
Sex	Male	1,252	97.1	253	95.5
	Female	37	2.9	12	4.5
Race	White	1,235	95.8	252	95.1
	Black	54	4.2	13	4.9
	Other	0	0.0	0	0.0
Age	15-24	1	0.1	1	0.4
	25-34	2	0.2	0	0.0
	35-44	12	0.9	2	0.8
	45-54	41	3.2	5	1.9
	55-64	212	16.4	27	10.2
	65-74	472	36.6	85	32.1
	75-84	428	33.2	105	39.6
	85+	121	9.4	40	15.1
	Mean age	72.0		74.9	
	Range for age	21-99		21-99	

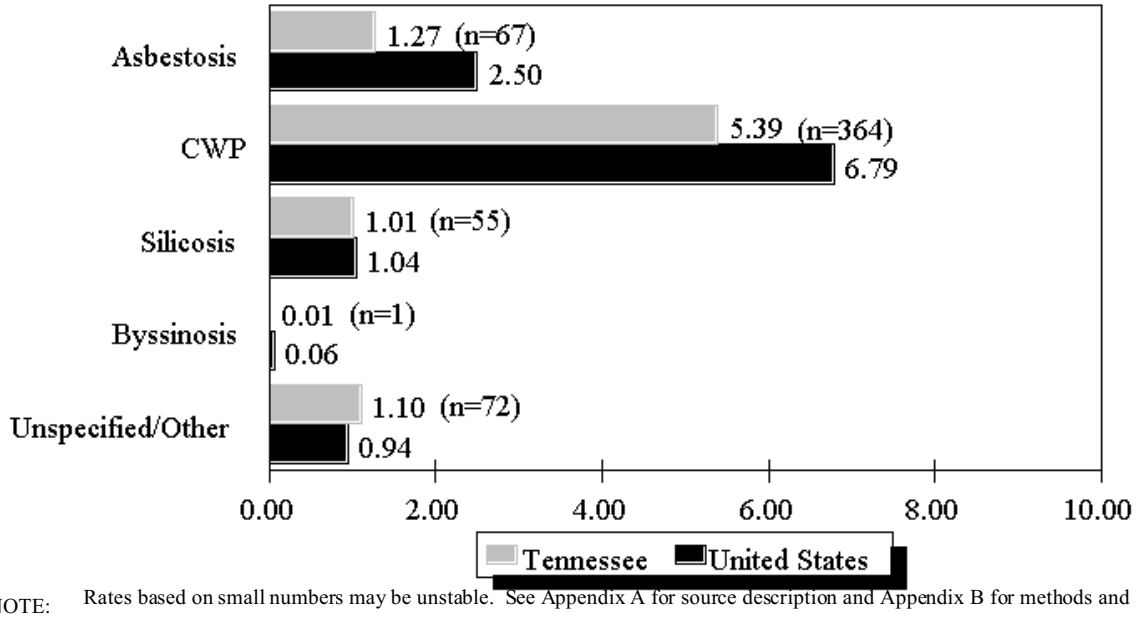
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure TN-3. Pneumoconiosis deaths by condition, Tennessee residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure TN-4. Tennessee and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table TN-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Tennessee residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Anderson	3	**3.85**	43	**42.69**	-	**-**	-	**-**	9	**8.25**	54	**53.51**
Bedford	1	**3.09**	-	**-**	-	**-**	-	**-**	1	**3.09**	2	**6.19**
Benton	1	**2.47**	1	**2.47**	1	**2.47**	-	**-**	-	**-**	3	**7.42**
Bledsoe	-	**-**	6	**51.21**	-	**-**	-	**-**	-	**-**	6	**51.21**
Blount	2	**1.69**	3	**2.81**	-	**-**	1	**0.57**	1	**1.12**	7	**6.20**
Bradley	3	**4.67**	1	**1.56**	1	**1.56**	-	**-**	-	**-**	5	**7.78**
Campbell	-	**-**	72	**135.24**	3	**6.60**	-	**-**	7	**11.77**	82	**153.61**
Cannon	-	**-**	-	**-**	1	**8.61**	-	**-**	-	**-**	1	**8.61**
Carroll	1	**1.27**	1	**1.27**	-	**-**	-	**-**	-	**-**	2	**2.53**
Carter	-	**-**	3	**3.51**	1	**0.87**	-	**-**	-	**-**	4	**4.38**
Chester	1	**7.63**	-	**-**	-	**-**	-	**-**	-	**-**	1	**7.63**
Claiborne	1	**2.08**	26	**84.27**	3	**9.89**	-	**-**	5	**15.87**	33	**104.30**
Cocke	-	**-**	1	**1.80**	-	**-**	-	**-**	-	**-**	1	**1.80**
Cumberland	-	**-**	6	**9.89**	-	**-**	-	**-**	2	**2.57**	8	**12.46**
Davidson	5	**0.89**	-	**-**	1	**0.22**	-	**-**	2	**0.33**	8	**1.45**
Decatur	1	**7.44**	-	**-**	-	**-**	-	**-**	-	**-**	1	**7.44**
Dickson	2	**4.66**	-	**-**	-	**-**	-	**-**	-	**-**	2	**4.66**
Fayette	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.88**	1	**1.88**
Fentress	-	**-**	6	**29.63**	-	**-**	-	**-**	2	**13.38**	8	**43.01**
Franklin	-	**-**	1	**1.39**	-	**-**	-	**-**	-	**-**	1	**1.39**
Grainger	-	**-**	5	**23.56**	-	**-**	-	**-**	-	**-**	5	**23.56**
Greene	1	**0.88**	5	**5.16**	3	**5.62**	-	**-**	1	**2.33**	10	**13.99**
Grundy	-	**-**	17	**94.66**	1	**7.53**	-	**-**	1	**10.56**	19	**112.75**
Hamblen	2	**3.95**	9	**14.13**	-	**-**	-	**-**	-	**-**	11	**18.08**
Hamilton	5	**1.54**	5	**1.41**	4	**1.23**	-	**-**	5	**1.41**	19	**5.59**
Hancock	-	**-**	2	**19.33**	-	**-**	-	**-**	-	**-**	2	**19.33**
Hawkins	1	**2.24**	7	**15.34**	-	**-**	-	**-**	4	**5.80**	12	**23.38**
Henry	1	**2.68**	-	**-**	-	**-**	-	**-**	1	**1.19**	2	**3.87**
Jackson	-	**-**	-	**-**	1	**8.96**	-	**-**	-	**-**	1	**8.96**
Jefferson	-	**-**	2	**4.46**	1	**2.88**	-	**-**	-	**-**	3	**7.34**
Johnson	1	**2.84**	4	**11.35**	-	**-**	-	**-**	1	**2.84**	6	**17.02**
Knox	6	**1.74**	12	**2.79**	9	**1.90**	-	**-**	1	**0.16**	27	**6.42**
Loudon	-	**-**	1	**2.89**	2	**4.44**	-	**-**	1	**1.55**	4	**8.87**

See footnotes at end of table.

Table TN-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Tennessee residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
McMinn	1	**3.24**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.24**
McNairy	1	**3.94**	1	**1.71**	-	**-**	-	**-**	-	**-**	2	**5.65**
Marion	-	**-**	9	**29.83**	-	**-**	-	**-**	2	**6.41**	11	**36.24**
Maury	4	**7.20**	1	**1.86**	2	**2.75**	-	**-**	-	**-**	7	**11.81**
Meigs	-	**-**	1	**8.02**	-	**-**	-	**-**	1	**13.11**	2	**21.13**
Monroe	-	**-**	-	**-**	1	**3.25**	-	**-**	-	**-**	1	**3.25**
Montgomery	1	**1.54**	6	**6.72**	2	**1.82**	-	**-**	-	**-**	9	**10.08**
Moore	-	**-**	-	**-**	1	**19.94**	-	**-**	-	**-**	1	**19.94**
Morgan	-	**-**	17	**79.52**	1	**6.38**	-	**-**	-	**-**	18	**85.90**
Overton	-	**-**	3	**15.29**	-	**-**	-	**-**	-	**-**	3	**15.29**
Polk	-	**-**	2	**7.18**	-	**-**	-	**-**	-	**-**	2	**7.18**
Putnam	1	**2.09**	5	**7.18**	1	**1.00**	-	**-**	2	**4.17**	9	**14.45**
Rhea	2	**8.22**	4	**9.93**	1	**4.11**	-	**-**	-	**-**	7	**22.26**
Roane	4	**8.16**	15	**15.99**	-	**-**	-	**-**	3	**3.94**	22	**28.09**
Roberton	1	**1.28**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.28**
Rutherford	2	**2.63**	1	**0.72**	-	**-**	-	**-**	-	**-**	3	**3.35**
Scott	1	**5.90**	7	**29.44**	-	**-**	-	**-**	2	**8.84**	10	**44.18**
Sequatchic	1	**12.65**	5	**42.29**	-	**-**	-	**-**	-	**-**	6	**54.95**
Sevier	-	**-**	3	**5.22**	1	**2.02**	-	**-**	-	**-**	4	**7.24**
Shelby	1	**0.15**	2	**0.30**	7	**1.06**	-	**-**	1	**0.15**	11	**1.66**
Smith	-	**-**	1	**6.38**	-	**-**	-	**-**	-	**-**	1	**6.38**
Sullivan	3	**1.36**	23	**11.30**	1	**0.37**	-	**-**	8	**4.48**	35	**17.51**
Sumner	1	**0.68**	1	**1.23**	-	**-**	-	**-**	-	**-**	2	**1.91**
Unicoi	-	**-**	2	**4.74**	3	**9.73**	-	**-**	1	**4.99**	6	**19.45**
Union	1	**8.75**	4	**26.46**	-	**-**	-	**-**	1	**4.48**	6	**39.69**
Van Buren	-	**-**	1	**11.69**	-	**-**	-	**-**	-	**-**	1	**11.69**
Warren	-	**-**	1	**1.38**	-	**-**	-	**-**	-	**-**	1	**1.38**
Washington	2	**2.14**	6	**4.23**	-	**-**	-	**-**	1	**0.52**	9	**6.89**
Wayne	-	**-**	1	**3.25**	-	**-**	-	**-**	-	**-**	1	**3.25**
Weakley	-	**-**	-	**-**	1	**2.99**	-	**-**	1	**1.15**	2	**4.14**
White	-	**-**	1	**2.05**	-	**-**	-	**-**	2	**4.10**	3	**6.15**
Williamson	1	**1.78**	-	**-**	1	**1.06**	-	**-**	1	**1.06**	3	**3.91**
Wilson	1	**1.90**	2	**2.13**	-	**-**	-	**-**	1	**1.06**	4	**5.09**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

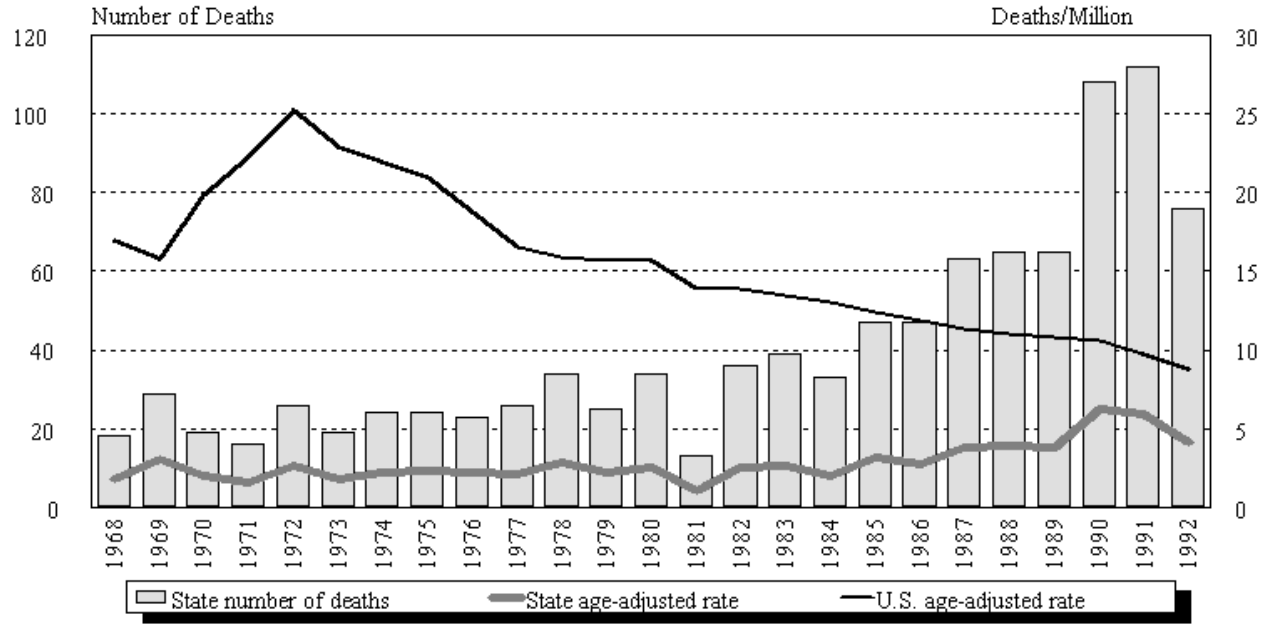
Texas: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	426	10
Crude mortality rate (per 1,000,000 population)	6.59	32
Age-adjusted mortality rate (per 1,000,000 population)	4.81	28
Total years of potential life lost to life expectancy	5,537	10
Years of potential life lost to life expectancy (per death)	13.0	9

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	335	78.6
Coal workers' pneumoconiosis	33	7.7
Silicosis	45	10.6
Byssinosis	1	0.2
Unspecified/Other pneumoconiosis	18	4.2

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure TX-1. All pneumoconioses: Texas and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Texas

Table TX-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Texas residents age 15 and over, 1968-1992

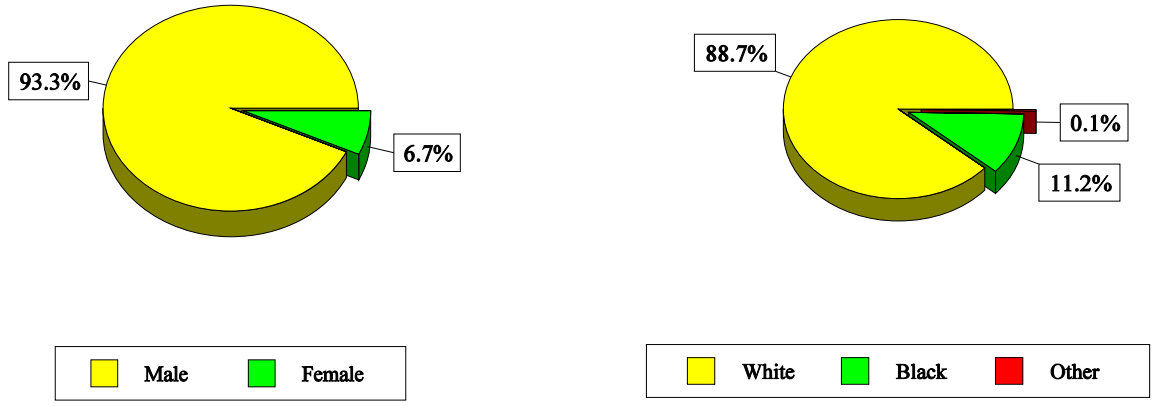
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	2	0.22	2	0.20	8	0.75			6	0.64	18	1.81
1969	2	0.21	3	0.26	15	1.58			10	1.04	29	3.02
1970	2	0.22	2	0.23	7	0.71			9	0.97	19	2.01
1971	-	-	1	0.05	9	0.87			6	0.64	16	1.56
1972	6	0.62	-	-	12	1.17			10	1.08	26	2.68
1973	1	0.11	4	0.33	6	0.60			8	0.79	19	1.82
1974	4	0.41	5	0.39	7	0.66			8	0.73	24	2.18
1975	3	0.31	3	0.24	11	1.13			8	0.71	24	2.30
1976	6	0.55	3	0.21	10	1.00			4	0.41	23	2.17
1977	4	0.36	6	0.38	7	0.66			9	0.76	26	2.16
1978	4	0.28	2	0.14	13	1.20			16	1.27	34	2.83
1979	12	1.10	6	0.48	5	0.47	-	-	2	0.13	25	2.18
1980	8	0.67	4	0.26	16	1.23	-	-	6	0.41	34	2.57
1981	6	0.47	5	0.43	-	-	-	-	2	0.15	13	1.05
1982	12	0.94	12	0.73	12	0.91	-	-	2	0.06	36	2.53
1983	19	1.29	7	0.40	8	0.63	-	-	5	0.28	39	2.60
1984	12	0.79	8	0.45	11	0.68	1	0.08	1	0.07	33	2.06
1985	26	1.73	11	0.67	5	0.37	-	-	5	0.39	47	3.16
1986	25	1.42	7	0.36	14	0.87	1	0.07	1	0.07	47	2.73
1987	48	2.85	1	0.04	10	0.70	-	-	4	0.18	63	3.77
1988	46	2.68	7	0.37	12	0.81	-	-	2	0.15	65	3.87
1989	49	2.83	5	0.22	4	0.33	1	0.04	6	0.36	65	3.79
1990	91	5.29	5	0.17	7	0.52	-	-	6	0.36	108	6.28
1991	95	5.04	7	0.26	11	0.64	-	-	1	0.02	112	5.88
1992	54	3.01	9	0.35	11	0.62	-	-	3	0.19	76	4.08

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure TX-2. All pneumoconioses: Distribution of deaths by sex and race, Texas residents age 15 and over, 1968-1992



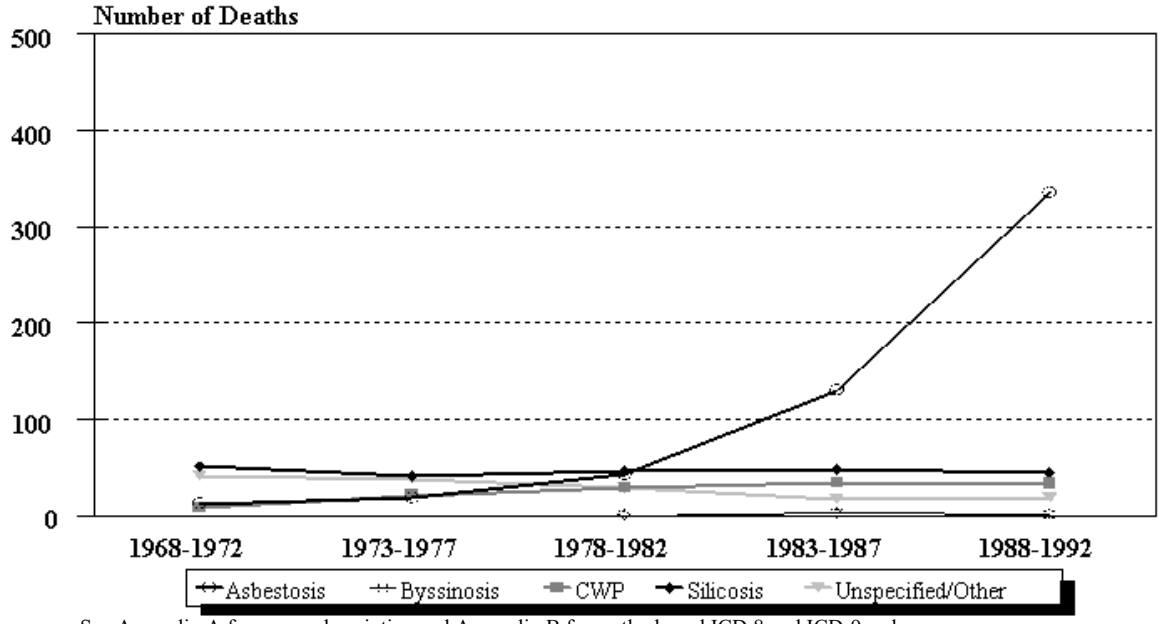
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table TX-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Texas residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		1,021	100.0	426	100.0
Sex	Male	953	93.3	406	95.3
	Female	68	6.7	20	4.7
Race	White	906	88.7	383	89.9
	Black	114	11.2	43	10.1
	Other	1	0.1	0	0.0
Age	15-24	8	0.8	1	0.2
	25-34	4	0.4	1	0.2
	35-44	13	1.3	1	0.2
	45-54	82	8.0	18	4.2
	55-64	178	17.4	59	13.8
	65-74	364	35.7	152	35.7
	75-84	304	29.8	156	36.6
	85+	68	6.7	38	8.9
	Mean age	69.7		72.5	
	Range for age	20-95		22-93	

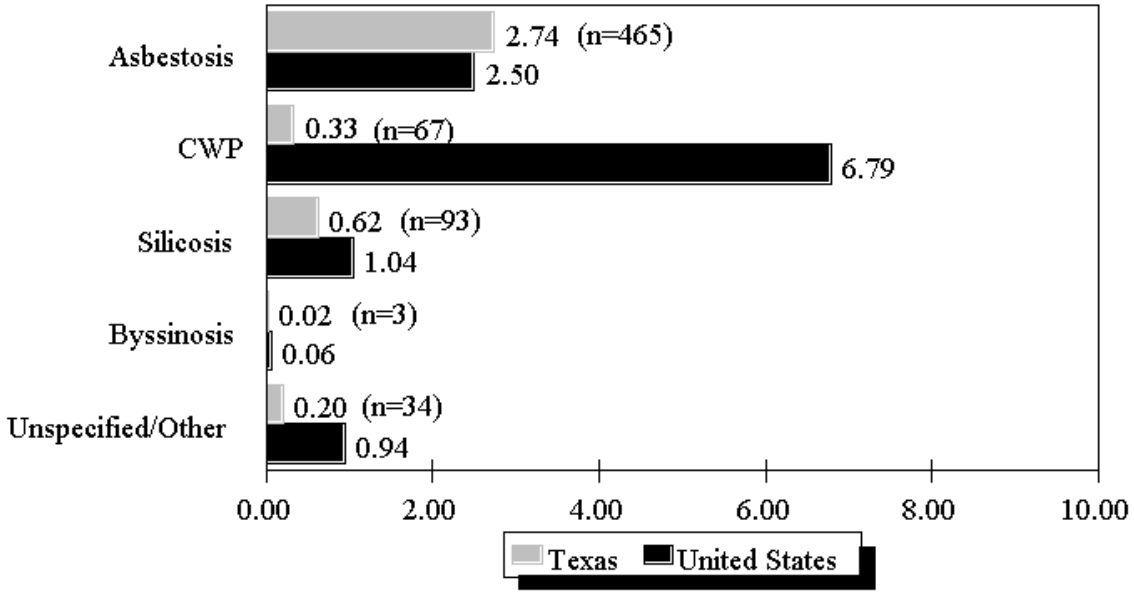
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure TX-3. Pneumoconiosis deaths by condition, Texas residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure TX-4. Texas and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table TX-3 (page 1 of 4). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Texas residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Anderson	1	**2.40**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.40**
Angelina	5	**6.67**	-	**-**	4	**6.15**	-	**-**	-	**-**	9	**12.82**
Aransas	1	**3.96**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.96**
Atascosa	-	**-**	1	**1.85**	-	**-**	-	**-**	-	**-**	1	**1.85**
Austin	1	**4.51**	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.51**
Bastrop	1	**1.30**	-	**-**	3	**7.10**	-	**-**	-	**-**	4	**8.40**
Bee	2	**9.19**	-	**-**	-	**-**	-	**-**	-	**-**	2	**9.19**
Bell	1	**0.80**	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.80**
Bexar	8	**0.68**	2	**0.17**	9	**0.79**	-	**-**	1	**0.06**	20	**1.71**
Bosque	-	**-**	-	**-**	1	**4.74**	-	**-**	-	**-**	1	**4.74**
Brazoria	16	**10.62**	-	**-**	-	**-**	-	**-**	-	**-**	16	**10.62**
Brazos	3	**4.95**	-	**-**	-	**-**	-	**-**	-	**-**	3	**4.95**
Burleson	2	**8.31**	1	**2.46**	-	**-**	-	**-**	-	**-**	3	**10.77**
Burnet	1	**1.25**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.25**
Cameron	1	**0.49**	1	**0.49**	3	**1.02**	-	**-**	-	**-**	5	**2.00**
Carson	-	**-**	2	**19.77**	-	**-**	-	**-**	-	**-**	2	**19.77**
Chambers	3	**15.72**	-	**-**	1	**6.31**	-	**-**	-	**-**	4	**22.04**
Cherokee	4	**7.38**	-	**-**	2	**6.02**	-	**-**	-	**-**	6	**13.40**
Clay	1	**3.42**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.42**
Collin	1	**0.51**	-	**-**	-	**-**	-	**-**	-	**-**	1	**0.51**
Comal	3	**4.22**	-	**-**	-	**-**	-	**-**	1	**1.69**	4	**5.91**
Comanche	1	**1.72**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.72**
Cooke	1	**3.05**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.05**
Coryell	1	**3.14**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.14**
Dallas	23	**1.53**	3	**0.14**	4	**0.25**	1	**0.05**	2	**0.12**	32	**2.04**
Denton	1	**0.51**	2	**1.03**	-	**-**	-	**-**	-	**-**	3	**1.54**
Duval	1	**7.78**	-	**-**	-	**-**	-	**-**	-	**-**	1	**7.78**
Ector	1	**1.00**	1	**1.23**	-	**-**	-	**-**	1	**1.00**	3	**3.22**
El Paso	3	**0.49**	1	**0.16**	3	**0.65**	-	**-**	3	**0.65**	10	**1.95**
Erath	-	**-**	1	**6.54**	1	**3.85**	-	**-**	-	**-**	2	**10.39**
Falls	1	**1.48**	-	**-**	1	**1.48**	-	**-**	-	**-**	2	**2.96**
Fannin	1	**3.06**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.06**
Foard	1	**38.68**	-	**-**	-	**-**	-	**-**	-	**-**	1	**38.68**

See footnotes at end of table.

Table TX-3 (page 2 of 4). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Texas residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Fort Bend	2	**1.69**	-	**-**	-	**-**	-	**-**	-	**-**	2	**1.69**
Freestone	1	**5.25**	-	**-**	1	**1.75**	-	**-**	-	**-**	2	**7.00**
Galveston	23	**9.32**	1	**0.51**	4	**2.00**	-	**-**	2	**0.84**	29	**12.03**
Gonzales	-	**-**	1	**1.82**	-	**-**	-	**-**	1	**1.82**	2	**3.64**
Grayson	1	**0.39**	1	**0.96**	-	**-**	-	**-**	1	**0.39**	3	**1.73**
Gregg	7	**5.92**	-	**-**	-	**-**	-	**-**	-	**-**	7	**5.92**
Grimes	-	**-**	-	**-**	1	**5.33**	-	**-**	-	**-**	1	**5.33**
Guadalupe	2	**2.68**	-	**-**	1	**1.75**	-	**-**	-	**-**	3	**4.42**
Hale	-	**-**	1	**1.41**	1	**3.10**	-	**-**	-	**-**	2	**4.51**
Hall	-	**-**	-	**-**	1	**16.20**	-	**-**	-	**-**	1	**16.20**
Hardin	5	**8.15**	-	**-**	-	**-**	-	**-**	-	**-**	5	**8.15**
Harris	74	**3.52**	12	**0.52**	21	**1.08**	-	**-**	2	**0.08**	107	**5.09**
Harrison	2	**3.38**	1	**1.79**	1	**1.79**	-	**-**	-	**-**	4	**6.96**
Hemphill	-	**-**	-	**-**	-	**-**	-	**-**	1	**10.93**	1	**10.93**
Henderson	5	**4.55**	-	**-**	1	**1.22**	-	**-**	-	**-**	6	**5.78**
Hidalgo	1	**0.19**	-	**-**	1	**0.36**	-	**-**	-	**-**	2	**0.56**
Hill	1	**1.02**	-	**-**	1	**1.02**	-	**-**	-	**-**	2	**2.05**
Hockley	-	**-**	1	**5.03**	-	**-**	-	**-**	-	**-**	1	**5.03**
Hood	1	**2.85**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.85**
Houston	1	**1.39**	-	**-**	1	**3.97**	-	**-**	-	**-**	2	**5.36**
Howard	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.41**	1	**1.41**
Hunt	-	**-**	1	**0.68**	-	**-**	-	**-**	-	**-**	1	**0.68**
Hutchinson	3	**8.36**	-	**-**	-	**-**	-	**-**	-	**-**	3	**8.36**
Jasper	11	**28.75**	1	**1.30**	-	**-**	-	**-**	-	**-**	12	**30.05**
Jefferson	73	**22.14**	1	**0.20**	9	**3.58**	-	**-**	1	**0.59**	83	**26.12**
Jim Wells	-	**-**	1	**1.48**	-	**-**	-	**-**	-	**-**	1	**1.48**
Johnson	3	**3.38**	-	**-**	-	**-**	-	**-**	1	**1.45**	4	**4.83**
Kerr	4	**2.83**	-	**-**	-	**-**	-	**-**	-	**-**	4	**2.83**
Lavaca	1	**3.94**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.94**
Leon	2	**11.39**	-	**-**	-	**-**	-	**-**	1	**13.03**	3	**24.43**
Liberty	3	**5.94**	-	**-**	-	**-**	-	**-**	1	**1.98**	4	**7.92**
Limestone	1	**1.38**	-	**-**	-	**-**	-	**-**	1	**1.38**	2	**2.77**

See footnotes at end of table.

Table TX-3 (page 3 of 4). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Texas residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Live Oak	1	**4.32**	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.32**
Llano	-	**-**	3	**7.35**	-	**-**	-	**-**	-	**-**	3	**7.35**
Lubbock	2	**1.18**	-	**-**	1	**0.31**	1	**0.59**	1	**0.59**	5	**2.68**
McCulloch	1	**9.28**	-	**-**	-	**-**	1	**9.28**	-	**-**	2	**18.56**
McLennan	9	**3.13**	-	**-**	1	**0.56**	-	**-**	-	**-**	10	**3.69**
Madison	1	**9.40**	1	**3.08**	1	**3.08**	-	**-**	-	**-**	2	**12.48**
Mason	1	**19.60**	-	**-**	-	**-**	-	**-**	-	**-**	1	**19.60**
Matagorda	1	**2.91**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.91**
Maverick	1	**2.51**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.51**
Midland	1	**0.77**	1	**1.16**	-	**-**	-	**-**	-	**-**	2	**1.93**
Mills	-	**-**	1	**4.47**	-	**-**	-	**-**	-	**-**	1	**4.47**
Mitchell	-	**-**	-	**-**	-	**-**	-	**-**	1	**9.32**	1	**9.32**
Montgomery	5	**3.59**	3	**1.79**	2	**1.28**	-	**-**	-	**-**	10	**6.66**
Morris	-	**-**	1	**2.71**	-	**-**	-	**-**	-	**-**	1	**2.71**
Nacogdoches	-	**-**	-	**-**	1	**2.30**	-	**-**	1	**2.30**	2	**4.60**
Navarro	-	**-**	1	**0.79**	1	**0.79**	-	**-**	1	**0.79**	3	**2.36**
Newton	2	**10.53**	-	**-**	-	**-**	-	**-**	1	**6.88**	3	**17.41**
Nueces	10	**3.92**	4	**0.99**	-	**-**	-	**-**	-	**-**	14	**4.91**
Orange	50	**56.05**	2	**2.23**	1	**0.91**	-	**-**	-	**-**	52	**58.28**
Palo Pinto	2	**2.87**	-	**-**	-	**-**	-	**-**	-	**-**	2	**2.87**
Panola	1	**1.73**	1	**4.16**	-	**-**	-	**-**	-	**-**	2	**5.89**
Parker	1	**1.79**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.79**
Reeves	-	**-**	-	**-**	1	**7.33**	-	**-**	-	**-**	1	**7.33**
Rockwall	-	**-**	1	**5.90**	-	**-**	-	**-**	-	**-**	1	**5.90**
Rusk	3	**3.59**	-	**-**	-	**-**	-	**-**	-	**-**	3	**3.59**
Sabine	2	**11.59**	-	**-**	1	**3.07**	-	**-**	-	**-**	3	**14.66**
San Jacinto	1	**4.91**	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.91**
Shelby	2	**2.77**	1	**3.61**	-	**-**	-	**-**	-	**-**	3	**6.38**
Smith	11	**7.28**	-	**-**	-	**-**	-	**-**	1	**0.67**	12	**7.95**
Starr	-	**-**	1	**4.19**	-	**-**	-	**-**	-	**-**	1	**4.19**
Tarrant	8	**0.79**	6	**0.54**	5	**0.57**	-	**-**	2	**0.20**	21	**2.09**
Taylor	1	**0.97**	-	**-**	-	**-**	-	**-**	1	**0.97**	2	**1.94**

See footnotes at end of table.

Table TX-3 (page 4 of 4). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Texas residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Tom Green	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.15**	1	**1.15**
Travis	5	**1.35**	-	**-**	-	**-**	-	**-**	1	**0.26**	6	**1.61**
Trinity	1	**2.72**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.72**
Tyler	3	**8.16**	-	**-**	-	**-**	-	**-**	-	**-**	3	**8.16**
Upshur	2	**6.04**	1	**1.31**	-	**-**	-	**-**	-	**-**	3	**7.35**
Val Verde	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.03**	1	**2.03**
Van Zandt	2	**4.20**	-	**-**	-	**-**	-	**-**	-	**-**	2	**4.20**
Victoria	6	**8.39**	-	**-**	-	**-**	-	**-**	-	**-**	6	**8.39**
Waller	-	**-**	-	**-**	1	**2.40**	-	**-**	-	**-**	1	**2.40**
Washington	2	**7.61**	-	**-**	-	**-**	-	**-**	-	**-**	2	**7.61**
Wharton	1	**2.51**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.51**
Wichita	3	**1.66**	-	**-**	-	**-**	-	**-**	1	**0.40**	4	**2.06**
Wilbarger	1	**5.49**	-	**-**	-	**-**	-	**-**	-	**-**	1	**5.49**
Wilson	1	**5.09**	-	**-**	-	**-**	-	**-**	-	**-**	1	**5.09**
Wise	1	**3.11**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.11**
Wood	2	**4.98**	1	**1.02**	-	**-**	-	**-**	-	**-**	3	**6.00**
Yoakum	-	**-**	-	**-**	1	**14.71**	-	**-**	-	**-**	1	**14.71**
Young	-	**-**	1	**1.61**	-	**-**	-	**-**	-	**-**	1	**1.61**
Zapata	1	**5.35**	-	**-**	-	**-**	-	**-**	-	**-**	1	**5.35**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

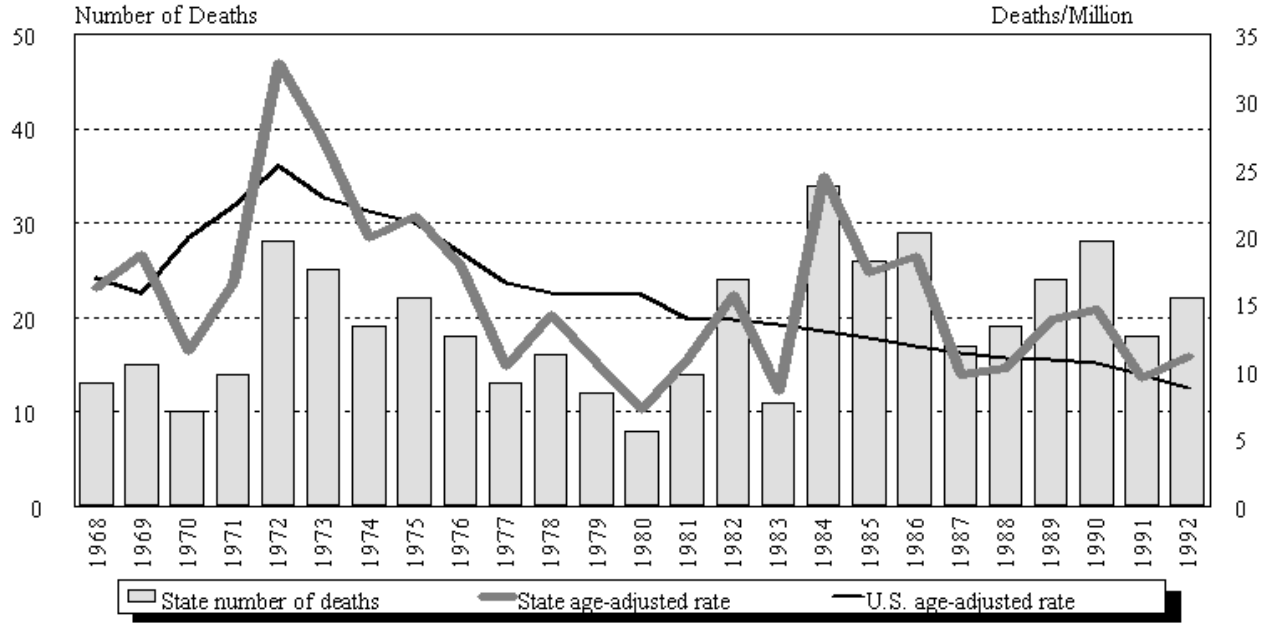
Utah: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	111	26
Crude mortality rate (per 1,000,000 population)	18.67	10
Age-adjusted mortality rate (per 1,000,000 population)	11.88	7
Total years of potential life lost to life expectancy	1,119	29
Years of potential life lost to life expectancy (per death)	10.1	48

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	10	9.0
Coal workers' pneumoconiosis	73	65.8
Silicosis	18	16.2
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	11	9.9

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure UT-1. All pneumoconioses: Utah and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Utah

Table UT-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Utah residents age 15 and over, 1968-1992

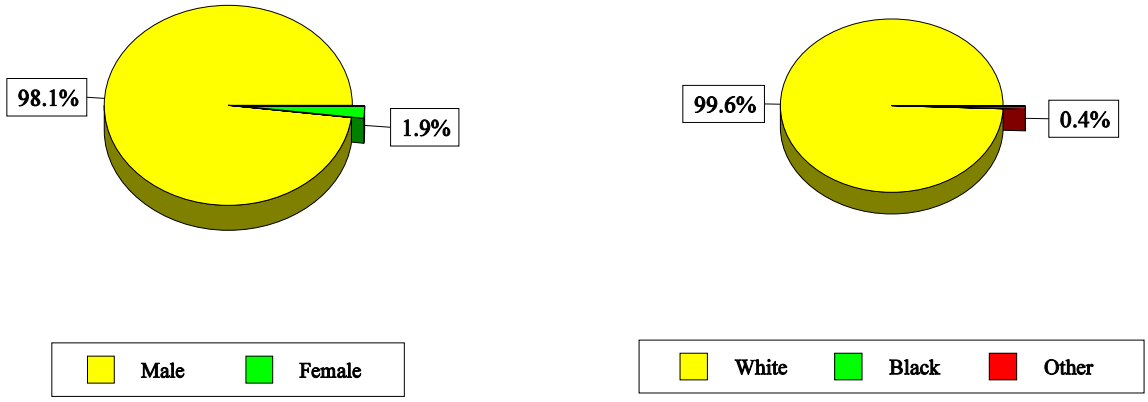
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	10	12.61			4	4.97	13	16.25
1969	-	-	3	3.56	10	13.22			2	1.96	15	18.73
1970	-	-	-	-	5	5.65			5	5.87	10	11.51
1971	-	-	-	-	11	13.68			5	5.43	14	16.53
1972	-	-	-	-	12	13.20			16	19.65	28	32.84
1973	-	-	4	4.30	13	13.61			8	9.13	25	27.04
1974	-	-	3	3.72	8	7.73			8	8.44	19	19.90
1975	-	-	5	4.16	8	8.29			10	10.15	22	21.47
1976	-	-	2	2.18	11	10.31			5	5.34	18	17.82
1977	-	-	3	3.02	9	6.83			1	0.48	13	10.33
1978	1	1.01	4	4.04	5	4.44			6	4.76	16	14.26
1979	-	-	3	2.68	3	2.68	-	-	6	5.26	12	10.63
1980	1	0.95	1	0.95	5	4.62	-	-	1	0.70	8	7.22
1981	2	1.57	6	4.72	3	2.24	-	-	3	2.48	14	11.01
1982	1	0.36	14	9.89	6	3.90	-	-	4	2.23	24	15.75
1983	1	0.84	4	3.04	4	2.63	-	-	2	1.99	11	8.50
1984	1	0.58	17	12.80	9	6.72	-	-	7	4.43	34	24.52
1985	-	-	14	8.54	9	6.40	-	-	3	2.33	26	17.26
1986	2	0.84	16	10.02	4	2.40	-	-	7	5.31	29	18.57
1987	2	1.28	12	6.98	2	1.04	-	-	1	0.52	17	9.82
1988	1	0.76	16	8.44	1	0.50	-	-	1	0.50	19	10.21
1989	2	1.74	14	7.17	6	3.24	-	-	2	1.66	24	13.81
1990	3	1.68	18	9.21	2	1.27	-	-	5	2.48	28	14.64
1991	-	-	12	6.84	5	2.21	-	-	1	0.46	18	9.50
1992	4	2.02	13	6.29	4	2.57	-	-	2	0.68	22	11.11

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure UT-2. All pneumoconioses: Distribution of deaths by sex and race, Utah residents age 15 and over, 1968-1992



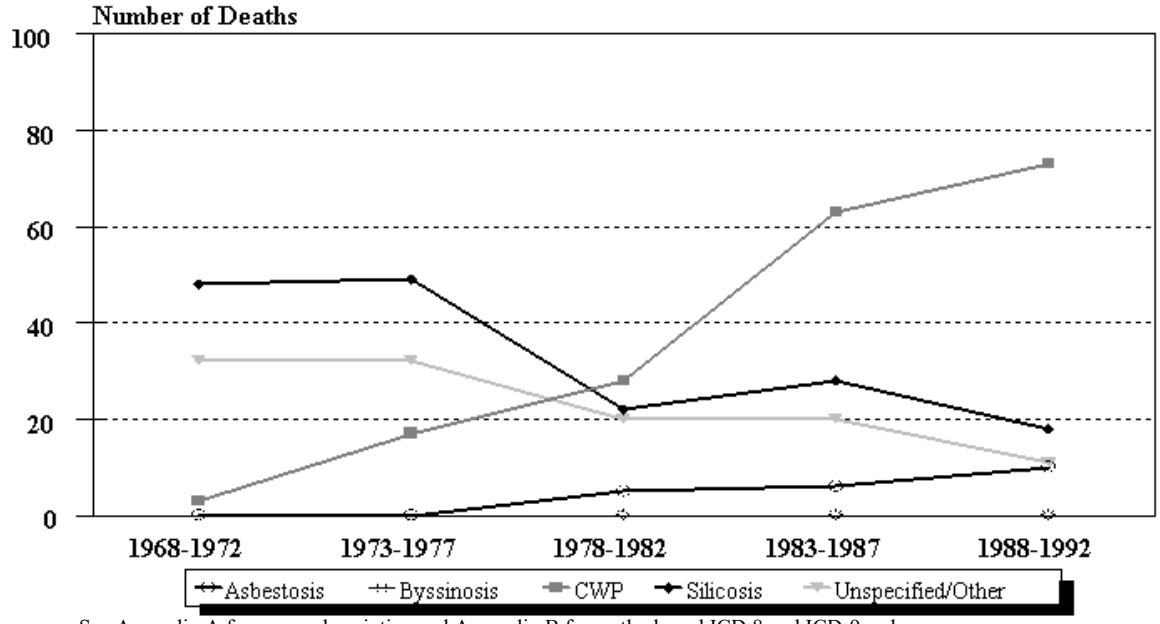
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table UT-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Utah residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		479	100.0	111	100.0
Sex	Male	470	98.1	110	99.1
	Female	9	1.9	1	0.9
Race	White	477	99.6	110	99.1
	Black	0	0.0	0	0.0
	Other	2	0.4	1	0.9
Age	15-24	1	0.2	0	0.0
	25-34	1	0.2	0	0.0
	35-44	0	0.0	0	0.0
	45-54	5	1.0	1	0.9
	55-64	51	10.6	5	4.5
	65-74	179	37.4	27	24.3
	75-84	193	40.3	61	55.0
	85+	49	10.2	17	15.3
	Mean age	74.2		77.8	
	Range for age	15-96		53-96	

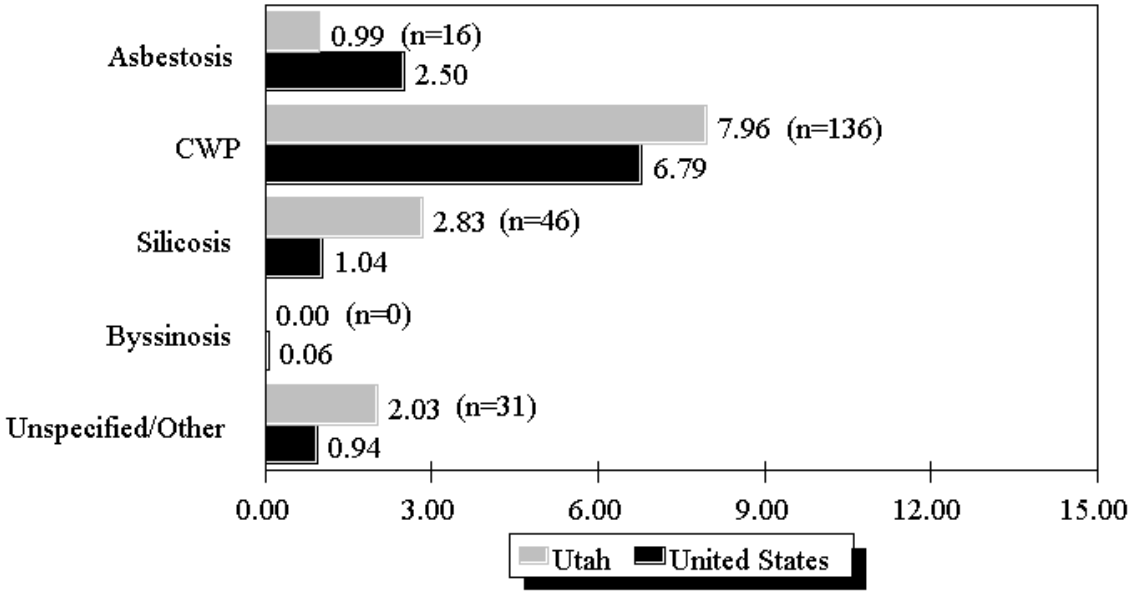
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure UT-3. Pneumoconiosis deaths by condition, Utah residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure UT-4. Utah and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table UT-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Utah residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Box Elder	-	**-**	-	**-**	1	**3.61**	-	**-**	-	**-**	1	**3.61**
Cache	-	**-**	-	**-**	1	**1.03**	-	**-**	-	**-**	1	**1.03**
Carbon	-	**-**	74	**270.72**	1	**5.16**	-	**-**	22	**87.02**	97	**362.90**
Davis	-	**-**	3	**2.41**	-	**-**	-	**-**	-	**-**	3	**2.41**
Emery	-	**-**	15	**149.91**	-	**-**	-	**-**	1	**15.06**	16	**164.97**
Grand	-	**-**	1	**10.34**	2	**24.87**	-	**-**	-	**-**	3	**35.21**
Iron	1	**3.61**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.61**
Juab	-	**-**	-	**-**	1	**7.22**	-	**-**	-	**-**	1	**7.22**
Salt Lake	12	**1.76**	18	**2.33**	22	**3.40**	-	**-**	4	**0.55**	56	**8.04**
San Juan	-	**-**	1	**14.13**	-	**-**	-	**-**	-	**-**	1	**14.13**
Sanpete	-	**-**	2	**5.60**	-	**-**	-	**-**	-	**-**	2	**5.60**
Sevier	-	**-**	1	**3.00**	-	**-**	-	**-**	-	**-**	1	**3.00**
Summit	-	**-**	1	**13.20**	3	**34.59**	-	**-**	1	**8.19**	5	**55.98**
Tooele	-	**-**	1	**3.41**	2	**8.30**	-	**-**	1	**4.89**	4	**16.61**
Uintah	-	**-**	1	**6.52**	-	**-**	-	**-**	-	**-**	1	**6.52**
Utah	3	**2.22**	8	**3.72**	8	**4.45**	-	**-**	2	**0.82**	21	**11.21**
Washington	-	**-**	6	**5.87**	2	**1.96**	-	**-**	-	**-**	7	**6.85**
Weber	-	**-**	4	**2.69**	3	**1.56**	-	**-**	-	**-**	7	**4.25**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

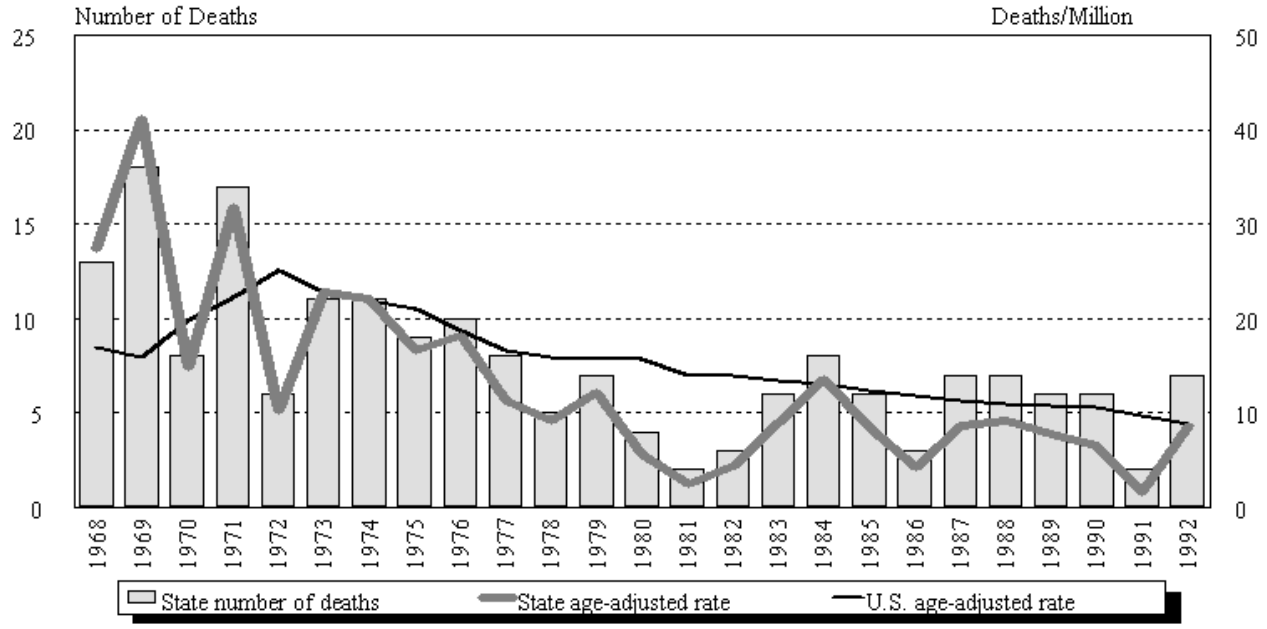
Vermont: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	28	43
Crude mortality rate (per 1,000,000 population)	12.67	15
Age-adjusted mortality rate (per 1,000,000 population)	6.73	18
Total years of potential life lost to life expectancy	274	44
Years of potential life lost to life expectancy (per death)	9.8	50

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	5	17.9
Coal workers' pneumoconiosis	4	14.3
Silicosis	16	57.1
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	3	10.7

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure VT-1. All pneumoconioses: Vermont and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Vermont

Table VT-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Vermont residents age 15 and over, 1968-1992

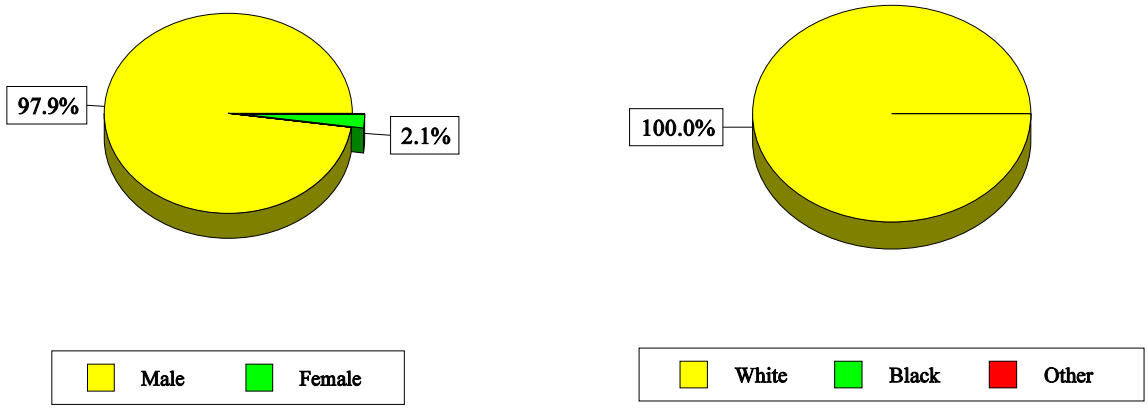
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	11	22.06			2	5.39	13	27.45
1969	2	4.96	-	-	16	36.16			1	2.69	18	41.12
1970	-	-	-	-	6	11.84			2	3.08	8	14.92
1971	-	-	1	0.88	10	17.87			7	15.32	17	31.84
1972	-	-	-	-	2	4.39			4	5.89	6	10.28
1973	-	-	-	-	9	17.99			2	4.78	11	22.77
1974	-	-	-	-	11	22.13			-	-	11	22.13
1975	-	-	-	-	7	12.42			2	4.15	9	16.57
1976	-	-	-	-	8	14.14			2	4.07	10	18.22
1977	-	-	-	-	6	8.69			3	4.01	8	11.36
1978	-	-	-	-	2	3.27			3	5.91	5	9.18
1979	2	3.88	-	-	5	8.38	-	-	-	-	7	12.26
1980	-	-	-	-	4	5.66	-	-	-	-	4	5.66
1981	-	-	-	-	2	2.50	-	-	-	-	2	2.50
1982	1	1.89	-	-	2	2.45	-	-	-	-	3	4.34
1983	1	2.35	1	1.21	3	3.63	-	-	1	1.87	6	9.05
1984	1	1.86	-	-	5	6.52	-	-	2	5.14	8	13.52
1985	1	1.85	1	0.55	3	4.88	1	1.18	-	-	6	8.46
1986	1	1.83	-	-	-	-	-	-	2	2.32	3	4.16
1987	2	2.89	1	1.81	3	2.87	1	1.14	-	-	7	8.70
1988	1	1.11	2	2.30	2	2.22	-	-	2	3.56	7	9.20
1989	-	-	1	1.09	4	4.35	-	-	1	2.37	6	7.81
1990	1	1.07	-	-	5	5.44	-	-	-	-	6	6.51
1991	-	-	1	0.48	1	1.04	-	-	-	-	2	1.52
1992	3	3.91	-	-	4	4.78	-	-	-	-	7	8.69

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure VT-2. All pneumoconioses: Distribution of deaths by sex and race, Vermont residents age 15 and over, 1968-1992



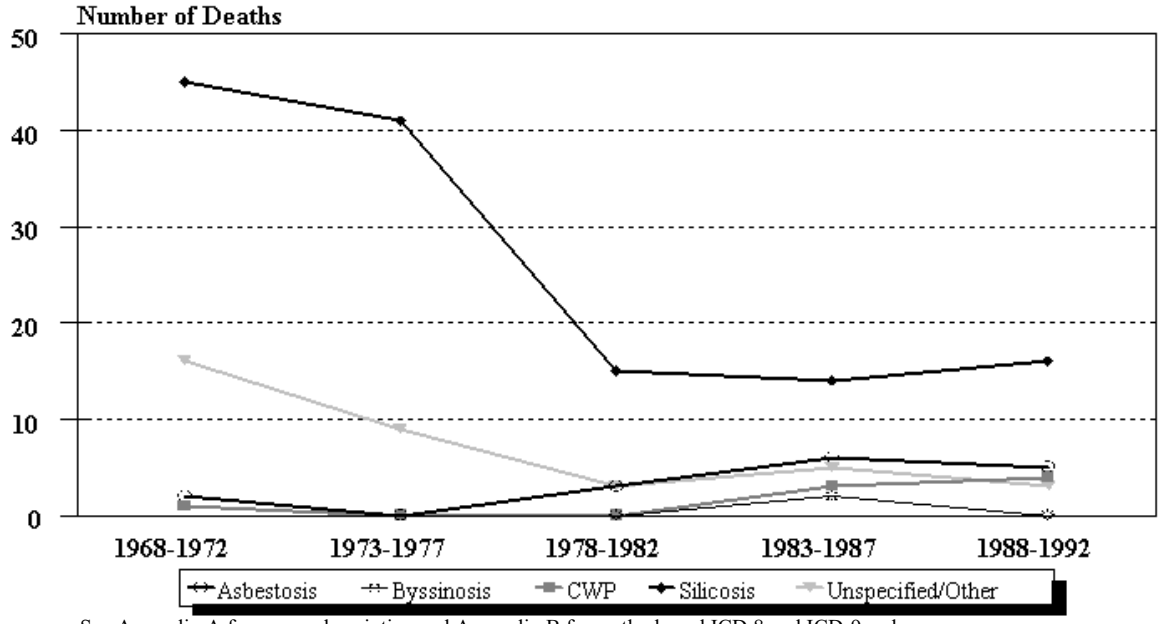
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table VT-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Vermont residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		190	100.0	28	100.0
Sex	Male	186	97.9	26	92.9
	Female	4	2.1	2	7.1
Race	White	190	100.0	28	100.0
	Black	0	0.0	0	0.0
	Other	0	0.0	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	0	0.0	0	0.0
	35-44	0	0.0	0	0.0
	45-54	2	1.1	0	0.0
	55-64	21	11.1	1	3.6
	65-74	81	42.6	7	25.0
	75-84	68	35.8	16	57.1
	85+	18	9.5	4	14.3
	Mean age	74.0		78.4	
	Range for age	49-96		64-88	

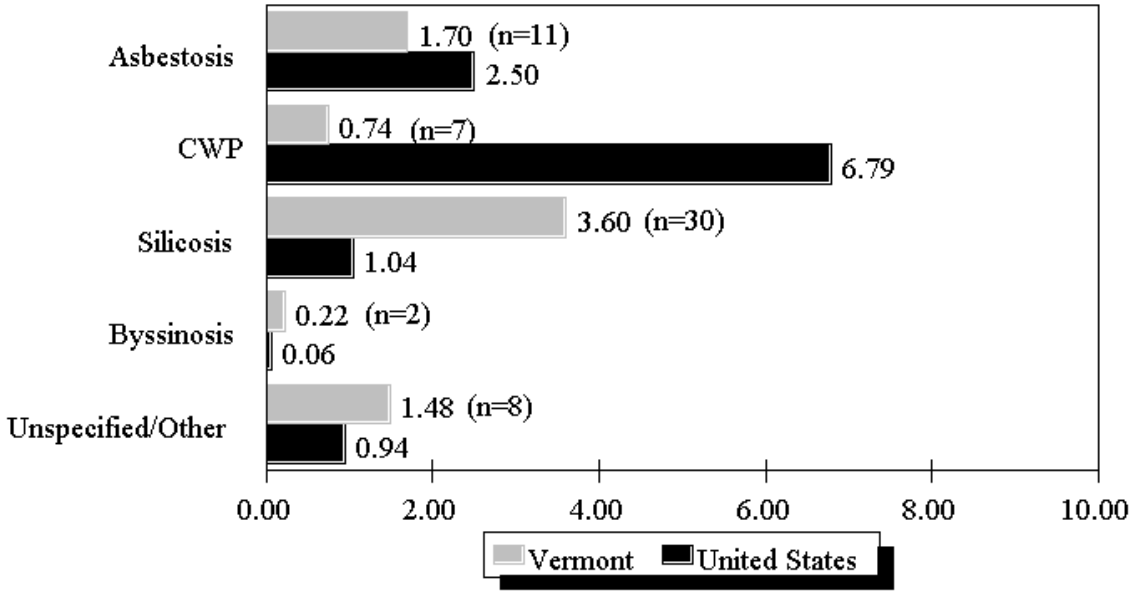
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure VT-3. Pneumoconiosis deaths by condition, Vermont residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure VT-4. Vermont and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table VT-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Vermont residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Bennington	1	**2.81**	1	**1.13**	-	**-**	-	**-**	-	**-**	2	**3.94**
Caledonia	1	**3.89**	-	**-**	1	**1.78**	-	**-**	1	**3.89**	3	**9.56**
Chittenden	2	**2.39**	-	**-**	1	**0.62**	-	**-**	-	**-**	3	**3.01**
Essex	-	**-**	1	**7.92**	-	**-**	-	**-**	-	**-**	1	**7.92**
Franklin	2	**6.27**	-	**-**	-	**-**	-	**-**	1	**3.13**	3	**9.40**
Grand Isle	-	**-**	-	**-**	-	**-**	1	**12.28**	-	**-**	1	**12.28**
Lamoille	3	**12.78**	1	**3.11**	1	**3.11**	-	**-**	1	**6.56**	6	**25.56**
Orleans	-	**-**	-	**-**	1	**2.04**	-	**-**	-	**-**	1	**2.04**
Rutland	-	**-**	2	**1.49**	10	**12.18**	-	**-**	3	**4.74**	15	**18.40**
Washington	-	**-**	1	**2.12**	15	**15.40**	1	**0.86**	-	**-**	17	**18.38**
Windham	2	**2.26**	-	**-**	1	**1.13**	-	**-**	-	**-**	3	**3.39**
Windsor	-	**-**	1	**1.81**	-	**-**	-	**-**	2	**2.65**	3	**4.46**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

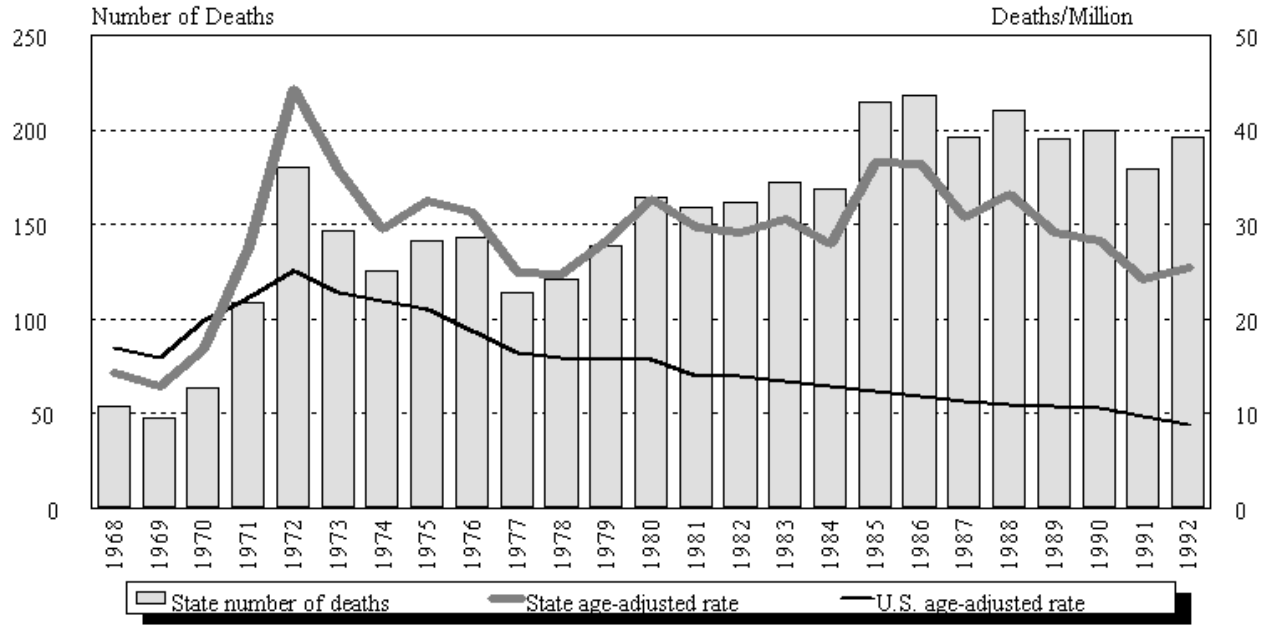
Virginia: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	980	3
Crude mortality rate (per 1,000,000 population)	39.76	4
Age-adjusted mortality rate (per 1,000,000 population)	28.00	4
Total years of potential life lost to life expectancy	12,282	3
Years of potential life lost to life expectancy (per death)	12.5	14

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	196	20.0
Coal workers' pneumoconiosis	715	73.0
Silicosis	14	1.4
Byssinosis	2	0.2
Unspecified/Other pneumoconiosis	54	5.5

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure VA-1. All pneumoconioses: Virginia and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Virginia

Table VA-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Virginia residents age 15 and over, 1968-1992

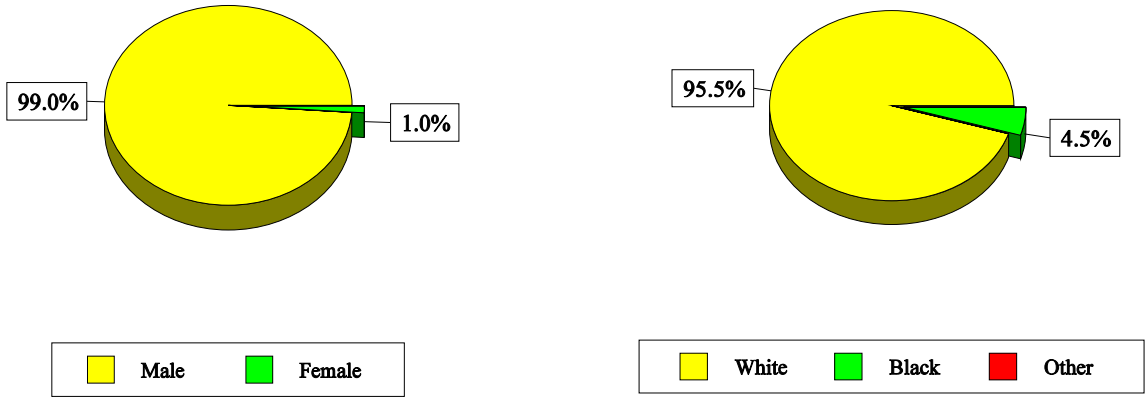
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	2	0.57	3	0.77	38	10.27			11	2.78	54	14.38
1969	1	0.28	4	1.04	35	9.44			8	2.08	48	12.84
1970	4	1.12	10	2.58	15	3.91			37	9.68	64	16.81
1971	1	0.27	46	11.65	15	3.82			50	12.67	109	27.64
1972	2	0.58	48	11.77	38	9.26			94	23.20	180	44.29
1973	2	0.59	45	10.94	22	5.21			80	19.40	147	35.69
1974	2	0.49	43	9.72	22	5.26			59	14.16	125	29.45
1975	5	1.19	55	12.96	17	3.84			65	14.73	141	32.49
1976	3	0.69	55	12.11	20	4.33			68	14.74	143	31.20
1977	9	1.88	40	8.75	13	2.87			56	12.24	114	24.89
1978	8	1.65	49	9.99	14	3.08			54	10.84	121	24.74
1979	13	2.75	46	9.57	7	1.34	-	-	73	14.63	139	28.28
1980	14	2.94	56	11.36	8	1.70	-	-	86	16.70	164	32.70
1981	11	2.14	66	12.40	10	1.87	-	-	72	13.35	159	29.76
1982	11	2.08	110	19.68	7	1.26	-	-	35	6.20	162	29.08
1983	18	3.26	129	22.98	7	1.22	-	-	19	3.11	172	30.49
1984	14	2.43	133	22.03	7	1.30	-	-	16	2.31	169	27.93
1985	27	4.81	167	28.20	5	0.70	1	0.21	16	2.69	215	36.54
1986	24	4.13	169	28.22	8	1.16	-	-	17	2.93	218	36.44
1987	22	3.46	150	23.55	11	1.67	1	0.21	14	2.14	196	30.73
1988	35	5.58	157	24.81	2	0.19	-	-	16	2.56	210	33.13
1989	35	5.37	146	21.85	4	0.56	-	-	10	1.45	195	29.23
1990	47	6.71	131	18.48	3	0.44	2	0.27	17	2.38	200	28.28
1991	36	5.20	134	18.07	2	0.32	-	-	7	0.69	179	24.28
1992	43	6.19	147	18.57	3	0.38	-	-	4	0.43	196	25.46

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure VA-2. All pneumoconioses: Distribution of deaths by sex and race, Virginia residents age 15 and over, 1968-1992



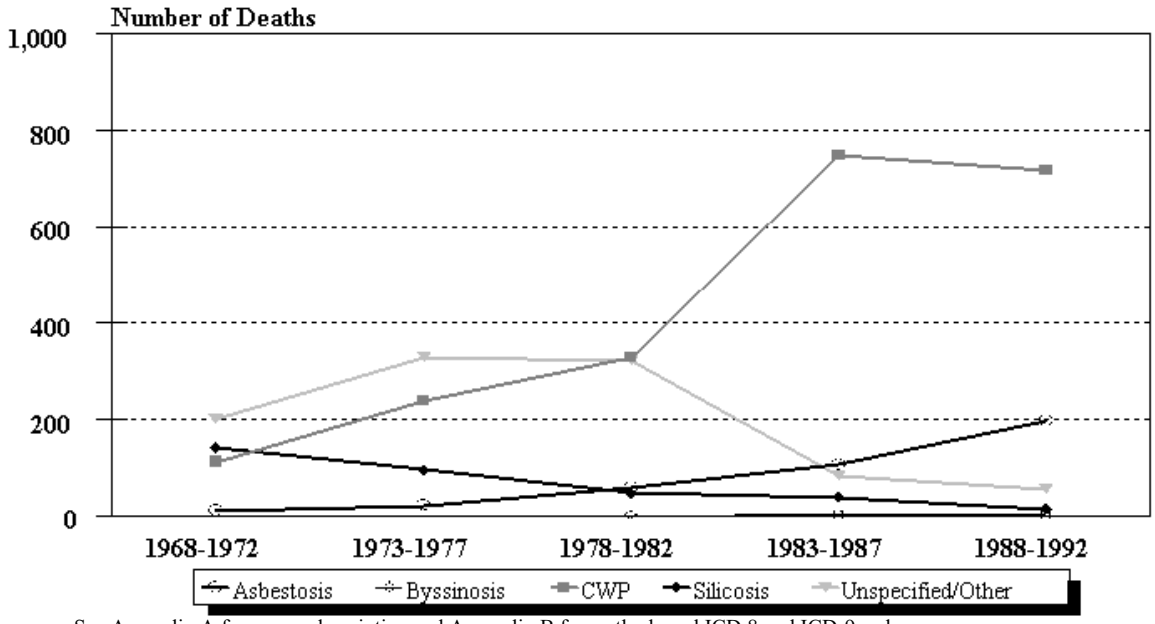
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table VA-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Virginia residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		3,820	100.0	980	100.0
Sex	Male	3,781	99.0	966	98.6
	Female	39	1.0	14	1.4
Race	White	3,650	95.5	939	95.8
	Black	170	4.5	41	4.2
	Other	0	0.0	0	0.0
Age	15-24	2	0.1	0	0.0
	25-34	9	0.2	0	0.0
	35-44	44	1.2	5	0.5
	45-54	202	5.3	25	2.6
	55-64	832	21.8	141	14.4
	65-74	1,427	37.4	349	35.6
	75-84	1,044	27.3	358	36.5
	85+	260	6.8	102	10.4
	Mean age	69.9		73.3	
	Range for age	22-103		39-103	

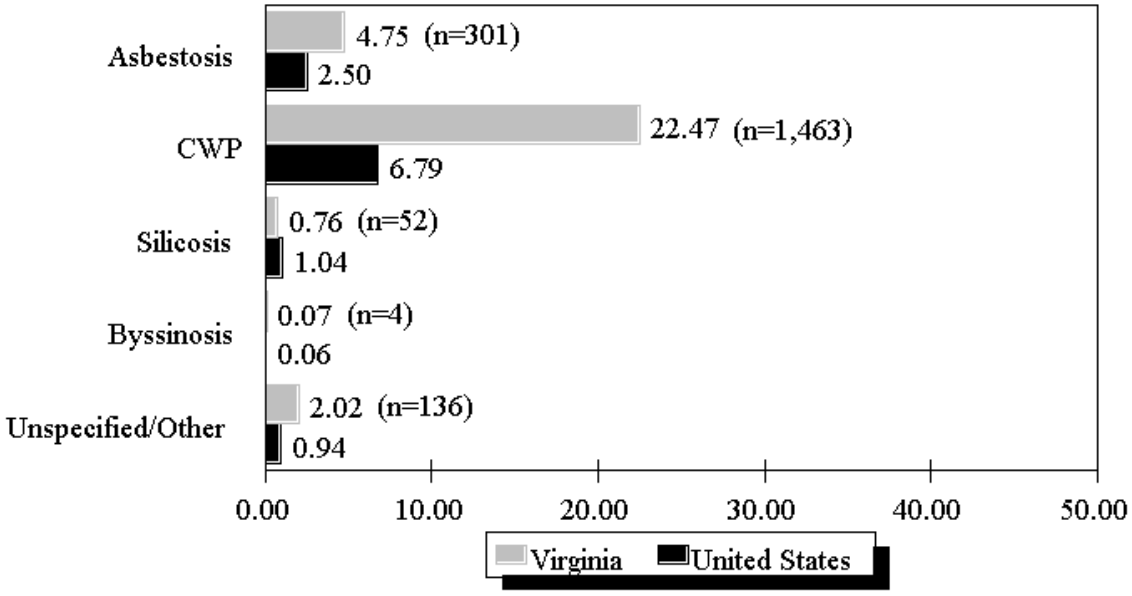
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure VA-3. Pneumoconiosis deaths by condition, Virginia residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure VA-4. Virginia and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table VA-3 (page 1 of 4). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Virginia residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Accomack	2	**4.93**	1	**1.11**	-	**-**	-	**-**	-	**-**	3	**6.04**
Albemarle	-	**-**	3	**3.37**	-	**-**	-	**-**	1	**1.94**	4	**5.31**
Alleghany	-	**-**	1	**4.15**	-	**-**	-	**-**	-	**-**	1	**4.15**
Amherst	-	**-**	-	**-**	3	**7.52**	-	**-**	2	**5.52**	5	**13.03**
Arlington	2	**0.68**	4	**2.08**	-	**-**	-	**-**	-	**-**	6	**2.76**
Augusta	4	**6.27**	3	**4.32**	-	**-**	-	**-**	-	**-**	7	**10.60**
Bedford	-	**-**	5	**10.48**	-	**-**	-	**-**	-	**-**	5	**10.48**
Bland	-	**-**	5	**59.66**	-	**-**	-	**-**	1	**7.59**	6	**67.25**
Botetourt	2	**7.86**	-	**-**	1	**2.48**	-	**-**	-	**-**	3	**10.34**
Buchanan	1	**3.95**	292	**1036.86**	-	**-**	-	**-**	7	**26.49**	300	**1067.29**
Buckingham	2	**11.02**	1	**3.60**	-	**-**	-	**-**	1	**3.60**	4	**18.22**
Campbell	-	**-**	-	**-**	1	**2.20**	-	**-**	-	**-**	1	**2.20**
Caroline	-	**-**	2	**8.81**	-	**-**	-	**-**	-	**-**	2	**8.81**
Carroll	3	**4.63**	6	**12.50**	1	**3.16**	-	**-**	2	**4.70**	12	**24.99**
Chesterfield	5	**3.93**	2	**1.47**	-	**-**	-	**-**	-	**-**	7	**5.40**
Clarke	-	**-**	1	**8.14**	1	**8.14**	-	**-**	-	**-**	2	**16.28**
Craig	1	**21.36**	-	**-**	-	**-**	-	**-**	-	**-**	1	**21.36**
Culpeper	-	**-**	2	**8.38**	-	**-**	-	**-**	-	**-**	2	**8.38**
Dickinson	-	**-**	128	**613.86**	-	**-**	-	**-**	9	**36.07**	137	**649.94**
Dinwiddie	1	**4.65**	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.65**
Fairfax	1	**0.14**	7	**1.27**	2	**0.35**	-	**-**	2	**0.36**	11	**1.95**
Fauquier	-	**-**	1	**2.73**	-	**-**	-	**-**	1	**2.73**	2	**5.45**
Floyd	-	**-**	1	**3.16**	-	**-**	-	**-**	1	**7.38**	2	**10.54**
Fluvanna	1	**7.99**	-	**-**	1	**4.96**	-	**-**	-	**-**	2	**12.95**
Franklin	1	**1.38**	4	**9.84**	-	**-**	-	**-**	-	**-**	5	**11.21**
Frederick	-	**-**	-	**-**	1	**3.01**	-	**-**	-	**-**	1	**3.01**
Giles	2	**5.47**	4	**13.07**	1	**2.73**	-	**-**	2	**7.60**	9	**28.87**
Gloucester	2	**7.90**	1	**2.08**	-	**-**	-	**-**	-	**-**	3	**9.98**
Goochland	-	**-**	1	**4.40**	-	**-**	-	**-**	-	**-**	1	**4.40**
Grayson	-	**-**	1	**5.00**	-	**-**	-	**-**	-	**-**	1	**5.00**
Greensville	-	**-**	1	**8.20**	1	**8.20**	-	**-**	3	**30.40**	4	**38.59**
Halifax	1	**4.69**	1	**2.96**	2	**4.40**	-	**-**	-	**-**	4	**12.04**
Hanover	4	**6.12**	-	**-**	-	**-**	-	**-**	-	**-**	4	**6.12**

See footnotes at end of table.

Table VA-3 (page 2 of 4). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Virginia residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Henrico	6	**2.36**	-	**-**	-	**-**	-	**-**	-	**-**	6	**2.36**
Henry	-	**-**	6	**7.34**	1	**1.12**	-	**-**	-	**-**	7	**8.46**
Highland	-	**-**	-	**-**	1	**12.63**	-	**-**	-	**-**	1	**12.63**
Isle of Wight	10	**41.83**	-	**-**	-	**-**	-	**-**	-	**-**	10	**41.83**
James City	-	**-**	1	**3.23**	-	**-**	-	**-**	-	**-**	1	**3.23**
King and Queen	1	**13.53**	-	**-**	-	**-**	-	**-**	-	**-**	1	**13.53**
Lancaster	1	**5.47**	-	**-**	-	**-**	-	**-**	-	**-**	1	**5.47**
Lee	-	**-**	80	**217.51**	-	**-**	-	**-**	10	**28.43**	90	**245.94**
Loudoun	-	**-**	2	**2.75**	-	**-**	-	**-**	1	**2.20**	3	**4.95**
Louisa	-	**-**	-	**-**	1	**4.77**	-	**-**	-	**-**	1	**4.77**
Mathews	1	**7.98**	-	**-**	-	**-**	-	**-**	-	**-**	1	**7.98**
Mecklenburg	3	**7.94**	-	**-**	1	**2.65**	-	**-**	-	**-**	4	**10.59**
Middlesex	1	**7.70**	1	**7.70**	-	**-**	-	**-**	1	**7.70**	3	**23.09**
Montgomery	-	**-**	1	**1.14**	1	**1.14**	-	**-**	-	**-**	2	**2.29**
Nelson	-	**-**	1	**3.39**	-	**-**	-	**-**	-	**-**	1	**3.39**
Northampton	1	**2.44**	-	**-**	1	**5.44**	-	**-**	-	**-**	2	**7.89**
North-umberland	1	**5.46**	-	**-**	-	**-**	-	**-**	-	**-**	1	**5.46**
Nottoway	1	**2.34**	1	**2.34**	-	**-**	-	**-**	-	**-**	2	**4.67**
Orange	-	**-**	2	**4.49**	-	**-**	-	**-**	-	**-**	2	**4.49**
Page	-	**-**	1	**4.16**	-	**-**	-	**-**	-	**-**	1	**4.16**
Patrick	1	**2.26**	3	**9.47**	-	**-**	-	**-**	-	**-**	4	**11.73**
Pittsylvania	1	**1.25**	1	**0.73**	2	**1.98**	-	**-**	1	**0.73**	5	**4.69**
Powhatan	1	**6.42**	1	**9.01**	-	**-**	-	**-**	-	**-**	2	**15.43**
Prince Edward	-	**-**	1	**2.48**	-	**-**	-	**-**	-	**-**	1	**2.48**
Prince George	1	**5.49**	1	**5.49**	-	**-**	-	**-**	1	**5.49**	2	**10.98**
Prince William	2	**2.64**	4	**5.49**	-	**-**	-	**-**	1	**1.42**	7	**9.55**
Pulaski	2	**5.38**	10	**21.69**	1	**2.69**	-	**-**	1	**1.39**	14	**31.15**
Roanoke	2	**1.29**	3	**2.54**	-	**-**	-	**-**	-	**-**	5	**3.83**
Rockbridge	-	**-**	1	**3.22**	1	**4.64**	-	**-**	1	**4.64**	3	**12.50**
Rockingham	2	**1.78**	-	**-**	1	**0.89**	-	**-**	-	**-**	3	**2.67**
Russell	-	**-**	114	**335.83**	1	**3.47**	-	**-**	10	**27.13**	125	**366.43**

See footnotes at end of table.

Table VA-3 (page 3 of 4). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Virginia residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Scott	1	**3.55**	29	**69.42**	-	**-**	-	**-**	5	**10.30**	35	**83.27**
Smyth	-	**-**	14	**27.06**	1	**1.39**	-	**-**	-	**-**	15	**28.45**
Southampton	-	**-**	1	**3.00**	1	**3.00**	-	**-**	-	**-**	2	**6.00**
Spotsylvania	3	**7.16**	2	**5.08**	-	**-**	-	**-**	-	**-**	5	**12.24**
Stafford	-	**-**	1	**2.31**	1	**2.31**	-	**-**	-	**-**	1	**2.31**
Surry	2	**30.47**	-	**-**	-	**-**	-	**-**	1	**15.24**	3	**45.71**
Tazewell	-	**-**	285	**488.14**	3	**4.30**	2	**3.16**	23	**35.94**	313	**531.55**
Warren	3	**11.80**	-	**-**	-	**-**	-	**-**	-	**-**	3	**11.80**
Washington	2	**3.98**	49	**73.70**	1	**1.99**	-	**-**	2	**2.15**	54	**81.82**
Westmoreland	-	**-**	1	**2.58**	-	**-**	-	**-**	1	**4.83**	2	**7.41**
Wise	-	**-**	291	**575.96**	-	**-**	-	**-**	24	**44.95**	315	**620.92**
Wythe	-	**-**	3	**6.96**	1	**1.71**	-	**-**	3	**10.61**	6	**17.57**
York	4	**12.18**	1	**3.35**	-	**-**	-	**-**	-	**-**	5	**15.53**
Independent cities:												
Alexandria	3	**2.90**	2	**1.15**	1	**1.17**	-	**-**	1	**1.16**	7	**6.38**
Bedford	-	**-**	1	**3.39**	1	**3.39**	-	**-**	-	**-**	1	**3.39**
Bristol	1	**1.86**	4	**9.86**	-	**-**	-	**-**	1	**4.28**	6	**16.00**
Buena Vista	-	**-**	-	**-**	-	**-**	-	**-**	1	**6.48**	1	**6.48**
Charlottesville	1	**1.23**	-	**-**	1	**2.42**	-	**-**	-	**-**	2	**3.65**
Chesapeake	29	**24.79**	-	**-**	-	**-**	-	**-**	-	**-**	29	**24.79**
Colonial Heights	1	**3.46**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.46**
Covington	-	**-**	-	**-**	-	**-**	-	**-**	1	**10.06**	1	**10.06**
Danville	1	**0.99**	-	**-**	-	**-**	1	**2.14**	1	**0.99**	3	**4.12**
Fairfax	-	**-**	1	**5.44**	-	**-**	-	**-**	-	**-**	1	**5.44**
Fredericksburg	1	**2.47**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.47**
Galax	1	**4.22**	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.22**
Hampton	31	**25.34**	6	**4.79**	-	**-**	-	**-**	1	**0.67**	38	**30.80**
Harrisonburg	2	**6.84**	-	**-**	-	**-**	-	**-**	-	**-**	2	**6.84**
Lynchburg	-	**-**	2	**1.99**	5	**8.20**	-	**-**	1	**0.54**	8	**10.73**
Manassas	-	**-**	1	**9.39**	1	**5.06**	-	**-**	-	**-**	2	**14.45**
Manassas Park	1	**30.89**	1	**30.89**	-	**-**	-	**-**	-	**-**	2	**61.77**

See footnotes at end of table.

Table VA-3 (page 4 of 4). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Virginia residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Independent cities:												
Martinsville	1	**4.51**	2	**6.62**	-	**-**	-	**-**	-	**-**	3	**11.13**
Newport News	34	**20.80**	4	**1.98**	1	**0.49**	-	**-**	1	**0.79**	40	**24.05**
Norfolk	25	**11.25**	3	**1.46**	1	**0.26**	-	**-**	2	**0.97**	31	**13.94**
Norton	-	**-**	28	**445.35**	-	**-**	-	**-**	3	**53.04**	31	**498.39**
Petersburg	-	**-**	1	**2.38**	-	**-**	-	**-**	-	**-**	1	**2.38**
Poquoson	8	**84.92**	1	**12.66**	-	**-**	-	**-**	-	**-**	9	**97.58**
Portsmouth	36	**28.90**	-	**-**	2	**2.09**	-	**-**	-	**-**	38	**30.99**
Radford	-	**-**	1	**5.23**	-	**-**	-	**-**	-	**-**	1	**5.23**
Richmond	7	**3.04**	-	**-**	1	**0.47**	-	**-**	1	**0.19**	9	**3.70**
Roanoke	5	**2.89**	9	**4.89**	2	**1.26**	-	**-**	2	**0.74**	18	**9.79**
Salem	-	**-**	1	**1.75**	-	**-**	-	**-**	1	**5.90**	2	**7.65**
Suffolk	12	**17.95**	1	**1.09**	-	**-**	-	**-**	1	**1.09**	14	**20.12**
Virginia Beach	8	**3.46**	3	**1.15**	1	**0.38**	1	**0.48**	-	**-**	13	**5.47**
Waynesboro	2	**4.85**	1	**4.52**	-	**-**	-	**-**	-	**-**	3	**9.36**
Winchester	3	**13.05**	-	**-**	-	**-**	-	**-**	-	**-**	3	**13.05**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

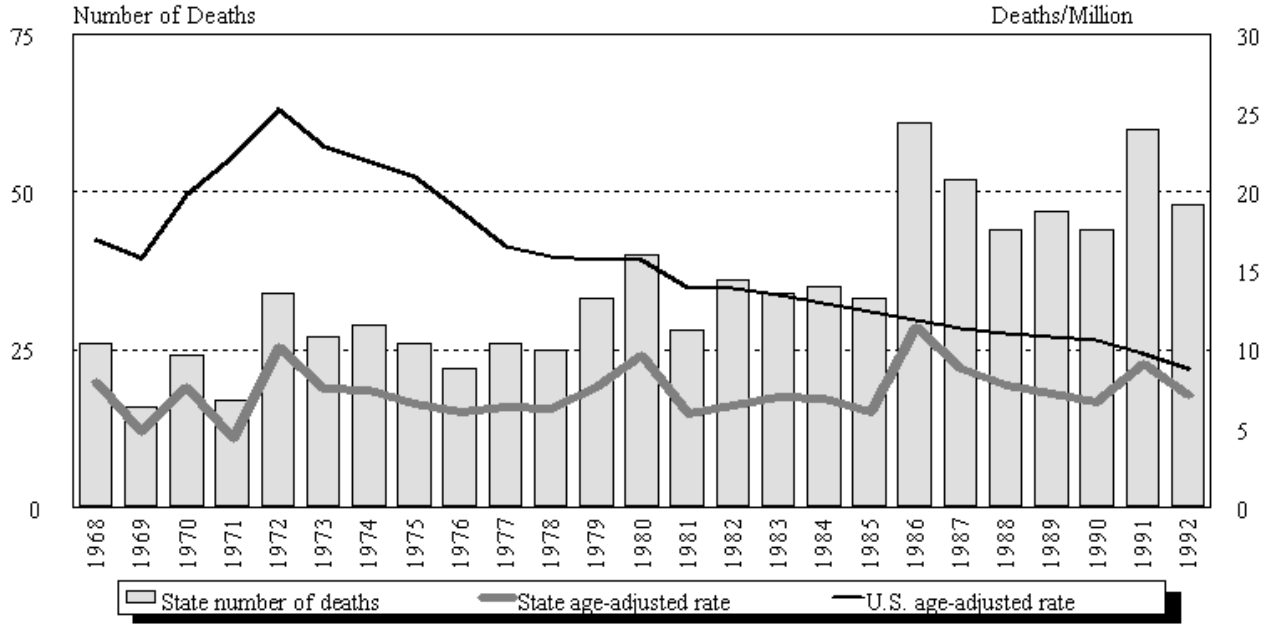
Washington: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	243	16
Crude mortality rate (per 1,000,000 population)	12.77	14
Age-adjusted mortality rate (per 1,000,000 population)	7.54	14
Total years of potential life lost to life expectancy	2,755	16
Years of potential life lost to life expectancy (per death)	11.3	37

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	195	80.2
Coal workers' pneumoconiosis	15	6.2
Silicosis	22	9.1
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	13	5.3

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure WA-1. All pneumoconioses: Washington and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Washington

Table WA-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Washington residents age 15 and over, 1968-1992

Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	6	2.28	1	0.34	17	4.97			2	0.37	26	7.95
1969	-	-	1	0.14	15	4.59			-	-	16	4.73
1970	4	1.43	3	0.90	11	3.31			6	1.99	24	7.64
1971	6	1.70	-	-	9	2.12			2	0.55	17	4.36
1972	8	2.86	2	0.68	14	3.87			10	2.74	34	10.15
1973	10	3.00	3	0.86	12	2.94			2	0.71	27	7.52
1974	7	2.07	4	0.55	9	2.25			10	2.75	29	7.41
1975	8	2.03	2	0.50	12	2.98			4	1.08	26	6.58
1976	12	3.56	-	-	6	1.45			4	1.00	22	6.01
1977	10	2.56	1	0.10	10	2.35			7	1.83	26	6.37
1978	10	2.76	2	0.49	10	2.22			3	0.78	25	6.25
1979	16	3.67	3	0.73	14	3.39	1	0.09	1	0.19	33	7.62
1980	23	6.05	7	1.40	10	2.20	-	-	1	0.09	40	9.65
1981	18	4.04	2	0.17	2	0.35	-	-	6	1.37	28	5.93
1982	20	4.14	6	0.84	10	1.51	-	-	-	-	36	6.48
1983	24	5.18	4	0.72	6	1.14	-	-	-	-	34	7.04
1984	28	5.60	4	0.77	1	0.08	-	-	2	0.44	35	6.88
1985	21	4.08	3	0.23	8	1.54	-	-	1	0.22	33	6.08
1986	47	9.00	7	1.09	6	1.16	-	-	1	0.22	61	11.46
1987	40	6.92	6	0.97	6	0.92	-	-	-	-	52	8.81
1988	34	6.04	4	0.55	6	1.14	-	-	-	-	44	7.73
1989	37	5.57	3	0.46	4	0.60	-	-	3	0.53	47	7.16
1990	34	5.30	6	0.70	-	-	-	-	4	0.67	44	6.68
1991	50	7.54	1	0.12	7	0.99	-	-	3	0.59	60	9.12
1992	40	6.02	1	0.12	5	0.63	-	-	3	0.42	48	7.06

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure WA-2. All pneumoconioses: Distribution of deaths by sex and race, Washington residents age 15 and over, 1968-1992

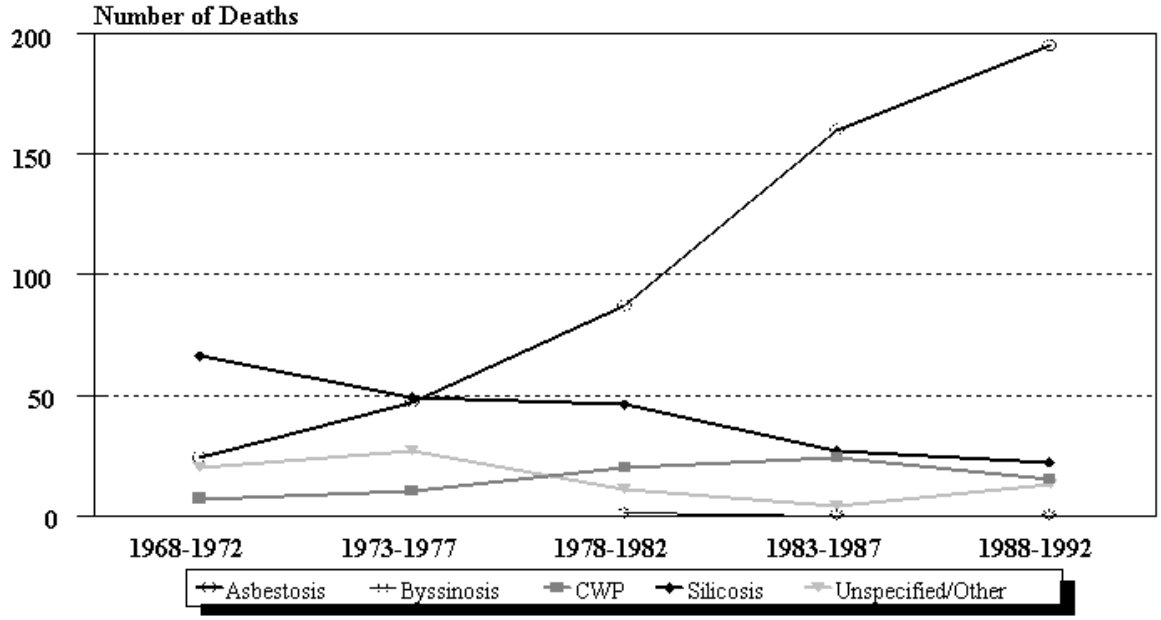
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table WA-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Washington residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		867	100.0	243	100.0
Sex	Male	826	95.3	236	97.1
	Female	41	4.7	7	2.9
Race	White	846	97.6	238	97.9
	Black	15	1.7	4	1.6
	Other	6	0.7	1	0.4
Age	15-24	0	0.0	0	0.0
	25-34	1	0.1	0	0.0
	35-44	5	0.6	2	0.8
	45-54	31	3.6	4	1.6
	55-64	122	14.1	16	6.6
	65-74	301	34.7	81	33.3
	75-84	320	36.9	113	46.5
	85+	87	10.0	27	11.1
	Mean age	72.8		75.3	
	Range for age	25-97		42-97	

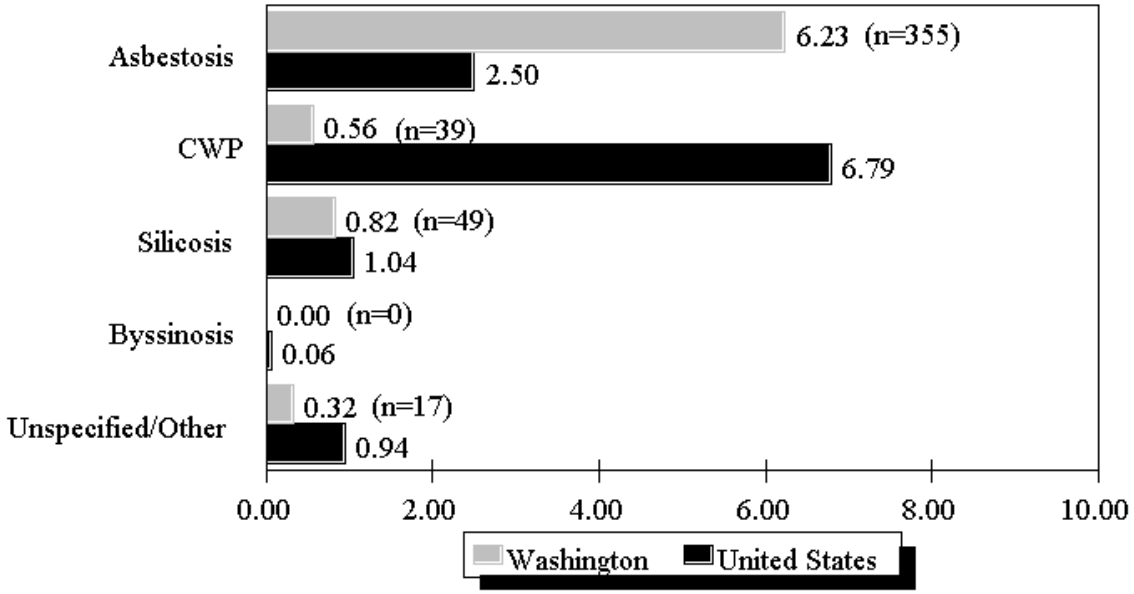
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure WA-3. Pneumoconiosis deaths by condition, Washington residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure WA-4. Washington and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table WA-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Washington residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Benton	12	**11.17**	2	**1.79**	-	**-**	-	**-**	1	**0.69**	15	**13.65**
Clallam	5	**5.61**	1	**1.43**	1	**1.43**	-	**-**	1	**0.66**	8	**9.13**
Clark	20	**8.83**	1	**0.30**	1	**0.56**	-	**-**	-	**-**	22	**9.68**
Columbia	-	**-**	1	**8.21**	1	**19.47**	-	**-**	-	**-**	2	**27.68**
Cowlitz	7	**7.11**	2	**1.26**	2	**1.26**	-	**-**	-	**-**	11	**9.62**
Douglas	-	**-**	-	**-**	2	**6.65**	-	**-**	-	**-**	2	**6.65**
Ferry	-	**-**	-	**-**	1	**19.27**	-	**-**	-	**-**	1	**19.27**
Franklin	1	**3.30**	-	**-**	1	**2.10**	-	**-**	-	**-**	2	**5.40**
Grant	2	**2.26**	-	**-**	1	**1.13**	-	**-**	-	**-**	3	**3.39**
Grays Harbor	3	**2.84**	1	**0.69**	-	**-**	-	**-**	-	**-**	4	**3.53**
Island	7	**9.84**	-	**-**	2	**2.24**	-	**-**	-	**-**	9	**12.08**
King	104	**6.12**	11	**0.63**	8	**0.46**	-	**-**	4	**0.25**	126	**7.43**
Kitsap	61	**33.85**	3	**1.78**	-	**-**	-	**-**	-	**-**	64	**35.63**
Kittitas	3	**8.12**	6	**13.76**	1	**1.88**	-	**-**	-	**-**	10	**23.77**
Lewis	-	**-**	-	**-**	-	**-**	-	**-**	2	**2.35**	2	**2.35**
Mason	6	**11.56**	1	**1.39**	-	**-**	-	**-**	-	**-**	7	**12.95**
Okanogan	2	**4.44**	-	**-**	1	**1.42**	-	**-**	-	**-**	3	**5.87**
Pacific	1	**3.73**	-	**-**	-	**-**	-	**-**	-	**-**	1	**3.73**
Pend Oreille	-	**-**	-	**-**	3	**31.45**	-	**-**	-	**-**	3	**31.45**
Pierce	41	**6.52**	4	**0.47**	6	**1.02**	-	**-**	2	**0.49**	53	**8.51**
San Juan	1	**4.02**	-	**-**	-	**-**	-	**-**	1	**7.14**	2	**11.16**
Skagit	4	**2.32**	-	**-**	1	**0.58**	-	**-**	2	**1.83**	7	**4.72**
Snohomish	26	**6.17**	2	**0.35**	4	**0.83**	-	**-**	3	**0.80**	35	**8.14**
Spokane	22	**5.89**	1	**0.39**	9	**2.19**	-	**-**	1	**0.31**	33	**8.78**
Stevens	1	**1.77**	1	**3.66**	1	**3.66**	-	**-**	-	**-**	3	**9.10**
Thurston	12	**6.21**	-	**-**	-	**-**	-	**-**	-	**-**	12	**6.21**
Wahkiakum	1	**23.49**	-	**-**	-	**-**	-	**-**	-	**-**	1	**23.49**
Walla Walla	1	**2.08**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.08**
Whatcom	3	**2.35**	-	**-**	1	**0.96**	-	**-**	-	**-**	4	**3.31**
Whitman	1	**3.98**	-	**-**	1	**1.70**	-	**-**	-	**-**	2	**5.68**
Yakima	8	**3.47**	2	**0.53**	1	**0.26**	-	**-**	-	**-**	10	**4.00**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

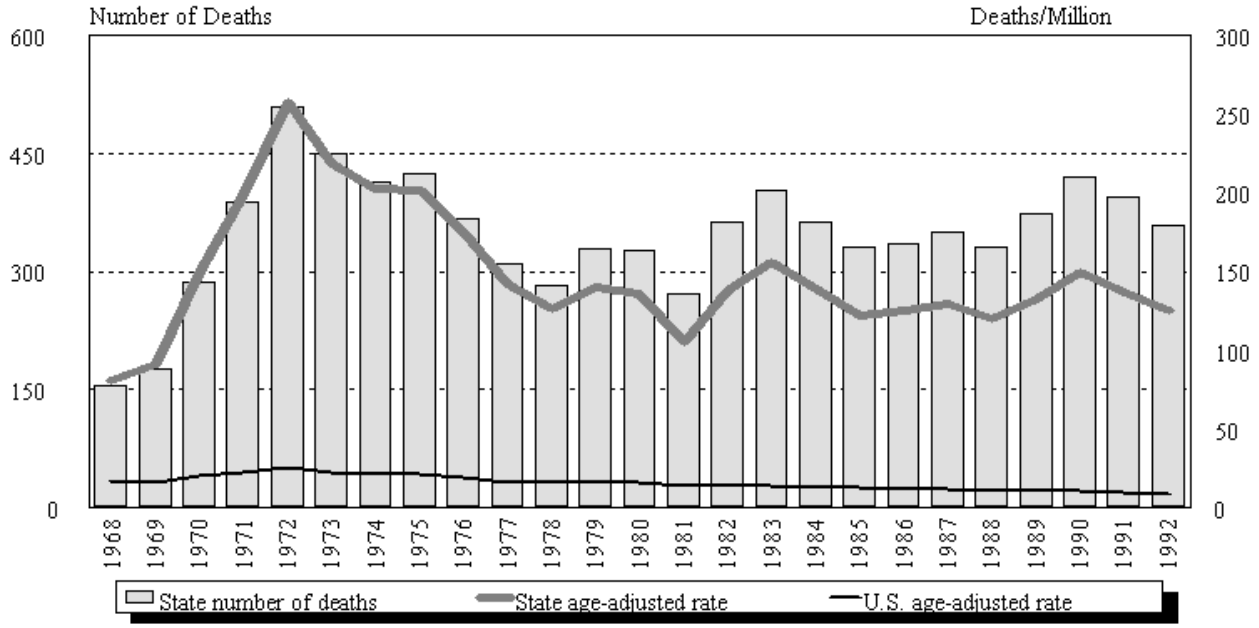
West Virginia: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	1,878	2
Crude mortality rate (per 1,000,000 population)	262.60	1
Age-adjusted mortality rate (per 1,000,000 population)	132.76	1
Total years of potential life lost to life expectancy	22,378	2
Years of potential life lost to life expectancy (per death)	11.9	27

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	86	4.6
Coal workers' pneumoconiosis	1,458	77.6
Silicosis	29	1.5
Byssinosis	1	0.1
Unspecified/Other pneumoconiosis	309	16.5

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure WV-1. All pneumoconioses: West Virginia and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

West Virginia

Table WV-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, West Virginia residents age 15 and over, 1968-1992

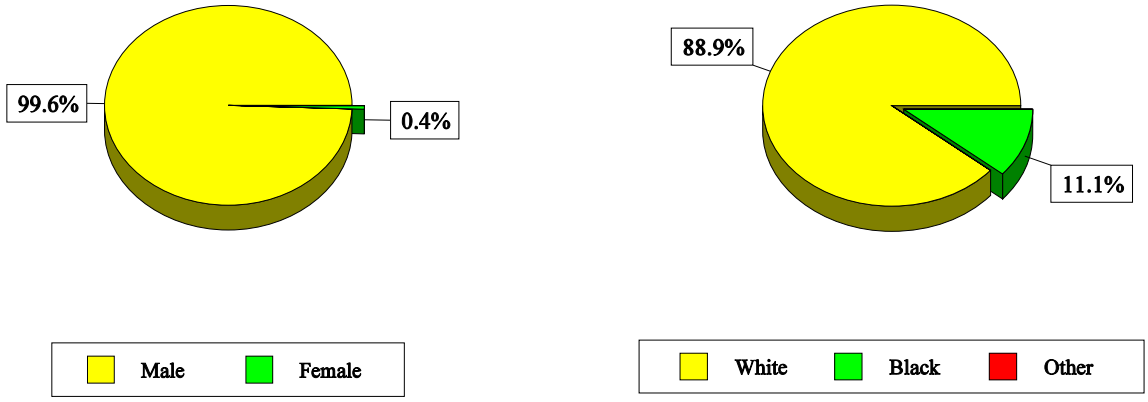
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	30	15.42	75	38.96			52	27.35	156	80.98
1969	-	-	37	18.75	87	44.50			53	27.93	177	91.17
1970	1	0.59	70	37.10	71	36.74			150	77.68	287	149.51
1971	-	-	109	55.69	55	26.99			231	119.19	388	197.85
1972	-	-	190	98.39	58	27.35			270	136.98	508	257.40
1973	-	-	166	82.93	47	23.65			241	114.89	449	218.87
1974	1	0.58	156	76.84	44	21.96			224	108.88	413	202.07
1975	1	0.75	159	77.85	32	16.11			236	109.52	423	201.41
1976	-	-	148	71.89	32	14.11			190	90.17	366	175.17
1977	1	0.75	125	57.89	17	7.86			169	77.47	309	142.53
1978	2	1.22	115	52.44	24	11.11			144	62.81	283	126.68
1979	2	0.78	153	65.95	10	4.34	-	-	164	69.17	329	140.23
1980	4	1.27	262	109.60	7	2.93	1	0.32	54	22.58	326	135.73
1981	-	-	204	79.21	9	3.84	-	-	59	22.05	272	105.10
1982	4	1.22	315	120.52	7	2.50	-	-	37	14.05	363	138.28
1983	6	2.92	345	133.53	4	1.05	-	-	48	18.64	403	156.14
1984	3	0.87	326	125.56	12	3.87	-	-	25	9.48	363	138.78
1985	5	2.52	281	103.06	5	1.56	-	-	39	14.88	330	122.03
1986	11	4.62	302	111.52	3	0.84	-	-	20	8.23	336	125.21
1987	15	6.14	284	105.23	7	1.98	-	-	46	16.82	350	129.33
1988	15	6.51	255	93.26	5	1.50	-	-	56	19.30	330	120.15
1989	6	2.23	333	116.01	2	0.68	-	-	33	13.20	374	132.13
1990	17	6.42	279	99.02	6	2.42	-	-	118	41.15	420	149.01
1991	20	7.29	308	104.42	12	5.75	1	0.62	58	20.03	395	136.44
1992	28	10.02	283	96.58	4	1.76	-	-	44	16.49	359	124.85

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure WV-2. All pneumoconioses: Distribution of deaths by sex and race, West Virginia residents age 15 and over, 1968-1992



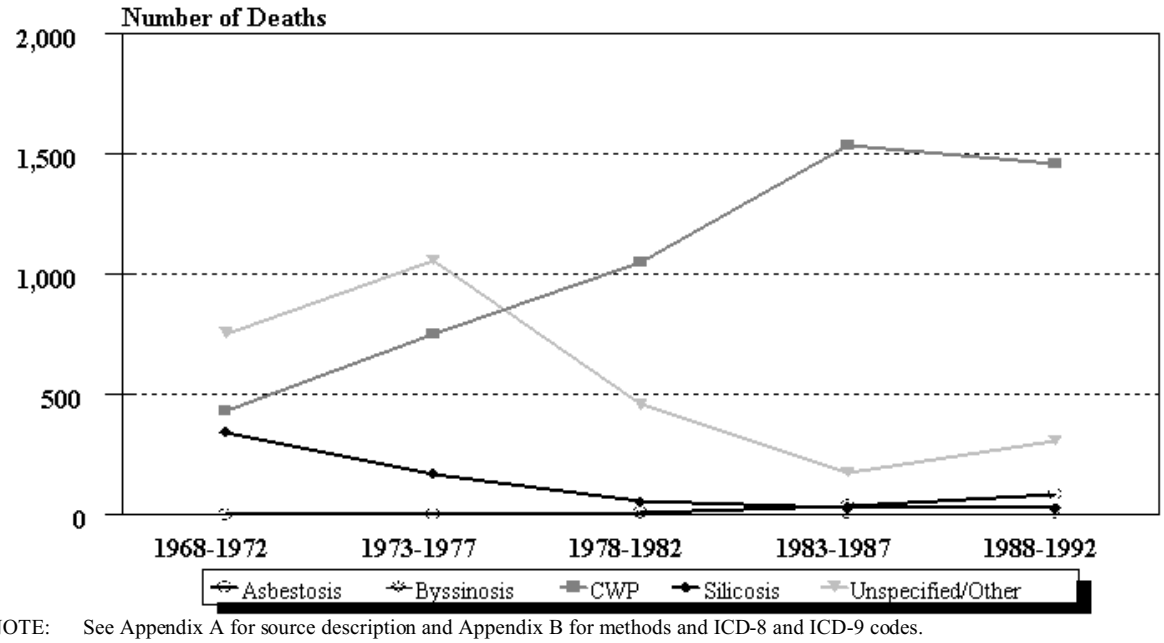
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table WV-2. All pneumoconioses: Distribution of deaths by sex, race, and age, West Virginia residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		8,709	100.0	1,878	100.0
Sex	Male	8,672	99.6	1,872	99.7
	Female	37	0.4	6	0.3
Race	White	7,746	88.9	1,746	93.0
	Black	963	11.1	132	7.0
	Other	0	0.0	0	0.0
Age	15-24	1	0.0	0	0.0
	25-34	4	0.0	0	0.0
	35-44	66	0.8	5	0.3
	45-54	404	4.6	38	2.0
	55-64	1,572	18.1	216	11.5
	65-74	3,166	36.4	656	34.9
	75-84	2,702	31.0	723	38.5
	85+	794	9.1	240	12.8
	Mean age	71.5		74.3	
	Range for age	24-107		39-107	

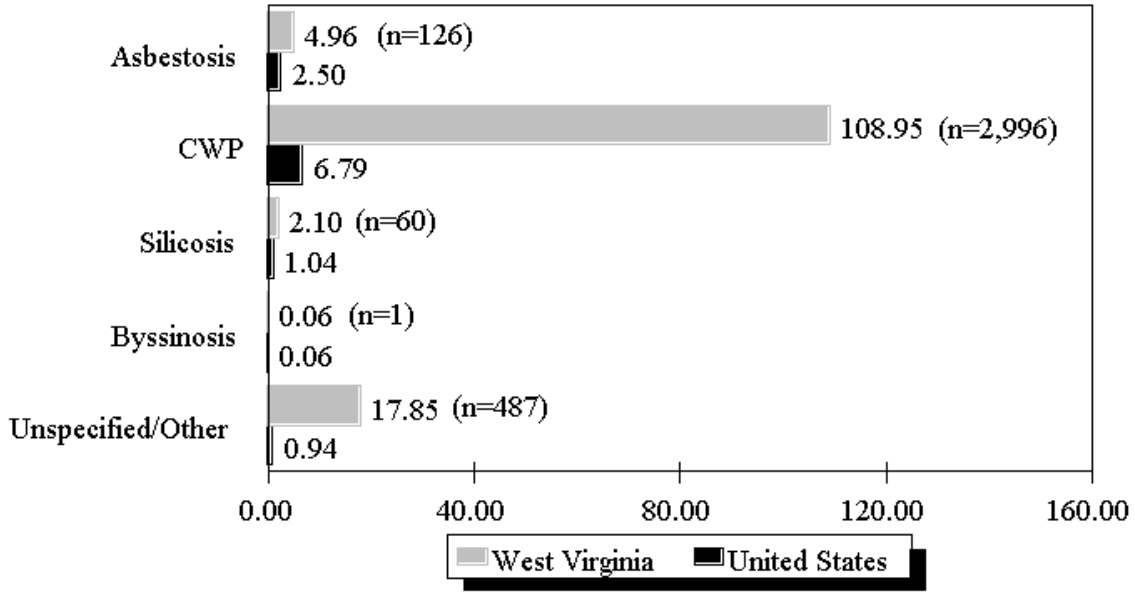
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure WV-3. Pneumoconiosis deaths by condition, West Virginia residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure WV-4. West Virginia and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table WV-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, West Virginia residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Barbour	-	-	16	61.88	-	-	-	-	1	2.35	17	64.23
Berkeley	-	-	1	1.84	-	-	-	-	-	-	1	1.84
Boone	1	2.21	163	522.99	4	11.86	-	-	32	96.38	200	633.45
Braxton	-	-	6	23.65	-	-	-	-	2	13.48	8	37.13
Brooke	2	5.99	9	23.92	-	-	-	-	1	1.61	12	31.52
Cabell	8	4.14	13	7.56	-	-	-	-	4	3.61	25	15.31
Calhoun	-	-	1	4.74	-	-	-	-	-	-	1	4.74
Clay	-	-	16	132.62	-	-	-	-	2	14.73	18	147.35
Doddridge	-	-	1	12.02	-	-	-	-	1	12.02	2	24.03
Fayette	1	1.68	279	350.83	1	0.78	-	-	60	77.35	341	430.64
Gilmer	-	-	1	4.32	1	12.27	-	-	-	-	2	16.59
Grant	-	-	4	22.17	-	-	-	-	-	-	4	22.17
Greenbrier	1	1.02	70	119.25	-	-	-	-	10	19.75	81	140.02
Hampshire	3	20.18	-	-	2	11.35	-	-	-	-	5	31.53
Hancock	1	2.20	-	-	1	1.31	-	-	1	1.31	3	4.82
Hardy	-	-	-	-	-	-	-	-	1	13.39	1	13.39
Harrison	7	6.88	58	45.87	2	2.34	-	-	17	13.36	83	67.28
Jackson	1	5.12	3	9.11	1	1.84	-	-	1	3.63	6	19.70
Jefferson	1	1.90	-	-	-	-	-	-	-	-	1	1.90
Kanawha	49	17.14	127	38.92	3	1.02	-	-	24	6.83	202	63.50
Lewis	-	-	8	30.49	1	2.02	-	-	-	-	9	32.51
Lincoln	1	4.90	17	61.75	1	4.90	-	-	2	9.80	21	81.35
Logan	1	2.20	168	319.60	3	4.88	-	-	48	91.15	220	417.83
McDowell	-	-	333	635.19	6	8.96	1	2.37	18	32.13	356	676.02
Marion	1	0.60	139	133.41	2	2.00	-	-	26	26.28	168	162.29
Marshall	3	7.14	9	16.61	1	1.25	-	-	1	1.25	14	26.25
Mason	4	12.86	3	9.20	1	1.87	-	-	1	3.66	9	27.59
Mercer	2	1.25	168	170.47	3	1.87	-	-	29	28.16	200	199.82
Mineral	4	10.48	2	3.55	-	-	-	-	1	3.46	7	17.49
Mingo	-	-	59	169.26	3	8.71	-	-	26	70.28	87	244.95
Monongalia	6	6.51	55	68.36	1	1.65	-	-	7	8.16	69	84.69
Monroe	-	-	9	54.68	-	-	-	-	1	3.26	10	57.94

See footnotes at end of table.

Table WV-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, West Virginia residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Morgan	-	-	1	**3.76**	-	-	-	-	1	**6.98**	2	**10.74**
Nicholas	-	-	70	**210.26**	-	-	-	-	18	**55.12**	88	**265.38**
Ohio	2	**1.33**	12	**12.10**	4	**3.49**	-	-	6	**7.29**	24	**24.21**
Pendleton	-	-	-	-	-	-	-	-	1	**10.75**	1	**10.75**
Pleasants	2	**11.85**	-	-	-	-	-	-	-	-	2	**11.85**
Pocahontas	1	**8.89**	1	**8.89**	-	-	-	-	2	**7.01**	4	**24.80**
Preston	-	-	47	**123.40**	1	**4.81**	-	-	1	**3.29**	49	**131.50**
Putnam	10	**23.05**	7	**14.06**	1	**1.54**	-	-	7	**15.15**	25	**53.80**
Raleigh	3	**2.82**	784	**664.06**	3	**1.71**	-	-	75	**65.17**	865	**733.76**
Randolph	1	**1.44**	22	**56.69**	-	-	-	-	-	-	23	**58.12**
Ritchie	-	-	1	**8.53**	1	**8.53**	-	-	-	-	2	**17.05**
Roane	-	-	2	**8.64**	-	-	-	-	2	**8.64**	4	**17.27**
Summers	-	-	14	**59.18**	-	-	-	-	3	**11.15**	17	**70.32**
Taylor	-	-	16	**66.40**	-	-	-	-	8	**33.20**	24	**99.60**
Tucker	-	-	8	**48.93**	-	-	-	-	-	-	8	**48.93**
Upshur	-	-	28	**75.72**	1	**1.73**	-	-	8	**13.80**	37	**91.25**
Wayne	2	**4.46**	22	**37.06**	3	**6.69**	-	-	1	**2.23**	27	**48.22**
Webster	1	**8.47**	41	**258.65**	-	-	-	-	5	**42.36**	47	**309.48**
Wetzel	-	-	2	**6.71**	2	**4.17**	-	-	-	-	4	**10.89**
Wirt	1	**9.02**	-	-	-	-	-	-	-	-	1	**9.02**
Wood	6	**4.72**	3	**2.65**	4	**2.57**	-	-	4	**3.73**	17	**13.67**
Wyoming	-	-	177	**546.97**	3	**10.33**	-	-	28	**91.71**	206	**642.12**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

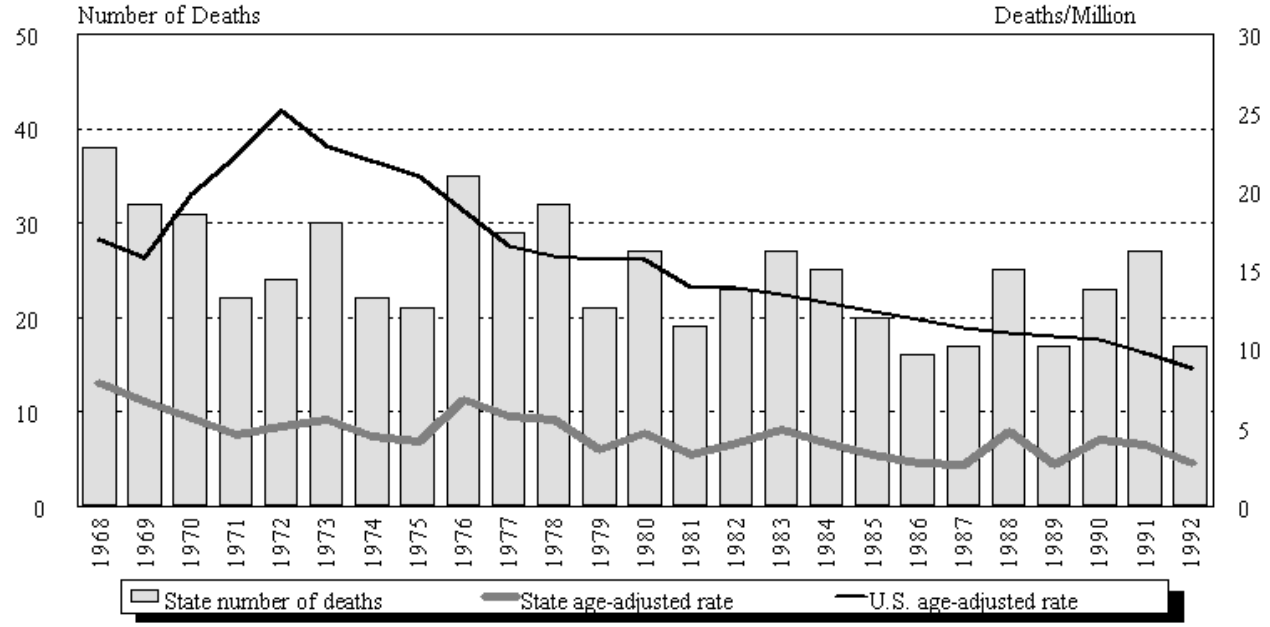
Wisconsin: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	109	27
Crude mortality rate (per 1,000,000 population)	5.73	39
Age-adjusted mortality rate (per 1,000,000 population)	3.64	36
Total years of potential life lost to life expectancy	1,513	23
Years of potential life lost to life expectancy (per death)	13.9	5

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	37	33.9
Coal workers' pneumoconiosis	7	6.4
Silicosis	58	53.2
Byssinosis	1	0.9
Unspecified/Other pneumoconiosis	8	7.3

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure WI-1. All pneumoconioses: Wisconsin and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Wisconsin

Table WI-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Wisconsin residents age 15 and over, 1968-1992

Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	1	0.26	2	0.49	30	6.29			5	0.84	38	7.88
1969	-	-	1	0.23	20	4.19			11	2.23	32	6.65
1970	-	-	4	0.92	22	3.87			7	1.09	31	5.57
1971	-	-	1	0.26	14	2.82			7	1.45	22	4.53
1972	2	0.52	-	-	14	2.88			8	1.73	24	5.13
1973	3	0.58	1	0.26	19	3.56			9	1.47	30	5.51
1974	-	-	3	0.52	15	3.02			7	1.39	22	4.41
1975	1	0.33	1	0.26	12	1.90			7	1.64	21	4.12
1976	2	0.28	2	0.29	22	4.62			10	1.88	35	6.82
1977	2	0.46	3	0.59	17	3.24			7	1.41	29	5.71
1978	5	0.91	1	0.25	14	2.34			13	2.05	32	5.48
1979	-	-	1	0.20	15	2.71	-	-	5	0.71	21	3.62
1980	4	0.71	2	0.26	17	2.93	-	-	5	0.85	27	4.62
1981	2	0.44	3	0.43	13	2.26	-	-	1	0.13	19	3.25
1982	6	1.41	3	0.38	12	1.87	-	-	2	0.39	23	4.05
1983	6	1.00	3	0.76	18	3.06	-	-	-	-	27	4.82
1984	6	1.10	1	0.19	17	2.51	-	-	2	0.44	25	4.05
1985	3	0.55	1	0.19	12	1.95	-	-	4	0.61	20	3.31
1986	5	1.11	-	-	10	1.56	-	-	1	0.12	16	2.78
1987	4	0.60	1	0.19	10	1.59	-	-	2	0.24	17	2.61
1988	4	0.75	1	0.18	16	2.79	1	0.25	3	0.78	25	4.76
1989	7	0.98	2	0.16	7	1.28	-	-	1	0.18	17	2.60
1990	9	1.66	3	0.70	10	1.67	-	-	2	0.43	23	4.20
1991	11	2.04	1	0.10	16	2.09	-	-	-	-	27	3.92
1992	6	0.94	-	-	9	1.58	-	-	2	0.20	17	2.72

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure WI-2. All pneumoconioses: Distribution of deaths by sex and race, Wisconsin residents age 15 and over, 1968-1992

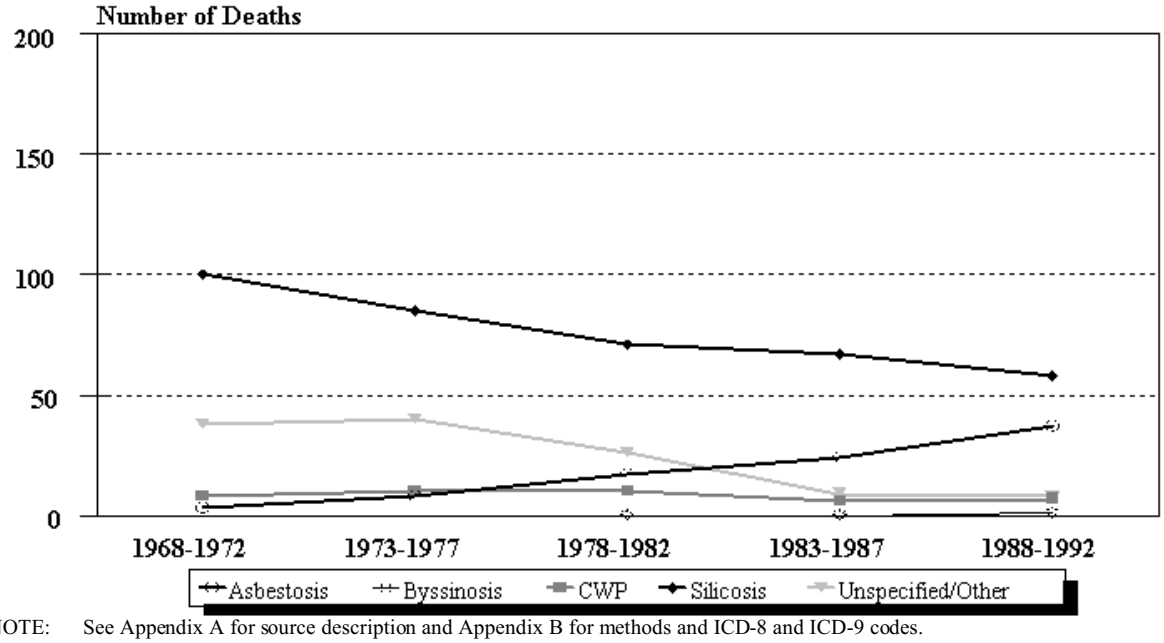
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table WI-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Wisconsin residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		620	100.0	109	100.0
Sex	Male	602	97.1	107	98.2
	Female	18	2.9	2	1.8
Race	White	563	90.8	97	89.0
	Black	56	9.0	12	11.0
	Other	1	0.2	0	0.0
Age	15-24	0	0.0	0	0.0
	25-34	1	0.2	0	0.0
	35-44	6	1.0	2	1.8
	45-54	28	4.5	8	7.3
	55-64	102	16.5	17	15.6
	65-74	218	35.2	35	32.1
	75-84	201	32.4	36	33.0
	85+	64	10.3	11	10.1
	Mean age	71.8		71.6	
	Range for age	27-95		42-95	

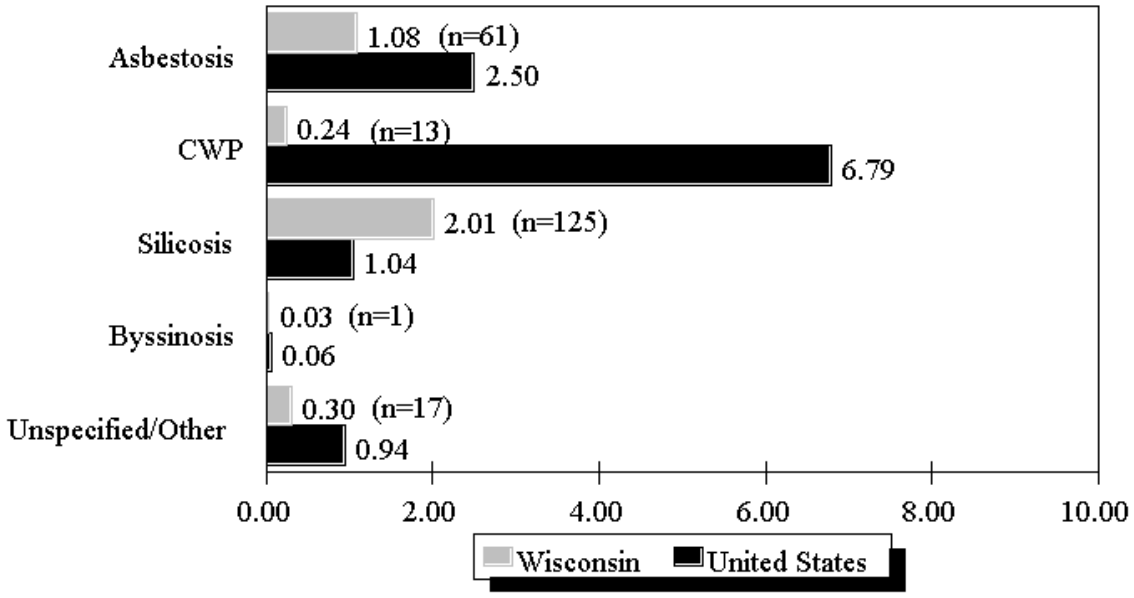
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure WI-3. Pneumoconiosis deaths by condition, Wisconsin residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure WI-4. Wisconsin and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table WI-3 (page 1 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Wisconsin residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Barron	1	**2.34**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.34**
Bayfield	2	**8.56**	-	**-**	-	**-**	-	**-**	-	**-**	2	**8.56**
Brown	3	**1.75**	-	**-**	2	**0.98**	-	**-**	-	**-**	5	**2.73**
Buffalo	2	**9.19**	-	**-**	-	**-**	-	**-**	-	**-**	2	**9.19**
Burnett	3	**19.76**	-	**-**	1	**11.72**	-	**-**	-	**-**	3	**19.76**
Calumet	-	**-**	-	**-**	1	**3.51**	-	**-**	-	**-**	1	**3.51**
Chippewa	-	**-**	-	**-**	1	**0.81**	-	**-**	-	**-**	1	**0.81**
Columbia	-	**-**	-	**-**	2	**4.27**	-	**-**	-	**-**	2	**4.27**
Crawford	-	**-**	-	**-**	1	**9.70**	-	**-**	-	**-**	1	**9.70**
Dane	-	**-**	-	**-**	4	**1.19**	-	**-**	2	**0.59**	6	**1.79**
Door	2	**6.91**	-	**-**	1	**1.32**	-	**-**	-	**-**	3	**8.23**
Douglas	3	**4.11**	-	**-**	-	**-**	-	**-**	-	**-**	3	**4.11**
Eau Claire	1	**1.90**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.90**
Fond du Lac	-	**-**	1	**0.48**	-	**-**	-	**-**	2	**0.96**	3	**1.44**
Green Lake	1	**4.48**	-	**-**	-	**-**	-	**-**	-	**-**	1	**4.48**
Jefferson	2	**2.33**	-	**-**	2	**2.33**	-	**-**	1	**1.63**	5	**6.29**
Juneau	-	**-**	-	**-**	1	**3.94**	-	**-**	-	**-**	1	**3.94**
Kenosha	4	**2.59**	1	**0.88**	2	**1.75**	-	**-**	1	**0.88**	8	**6.09**
Kewaunee	-	**-**	-	**-**	1	**5.08**	-	**-**	-	**-**	1	**5.08**
Langlade	-	**-**	-	**-**	1	**1.71**	-	**-**	-	**-**	1	**1.71**
Lincoln	1	**1.38**	-	**-**	1	**3.40**	-	**-**	-	**-**	2	**4.78**
Manitowoc	3	**2.84**	-	**-**	2	**3.04**	-	**-**	-	**-**	5	**5.88**
Marathon	2	**1.95**	-	**-**	7	**4.73**	-	**-**	1	**0.98**	10	**7.65**
Marinette	-	**-**	-	**-**	1	**0.86**	-	**-**	-	**-**	1	**0.86**
Marquette	-	**-**	1	**5.64**	2	**8.44**	-	**-**	-	**-**	3	**14.08**
Milwaukee	15	**1.27**	3	**0.32**	29	**3.03**	-	**-**	5	**0.54**	51	**5.06**
Oneida	-	**-**	1	**1.22**	-	**-**	-	**-**	-	**-**	1	**1.22**
Outagamie	1	**0.90**	-	**-**	3	**2.40**	-	**-**	-	**-**	4	**3.30**
Ozaukee	1	**0.90**	-	**-**	2	**1.81**	-	**-**	-	**-**	3	**2.71**
Pierce	-	**-**	-	**-**	1	**4.11**	-	**-**	-	**-**	1	**4.11**
Polk	1	**2.86**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.86**
Portage	1	**2.20**	-	**-**	-	**-**	-	**-**	-	**-**	1	**2.20**

See footnotes at end of table.

Table WI-3 (page 2 of 2). Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Wisconsin residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Racine	1	**0.32**	1	**0.64**	6	**3.05**	-	**-**	-	**-**	8	**4.00**
Rock	1	**0.79**	2	**1.57**	5	**2.22**	-	**-**	-	**-**	8	**4.58**
Rusk	-	**-**	-	**-**	1	**2.27**	-	**-**	-	**-**	1	**2.27**
Sauk	-	**-**	-	**-**	1	**0.82**	-	**-**	-	**-**	1	**0.82**
Shawano	-	**-**	-	**-**	1	**2.34**	-	**-**	-	**-**	1	**2.34**
Sheboygan	-	**-**	-	**-**	31	**14.93**	-	**-**	1	**0.41**	32	**15.33**
Trempealeau	-	**-**	-	**-**	-	**-**	1	**3.65**	-	**-**	1	**3.65**
Vernon	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.23**	1	**1.23**
Walworth	1	**1.43**	-	**-**	1	**1.43**	-	**-**	-	**-**	2	**2.86**
Washington	3	**4.17**	-	**-**	1	**0.67**	-	**-**	-	**-**	4	**4.84**
Waukesha	1	**0.24**	1	**0.40**	5	**1.70**	-	**-**	2	**0.64**	9	**2.99**
Waupaca	1	**0.70**	-	**-**	1	**2.07**	-	**-**	-	**-**	2	**2.77**
Waushara	1	**1.74**	-	**-**	-	**-**	-	**-**	-	**-**	1	**1.74**
Winnebago	-	**-**	2	**1.61**	2	**1.15**	-	**-**	1	**0.81**	5	**3.56**
Wood	3	**4.31**	-	**-**	2	**2.87**	-	**-**	-	**-**	4	**5.74**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

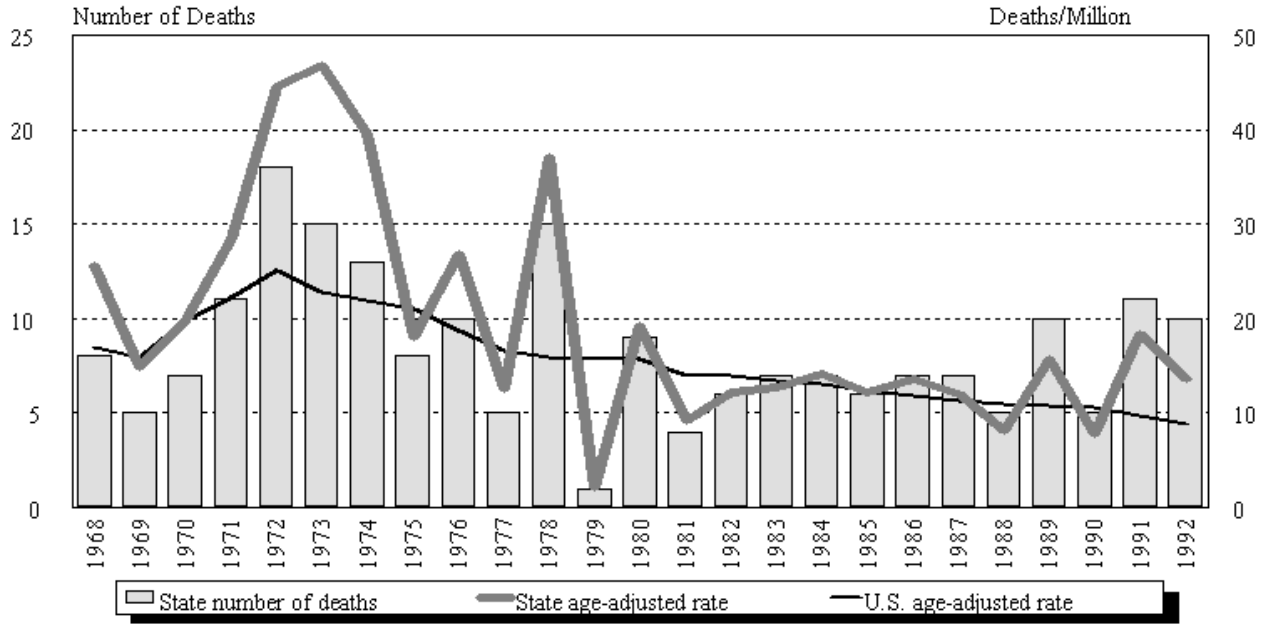
Wyoming: Selected statistics from the United States section

All pneumoconioses mortality, 1988-1992	Value	State rank
Total deaths	41	38
Crude mortality rate (per 1,000,000 population)	24.17	6
Age-adjusted mortality rate (per 1,000,000 population)	12.77	6
Total years of potential life lost to life expectancy	382	42
Years of potential life lost to life expectancy (per death)	9.3	51

Deaths by type of pneumoconiosis, 1988-1992	Deaths*	Percent** distribution
Asbestosis	8	19.5
Coal workers' pneumoconiosis	26	63.4
Silicosis	1	2.4
Byssinosis	0	0.0
Unspecified/Other pneumoconiosis	6	14.6

* Sum of column may exceed total deaths because of deaths with multiple pneumoconioses.
** Percentages may total more than 100% due to deaths with multiple pneumoconioses.
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure WY-1. All pneumoconioses: Wyoming and U.S. age-adjusted mortality rates, residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Wyoming

Table WY-1. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition, Wyoming residents age 15 and over, 1968-1992

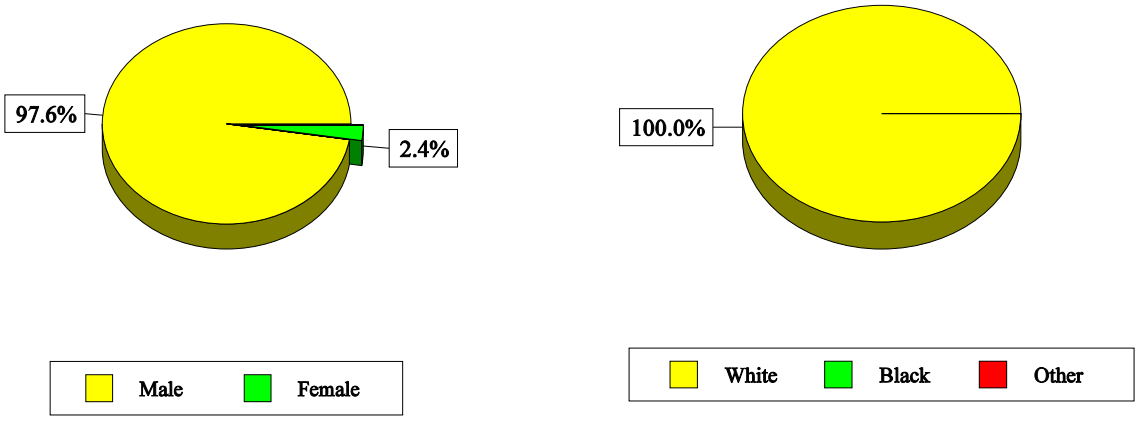
Year	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis*		Unspecified/Other pneumoconioses		All pneumoconioses	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1968	-	-	-	-	2	7.23			6	18.34	8	25.57
1969	-	-	1	3.51	1	3.61			3	7.66	5	14.77
1970	-	-	1	3.51	1	2.37			5	14.12	7	20.00
1971	-	-	2	7.24	3	5.65			6	15.58	11	28.47
1972	2	7.23	8	15.47	-	-			8	21.78	18	44.49
1973	-	-	6	20.41	-	-			9	26.44	15	46.85
1974	-	-	7	20.58	3	9.83			3	9.09	13	39.50
1975	-	-	2	4.42	1	2.21			5	11.37	8	18.00
1976	-	-	4	10.88	1	3.10			6	15.94	10	26.81
1977	-	-	2	5.22	-	-			3	7.26	5	12.48
1978	-	-	4	9.81	2	5.15			9	22.12	15	37.08
1979	-	-	-	-	-	-	-	-	1	2.16	1	2.16
1980	-	-	6	11.95	-	-	-	-	3	7.32	9	19.27
1981	-	-	2	4.61	-	-	-	-	2	4.61	4	9.21
1982	-	-	2	5.04	1	0.93	-	-	3	6.22	6	12.18
1983	-	-	4	6.87	1	2.44	-	-	2	3.33	7	12.63
1984	-	-	5	9.28	1	2.41	-	-	1	2.41	7	14.09
1985	-	-	6	12.17	1	1.68	-	-	-	-	6	12.17
1986	-	-	4	7.23	3	6.30	-	-	-	-	7	13.53
1987	2	3.20	2	3.98	1	2.35	-	-	2	2.47	7	12.00
1988	1	1.61	4	6.42	-	-	-	-	-	-	5	8.03
1989	1	2.99	5	7.17	1	1.58	-	-	3	3.99	10	15.73
1990	1	1.55	4	6.22	-	-	-	-	-	-	5	7.77
1991	4	7.64	7	10.64	-	-	-	-	-	-	11	18.28
1992	1	0.76	6	8.37	-	-	-	-	3	4.42	10	13.56

- indicates no deaths listed. * no specific code for byssinosis in ICD-8 (1968-1978).

NOTE: Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Figure WY-2. All pneumoconioses: Distribution of deaths by sex and race, Wyoming residents age 15 and over, 1968-1992



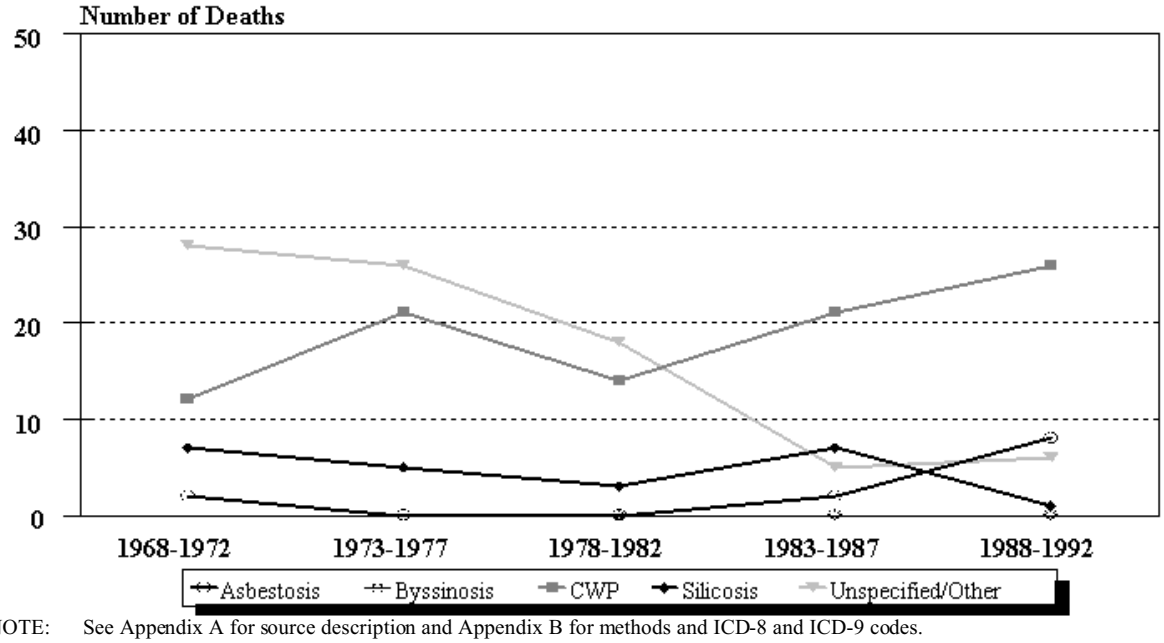
NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Table WY-2. All pneumoconioses: Distribution of deaths by sex, race, and age, Wyoming residents age 15 and over, 1968-1992

		1968-1992		1988-1992	
		Number	Percent	Number	Percent
Total deaths		210	100.0	41	100.0
Sex	Male	205	97.6	41	100.0
	Female	5	2.4	0	0.0
Race	White	210	100.0	41	100.0
	Black	0	0.0	0	0.0
	Other	0	0.0	0	0.0
Age	15-24	1	0.5	0	0.0
	25-34	0	0.0	0	0.0
	35-44	1	0.5	0	0.0
	45-54	2	1.0	0	0.0
	55-64	24	11.4	2	4.9
	65-74	60	28.6	7	17.1
	75-84	88	41.9	21	51.2
	85+	34	16.2	11	26.8
	Mean age	75.2		79.1	
	Range for age	19-100		59-96	

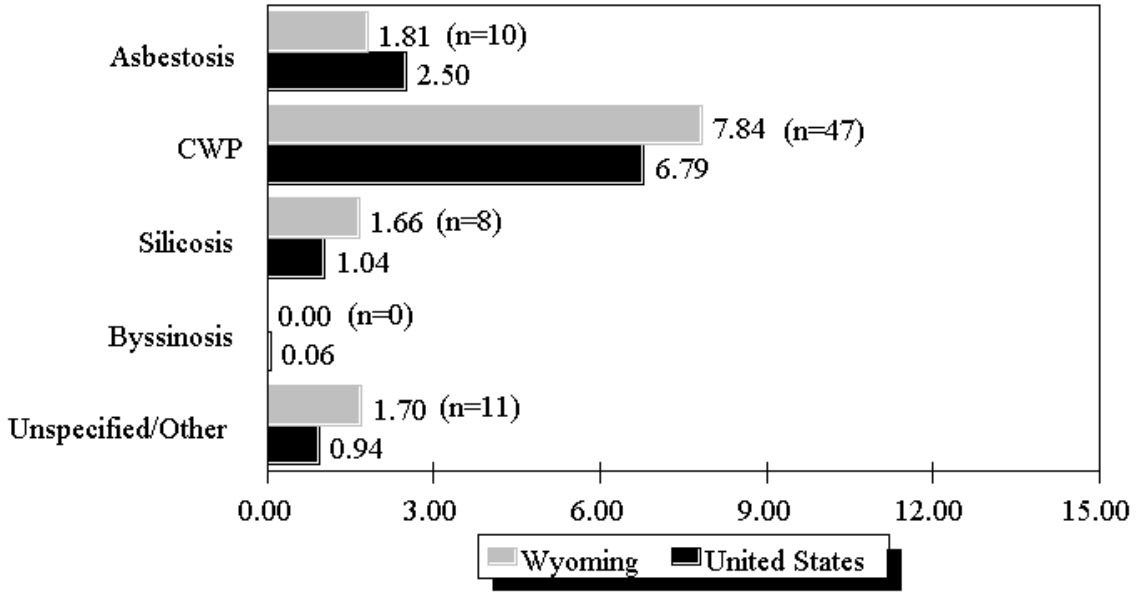
NOTE: Percentages may not total to 100% due to rounding. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure WY-3. Pneumoconiosis deaths by condition, Wyoming residents age 15 and over, 1968-1992



NOTE: See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data.

Figure WY-4. Wyoming and U.S. age-adjusted mortality rates (per 1,000,000 population) by condition, residents age 15 and over, 1983-1992



NOTE: Rates based on small numbers may be unstable. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.
SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

Table WY-3. Number of deaths and age-adjusted mortality rate (per 1,000,000 population) by condition and county, Wyoming residents age 15 and over, 1983-1992

	Asbestosis		Coal workers' pneumoconiosis		Silicosis		Byssinosis		Unspecified/Other pneumoconioses		All pneumoconioses	
County	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**	**#**	**Rate**
Albany	-	**-**	2	**8.35**	2	**5.70**	-	**-**	-	**-**	3	**11.19**
Campbell	1	**7.80**	1	**6.03**	-	**-**	-	**-**	-	**-**	2	**13.83**
Carbon	-	**-**	3	**15.13**	-	**-**	-	**-**	-	**-**	3	**15.13**
Converse	-	**-**	1	**6.64**	-	**-**	-	**-**	-	**-**	1	**6.64**
Fremont	-	**-**	2	**3.83**	-	**-**	-	**-**	-	**-**	2	**3.83**
Goshen	-	**-**	1	**3.12**	-	**-**	-	**-**	1	**3.12**	2	**6.23**
Hot Springs	-	**-**	3	**17.46**	-	**-**	-	**-**	-	**-**	3	**17.46**
Johnson	-	**-**	3	**33.57**	1	**13.84**	-	**-**	-	**-**	4	**47.41**
Laramie	6	**6.98**	1	**0.92**	-	**-**	-	**-**	-	**-**	7	**7.90**
Lincoln	1	**5.94**	6	**46.06**	-	**-**	-	**-**	-	**-**	7	**51.99**
Natrona	2	**2.98**	3	**3.56**	1	**1.19**	-	**-**	1	**1.79**	7	**9.52**
Platte	-	**-**	-	**-**	1	**11.79**	-	**-**	-	**-**	1	**11.79**
Sublette	-	**-**	-	**-**	-	**-**	-	**-**	1	**11.07**	1	**11.07**
Sweetwater	-	**-**	20	**57.07**	1	**4.10**	-	**-**	8	**21.16**	29	**82.33**
Uinta	-	**-**	-	**-**	2	**20.16**	-	**-**	-	**-**	2	**20.16**
Washakie	-	**-**	1	**11.22**	-	**-**	-	**-**	-	**-**	1	**11.22**

- indicates no deaths listed.

NOTE: Counties with no deaths for all listed conditions are not displayed. Rates based on small numbers may be unstable. Sum of individual conditions may exceed total because of deaths with multiple pneumoconioses. See Appendix A for source description and Appendix B for methods and ICD-8 and ICD-9 codes.

SOURCE: National Center for Health Statistics multiple cause of death data. Population estimates from U.S. Bureau of the Census.

APPENDICES

Multiple Cause of Death Data, NCHS
The National Center for Health Statistics (NCHS) makes available multiple cause of death data files for the years 1968 to 1992. The files contain records of all deaths in the United States (approximately two million annually) that are reported to state vital statistics offices. All conditions listed on the death certificate, both underlying and contributing, are coded for each decedent. Additional data include age, race, sex, and state and county of residence at time of death. The usual occupation and industry of each decedent are available for some states since 1985 (see Appendix C).

Since 1989, the NCHS public use data files have not included data for counties reporting less than 3 deaths, for any given year. Files containing data not available for public use have been obtained directly from NCHS for use in generating mortality maps by county.

Potential limitations of multiple cause of death data include: under- or over-reporting of conditions on the death certificate by certifying physicians; incomplete or unclassified reporting of usual occupation and industry; and non-specificity of codes.

For more information refer to: *Vital Statistics of the United States, 1992*, Vol. l, DHHS Pub. No. (PHS) 96-1100 and Vol. ll, Part A, DHHS Pub. No. (PHS) 97-1101, Public Health Service, National Center for Health Statistics. U.S. Government Printing Office, Washington, D.C. 20402.

Population Estimates, Bureau of the Census
National population estimates used in this report are based on data from the United States Bureau of the Census for national, state, and county levels. A census of the United States population has been taken every 10 years since 1790. After the decennial population censuses are completed, intercensal population estimates are prepared for the preceding decade to replace postcensal estimates. Intercensal estimates take into account the census of the population at the beginning and end of each decade. In the current report, intercensal estimates have been used for all years preceding 1990. United States postcensal (Demo-Detail) files were used to compute rates for 1990 to 1992. As of June 1996, the census data may be found on the Wide-Ranging Online Data for Epidemiological Research (WONDER) computerized information system, maintained by the Centers for Disease Control and Prevention.

For information on the 1990 census, refer to: U.S. Bureau of the Census, *1990 Census of the Population, General Population Characteristics*, Series 1900, CP-1.

Respirable Coal Mine Dust Data, MSHA
These data were obtained from MSHA and represent respirable coal mine dust levels measured by MSHA inspectors at surface and underground coal mines beginning in 1970. The data include the sample collection date, dust concentration, occupation associated with the sample, an MSHA designator as to the validity of the sample, and the mine at which the sample was obtained.

The MSHA respirable coal mine dust samples are obtained by drawing mine air through a filter at the rate of two liters per minute, with a cyclone used to extract non-respirable particles prior to the filter. The dust weight collected on the filter is multiplied by 1.38 to complete the conversion to Mines Research Establishment (MRE) units. The "MRE" designation indicates that measurements obtained by MSHA were converted so that they would be equivalent to those obtained with an instrument on which the British standards have been based (Isleworth Type 113A Gravimetric Dust Sampler).

For more information, contact: Mine Safety and Health Administration, Information Resource Center, P.O. Box 25367, Denver, CO 80225-0367.

Respirable Coal Mine Quartz Dust Data, MSHA
These data were obtained from MSHA and represent respirable quartz levels derived from respirable coal mine dust samples collected by MSHA inspectors at

surface and underground coal mines beginning in 1982. The data include the sampling date, sampling time, initial and final weights, percent quartz, production level during sampling, the occupation associated with the sample, and the mine at which the sample was obtained.

For more information, contact: Mine Safety and Health Administration, Safety and Health Technology Center, Dust Division, PO Box 18233, Pittsburgh, PA 15236.

Mine Inspection Data Analysis System, BoM

The Mine Inspection Data Analysis System (MIDAS) was developed by the Bureau of Mines (BoM) to analyze the records of industrial hygiene samples collected by Mine Safety and Health Administration (MSHA) inspectors in non-coal (metal/non-metal) surface and underground mines beginning in 1974. Data in MIDAS, for both personal exposure samples and area samples, include the sampling date, contaminant code, airborne concentration, occupation, PEL, percent silica and silica concentration (where applicable), standard industrial classification, and the mine at which the sample was obtained. The MIDAS data were previously edited by the Bureau of Mines staff. This report uses all the MIDAS data reported for the agents listed in Appendix D.

For more information contact: W. F. Watts, Jr. at the University of Minnesota, Center for Diesel Research, Department of Mechanical Engineering, 125 ME, 111 Church St. SE, Minneapolis, MN 55455 or E-mail Watts@012.tc.umn.edu .

Note: The quartz reference standard used for MIDAS samples changed in 1988. For information regarding the quartz reference standard used for the MIDAS samples, contact: Laboratory Division, Denver Technical Support Center, Mine Safety and Health Administration, PO Box 25367, Denver, CO 80225-0367.

Integrated Management Information System, OSHA

The Integrated Management Information System (IMIS) includes most of the industrial hygiene sampling data from Occupational Safety and Health Administration (OSHA) compliance inspections beginning in May 1979. The data are reported by OSHA field compliance officers. OSHA provides IMIS data to NIOSH on an annual basis. The IMIS data include the sampling date, substance code, airborne concentration, sample and exposure type (see Methods, Appendix B), occupation, PEL, and standard industrial classification.

For more information contact: OSHA, Office of Management Data Systems, 200 Constitution Avenue, NW, Washington, D.C. 20210.

International Classification of Disease (ICD) Codes

Condition (as defined for this report)	**ICD-8 (1968-1978)**		**ICD-9 (1979-1992)**	
	Rubrics	Codes	Rubrics	Codes
Asbestosis	**Asbestosis**	**515.2**	**Asbestosis**	**501**
Coal Workers' Pneumoconiosis	**Anthracosilicosis** Anthracosis Coal miners' lung	**515.1**	**Coal Workers' Pneumoconiosis** Anthracosilicosis Anthracosis Black lung disease Coal workers' lung Miners' asthma	**500**
Silicosis	**Silicosis** Calcicosis Chalicosis	**515.0**	**Pneumoconiosis due to other silica or silicates** Pneumoconiosis due to talc Silicotic fibrosis (massive) Silicosis (simple)/(complicated)	**502**
	Silicotuberculosis Colliers' phthisis Grinders' phthisis Miners' phthisis Stonemasons' phthisis	**010**	*No equivalent ICD-9 code*	
Byssinosis	*No specific ICD-8 code for byssinosis*		**Pneumonopathy due to inhalation of other dust** Byssinosis Cannabinosis Flax-dressers' disease	**504**
Unspecified/ Other Pneumoconioses	**Pneumoconiosis due to inhalation of other inorganic dust** Aluminosis (of lung) Bauxite fibrosis (of lung) Berylliosis Graphite fibrosis (of lung)	**516.0**	**Pneumoconiosis due to other inorganic dust** Aluminosis (of lung) Bauxite fibrosis (of lung) Berylliosis Graphite fibrosis (of lung) Siderosis Stannosis	**503**
	Other pneumoconiosis, including unspecified Pneumoconiosis: NOS; due to: silicates NEC talc	**515.9**	**Pneumoconiosis, unspecified**	**505**

NOS - not otherwise specified NEC - not elsewhere classified

MORTALITY

Number of Deaths

The number of deaths for each occupational respiratory condition is the number of deaths in which the condition was coded as either underlying or contributing cause of death. These numbers were tabulated from the record axis of the NCHS multiple cause of death data files. Cause of death codes were defined as shown in the previous table [International Classification of Disease (ICD) Codes]. In the current report, the number of deaths by condition are reported both annually and for selected time periods. Where numbers of deaths are presented in this report, the total for the specific period is reported. Reported deaths are restricted to United States residents, 15 years or older, based on state of residence at death. For this report, race was classified as white, black, and all others.

Crude Mortality Rates

Cause-specific crude mortality rates for occupational respiratory conditions were computed for all United States decedents 15 years and older, from 1968 to 1992. To compute the annual rates, the total number of deaths with a specific condition mentioned as either underlying or contributing cause was divided by the comparable United States population, in the same year. Additional restrictions were placed on the data to compute race- and sex-specific rates.

State-specific crude mortality rates for 1991-1992 were computed by dividing the average number of reported deaths in each state by the average state population, 15 years and older, in that time period. State-specific crude mortality rates for other multi-year periods were computed by dividing the average annual number of deaths for the period by the mid-year population for that period.

Age-adjusted Mortality Rates

Age-adjusted mortality rates presented in this report were based on deaths with the condition of interest mentioned as either underlying or contributing cause of death. Age-adjusted rates were computed by the direct method. Rates were calculated annually for each specified condition from 1968 through 1992, as well as for selected periods. The age-adjusted rates, for a given year, represent the rates that would have been observed if the age-specific rates for specified age groups had occurred in a population with the same age distribution as that of the standard population. For this report, the 1940 United States population was used as the standard. The specific age intervals used were 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, and 85 years and older. Rates for the entire U.S. population, and for each sex-race group were adjusted separately, each using the same standard population.

The method of calculation first computed the annual age-specific rates for the population of interest. The product of the age-specific rates and the number in the comparable age-specific group in the standard population equals the expected number of deaths per million population for each age group. The total expected numbers of deaths were then summed over all age groups. The sum of the expected number of deaths was divided by the sum of the standard population and the resulting quotient was multiplied by 1,000,000 to produce the age-adjusted rate.

Age-adjusted mortality rates were computed at the national, state, and county level for multi-year periods. The method of calculation first computed age-specific rates by dividing the average annual number of deaths for each age group by the corresponding age-grouped mid-year population for the comparable geographic unit. Age-adjusted rates were then computed as described above.

Age-adjusted rates computed for multi-year periods, by county, were based upon wider age intervals in order to aggregate a larger number of cause-specific deaths within each age group. Specific intervals used were 15-34, 35-54, 55-74, and 75 years and older.

Years of Potential Life Lost

Years of potential life lost (YPLL) were based on deaths with the condition of interest mentioned as

either underlying or contributing cause of death. They were calculated using the method described by the Centers for Disease Control (CDC) (MMWR, Vol 34/2S: December 19,1986). YPLL were calculated both to age 65 and to life expectancy. YPLL to age 65 may be considered as a loss of years from a normal working life, while YPLL until life expectancy may be considered as a loss of years from the overall life span. For YPLL to age 65, the number of deaths with a mention of a specific condition of interest were classified into the ten-year age groups mentioned in the section on age-adjusted mortality rates. The number of deaths in each age group was then multiplied by the difference between 65 years and the mid-point of the age group. Thus for the 15-24 year age group, the number of deaths would be multiplied by 45 (i.e., 65 minus 20 years). The age-specific YPLL were summed over all age groups for the total value.

For YPLL to life expectancy, the single difference was that the calculation was based on the number of deaths in the age-specific group multiplied by the difference between the mid-point of the age group and the life expectancy at that age in the year of death. Life tables published annually by NCHS were used to determine life expectancy. State-specific YPLL (to life expectancy) per death were calculated for only one period, 1988-1992. To calculate this index, YPLL (to life expectancy) were divided by the total number of deaths in the time period.

Proportionate Mortality Ratio (PMR)

The data for PMR analyses were a subset of the NCHS multiple cause of death files for which usual occupation and industry are available (see Appendix C for a list of states and years reporting).

The PMR is defined as the observed number of deaths with the condition of interest (mentioned as either underlying or contributing cause) in a specified occupation or industry divided by the expected number of deaths with that condition. The expected number of deaths is the total number of deaths in the occupation or industry of interest multiplied by the proportion, defined as the number of cause-specific deaths for the condition of interest, divided by the total number of deaths in the population. The PMRs in the report have been internally age-adjusted (i.e., 15-34, 35-54, 55-74, and 75 years and over). Confidence intervals were calculated assuming Poisson distribution of the data.

A PMR over 1.00 indicates that there were more deaths with the condition in a specified occupation or industry than expected. PMRs with the lower 95% confidence limit exceeding 1.0 have been listed for occupations or industries with at least 5 deaths from the condition of interest.

Rank Order

For each state, a rank order is presented for each of several mortality measures. Depending on the specific mortality measures, a rank order of "1" indicates the greatest number of deaths, highest mortality rate, or highest YPLL among all states in the U.S.

EXPOSURE

Data Selection

MSHA respirable coal mine dust samples selected for analysis were restricted to those samples which met *all three* of the following criteria:

1) samples obtained in the 50 U.S. states or Washington, D.C. (i.e., the Virgin Islands and Puerto Rico were excluded); and
2) samples designated by MSHA as valid; and
3) samples coded as "designated occupation," "non-designated occupation," "designated work position," "non-designated work position" with valid occupation codes, or "designated area" other than "intake air."

MSHA coal mine quartz samples selected for analysis are those samples which met *all five* of the following criteria:

1) samples obtained in the 50 U.S. states or Washington, D.C. (i.e., the Virgin Islands and Puerto Rico were excluded); and
2) samples designated by MSHA as valid; and
3) samples with sampling time greater than zero; and
4) samples with quartz concentration greater than zero; and
5) samples coded as "designated occupation," "non-designated occupation," "designated work position," "non-designated work position" with valid occupation codes, or "designated area" other than "intake air."

MIDAS data selected for analysis are all sample records for agents listed in Appendix D that were collected in the 50 U.S. states or Washington, D.C. (i.e., the Virgin Islands and Puerto Rico were excluded).

IMIS data selected for analysis were a subset of all sample records for agents listed in Appendix D. The subset for analysis resulted from selecting records which met *all four* of the following criteria:

1) records with the state code of one of the 50 U.S. states or Washington, D.C. (i.e., the Virgin Islands and Puerto Rico were excluded); and
2) records with sample type "area" or "personal" (i.e., "bulk," "wipe," "screen," "blood," and "urine samples were excluded); and
3) records with exposure type "time-weighted average," "ceiling," "peak," or "not detected" (i.e., "dose," "sound reading," "not analyzed," and "not valid" were excluded); and
4) records for which the indicated PEL and units were applicable to the contaminant indicated by the substance code for the recorded date of sampling.

Data Analysis

The number of samples within an exposure category of interest was the total number of samples selected by the above criteria for the agents in that exposure category (see Appendix D for agents and exposure categories).

The severity level for any sample was calculated as the measured exposure level divided by either the enforced PEL or a surrogate for the enforced PEL (see the last two paragraphs of Data Analysis).

The percent of samples exceeding the PEL (or its surrogate) for an exposure category was calculated as the number of samples in that category with measured exposure exceeding the corresponding PEL (or its surrogate), divided by the total number of samples, and finally multiplying by 100.

The average severity level for an exposure category was calculated by determining the severity level for each sample in that category, then summing the severity levels, and finally dividing the sum by the number of samples. The average severity level for samples exceeding the PEL (or its surrogate) was calculated in the same manner, after restricting the data to samples for which measured exposure exceeded the PEL (or its surrogate).

With two exceptions (see below), the average severity levels for categories of pneumoconiotic agents were calculated using the enforced PEL as the denominator. Due to complexities of determining the PEL for respirable coal mine dust samples and for respirable coal mine quartz samples, the denominators used for calculating average severity levels for this report were always 2 mg/m^3 MRE for respirable coal mine dust and 0.1 mg/m^3 MRE for respirable coal mine quartz. By using these surrogate PELs in the denominators, the severity levels have consistent comparison points which are distinct for respirable coal mine dust and respirable coal mine quartz. The following paragraph explains the method of determining PELs for coal mine dust and provides a rationale for selecting the denominator used for determining severity levels of quartz samples from coal mines.

Since December 1972, the maximum PEL for respirable coal mine dust has been 2 mg/m^3 MRE

unless the quartz concentration at the particular mine has been found in excess of 5%. MSHA has no specific PEL for quartz in coal mines. MSHA's respirable coal mine quartz data are based on their analysis of respirable coal mine dust samples. However, for the period covered by this report (through 1994 for exposure data), inspector samples with less than 0.45 mg net weight gain were not analyzed for quartz. When the quartz content has been found to be in excess of 5% in dust from a particular mine, the 2 mg/m^3 MRE PEL is reduced based on the following formula:

$$\text{PEL} = \frac{10\ \text{mg/m}^3\ \text{MRE}}{\%\ \text{quartz}}$$

Using this formula, one sees that at 100% quartz, the PEL would be 0.1 mg/m^3 MRE.

Permissible Exposure Limits

OSHA and MSHA each enforce regulations which establish the legal limits on workplace exposures to pneumoconiotic agents. These legal limits are described in this report as permissible exposure limits (PELs), although the regulations sometimes use the term "standard" or "exposure limit." The current legal limits may be found in the U.S. Code of Federal Regulations (CFR), as follows:

OSHA

general industry:	29 CFR 1910.1000
	29 CFR 1910.1001
	29 CFR 1910.1043
construction industry:	29 CFR 1926.55
	29 CFR 1926.1001
maritime industry:	29 CFR 1915.1000
	29 CFR 1915.1101

MSHA

coal mine industry:	30 CFR 70.100-.101
	30 CFR 71.100-.101
	30 CFR 71.700
	30 CFR 75.321
non-coal industry:	30 CFR 56.5001
	30 CFR 57.5001

This report uses the PELs which were enforced at the time of the sample, unless a surrogate PEL was being used (see preceding section, Data Analysis).

States reporting industry and occupation codes from death certificates to NCHS, 1985-1992

State	1985	1986	1987	1988	1989	1990	1991	1992
Alaska			X	X				
Colorado	X	X	X	X	X	X	X	X
Georgia	X	X	X	X	X	X	X	X
Idaho				X	X	X	X	X
Indiana		X	X	X	X	X	X	X
Kansas	X	X	X	X	X	X	X	X
Kentucky	X	X	X	X				
Maine	X	X	X	X	X	X	X	X
Missouri	X	X						
Nebraska	X							
Nevada	X	X	X	X	X	X	X	X
New Hampshire	X	X	X	X	X	X	X	X
New Jersey				X	X	X	X	X
New Mexico		X	X	X	X	X	X	X
North Carolina			X	X	X	X	X	X
Ohio	X	X	X	X	X	X	X	X
Oklahoma	X	X	X	X	X	X	X	X
Rhode Island	X	X	X	X	X	X	X	X
South Carolina	X	X	X	X	X	X	X	X
Tennessee	X	X	X	X				
Utah	X	X	X	X	X	X	X	X
Vermont		X	X	X	X	X	X	X
Washington					X	X	X	X
West Virginia				X	X	X	X	X
Wisconsin	X	X	X	X	X	X	X	X

Pneumoconiotic Agent Categories for MSHA and OSHA Inspector Data

Pneumoconiotic Agent Category (as defined for this report)	**OSHA Agents in Category**	**MSHA Agents in Category**
Asbestos	Asbestos (all forms) Asbestos (state of Oregon) Talc, fibrous tremolite (see asbestos) Tremolite*	Asbestos, fibers >5 µm in length ($3MgO \cdot 2SiO_2 \cdot 2H_2O$)
Cotton Dust	Cotton dust (raw) Flax dust*	
Coal and Coal Mine Dust	Coal dust Coal dust ($\leq$5% SiO_2)(respirable quartz fraction)	Coal dust, respirable fraction, <5% quartz Coal mine respirable dust
Silica	Silica (quartz, non-respirable) Silica crystalline quartz (as quartz), respirable dust Silica, amorphous, diatomaceous earth (>1% crystalline silica) Silica, crystalline cristobalite respirable dust Silica, crystalline tridymite respirable dust Silica, crystalline tripoli (as quartz)(respirable dust)	Coal mine quartz Cristobalite, respirable fraction Nuisance dust, respirable fraction, < 1 % quartz** Quartz, respirable fraction, >1% quartz Respirable dust (not analyzed or below detection limit)** Tridymite, respirable fraction Unlisted particulate, respirable fraction, < 1 % quartz**
Other	Alpha-alumina (total dust)* Aluminum (as Al), metal (respirable fraction) Aluminum(as Al), metal (total dust) Aluminum (as Al), welding fumes Aluminum oxide Aluminum silicate Antimony and compounds (as Sb) Barium (insoluble compounds) Barium sulfate (total dust) Beryllium and compounds Cadmium dust (as Cd) Cadmium fume (as Cd) Carbon black Cobalt, metal, fume and dust (as Co) Emery Emery (respirable fraction) Graphite (natural) Iron oxide fume Kaolin Kaolin (respirable fraction) Magnesite* Magnesite (respirable fraction) Mica (less than 1% crystalline silica) Portland cement (less than 1% quartz) Portland cement (respirable fraction) Rouge Rouge (respirable fraction) Talc (containing no asbestos) Talc, fibrous non-tremolite Tin oxide Titanium dioxide Tungsten and compounds (insoluble) (as W) Welding fumes (total particulate) Wollastonite*	Aluminum oxide dust, as Al_2O_3 Aluminum oxide fume, as Al_2O_3 Antimony dusts, as Sb Beryllium dusts, as Be Beryllium fumes, as Be Cadmium oxide fume, as Cd Cadmium, metal dusts and soluble salts, as Cd Carbon black Cobalt dusts, as Co Cobalt fumes, as Co Graphite (natural) Iron oxide fume, as Fe_2O_3 Mica* Talc, fibers >5 µm in length ($Mg_3Si_4O_{10}(OH)_2$) Talc, nonfibrous, <1% quartz Tin oxide dust, as SnO_2 Tin oxide fume, as SnO_2 Titanium dioxide dust, as TiO_2 Titanium dioxide fume, as TiO_2 Tungsten fumes, as W* Tungsten, insoluble dusts, as W* Welding fumes, total particulate

* No data reported for these agents.
** See Selected Limitations, page 6.

Summary Description of Previous *Work-Related Lung Disease (WoRLD) Surveillance Reports*

See page ii of this report for information on how to order copies of the previous Work-Related Lung Disease Surveillance Reports described below.

Work-Related Lung Disease Surveillance Report (original report issued in 1991)
The *1991 Work-Related Lung Disease Surveillance Report* was the first in a series of occupational respiratory disease surveillance reports produced by the Division of Respiratory Disease Studies (DRDS), National Institute for Occupational Safety and Health (NIOSH). The report represents a summary of surveillance data for various occupational respiratory diseases. The majority of data presented in the report is for the time period 1968-1987, however, the time period varies for different data sources.

Data presented in the report originated from programs administered by NIOSH (e.g., the Coal Workers' X-ray Surveillance Program, the National Coal Workers' Autopsy Study), the National Center for Health Statistics, the Bureau of Labor Statistics, the Mine Safety and Health Administration, the Occupational Safety and Health Administration, the Health Care Financing Administration, and the Social Security Administration.

The 1991 report is organized into two major sections: Figures and Tables. Section I contains 21 figures and Section II contains 59 tables. Within the figures and tables sections, data are provided under the following sub-headings: asbestosis, coal workers' pneumoconiosis, silicosis, exposure to cotton dust, pneumonopathy due to inhalation of other dust, hypersensitivity pneumonitis, toxic agents, dust diseases of the lung, and compensation.

Work-Related Lung Disease Surveillance Report Supplement, 1992
The 1992 *Work-Related Lung Disease Surveillance Report, Supplement*, presents updated data for many of the figures and tables presented in the 1991 report. Data from the 1991 report are updated to include 1988 mortality data.

In addition to updated data, this supplement includes data not previously presented. These data include: (1) sex, race, geographic distribution, industry and occupation from the multiple cause of death data for deaths with mention of asbestosis, malignant neoplasms of the pleura, malignant neoplasms of the peritoneum, coal workers' pneumoconiosis, silicosis, byssinosis, or hypersensitivity pneumonitis; (2) number of discharges with silicosis or asbestosis from the National Hospital Discharge Survey; and (3) reports of occupational asthma and silicosis from the Sentinel Event Notification Systems for Occupational Risks (SENSOR) program.

Work-Related Lung Disease Surveillance Report, 1994
The majority of data presented in the *1994 Work-Related Lung Disease Surveillance Report* is for the time period 1968-1990. However, the time period covered varies for some of the data sources.

A portion of the data contained in the *1994 WoRLD Surveillance Report* originates from programs and activities administered by NIOSH (e.g., the Coal Workers' X-ray Surveillance Program, the National Occupational Health Survey of Mining, and the SENSOR program). Other data were obtained from the National Center for Health Statistics, the Department of Labor, the Social Security Administration, the Mine Safety and Health Administration, the Occupational Safety and Health Administration, the Bureau of Mines, and the Association of Occupational and Environmental Clinics.

The organization of the *1994 WoRLD Surveillance Report* differs from earlier editions. It is divided into 11 major sections. The first ten sections are specific to selected occupational lung diseases or conditions, summarizing mortality and morbidity data, and other available information, such as occupational exposures or numbers of workers at risk. These sections include: asbestosis, malignant neoplasms of the pleura, coal workers' pneumoconiosis, silicosis, pneumoconiosis due to other inorganic dust, unspecified pneumoconiosis, byssinosis, hypersensitivity pneumonitis, occupational asthma, and other lung conditions. The remaining section provides data from the Association of Occupational and Environmental Clinics database. Most sections contain an initial group of figures, followed by data tables.

The *1994 WoRLD Surveillance Report* contains major additions, both in the addition of previously unreported data such as that from the National Health Interview Survey and the Association of Occupational and Environmental Clinics, and in supplementing the data with selected statistical measures, such as proportionate mortality ratios, both crude and age-adjusted rates at national and state levels, and years of potential life lost to age 65 and to life expectancy.

The following is a revision to Table 1-6 of the 1994 Work-Related Lung Disease(WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 1-6. Asbestosis: crude mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1968-1990

		White		Black	
Year	Overall rate	Males	Females	Males	Females
1968	0.53	1.08	0.09	0.44	-
1969	0.49	1.03	0.07	0.15	-
1970	0.60	1.30	0.03	0.59	-
1971	0.56	1.15	0.07	0.72	-
1972	0.91	2.04	0.03	0.56	-
1973	0.75	1.67	0.06	0.41	-
1974	0.72	1.51	0.11	0.66	-
1975	0.78	1.62	0.15	0.65	-
1976	0.87	1.89	0.04	1.13	-
1977	0.98	2.15	0.05	0.98	-
1978	1.41	3.01	0.13	1.68	0.10
1979	1.79	3.90	0.11	1.76	-
1980	1.93	4.09	0.19	2.62	-
1981	1.78	3.67	0.31	2.12	-
1982	2.37	5.03	0.25	2.96	-
1983	2.61	5.49	0.33	3.23	-
1984	2.41	5.20	0.18	3.18	0.09
1985	2.86	6.11	0.27	3.97	-
1986	3.72	7.96	0.32	4.92	0.09
1987	3.73	8.27	0.31	3.03	0.09
1988	4.00	8.76	0.28	4.49	0.26
1989	4.54	9.83	0.29	5.72	0.34
1990	4.85	10.23	0.51	7.40	0.17

- indicates no deaths listed.
SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 1-7 of the 1994 Work-Related Lung Disease(WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 1-7. Asbestosis: age-adjusted mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1968-1990

		White		Black	
Year	**Overall rate**	**Males**	**Females**	**Males**	**Females**
1968	0.44	0.92	0.07	0.43	-
1969	0.39	0.85	0.05	0.14	-
1970	0.49	1.09	0.02	0.65	-
1971	0.44	0.94	0.06	0.69	-
1972	0.73	1.69	0.03	0.56	-
1973	0.58	1.37	0.03	0.42	-
1974	0.58	1.26	0.09	0.70	-
1975	0.61	1.33	0.10	0.62	-
1976	0.66	1.53	0.02	1.18	-
1977	0.74	1.73	0.03	0.99	-
1978	1.08	2.42	0.08	1.87	0.07
1979	1.34	3.09	0.08	1.92	-
1980	1.43	3.24	0.12	2.71	-
1981	1.30	2.88	0.20	2.10	-
1982	1.75	3.94	0.15	3.18	-
1983	1.86	4.20	0.18	3.28	-
1984	1.67	3.86	0.12	3.31	0.08
1985	2.00	4.58	0.14	4.02	-
1986	2.51	5.78	0.18	5.05	0.08
1987	2.49	5.95	0.17	3.13	0.05
1988	2.62	6.21	0.14	4.56	0.24
1989	2.84	6.70	0.14	5.75	0.21
1990	3.01	6.90	0.25	7.41	0.15

- indicated no deaths listed.
SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 2-6 of the 1994 Work-Related Lung Disease(WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 2-6. Malignant neoplasm of the pleura: crude mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1968-1990

		White		Black	
Year	Overall rate	Males	Females	Males	Females
1968	2.67	3.51	2.00	3.39	1.65
1969	2.51	3.37	1.99	2.06	1.01
1970	2.90	4.25	1.88	3.24	1.39
1971	2.89	4.43	1.75	2.72	1.23
1972	2.80	4.05	1.57	5.00	2.15
1973	2.54	3.42	1.91	2.71	1.17
1974	2.60	3.78	1.77	2.12	1.47
1975	2.66	3.79	1.85	2.71	1.33
1976	2.72	3.90	1.91	3.14	0.75
1977	2.60	4.09	1.54	1.72	1.15
1978	2.77	4.31	1.79	1.32	1.33
1979	2.59	4.21	1.45	1.88	0.90
1980	2.60	4.20	1.44	2.05	1.46
1981	2.54	4.30	1.23	2.68	0.76
1982	2.79	4.21	1.99	2.08	0.47
1983	2.69	4.76	1.31	1.29	0.92
1984	2.89	4.68	1.57	2.65	1.18
1985	2.51	4.33	1.24	1.57	0.98
1986	2.62	4.33	1.43	2.26	0.88
1987	2.65	4.71	1.22	1.82	0.86
1988	2.56	4.34	1.39	2.10	0.43
1989	2.80	4.75	1.43	2.17	1.26
1990	2.83	5.13	1.31	1.95	0.58

SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 2-7 of the 1994 Work-Related Lung Disease(WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 2-7. Malignant neoplasm of the pleura: age-adjusted mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1968-1990

		White		Black	
Year	Overall rate	Males	Females	Males	Females
1968	2.10	2.90	1.44	3.42	1.34
1969	2.02	2.80	1.52	2.01	0.95
1970	2.29	3.49	1.34	3.27	1.34
1971	2.17	3.57	1.14	2.62	1.09
1972	2.18	3.32	1.04	5.11	2.10
1973	1.94	2.73	1.37	2.87	1.03
1974	2.02	3.10	1.21	2.25	1.39
1975	2.05	3.11	1.26	2.87	1.15
1976	2.05	3.17	1.24	3.22	0.73
1977	2.00	3.35	1.03	1.85	1.22
1978	2.08	3.50	1.14	1.55	1.10
1979	1.96	3.45	0.94	1.97	0.74
1980	1.91	3.37	0.84	2.27	1.20
1981	1.83	3.36	0.70	2.96	0.55
1982	2.06	3.36	1.20	2.35	0.44
1983	1.90	3.63	0.82	1.36	0.82
1984	2.09	3.61	0.97	2.96	1.03
1985	1.77	3.30	0.75	1.67	0.88
1986	1.83	3.25	0.84	2.46	0.70
1987	1.89	3.61	0.70	1.93	0.73
1988	1.78	3.24	0.82	2.26	0.47
1989	1.92	3.47	0.87	2.28	1.01
1990	1.91	3.72	0.73	2.02	0.40

SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 3-6 of the 1994 Work-Related Lung Disease(WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 3-6. Coal workers' pneumoconiosis: crude mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1968-1990

		White		Black	
Year	Overall rate	Males	Females	Males	Females
1968	12.15	27.87	0.19	4.42	0.13
1969	10.50	24.13	0.06	4.57	-
1970	14.99	34.29	0.15	7.07	0.13
1971	17.06	38.96	0.31	7.30	0.12
1972	18.85	43.01	0.26	9.73	-
1973	17.20	39.00	0.27	10.98	0.23
1974	17.27	39.23	0.32	10.58	0.11
1975	16.81	38.34	0.34	9.29	-
1976	15.11	34.32	0.28	10.44	0.11
1977	14.00	31.89	0.25	9.22	0.21
1978	13.40	30.80	0.21	7.46	-
1979	13.96	32.16	0.17	7.76	0.10
1980	14.65	33.84	0.14	8.43	0.10
1981	14.33	33.06	0.17	8.59	0.38
1982	15.27	35.04	0.26	11.07	-
1983	14.81	33.93	0.16	12.08	0.37
1984	14.55	33.86	0.16	7.85	0.36
1985	14.03	32.61	0.14	8.25	0.27
1986	12.95	29.79	0.25	9.75	0.26
1987	11.85	27.46	0.13	8.49	0.26
1988	11.55	26.94	0.17	6.98	0.26
1989	11.03	25.79	0.09	7.20	0.08
1990	10.19	23.71	0.14	6.82	0.17

- indicates no deaths listed.
SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 3-7 of the 1994 Work-Related Lung Disease(WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 3-7. Coal workers' pneumoconiosis: age-adjusted mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1968-1990

		White		Black	
Year	Overall rate	Males	Females	Males	Females
1968	8.53	21.03	0.12	4.17	0.12
1969	7.31	18.10	0.05	4.34	-
1970	10.47	25.80	0.09	6.60	0.11
1971	11.92	29.41	0.17	6.95	0.14
1972	13.32	32.92	0.11	9.24	-
1973	12.10	29.89	0.15	10.19	0.19
1974	12.11	30.08	0.17	9.71	0.13
1975	11.58	29.07	0.22	8.71	-
1976	10.38	26.02	0.12	9.75	0.09
1977	9.44	23.81	0.17	8.62	0.17
1978	8.89	22.71	0.10	7.24	-
1979	9.23	23.61	0.09	7.24	0.08
1980	9.61	24.64	0.10	7.85	0.06
1981	9.05	23.43	0.11	7.99	0.37
1982	9.45	24.48	0.12	10.05	-
1983	9.16	23.55	0.09	11.24	0.31
1984	8.94	23.35	0.07	7.23	0.31
1985	8.32	21.95	0.07	6.98	0.18
1986	7.61	19.82	0.09	8.69	0.24
1987	6.86	17.97	0.05	7.52	0.22
1988	6.48	17.15	0.08	6.35	0.19
1989	6.11	16.16	0.04	6.50	0.02
1990	5.44	14.43	0.05	5.91	0.14

- indicates no deaths listed.
SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 4-6 of the 1994 Work-Related Lung Disease (WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 4-6. Silicosis: crude mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1968-1990

		White		Black	
Year	Overall rate	Males	Females	Males	Females
1968	7.92	16.52	0.19	16.94	0.38
1969	7.83	16.26	0.18	17.38	0.13
1970	7.44	15.70	0.19	13.70	0.13
1971	6.20	13.30	0.15	10.02	0.12
1972	6.45	13.33	0.17	14.45	-
1973	5.47	11.41	0.15	11.25	0.23
1974	4.99	10.56	0.11	9.39	0.23
1975	4.52	9.43	0.16	9.29	0.11
1976	4.09	8.54	0.12	8.80	-
1977	3.36	7.02	0.07	7.50	-
1978	3.16	6.41	0.19	7.58	0.10
1979	2.61	5.25	0.06	7.52	0.10
1980	2.55	4.99	0.18	7.52	-
1981	2.12	4.37	0.22	3.46	0.10
1982	2.16	4.36	0.04	6.14	-
1983	1.97	4.04	0.06	4.85	-
1984	2.07	4.09	0.11	6.15	0.09
1985	1.79	3.52	0.10	5.43	0.09
1986	1.69	3.32	0.10	4.82	-
1987	1.80	3.50	0.18	4.95	0.09
1988	1.57	3.00	0.11	5.29	0.17
1989	1.56	3.03	0.14	4.34	0.25
1990	1.58	3.14	0.11	4.38	0.08

- indicates no deaths listed.
SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 4-7 of the 1994 Work-Related Lung Disease(WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 4-7. Silicosis: age-adjusted mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1968-1990

		White		Black	
Year	Overall rate	Males	Females	Males	Females
1968	5.64	12.52	0.13	16.26	0.39
1969	5.51	12.22	0.12	16.75	0.12
1970	5.21	11.75	0.14	13.03	0.14
1971	4.39	10.06	0.10	9.87	0.05
1972	4.58	10.10	0.13	14.36	-
1973	3.78	8.59	0.10	10.73	0.23
1974	3.48	7.99	0.07	9.25	0.22
1975	3.09	7.05	0.11	9.27	0.10
1976	2.86	6.49	0.08	8.79	-
1977	2.29	5.22	0.04	7.56	-
1978	2.19	4.80	0.14	7.66	0.07
1979	1.79	3.88	0.04	7.71	0.04
1980	1.70	3.60	0.12	7.72	-
1981	1.40	3.17	0.11	3.44	0.08
1982	1.42	3.10	0.02	6.36	-
1983	1.28	2.85	0.05	4.85	-
1984	1.31	2.80	0.06	6.50	0.12
1985	1.15	2.44	0.05	5.60	0.10
1986	1.03	2.26	0.05	4.63	-
1987	1.12	2.38	0.08	5.19	0.03
1988	0.94	1.96	0.05	5.27	0.14
1989	0.94	1.98	0.07	4.31	0.26
1990	0.96	2.06	0.04	4.54	0.08

- indicates no deaths listed.
SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 5-6 of the 1994 Work-Related Lung Disease (WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 5-6. Pneumoconiosis due to other inorganic dust: crude mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1968-1990

		White		Black	
Year	Overall rate	Males	Females	Males	Females
1968	0.09	0.18	0.01	-	0.13
1969	0.10	0.10	0.10	0.15	-
1970	0.12	0.18	0.09	-	-
1971	0.08	0.11	0.04	0.14	0.12
1972	0.11	0.12	0.09	0.28	-
1973	0.06	0.11	0.03	-	-
1974	0.09	0.15	0.03	0.13	-
1975	0.06	0.09	0.04	0.13	-
1976	0.08	0.10	0.07	0.13	-
1977	0.08	0.13	0.05	-	-
1978	0.08	0.06	0.08	0.36	-
1979	0.09	0.08	0.06	0.59	-
1980	0.06	0.08	0.05	0.11	-
1981	0.08	0.11	0.07	-	-
1982	0.07	0.15	-	0.22	-
1983	0.08	0.12	0.06	0.11	-
1984	0.11	0.13	0.10	0.32	-
1985	0.09	0.14	0.05	0.10	-
1986	0.05	0.09	0.04	-	-
1987	0.04	0.05	0.04	-	-
1988	0.07	0.06	0.07	0.30	-
1989	0.09	0.14	0.06	0.10	-
1990	0.07	0.15	0.02	-	-

- indicates no deaths listed.
SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 5-7 of the 1994 Work-Related Lung Disease(WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 5-7. Pneumoconiosis due to other inorganic dust: age-adjusted mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1968-1990

		White		Black	
Year	**Overall rate**	**Males**	**Females**	**Males**	**Females**
1968	0.07	0.15	0.01	-	0.12
1969	0.09	0.09	0.10	0.17	-
1970	0.10	0.16	0.07	-	-
1971	0.06	0.08	0.04	0.11	0.14
1972	0.10	0.12	0.08	0.31	-
1973	0.05	0.10	0.02	-	-
1974	0.07	0.13	0.02	0.12	-
1975	0.05	0.08	0.03	0.15	-
1976	0.07	0.09	0.06	0.11	-
1977	0.06	0.11	0.04	-	-
1978	0.06	0.05	0.06	0.37	-
1979	0.08	0.07	0.04	0.64	-
1980	0.05	0.08	0.04	0.12	-
1981	0.06	0.08	0.04	-	-
1982	0.05	0.11	-	0.23	-
1983	0.07	0.10	0.05	0.09	-
1984	0.09	0.10	0.08	0.36	-
1985	0.07	0.11	0.04	0.12	-
1986	0.04	0.06	0.03	-	-
1987	0.02	0.04	0.02	-	-
1988	0.06	0.05	0.05	0.33	-
1989	0.06	0.11	0.03	0.10	-
1990	0.06	0.13	0.01	-	-

- indicates no deaths listed.
SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 6-6 of the 1994 Work-Related Lung Disease (WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 6-6. Unspecified pneumoconiosis: crude mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1968-1990

		White		Black	
Year	Overall rate	Males	Females	Males	Females
1968	3.74	7.79	0.22	6.78	0.13
1969	3.90	7.99	0.19	8.54	0.38
1970	5.67	11.90	0.27	9.87	0.51
1971	8.54	18.21	0.36	13.31	-
1972	9.90	21.02	0.49	15.84	-
1973	9.52	20.53	0.58	10.85	0.58
1974	8.66	18.28	0.88	9.79	0.79
1975	8.63	17.80	1.06	11.74	0.88
1976	7.30	15.02	0.90	10.69	0.54
1977	6.16	12.63	0.74	9.59	0.52
1978	5.80	12.10	0.83	5.77	0.72
1979	5.04	11.19	0.05	6.23	0.20
1980	4.52	9.99	0.06	6.15	-
1981	3.34	7.42	0.02	4.46	-
1982	2.02	4.33	0.11	3.29	-
1983	1.80	3.87	0.15	2.48	-
1984	1.69	3.66	0.04	2.87	0.09
1985	1.56	3.46	0.04	1.98	-
1986	1.24	2.68	0.06	1.74	-
1987	1.50	3.26	0.07	2.22	0.09
1988	1.52	3.35	0.04	2.29	-
1989	1.48	3.12	0.14	2.47	-
1990	1.95	4.32	0.08	2.43	0.08

- indicates no deaths listed.
SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 6-7 of the 1994 Work-Related Lung Disease(WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 6-7. Unspecified pneumoconiosis: age-adjusted mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1968-1990

		White		Black	
Year	Overall rate	Males	Females	Males	Females
1968	2.57	5.75	0.14	6.45	0.14
1969	2.72	5.96	0.14	8.11	0.36
1970	3.96	8.86	0.21	9.38	0.49
1971	5.91	13.62	0.26	12.39	-
1972	6.85	15.80	0.34	15.03	-
1973	6.60	15.52	0.42	10.17	0.61
1974	6.02	13.84	0.57	9.40	0.74
1975	5.94	13.38	0.73	11.27	0.90
1976	5.03	11.36	0.59	10.05	0.49
1977	4.18	9.42	0.49	8.96	0.59
1978	3.86	8.86	0.55	5.41	0.75
1979	3.28	8.16	0.03	5.62	0.13
1980	2.91	7.21	0.04	5.85	-
1981	2.08	5.22	0.01	4.15	-
1982	1.28	3.07	0.05	3.15	-
1983	1.12	2.67	0.06	2.57	-
1984	0.99	2.45	0.02	2.67	0.06
1985	0.92	2.31	0.02	1.92	-
1986	0.73	1.80	0.02	1.57	-
1987	0.86	2.12	0.04	2.11	0.05
1988	0.89	2.19	0.02	2.17	-
1989	0.86	1.99	0.07	2.55	-
1990	1.09	2.70	0.03	2.28	0.07

- indicates no deaths listed.
SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 7-5 of the 1994 Work-Related Lung Disease(WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 7-5. Byssinosis: crude mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1979-1990

		White		Black	
Year	Overall rate	Males	Females	Males	Females
1979	0.06	0.08	0.05	-	-
1980	0.05	0.10	0.03	-	-
1981	0.07	0.15	0.01	0.11	-
1982	0.02	0.04	0.01	-	-
1983	0.09	0.08	0.11	0.11	-
1984	0.10	0.13	0.09	0.11	-
1985	0.08	0.10	0.06	0.10	-
1986	0.08	0.12	0.07	0.10	-
1987	0.08	0.17	0.01	0.20	-
1988	0.07	0.15	0.02	-	-
1989	0.04	0.06	0.01	0.20	-
1990	0.09	0.15	0.06	0.10	-

- indicates no deaths listed.
SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 7-6 of the 1994 Work-Related Lung Disease(WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 7-6. Byssinosis: age-adjusted mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1979-1990

		White		Black	
Year	**Overall rate**	**Males**	**Females**	**Males**	**Females**
1979	0.04	0.05	0.04	-	-
1980	0.03	0.07	0.01	-	-
1981	0.05	0.11	0.01	0.12	-
1982	0.01	0.03	0.00	-	-
1983	0.07	0.06	0.07	0.13	-
1984	0.07	0.09	0.06	0.12	-
1985	0.06	0.09	0.04	0.12	-
1986	0.07	0.09	0.06	0.11	-
1987	0.06	0.12	0.01	0.21	-
1988	0.05	0.11	0.02	-	-
1989	0.03	0.06	0.01	0.18	-
1990	0.06	0.12	0.02	0.10	-

- indicates no deaths listed.
SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 8-5 of the 1994 Work-Related Lung Disease (WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

Table 8-5. Hypersensitivity pneumonitis: crude mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1979-1990

		White		Black	
Year	Overall rate	Males	Females	Males	Females
1979	0.09	0.14	0.05	0.12	-
1980	0.09	0.12	0.06	-	0.10
1981	0.07	0.12	0.04	-	-
1982	0.08	0.17	0.02	-	-
1983	0.11	0.20	0.06	-	-
1984	0.20	0.39	0.06	-	0.09
1985	0.19	0.28	0.13	0.10	0.09
1986	0.13	0.23	0.05	-	0.18
1987	0.14	0.23	0.08	-	0.09
1988	0.13	0.20	0.08	-	0.09
1989	0.14	0.20	0.13	0.10	-
1990	0.21	0.36	0.11	0.10	-

- indicates no deaths listed.

SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a revision to Table 8-6 of the 1994 Work-Related Lung Disease(WoRLD) Surveillance Report. The overall rate reported in the 1994 WoRLD Surveillance Report included only whites and blacks. The revised overall rates presented below are based on all races. U.S. population data files have also been revised and updated for the tables presented below.

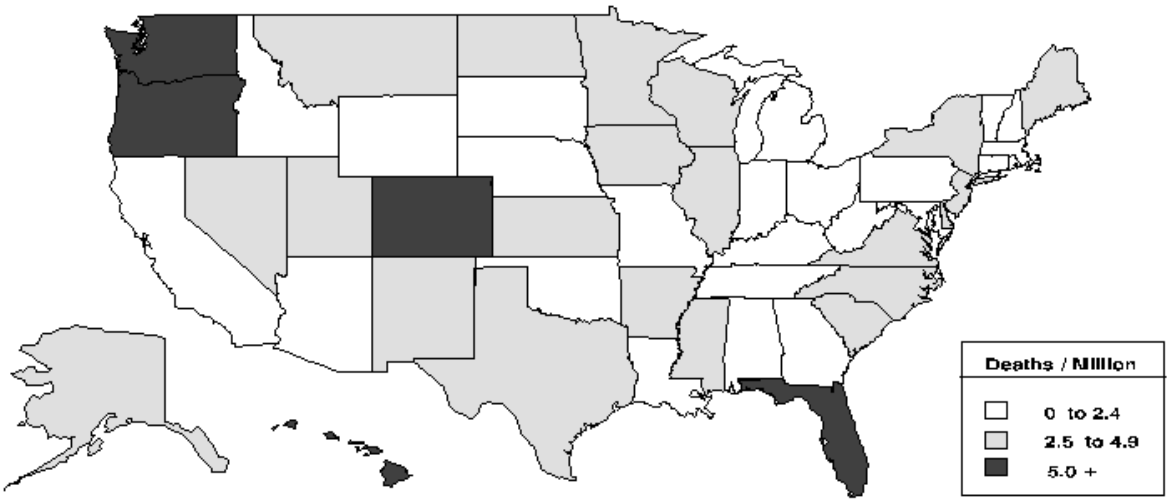
Table 8-6. Hypersensitivity pneumonitis: age-adjusted mortality rates (per 1,000,000 population), U.S. residents age 15 and over, by race and sex, 1979-1990

		White		Black	
Year	**Overall rate**	**Males**	**Females**	**Males**	**Females**
1979	0.06	0.11	0.03	0.11	-
1980	0.07	0.10	0.05	-	0.10
1981	0.04	0.08	0.03	-	-
1982	0.06	0.13	0.02	-	-
1983	0.07	0.14	0.04	-	-
1984	0.15	0.32	0.03	-	0.12
1985	0.12	0.21	0.05	0.15	0.12
1986	0.09	0.18	0.03	-	0.15
1987	0.08	0.16	0.03	-	0.12
1988	0.08	0.14	0.05	-	0.08
1989	0.10	0.15	0.06	0.12	-
1990	0.15	0.27	0.05	0.08	-

- indicates no deaths listed.
SOURCE: National Center for Health Statistics multiple cause of death data.
U.S. Bureau of the Census: 1970-1990 population estimates of the U.S.

The following is a correction to Figure 2-4. in the 1994 Work-Related Lung Disease Surveillance Report. The state of Pennsylvania was shaded incorrectly. Pennsylvania should have been shaded to be included in the 0 to 2.4 range.

Figure 2-4. Malignant neoplasm of the pleura: crude mortality rates, U.S. residents age 15 and over, by state, 1989-1990

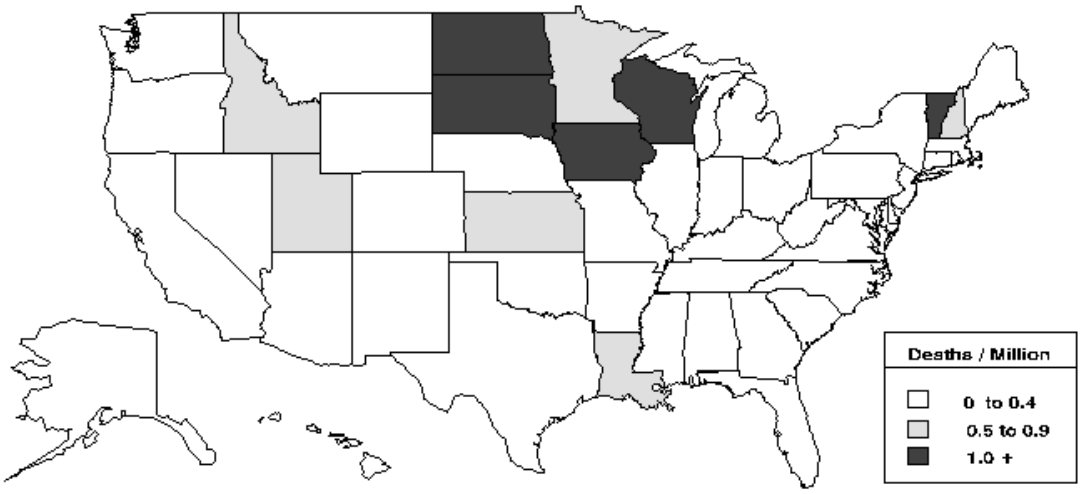


The following is a correction to Figure 5-2 in the 1994 Work-Related Lung Disease Surveillance Report. The state of Wisconsin was shaded incorrectly. Wisconsin should have been shaded to be included in the 0 to 5 range.

Figure 5-2 Pneumoconiosis due to other inorganic dust: number of deaths, U.S. residents age 15 and over, 1968-1990

The following is a correction to Figure 8-4 in the 1994 Work-Related Lung Disease Surveillance Report. The state of Mississippi was shaded incorrectly. Mississippi should have been shaded to be included in the 0 to 0.4 range.

Figure 8-4. Hypersensitivity Pneumonitis: crude mortality rates, U.S. residents age 15 and over, by state, 1989-1990



The following is a correction to Figure 9-1 in the 1994 Work-Related Lung Disease Surveillance Report. The legend printed in the 1994 was incorrect. The correct graph and legend is presented below.

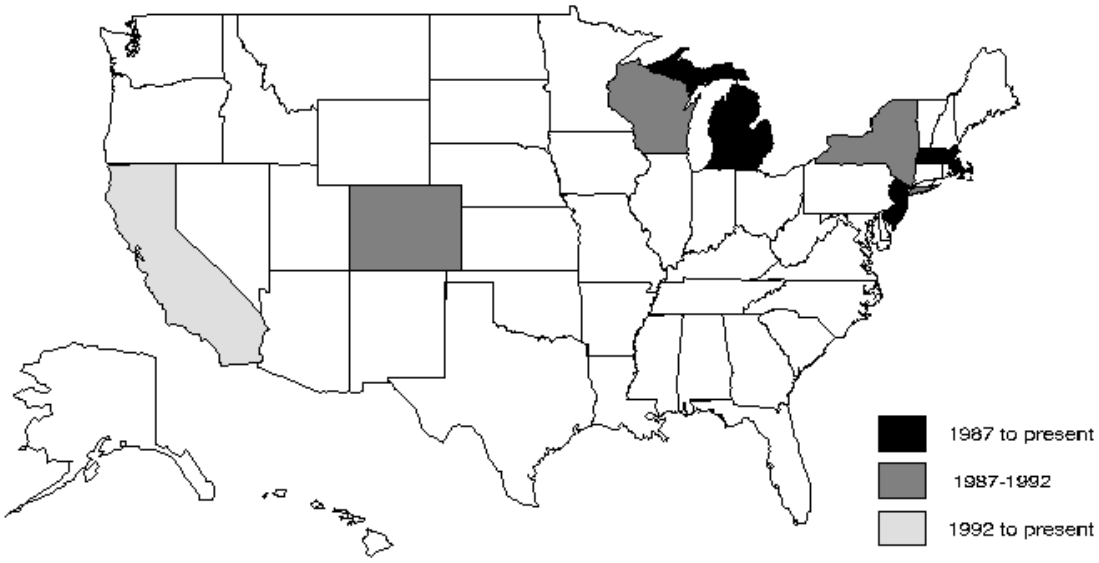



Figure 9-1. States with SENSOR cccupational asthma programs