Putting Data To Work In Connecticut

A Five Year Review of Occupational Health Indicators

2000-2004

State of Connecticut Department of Public Health
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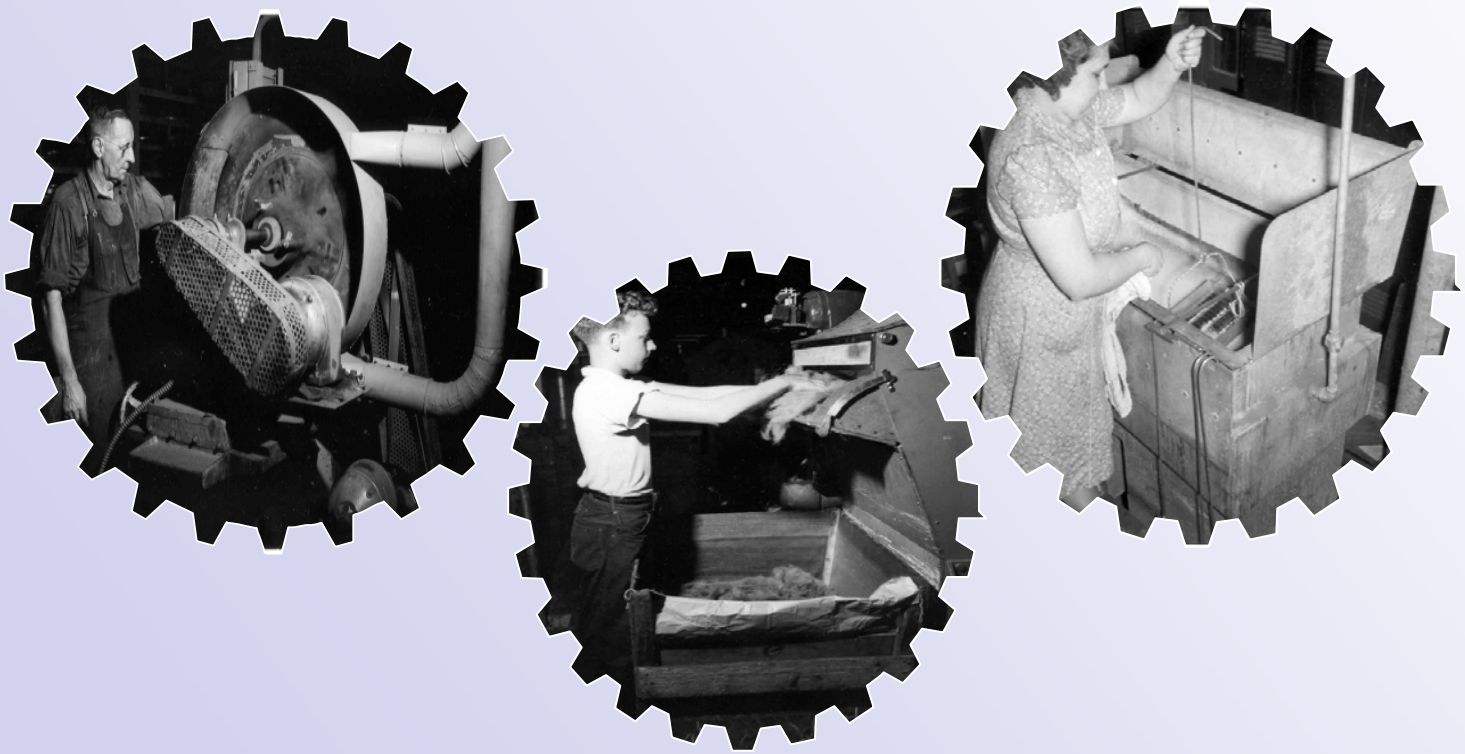

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Introduction

Approximately 1.7 million Connecticut residents report to work every day. Every year, many of these workers are either killed, injured, or made ill as a direct result of their employment. These injuries, illnesses, and fatalities can result in a serious burden on the workers and their families. In addition, workplace illnesses and injuries have an economic impact on our state. In 2003, Connecticut paid out over $753 million in Workers' Compensation benefits. These impacts highlight the need to study and analyze data, and to intervene to provide a safer workplace for Connecticut workers. A national surveillance system already exists for fatal occupational injuries however, no national system provides similar comprehensive surveillance data for non-fatal occupational injuries and illnesses. In an attempt to bridge this gap in surveillance data, the Council of State and Territorial Epidemiologists (CSTE) in association with the National Institute for Occupational Safety and Health (NIOSH) convened a workgroup in 1998, comprised of state-based and federal occupational health professionals, to develop a more comprehensive surveillance tool to track occupational illnesses and injuries nationwide.

In 2003, CSTE published ***Occupational Health Indicators: A Guide for Tracking Occupational Health Conditions and their Determinants***, which focused on 19 occupational health indicators selected based on the availability of data needed to calculate them and their importance to the improvement of worker health. Thirteen states volunteered to pilot this "how-to" document to produce occupational health indicator data for the year 2000. The results of that work was captured in a report published jointly by CSTE and NIOSH titled ***Putting Data to Work: Occupational Health Indicators from Thirteen Pilot States for 2000***.

The following report represents five years of occupational health indicator data specific to Connecticut. Workforce demographics are also tracked as part of the occupational health indicators and are included in this report. This "Demographic Profile" details the racial, ethnic, age, and gender composition of the Connecticut workforce, as well as the distribution of the workforce by industry and occupation. National data for the year 2000 is provided in addition to Connecticut-specific data, when available and appropriate, for comparison. Descriptions of the specific data resources used for compilation of each indicator are provided as well.

In some cases, the data used to generate the occupational health indicators are derived from estimates of employer surveys performed on an annual basis, while in other cases the data represent individual case counts of affected workers. However, in all cases the data used to generate occupational health indicators are subject to limitations that affect their quality. Some of these factors include underreporting of occupational illnesses and injuries by employees, physicians, and employers, inadequate healthcare provider recognition of occupational injuries and illnesses, difficulties in attributing diseases with long latency periods (e.g. silicosis, cancers) to workplace exposures, exclusion of certain at-risk populations from the surveillance pool (e.g. self-employed, military), and coding discrepancies. Given these limitations, caution should be used when interpreting or applying the occupational health indicators broadly.

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Profile of Employment Demographics 2000-2004

Table P1: Demographic and Employment Characteristics for Workers 16 years and Older in Connecticut 2000-2004 and U.S. 2000.

Calculated as percentage of total workforce.

	2000	2001	2002	2003	2004	U.S. 2000
Number Employed	**1,707,000**	**1,661,000**	**1,696,000**	**1,704,000**	**1,702,000**	**135,208,000**
Workforce Unemployed	2.2	3.3	4.3	5.5	4.9	4.0
Male	52.5	52.6	51.7	51.9	52.6	53.5
Female	47.5	47.4	48.3	48.1	47.4	46.5
Aged 16-17	2.3	2.2	2.0	2.1	2.0	2.7
Aged 18-64	93.5	93.4	94.5	93.3	93.3	94.2
Aged 65 and Older	4.2	4.4	3.6	4.5	4.6	3.1
White	85.6	87.3	86.6	86.3	87.5	83.9
Black	11.3	10.3	10.2	8.7	8.8	11.3
Other Race	3.1	2.4	3.2	4.9	3.7	4.7
Hispanic	5.9	5.4	7.6	8.1	8.6	10.7
Self Employed	7.3	7.3	7.4	6.9	6.2	7.3
Employed Part-Time	18.2	19.4	19.8	21.0	20.8	16.9
Working < 40 Hours Per Week	35.3	37.8	37.5	38.2	39.1	32.4
Working 40 Hours Per Week	32.4	32.5	34.2	34.7	33.4	37.7
Working 41 + Hours Per Week	32.3	29.8	28.1	27.2	27.6	29.9

Table P1 shows demographic and employment characteristics for workers aged 16 years and over in Connecticut for the years 2000-2004, and the U.S. for 2000. Over this time period, the gender and age composition of Connecticut's workforce has remained fairly stable, while the racial and ethnic distribution has changed more significantly. Specifically, increases in workers categorized as workers of "Other Race", comprised 3.1% of the workforce in 2000, and increased to 4.9% in 2003. Similarly, the percentage of workers in Connecticut identified as being of Hispanic ethnicity increased from 5.9% in 2000 to 8.6% in 2004.

Changes have also been noted in the number of hours that Connecticut's workers spend working. The percentage of workers who work less than 40 hours per week increased from 35.3% in 2000 to 39.1% in 2004, and workers working more than 40 hours per week decreased from 32.3% in 2000 to 27.6% in 2004.

DATA SOURCES: US Department of Labor, Bureau of Labor Statistics, Current Population Survey and Geographic Profile of Employment and Unemployment.

Profile of Employment Demographics 2000-2004

Table P2: Distribution of Workforce by Major Industry and Occupation Groups in Connecticut 2000-2004, and U.S. 2000

Calculated as percentage of total workforce	2000	2001	2002	2003	2004	U.S. 2000
Number Employed	**1,707,000**	**1,661,000**	**1,696,000**	**1,704,000**	**1,702,000**	**135,208,000**
Industry						
Construction	4.0	4.0	4.5	6.7	5.9	5.4
Manufacturing Durable Goods	11.0	10.3	10.3	9.8	10.3	8.8
Manufacturing Non-Durable Goods	5.8	4.5	5.3	3.9	3.4	5.6
Transportation/Communications/Public Utilities	4.6	4.4	5.3	4.4	4.0	5.7
Trade	17.2	17.5	16.5	14.5	14.8	19.4
Finance/Insurance/Real Estate	8.6	8.4	8.3	9.5	9.4	5.8
Services	28.1	29.4	29.9	NA	NA	25.2
Government	11.8	13.0	11.8	NA	NA	14.1
Agriculture	0.9	1.3	1.3	0.4	0.4	2.4
Occupation						
Executive/Administrative/Managerial	16.9	17.5	17.8	16.2	17.0	14.6
Professional Specialty	19.4	18.9	17.9	23.3	23.1	15.6
Technicians and Related Support	3.0	3.7	4.0	NA	NA	3.2
Sales	12.0	12.7	12.3	11.5	11.9	12.1
Administrative Support Including Clerical	14.6	13.2	13.7	15.1	13.6	13.8
Service Occupations	12.1	12.7	12.8	15.0	15.3	13.5
Precision Production/Craft/Repair	9.9	10.5	10.6	NA	NA	11.0
Machine Operators/Assemblers/Inspectors	4.5	4.3	3.9	NA	NA	5.4
Transportation/Material Moving	3.5	3.2	2.9	4.3	4.4	4.1
Handlers/Equipment Cleaners/Helpers/Laborers	3.2	2.3	2.7	NA	NA	4.0
Farming/Forestry/Fishing	0.8	1.1	1.3	0.1	0.1	2.5

N/A denotes data unavailable, blank fields in table indicate 2003 NAICS reclassification, with inability to obtain data.

Table P2 shows the workforce distribution by major industry and occupation classification in Connecticut for the years 2000-2004, as well as the U.S. distribution for 2000. In 2000, the Connecticut industries that comprised the largest percentage of Connecticut's workforce were Services (28.1%), Trade (17.2%), and Government (11.8%).

The occupations that employed the largest percentage of Connecticut's workers in 2000 were professional specialty (19.4%), Executive/Administrative/Managerial (16.9%), and Administrative/Clerical (14.6%).

DATA SOURCES: ***US Department of Labor, Bureau of Labor Statistics, Current Population Survey and Geographic Profile of Employment and Unemployment.***

Indicator 1: Non-Fatal Injuries and Illnesses Reported by Employers

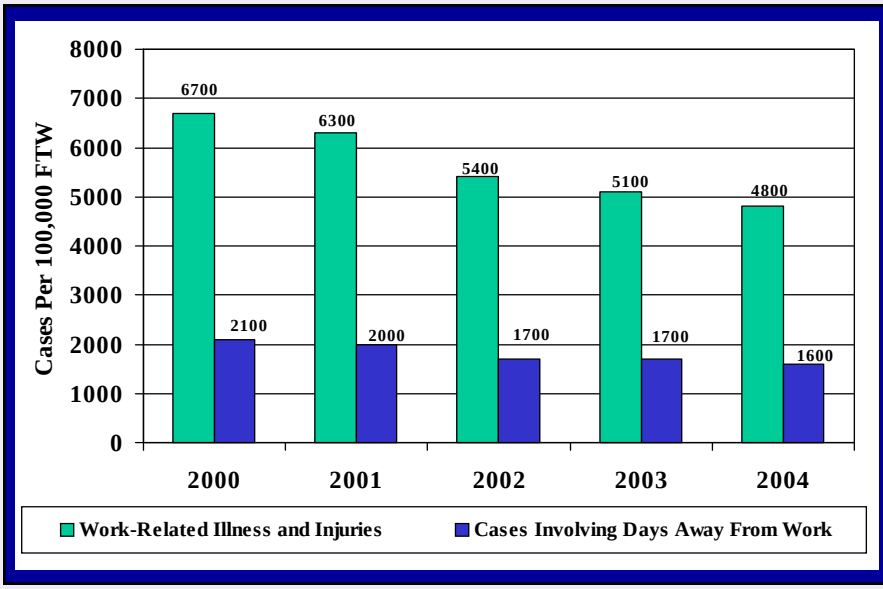


Figure 1: Rates of Non-Fatal Injuries and Illnesses Reported by Employers, Connecticut, 2000-2004.

Calculated as number of cases per 100,000 full-time workers (FTW) for overall illness and injury rate, and rate for cases involving days away from work.

Figure 1 shows the rate of non-fatal injuries and illnesses reported by employers for all cases and those involving days away from work for the years 2000-2004. The overall illness and injury rate in Connecticut workers declined steadily between the years 2000, when the rate was 6,700 per 100,000 full-time workers (FTW), and 2004, when the rate was 4,800 per 100,000 FTW. Similarly, the rate for cases involving days away from work for this time period ranged from 2,100 per 100,000 FTW in 2000 to 1,600 per 100,000 FTW in 2004.

Table 1 shows the total number of non-fatal injuries and illnesses in Connecticut workers for the time period 2000-2004, as well as the number of cases involving any days away from work and those involving more than 10 days away from work. The largest number of cases involving more than 10 days away from work during this time period was observed in 2002 (9,266 cases), and the lowest number observed in 2004 (8,560 cases).

Table 1: Numbers of Non-Fatal Injuries and Illnesses Reported by Employers, Connecticut, 2000-2004.

	2000	2001	2002	2003	2004
Total number of work-related illness and injury cases	82,700	73,600	63,500	58,600	54,500
Cases involving days away from work	25,600	23,600	20,000	19,900	18,600
Cases involving more than 10 days away from work	8,988	8,620	9,266	8,560	7,910

DATA SOURCES: US Department of Labor, Bureau of Labor Statistics, Annual Survey of Occupational Injuries and Illnesses and the Connecticut Department of Labor.

Indicator 2: Work-Related Hospitalizations

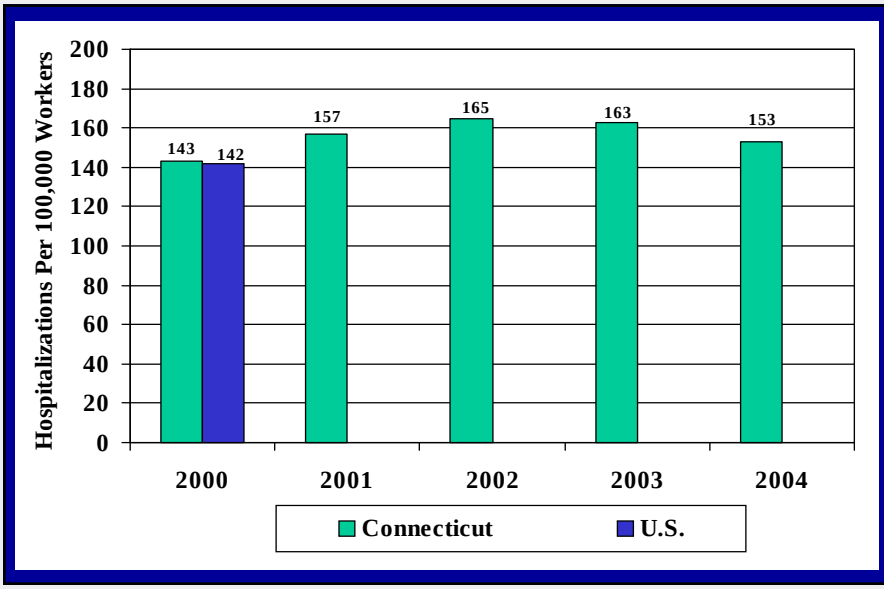


Figure 2: Rate of Work-Related Hospitalizations in Connecticut, 2000-2004.

Calculated as number of cases per 100,000 full-time workers (FTW) for work-related hospitalizations, where Workers' Compensation is the primary payer.

Figure 2 shows the rate of work-related hospitalizations for the years 2000-2004, as well as the 2000 U.S. average. The overall work-related hospitalization rate in Connecticut workers increased from a low of 143 per 100,000 full time workers (FTW) in 2000, to a high of 165 per 100,000 FTW in 2002.

Work-related hospitalizations were identified using hospital discharge data records where Workers' Compensation was indicated as the primary payer. In addition, the patient must have been 16 years old or older and a Connecticut resident to be included in the dataset. Excluded were those with unknown ages, out of state and unknown residences, and out of state hospitalizations.

Table 2 shows the total number of work-related hospitalizations in Connecticut workers for the time period 2000-2004, and the number of work-related hospitalizations for the entire U.S. workforce in 2000. The year with the highest number of work-related hospitalizations in Connecticut was 2002, with 2,796 hospitalizations, while 2000 had the lowest number of work-related hospitalizations, with 2,448.

Table 2: Numbers of Work-Related Hospitalizations Connecticut 2000-2004.

	2000	2001	2002	2003	2004	U.S. 2000
Annual number of work-related hospitalizations	2,448	2,601	2,796	2,785	2,603	192,109

DATA SOURCES: State Hospital Discharge Data, National Hospitalization Discharge Data, Bureau of Labor Statistics

Indicator 3: Fatal Work-Related Injuries

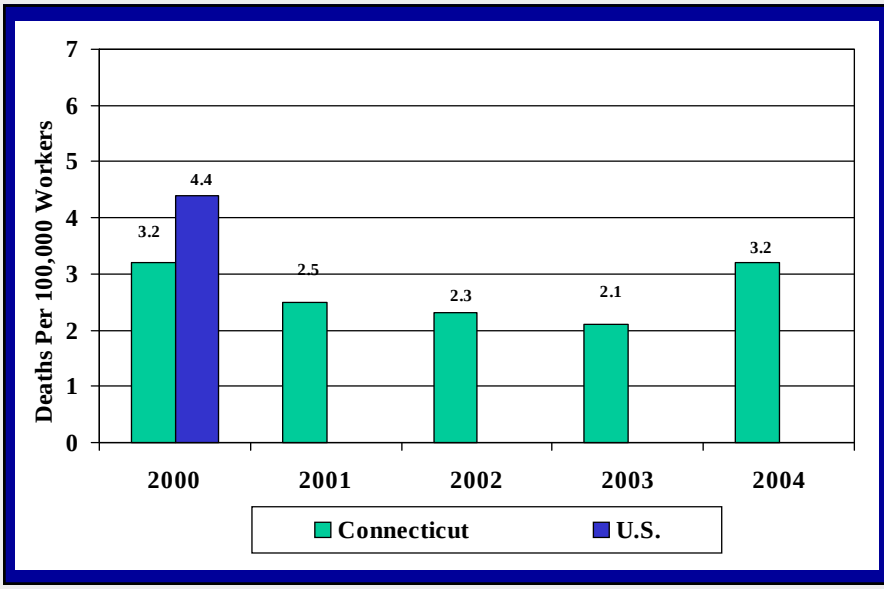


Figure 3: Rates of Fatal Work-Related Injuries Collected by the Census of Fatal Occupational Injuries (CFOI) for Connecticut 2000-2004; and U.S. 2000.

Calculated as number of deaths per 100,000 full-time workers (FTW) aged 16 years and older.

Figure 3 shows the rate of fatal work-related injuries for the years 2000-2004; the 2000 U.S. average is included for comparison. The fatality rate declined from 3.2 deaths per 100,000 full time workers (FTW) in 2000 to 2.1 per 100,000 FTW in 2003.

Work-related fatalities are tracked by the Bureau of Labor Statistics (BLS) through a surveillance system known as the Census of Fatal Occupational Injuries (CFOI). CFOI data has been collected for almost 15 years in an effort to track numbers and rates of work-related fatalities. CFOI data includes both intentional (i.e. homicides) and unintentional (i.e. electrocutions, falls, acute poisonings, and automobile accidents) fatalities that occur at the workplace.

Table 3 shows the total number of work-related fatalities in Connecticut workers for the time period 2000 -2004, as well as the 2000 annual number for all U.S. cases. The largest number of work-related fatality cases was observed in 2000, 55 cases, with the lowest number observed in year 2003, 36 cases.

Table 3: Number of Fatal Work-Related Injuries, Connecticut 2000-2004.

	2000	2001	2002	2003	2004	U.S. 2000
Annual number of fatal work-related injuries	55	41	39	36	54	5,920

DATA SOURCES: US Department of Labor, Bureau of Labor Statistics Current Population Survey, Census of Fatal Occupational Injuries

Indicator 4: Work-Related Amputations With Days Away From Work

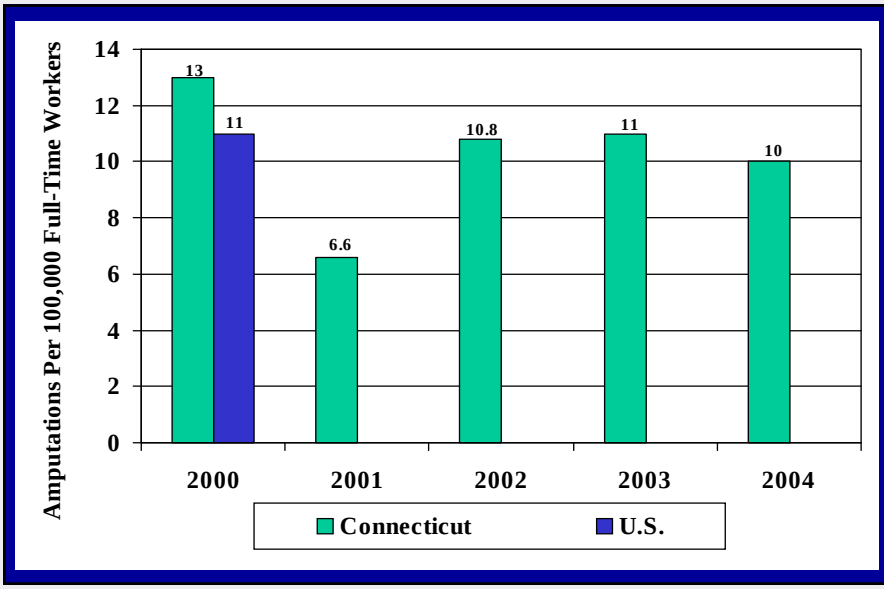


Figure 4: Rates of Work-Related Amputations in Connecticut with Days away from Work, 2000-2004; and U.S. 2000 average.

Calculated as number of cases per 100,000 full-time workers (FTW).

Figure 4 shows the rate of work-related amputations in Connecticut involving days away from work for the years 2000-2004, and the U.S. rate for year 2000. The overall amputation rate in Connecticut workers has not shown any pattern for the period, with a high of 13 amputations per 100,000 full time workers (FTW) in 2000 to a low of 6.6 amputations per 100,000 FTWs in 2001.

Many jobs in Connecticut can put workers at risk for amputations. For example, occupations that involve food preparation require the use of many tools that can result in the complete or partial amputation of fingers. Farming and manufacturing also may require the use of dangerous equipment where a worker's body parts can become entangled and amputated.

Table 4 shows the total number of work-related amputations in Connecticut workers for the time period 2000-2004, as well as the 2000 U.S. number. The largest number of cases in Connecticut was seen in 2000, 163 cases, and the lowest number was seen in 2001, 77 cases.

Table 4: Estimated Annual Number of Amputations Involving Days Away from Work, Connecticut, 2000-2004 and U.S. 2000.

	2000	2001	2002	2003	2004	U.S. 2000
Total number of work-related amputations	163	77	108	110	110	9,658

DATA SOURCES: US Department of Labor, Bureau of Labor Statistics, Annual Survey of Occupational Injuries and Illnesses

Indicator 5: State Workers' Compensation Claims For Amputations With Lost Work Time

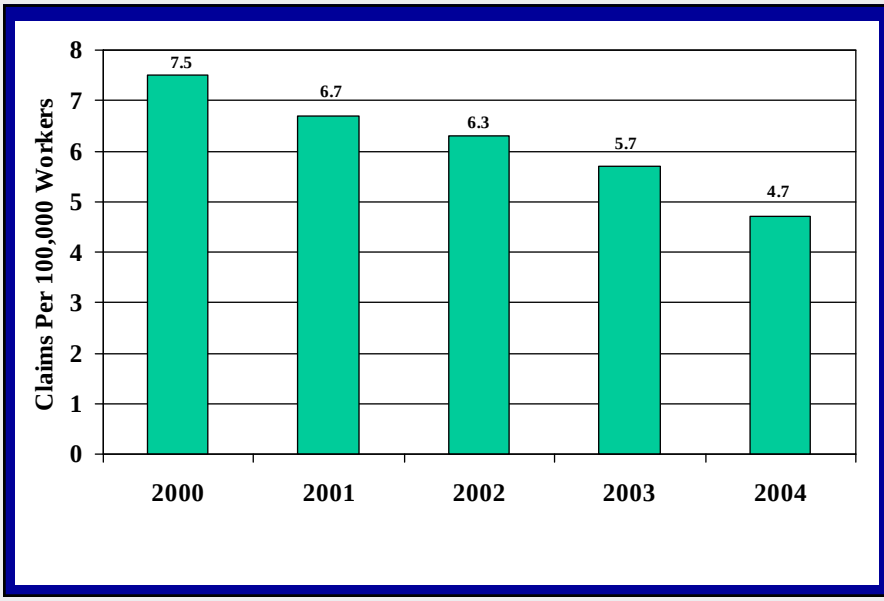


Figure 5: Rates of Workers' Compensation Claims for Amputations , Connecticut, 2000-2004.

Calculated as number of cases identified in Workers' Compensation per 100,000 full -time workers (FTW) covered by Workers' Compensation system.

Figure 5 shows the rate of Workers' Compensation claims for amputations for the years 2000-2004. The overall rate of claims for workplace amputations in Connecticut declined steadily between the years 2000 (7.5 per 100,000 full-time workers (FTW)), and 2004, (4.7 per 100,000 FTW).

Data for *Indicator 5* is collected from the Connecticut Workers' Compensation System, which leads to notably different rates than those seen for *Indicator 4* (work-related amputations) which uses data collected by the BLS Survey of Occupational Injuries and Illnesses (SOII). Both data sources have limitations that affect the comparability and reliability of their data. The inability to compare data among states is one limitation, due to differences in Workers' Compensation laws.

Table 5 shows the total number of lost work time claims for amputations in Connecticut workers for the time period 2000-2004. The largest number of claims during the time period was observed in 2000, 124 claims, with the lowest number observed in 2004, 75 claims.

Table 5: Number of Lost Work Time Claims for Amputations Identified in the Connecticut Workers' Compensation System, 2000-2004.

	2000	2001	2002	2003	2004
Annual number of amputation claims filed with the state Workers' Compensation System	124	110	102	91	75

DATA SOURCES: Connecticut Workers' Compensation Commission, National Academy of Social Insurance.

Indicator 6: Hospitalization For Work-Related Burns

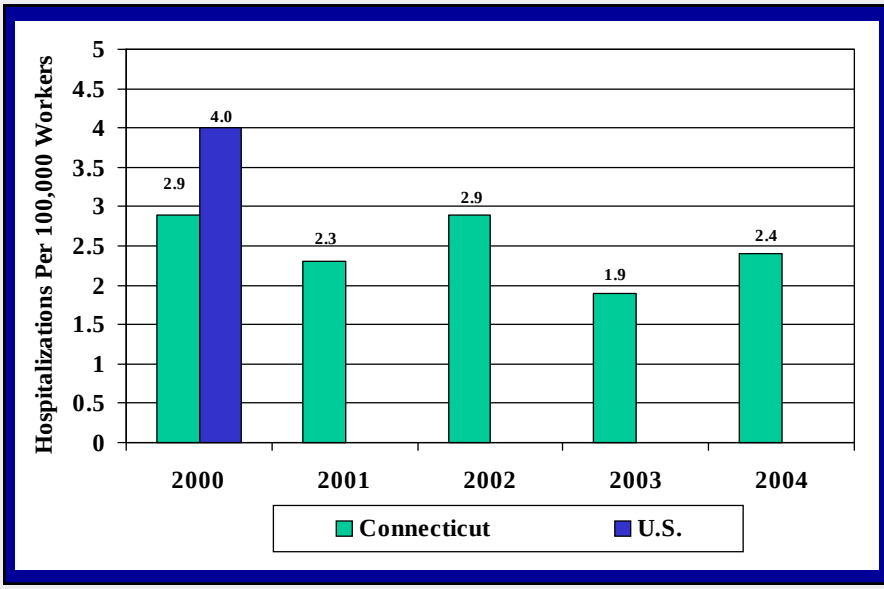


Figure 6: Rates of Hospitalization for Work-Related Burns, Connecticut 2000-2004, and U.S. 2000.

Calculated as number of hospitalizations per 100,000 full-time workers (FTW).

Figure 6 shows the rate of hospitalization for work-related burns in Connecticut for the years 2000-2004 and the U.S. rate for 2000. The overall rate for work-related burn hospitalizations has been inconsistent from 2000-2004. Year 2000 and 2002 were the years with the highest burn hospitalization rate (2.9 per 100,000 workers) and 2003 had the lowest rate (1.9 cases per 100,000 workers).

Causes of work-related burns can be chemical, electrical, friction, radiation, contact with dry heat (such as fire), or contact with moist heat (such as steam). Work-related burn hospitalizations were identified using hospital discharge data records where an ICD-9 code indicated a burn injury and Workers' Compensation was indicated as the primary payer.

Table 6 shows the total number of work-related burn hospitalizations in Connecticut for the time period 2000-2004, as well as the number of total work-related burn hospitalizations in the U.S. for 2000. The year with the highest number of work-related burn hospitalizations in Connecticut was 2000, with 50, and the year with the lowest number was 2003, with 33.

Table 6: Number of Hospitalizations from Work-Related Burns in Connecticut 2000-2004 and U.S. 2000.

	2000	2001	2002	2003	2004	U.S. 2000
Annual number of work-related burn hospitalizations	50	38	49	33	41	5,370

DATA SOURCES: State Hospital Discharge Data, National Hospital Discharge Survey, Bureau of Labor Statistics Current Population Survey

Indicator 7: Work-Related Musculoskeletal Disorders With Days Away From Work Reported By Employers

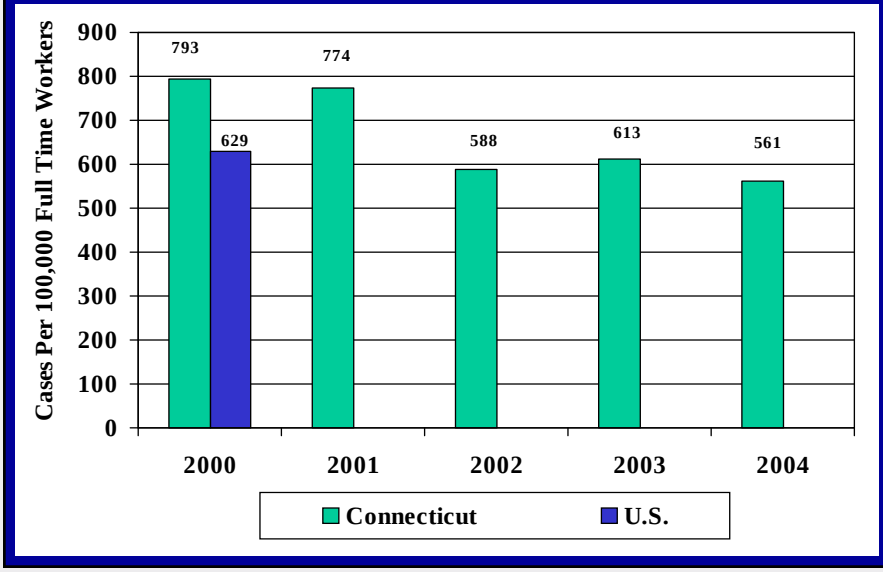


Figure 7: Rate of Work-Related Musculoskeletal Disorders Involving Days Away From Work Reported by Private Sector Employers in Connecticut, 2000-2004, and U.S. 2000.

Calculated as number of musculoskeletal disorders per 100,000 full-time workers (FTW).

Figure 7 shows the rate of work-related musculoskeletal disorders involving days away from work for the years 2000-2004, and the 2000 U.S. rate, reported by private sector employers. The highest rate of work-related musculoskeletal disorders for this time period was observed in 2000 (793 per 100,000 workers).

Table 7A shows the total number of selected work-related musculoskeletal disorders in Connecticut for the years 2000-2004, along with the U.S. total for 2000.

Table 7B shows the number of days away from work for selected work-related musculoskeletal disorders in Connecticut for the years 2000-2004, and the U.S. rate for 2000. A decline in the rate of work-related musculoskeletal disorders involving the back was observed between 2000 (423 per 100,000 workers) and 2004 (274 cases per 100,000 workers).

	2000	2001	2002	2003	2004	U.S. 2000
All musculoskeletal disorders	9,840	9,058	6,967	7,030	6,420	577,814
Neck shoulders and upper extremities	2,659	2,435	1,768	2,280	1,880	160,156
Carpal tunnel syndrome cases	615	472	347	560	300	27,571
Back disorders	5,245	4,714	3,771	3,480	3,140	293,033

Table 7A: Number of Work-Related Musculoskeletal Disorders Involving Days Away from Work Reported by Private Sector Employers in Connecticut, 2000-2004 and U.S. 2000.

	2000	2001	2002	2003	2004	U.S. 2000
Neck, shoulder, and upper extremities	214	208	149	199	163	174
Carpal tunnel syndrome	50	40	29	49	26	30
Back	423	403	318	303	274	319

Table 7B: Rates of Work-Related Musculoskeletal Disorders Involving Days Away from Work per 100,000 FTW, Connecticut, 2000-2004 and U.S. 2000.

DATA SOURCES: US Department of Labor, Bureau of Labor Statistics, Annual Survey of Occupational Injuries and Illnesses .

Indicator 8: Carpal Tunnel Syndrome Cases Filed With The State Workers' Compensation System

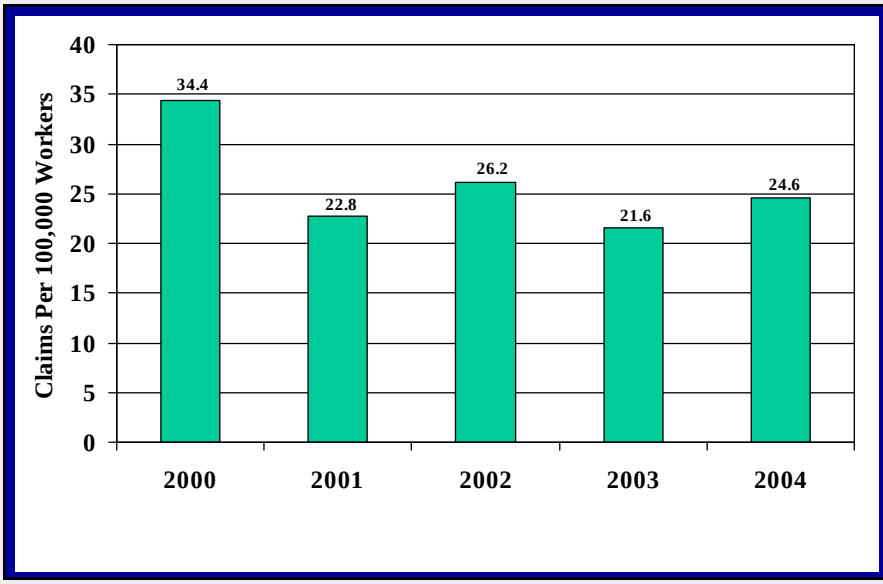


Figure 8: Carpal Tunnel Syndrome Claims Filed with the State Workers' Compensation System 2000-2004.

Calculated as number of carpal tunnel syndrome claims per 100,000 employed workers.

Figure 8 shows the rate of carpal tunnel syndrome claims filed with the Connecticut Workers' Compensation system for 2000-2004. The highest rate was seen in 2000 when the rate was 34.4 cases per 100,000 Connecticut workers. The rate of carpal tunnel syndrome cases has declined since 2000, to 24.6 claims per 100,000 workers in 2004.

Carpal Tunnel Syndrome is a disease caused when the median nerve in the wrist is compressed. Occupational factors that can lead to this disease include typing, using awkward hand postures, use of vibrating tools, and other repetitive and forceful hand uses and motions.

Table 8 shows the total annual number of lost work time claims for carpal tunnel syndrome cases that were identified in the State Workers' Compensation system for the years 2000-2004. There has been a decline in the total number of cases filed with the Workers' Compensation system which mirrors the decline noted in the rates above.

Table 8: Numbers of Lost Work Time Claims for Carpal Tunnel Syndrome Cases Identified in the Workers' Compensation System Connecticut, 2000-2004.

	2000	2001	2002	2003	2004
Annual number of carpal tunnel syndrome cases filed with the State Workers' Compensation system	568	375	427	346	397

DATA SOURCES: State Workers' Compensation Systems, National Academy of Social Insurance

Indicator 9: Hospitalization From Or With Pneumoconiosis

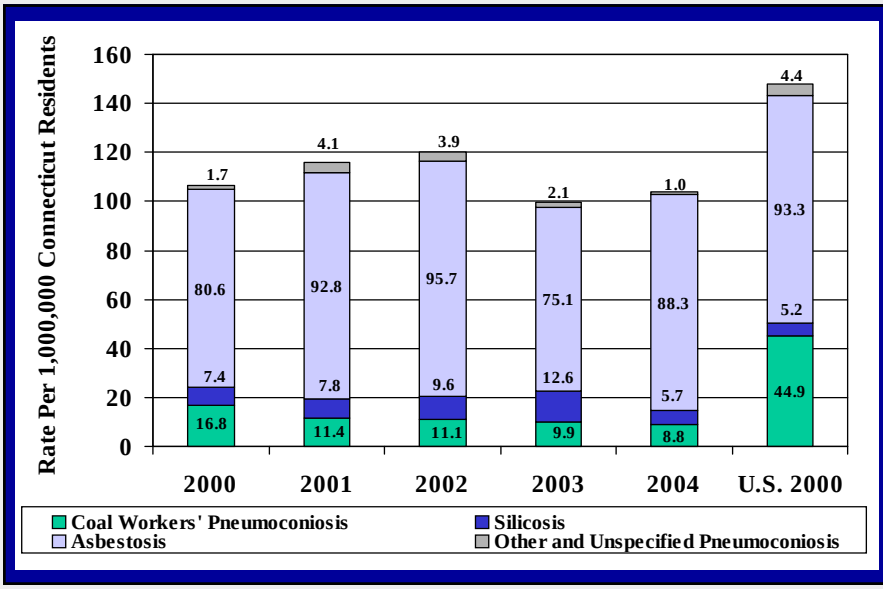


Figure 9: Age-Standardized Rates of Selected Pneumoconiosis Hospitalization in Connecticut, by Type 2000-2004 and U.S. 2000.

Calculated as number of pneumoconiosis and asbestosis hospitalizations per 1,000,000 residents, where pneumoconiosis is a principle or secondary discharge diagnosis.

Figure 9 shows the rate of hospitalization for total pneumoconiosis, by type in Connecticut for the years 2000-2004. As a comparison, the U.S. rate for the year 2000 is provided. The rate of total pneumoconiosis in Connecticut from 2000-2004 was below the U.S. rate seen in 2000.

The term pneumoconiosis is a general term used to describe a class of non-malignant lung diseases that are caused by the inhalation of mineral dusts. Pneumoconiosis is typically the result of an occupational exposure, and in many cases has a very long latency period. Clinical disease usually occurs in older people that have been long retired in the line of work where they received their exposure. Pneumoconiosis is a broad disease term that includes coal workers' pneumoconiosis, silicosis, asbestosis, and pneumoconiosis due to the inhalation of other mineral dusts such as bauxite, talc, aluminum, and graphite.

Table 9 shows the numbers of hospitalizations in Connecticut from, or with, total and selected pneumoconiosis types from 2000-2004, and U.S. numbers for 2000.

Table 9: Numbers of Hospitalizations from or with Pneumoconiosis in Connecticut 2000-2004, and U.S. 2000.

	2000	2001	2002	2003	2004	U.S. 2000
Total pneumoconiosis	309	339	351	336	306	31,755
Coal workers' pneumoconiosis	48	34	32	27	26	9,715
Asbestosis	235	270	282	221	262	20,223
Silicosis	21	23	28	36	17	1,128
Other and unspecified pneumoconiosis	NA	12	11	NA	NA	952

Note: Blank data fields indicate censored State data

DATA SOURCES: State Hospital Discharge Data, U.S. National Discharge Survey, U.S. Census Bureau

Indicator 10: Mortality From or With Pneumoconiosis

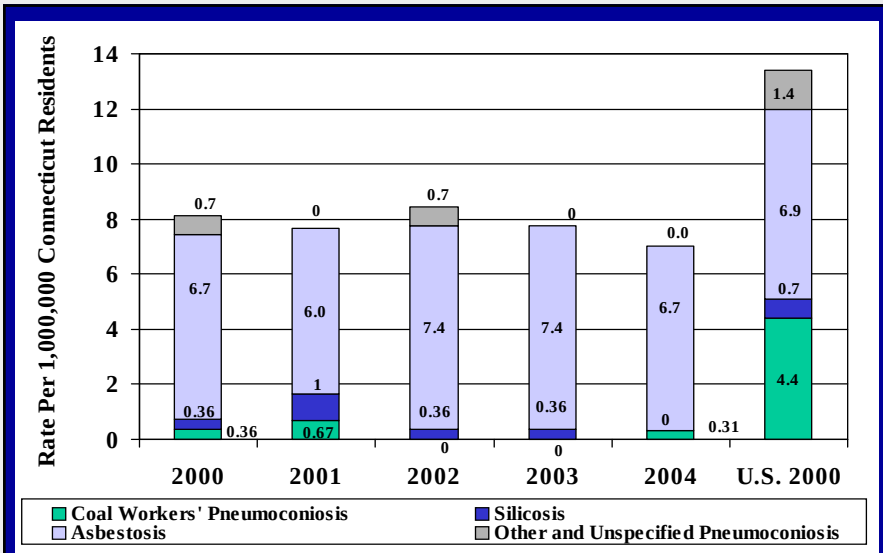


Figure 10: Age Standardized Mortality Rates from Selected Pneumoconiosis, by Type, Connecticut 2000-2004 and U.S. 2000.

Calculated as number of deaths per million residents where pneumoconiosis is the underlying or a contributing cause of death.

Figure 10 shows the death rate per million residents where pneumoconiosis is the principle or an underlying cause of death. In 2000, the Connecticut rate remained lower than the U.S. average for total pneumoconiosis, but was nearly equal to the U.S. rate for asbestosis.

The term pneumoconiosis is a general term used to describe a class of non-malignant lung diseases that are caused by the inhalation of mineral dusts. Pneumoconiosis usually is the result of an occupational exposure, and in many cases has a very long latency period. Clinical disease usually occurs in older people that have been long retired in the line of work where they received their exposure.

Table 10 shows the numbers of deaths from or with pneumoconiosis for Connecticut from 2000-2004, and the U.S. for 2000. Asbestosis is the largest contributor to pneumoconiosis deaths in Connecticut, at 83%.

Table 10: Number of Deaths from or with Pneumoconiosis in Connecticut 2000-2004, and U.S. 2000.

	2000	2001	2002	2003	2004	U.S. 2000
All pneumoconiosis	24	23	26	22	21	2,864
Coal workers' pneumoconiosis	-	-	0	0	-	950
Asbestosis	20	18	23	22	20	1,493
Silicosis	-	-	-	-	0	152
Other and unspecified pneumoconiosis	-	0	-	0	0	307

Note: Missing data fields indicate censored State data (case count ≤ 5)

DATA SOURCES: State Vital Records, U.S. National Center for Health Statistics, U.S. Census Bureau

Indicator 11: Acute Work-Related Pesticide-Associated Illness And Injury Reported To Poison Control Centers

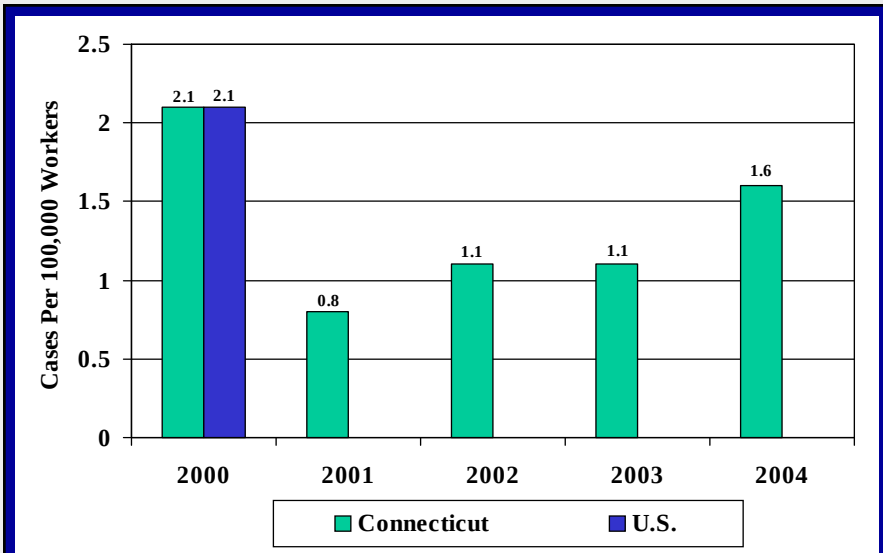


Figure 11: Rates of Work-Related Pesticide Poisoning Connecticut 2000-2004, and U.S. 2000.

Calculated as number of cases per 100,000 full-time workers (FTW).

Figure 11 shows the rate of work-related pesticide poisoning in Connecticut for the years 2000-2004, and the U.S. rate for 2000. In 2000, the rate of work-related pesticide poisoning in Connecticut was equal to the U.S. rate.

Pesticides are substances that are used to control nuisance insects, animals, plants, and fungi. In Connecticut, pesticides are important for controlling insect damage to crops, along with many other uses such as lawn care, problem insect extermination, and the control of invasive plant species. It is well documented that pesticides can cause harm to people that work with and apply them. Industries in Connecticut such as agriculture, and occupations such as lawn care and pest control employ positions where workers are exposed to pesticides. The U.S. Environmental Protection Agency (EPA) estimates that approximately 20,000-40,000 work-related pesticide poisonings occur in the U.S. per year.

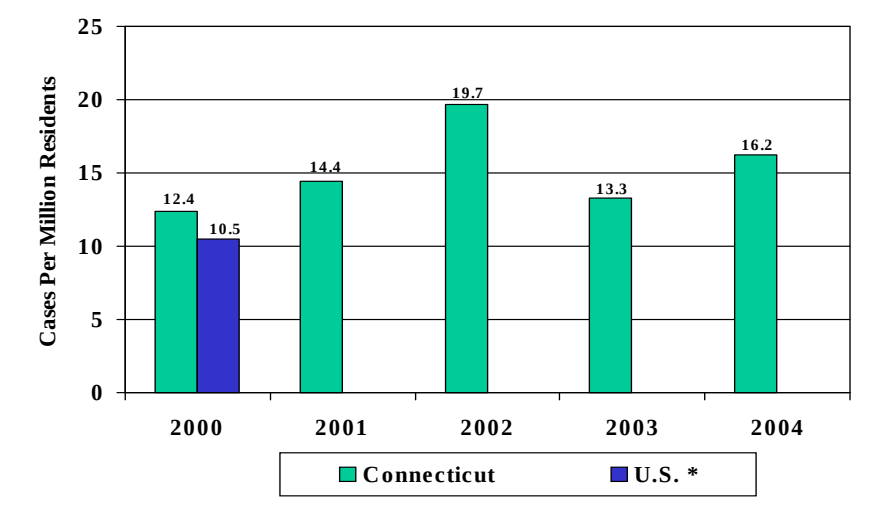
Table 11 shows the total number of work-related pesticide poisonings in Connecticut from 2000-2004, and in the U.S. for 2000.

Table 11: Number of Work-Related Pesticide Poisoning Cases in Connecticut 2000-2004, and U.S. 2000.

	2000	2001	2002	2003	2004	U.S.2000
Total number of work-related pesticide poisoning cases	35	14	18	19	27	2,827

DATA SOURCES: American Association of Poison Control Centers, Bureau of Labor Statistics Current Population Survey.

Indicator 12: Incidence Of Malignant Mesothelioma



*Estimated from 13 Surveillance, Epidemiology, and End Results program (SEER) cancer registries

Figure 12: Age-Standardized Rate of Malignant Mesothelioma, Connecticut 2000-2004, and U.S. 2000.

Calculated as number of cases per 1,000,000 residents.

Figure 12 shows the age-standardized rate of malignant mesothelioma for the years 2000-2004 in Connecticut, and the year 2000 for the U.S. Rates of malignant mesothelioma have ranged from a low of 12.4 cases per million residents in 2000 to a high of 19.7 cases per million residents in 2002. Connecticut's rate was slightly higher than the U.S. rate in 2000 for malignant mesothelioma.

Malignant mesothelioma is a rare cancer affecting the pleura of the lung and the peritoneum of the abdominal cavity. Mesothelioma is highly fatal once diagnosed, and exposure to asbestos fibers is the only well-documented cause for this disease. Because of the amount of asbestos fiber exposure necessary to cause disease, all cases of malignant mesothelioma are assumed to be due to work-related exposures, unless no significant work history of asbestos exposure is indicated. Mesothelioma has a very long latency period between the asbestos exposure and the onset of disease, typically 20-40 years. Asbestos usage in industrial processes increased from the 1940's through the 1970's due to its unique insulating properties. This increase in usage resulted in an increase in mesothelioma cases diagnosed during the 1980's and 1990's. In Connecticut, asbestos was commonly used in ship building occupations and for building materials, which exposed many of Connecticut's workers to large amounts of asbestos at work for a 30-40 year period.

Table 12 shows the number of malignant mesothelioma cases in Connecticut for the years 2000-2004. The number of cases of malignant mesothelioma have remained fairly stable in Connecticut from 2000-2004.

Table 12: Number of Cases of Malignant Mesothelioma in Connecticut, 2000-2003.

	2000	2001	2002	2003	2004
Mesothelioma cases	36	42	57	41	50

DATA SOURCES: State Tumor Registry, U.S. Census Bureau

Indicator 13: Elevated Blood Lead Levels Among Adults

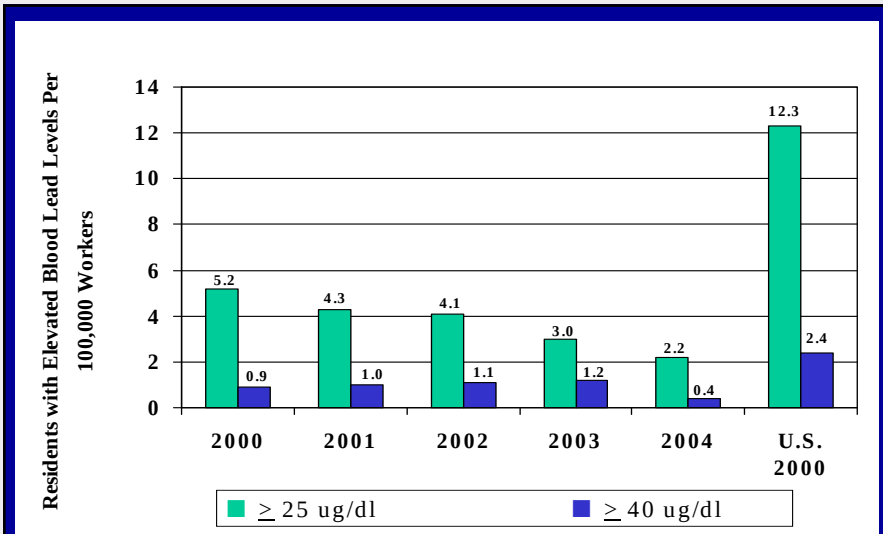


Figure 13: Prevalence Rates of people with Blood Lead Levels ≥ 25 ug/dl and ≥ 40 ug/dl, Connecticut, 2000-2004, and U.S. 2000.

Calculated as number of residents 16 years and older with elevated blood lead levels per 100,000 full-time workers (FTW). U.S. rates estimated from 25 states that participated in the Adult Blood Lead Epidemiology and Surveillance (ABLES) Program.

Figure 13 shows the prevalence rate of elevated blood lead levels (BLLs) in Connecticut residents from 2000-2004, and the U.S. rate for 2000. In 2000, the U.S. prevalence rate for BLLs ≥ 25 ug/dl (12.3 per 100,000) was 58% higher than the Connecticut rate (5.2 per 100,000). For residents with BLL ≥ 40 ug/dl during the same year, the U.S. rate was 61% higher (2.4 vs. 0.9 per 100,000). Rates of elevated blood lead ≥ 25 ug/dl have slowly declined in Connecticut from 2000 (5.2 per 100,000) to 2004 (2.2 per 100,000).

Table 13A shows the incidence rate of elevated blood lead levels in Connecticut residents age 16 years or older for 2000-2004, and for the U.S. in 2000. Table 13B shows the number of prevalent and incident cases of elevated blood lead levels in Connecticut residents for 2000-2004, and for the U.S. in 2000.

Table 13A: Rate of Incident Cases of People Age 16 and Older with Elevated Blood Lead Levels, Connecticut 2000-2004, and U.S. 2000.

	2000	2001	2002	2003	2004	U.S. 2000
Incidence rate: blood lead level ≥ 25 ug/dl	4.1	3.4	1.7	1.5	1.7	5.5
Incidence rate: blood lead level ≥ 40 ug/dl	0.9	0.8	0.5	0.8	0.2	1.0

Table 13B: Number of Prevalent and Incident Cases of People Age 16 and Older with Elevated Blood Lead Levels, Connecticut 2000-2004, and U.S. 2000.

	2000	2001	2002	2003	2004	U.S. 2000
Prevalent cases with blood lead level ≥ 25 ug/dl	88	72	70	61	37	11,272
Incident cases with blood lead level ≥ 25 ug/dl	70	56	29	31	28	4,921
Prevalent cases with blood lead level ≥ 40 ug/dl	16	16	19	24	7	2,252
Incident cases with blood lead level ≥ 40 ug/dl	15	13	9	16	4	844

DATA SOURCES: Adult Blood Lead Epidemiology Surveillance (ABLES) Program, Bureau of Labor Statistics Current Population Survey

Indicator 14: Percentage Of Workers Employed In Industries At High-Risk For Occupational Morbidity

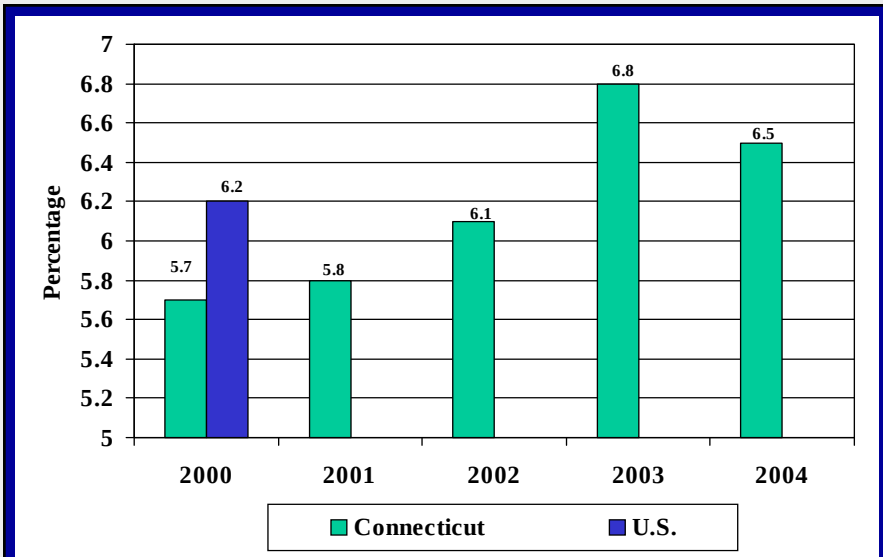


Figure 14: Rates of Workers with High Risk for Occupational Morbidity in Connecticut 2000-2004, and U.S. 2000.

Calculated as number of workers that are employed in industries at high risk for occupational morbidity per 100 full-time workers.

Figure 14 shows the rate of workers that are employed in industries that are at high risk for occupational morbidity in Connecticut for the years 2000-2004, and the U.S. for 2000. Although in 2000, Connecticut remained below the U.S. rate of 6.2%, there has been an increase in the percentage of total workers that are employed in high risk industries in Connecticut from 2000 (5.7%) to 2004 (6.5%).

In Connecticut, there are industries where non-fatal injuries and illnesses occur at higher rates than other industries. Industries such as construction, agriculture, and manufacturing have morbidity rates that are higher than the overall average rate in the U.S. In Connecticut, during the middle 1980's, the morbidity rates in some of these industries were almost twice as high as the "all industries" average, but they have seen steep declines since that time period.

Table 14 shows the total numbers of workers in Connecticut from 2000-2004 that were employed in industries considered "high-risk" for occupational morbidity, along with the U.S. number for 2000.

Table 14: Number of Workers Employed in Industries with High Risk for Occupational Morbidity in Connecticut 2000-2004, and the U.S. 2000.

	2000	2001	2002	2003	2004	U.S. 2000
Number of workers in high-risk industries	87,876	90,827	95,522	105,070	100,608	7,043,202

DATA SOURCES: U.S. Census Bureau County Business Patterns

Indicator 15: Percentage Of Workers Employed In Occupations At High-Risk For Occupational Morbidity

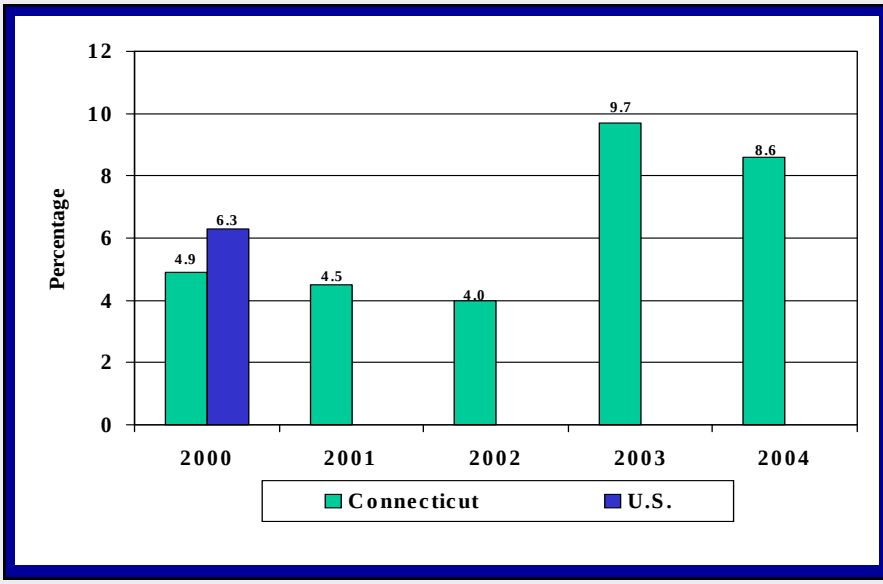


Figure 15: Rates of Workers in Occupations with High Risk for Occupational Morbidity Connecticut 2000 -2004, and U.S. 2000.

Calculated as number of employed in high risk occupations per 100 full-time workers.

Figure 15 shows the rate of workers employed in occupations at high risk for occupational morbidity in Connecticut for the years 2000-2004, and the U.S. for the year 2000. A large increase in the percentage of workers in high risk occupations was seen between 2002 and 2003 (4.0% vs. 9.7%).

Certain occupations within the Connecticut workforce carry a disproportionate risk for occupational morbidity. Many of these "high-risk" occupations fall within the industries known to have a higher risk for work-related morbidity, however some do not. Occupations such as food preparers, electrical apprentices, and truck drivers are some examples of high risk occupations in which Connecticut workers are employed.

Table 15 shows the number of workers employed in high risk occupations in Connecticut from 2000-2004, and the U.S. in 2000. A considerable increase in the number of workers in high-risk occupations occurred between the years 2002 and 2003. Generally, when sharp increases of this type are seen, changes in the coding or surveillance systems used to collect the data are suspected. In 2003, new high-risk occupations were prioritized and may have contributed to the increase seen in the 2003 and 2004 numbers.

Table 15: Number of Workers Employed in Occupations with High-Risk for Occupational Morbidity Connecticut 2000-2004, and U.S. 2000.

	2000	2001	2002	2003	2004	U.S. 2000
Workers in high-risk occupations	81,070	74,584	66,943	165,406	148,042	8,165,899

DATA SOURCES: Bureau of Labor Statistics Current Population Survey

Indicator 16: Workers Employed in Industries and Occupations With High-Risk For Occupational Mortality

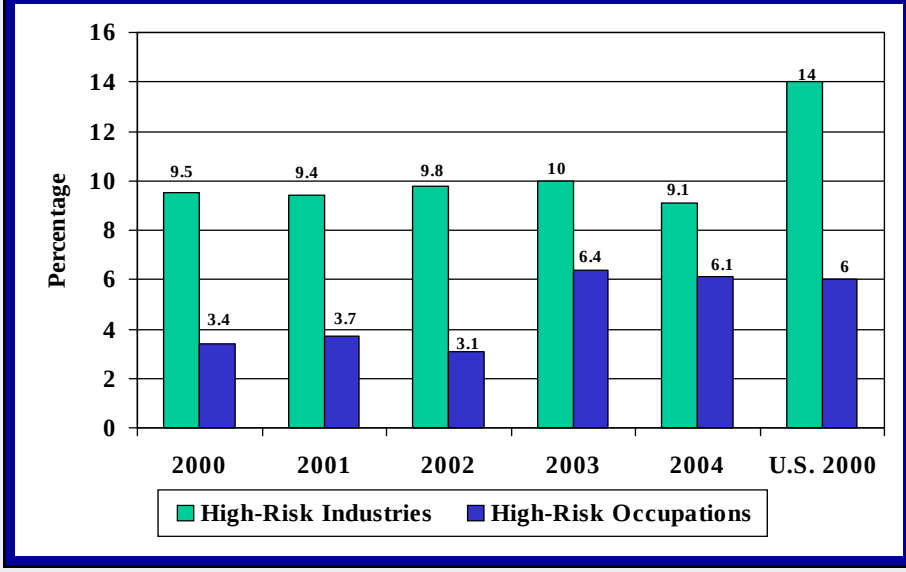


Figure 16: Rates of Workers Employed in Occupations and Industries with High Risk for Occupational Mortality in Connecticut 2000-2004 and U.S. 2000.

Calculated as number employed in high risk industries and occupations per 100 full-time workers.

Figure 16 shows the percentage of workers employed in occupations and industries with a high risk for occupational mortality in Connecticut from 2000-2004, and in the U.S. for 2000. The percentage of workers employed in high mortality risk occupations and industries remained fairly steady from 2000-2004. The proportion of Connecticut workers in high-risk industries was 32% lower than the overall U.S. rate in the year 2000, while the proportion in high-risk occupations was almost 44% lower than the U.S. rate.

According to the Census of Fatal Occupational Injuries (CFOI), over 6,000 work-related fatalities occur in the U.S. each year. Occupations and industries at high risk for occupational mortality are determined by these fatalities. The proportions of workers in high-risk industries and occupations may vary greatly among the different states and consequently will account for some proportion of the variation in work-related mortality rates among states.

Table 16 shows the number of workers employed in occupations and industries with a high risk for occupational mortality in Connecticut from 2000-2004, and in the U.S. for the year 2000.

Table 16: Number of Workers Employed in Occupations and Industries where Workers are at High-Risk for Occupational Mortality, Connecticut 2000-2004 and U.S. 2000.

	2000	2001	2002	2003	2004	U.S. 2000
Workers in high-risk industries	158,799	154,222	166,896	169,860	156,126	18,117,819
Workers in high-risk occupations	57,487	60,932	52,476	108,515	105,473	7,729,698

DATA SOURCES: Bureau of Labor Statistics Current Population Survey

Indicator 17: Occupational Safety And Health Professionals

	2000
Number of board-certified occupational medicine physicians	47
Number of ACOEM members	116
Number of board-certified occupational health registered nurses	110
Number of members of the AAOHN	129
Number of board-certified industrial hygienists	113
Number of AIHA members	186
Number of board-certified safety health professionals	168
Number of ASSE members	401

Table 17A: Numbers of Occupational Safety and Health Professionals in Connecticut, 2000.

Numbers of occupational health professionals in Connecticut were determined through contact with individual boards and registries.

Table 17A shows the number of occupational health professionals in Connecticut as of 2000. Every three to five years state surveillance personnel contact boards such as the American College of Occupational and Environmental Medicine (ACOEM), American Association of Occupational Health Nurses (ACOHN), the American Industrial Hygiene Association (AIHA), and the American Society of Safety Engineers (ASSE) to determine the number of occupational health professionals licensed and working in Connecticut.

Table 17B shows the rates of selected occupational health professionals licensed and working in Connecticut per 100,000 employed for the year 2000.

Table 17B: Rates of Occupational Safety and Health Professionals, Connecticut, 2000.

	2000
Rate of board-certified occupational physicians per 100,000 employed	2.8
Rate of ACOEM members per 100,000 employed	6.8
Rate of board-certified occupational health registered nurses per 100,000 employed	6.4
Rate of members of the AAOHN per 100,000 employed	7.6

	2000
Rate of board-certified industrial hygienists per 100,000 employed	6.6
Rate of AIHA members per 100,000 employed	10.9
Rate of board-certified safety health professionals per 100,000 employed	9.8
Rate of ASSE members per 100,000 employed	23.5

DATA SOURCES: Current Membership Rosters of Cited Organizations. Bureau of Labor Statistics Current Population Survey.

Indicator 18: OSHA Enforcement Activities

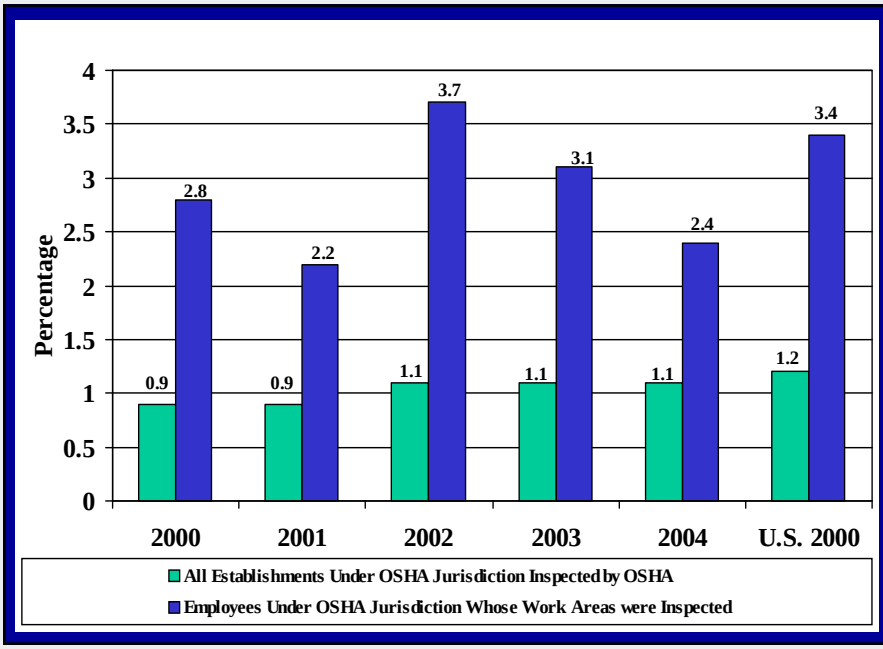


Figure 18: Percentage of Establishments Under OSHA Jurisdiction Inspected by OSHA, and of Workers in Establishments Under OSHA Jurisdiction whose Work Areas were Inspected by OSHA, Connecticut 2000-2004, and U.S. 2000.

Calculated as percentage of establishments inspected per 100 eligible establishments.

Figure 18 shows the percentage of establishments under OSHA jurisdiction inspected by OSHA as well as workers in establishments under OSHA jurisdiction whose work areas were inspected by OSHA, in Connecticut from 2000-2004, and in the U.S. for the year 2000.

The Occupational Safety and Health Administration (OSHA) has been responsible for the enforcement of worker safety and health in the U.S. since 1970. In Connecticut, worksites are inspected for many reasons, including in response to worker complaints, referrals from other agencies, as a response to fatal incidents when they occur, and as part of regularly scheduled inspections.

Table 18 shows the number of establishments inspected by OSHA and numbers of workers covered by inspections in Connecticut from 2000-2004, and in the U.S. for 2000.

Table 18: Numbers of Establishments Inspected by OSHA and Numbers of Workers Covered by Inspections, Connecticut 2000-2004, and U.S. 2000.

	2000	2001	2002	2003	2004	U.S. 2000
Total number of establishments under federal/state OSHA jurisdiction	107,787	108,201	107,884	108,397	113,707	7,870,222
Annual number of establishments inspected by federal/state OSHA	997	952	1,142	1,183	1,301	91,563
Annual number of employees whose work areas were inspected by federal/state OSHA	46,817	36,652	60,826	50,856	36,402	4,423,312

DATA SOURCES: OSHA Office of Statistics, Bureau of Labor Statistics Covered Employers and Wages.

Indicator 19: Workers' Compensation Awards

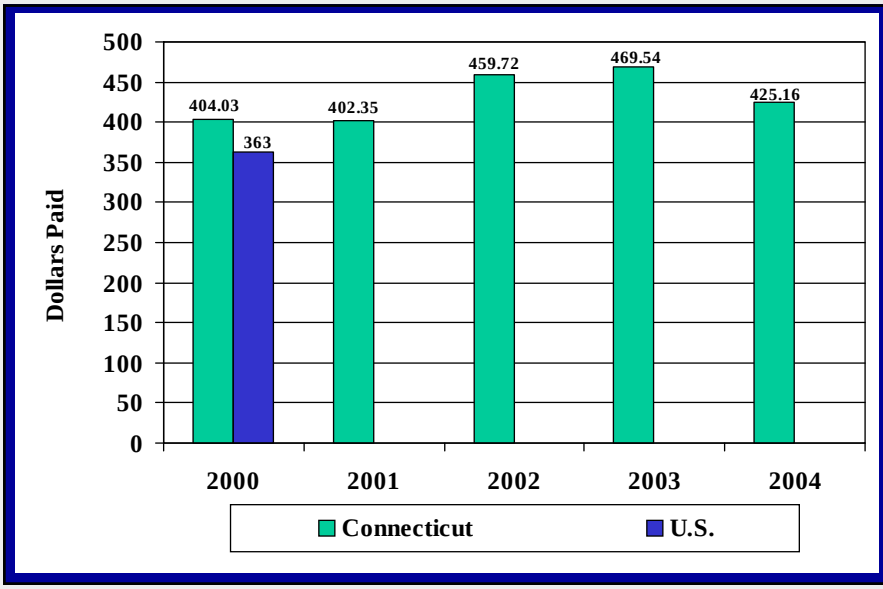


Figure 19: Average Workers' Compensation Benefit Paid per Covered Worker in Connecticut, 2000-2004.

Calculated as dollars paid per Connecticut full time worker eligible for workers compensation during the calendar year.

Figure 19 shows the average Workers' Compensation benefit paid per covered worker in Connecticut for the years 2000-2004, as well as the 2000 U.S. average. The overall dollars paid per covered worker in Connecticut increased from $404.03 in 2000 to a high of $469.54 per covered worker in 2003.

The Workers' Compensation system was established in 1913 to partially replace the wages and help pay for the medical expenses of those who experience work-related illnesses and injuries. In 2000, almost $46 billion was paid out in Workers' Compensation benefits in the U.S., and $667 million of those dollars were paid out specifically in Connecticut. In addition, Workers' Compensation pays out survivor benefits to beneficiaries in the event that a worker is killed while working.

Figure 19 shows the annual Workers' Compensation benefit paid to Connecticut workers from 2000 to 2004, in thousands of dollars. The total number of dollars paid in the U.S. for the year 2000 is included for comparison. The total benefits paid to workers in Connecticut has increased by almost $18 million (2.7%) from 2000 to 2004, while the overall U.S. inflation rate has increased by 9.7% during this same period.

Table 19: Total Workers' Compensation Awards in Connecticut from 2000-2004, in Thousands of Dollars.

	2000	2001	2002	2003	2004	U.S. 2000
Total amount of workers' compensation benefits paid (in thousands)	$667,056	$661,471	$747,959	$753,618	$684,930	$45,909,689

DATA SOURCES: National Academy of Social Insurance