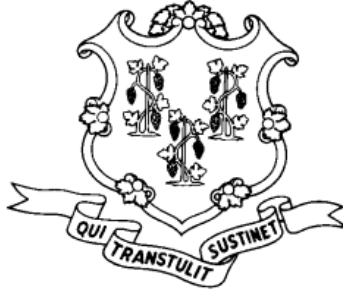


Occupational Disease in Connecticut, 2016



This report covers data for 2014
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A. Executive Summary

This report focuses on occupational *disease* reports for 2014 and recent trends in reported cases. It does not address traumatic occupational *injuries*, which are addressed in the annual report on occupational injuries and illnesses by the Connecticut Department of Labor (<http://www.ctdol.state.ct.us/osha/shstats.htm>). Occupational diseases are typically harder to detect than injuries, since they often occur over longer periods of time, and can have multiple (including non-occupational) risks. Therefore, this report uses data from three primary sources as a way of establishing a more complete picture of occupational disease: Workers' Compensation First Report of Injury cases (WCC), physicians' reports under the Occupational Illnesses and Injury Surveillance System (OIIS), and the Bureau of Labor Statistics/Conn-OSHA Annual Survey (BLS).

Table A-1: Summary of Diseases Reported by Systems, 2012-2014

Type of Disease	BLS/Conn-OSHA			WCC			OIIS (Physicians)			Unique Cases*		
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
Respiratory & poisonings	300	300	200	469	429	520	146	120	171	585	521	660
Lead **							283	327	379			
Skin	600	500	400	286	259	230	180	174	140	434	393	343
Musculoskeletal	***	***	***	3,110	3,232	3,028	580	666	774	3,525	3,741	3,610
Infectious				1,024	1,199	1,287	443	973	1500	1,401	1,975	2,572
Hearing loss	300	300	300	122	131	138	8	11	12		140	147
Other***	1,500	1,600	1,400	923	778	765	156	148	172	1,184	899	925
Total	2,700	2,600	2,400	5,934	6,028	5,968	1,796	2,419	3,148	7,129	7,669	8,257

Sources: BLS: Bureau of Labor Statistics/Conn-OSHA; WCC: CT Workers' Compensation Commission, First Report of Injury database
OIIS: Occupational Illnesses and Injury Surveillance System

Notes: Musculoskeletal Disorders (MSD) definitions vary somewhat between systems

*Unique cases are the combined total of Workers' Compensation cases and Physicians Reports, adjusted for cases reported to both systems

**Laboratory reports on lead are from the Connecticut Adult Blood Lead Epidemiology and Surveillance program.

***MSD is included in the "other" category for BLS/Conn-OSHA data

Table A-1 summarizes the data from the three different sources for the last 3 years. Approximately 2,400 cases of occupational diseases were reported under the BLS/Conn-OSHA survey, 5,968 through the workers' compensation first report of injuries and 3,148 for OIIS (including lead reports) for 2014. The number of reports in 2014 decreased 8% from 2013 in the BLS system and 1% for workers' compensation, but increased by 30% for physicians' reports. Reports from workers' compensation and physicians combined (adjusting for cases reported to both systems) totaled 8,257 unique reports (excluding the 379 lead poisoning cases), an increase of 8% from the previous year. Statistically adjusting for estimated unreported cases produces an estimate of approximately 35,000 cases of occupational illnesses in Connecticut for 2014.

Musculoskeletal disorders (MSD) such as Carpal Tunnel Syndrome and tendonitis dominated the workers' compensation reports, accounting for 51% of reports (25% of the physicians reports). MSD has not been broken out by BLS since 2002, but MSD cases are presumed to be the main portion of the "other illness" category, which is by far the largest BLS category. **Respiratory diseases and poisonings**, which include respiratory conditions and lung disease such as asthma, as well as poisonings such as from carbon monoxide and lead, accounted for 8-17% of cases. **Infectious diseases**, such as bloodborne diseases such as HIV and hepatitis, Tb, scabies, Lyme Disease (and including exposures as well as diagnosed disease) accounted for 22-48% of cases (infectious disease is categorized under "other disease in BLS). "Other diseases", which includes infectious diseases and MSD in BLS, physical hazards such as heat and cold exposures, allergies, cancer, and others in Workers' Compensation and Physicians reports, accounted for 6-21% of cases. **Skin conditions**

accounted for 4-17% of the illnesses reported. **Lead poisoning** is tracked separately and is based on laboratory reports to the Connecticut Department of Public Health.

There was an overall illness rate of 18.7 cases per 10,000 workers based on the BLS survey, an 8% decrease in the rate from the previous year. The CT rate was 7% higher than the average national rate. The highest specific sector rate based on the BLS survey was State government at 60.0, with high rates for “other” (24.6) and skin disorders (32.6). Manufacturing was second highest at 35.1, with the highest rate of hearing loss (12.7) and the second highest rate for “other” conditions (18.6). Local Government was third highest overall at 30.4 cases per 10,000 workers. Information Systems was next highest (29.2), driven by a rate of 18.3 for “Other” illnesses, with Education and Health at 25.7 overall.

Overall (based on Workers’ Compensation reports), approximately 50% were for women, but this varied by type of case, with higher proportions of women than average for infectious disease (65% women) and about even for MSD, but lower for all other types of illness. Based on workers’ compensation reports, workers in their 40’s or 50’s each accounted for about one-fourth of illnesses; 30’s were 18%, 20’s were 15%, and 60’s were 12%. Based on physician reports where race and ethnicity were known, 17% of cases were black and 7% Hispanic.

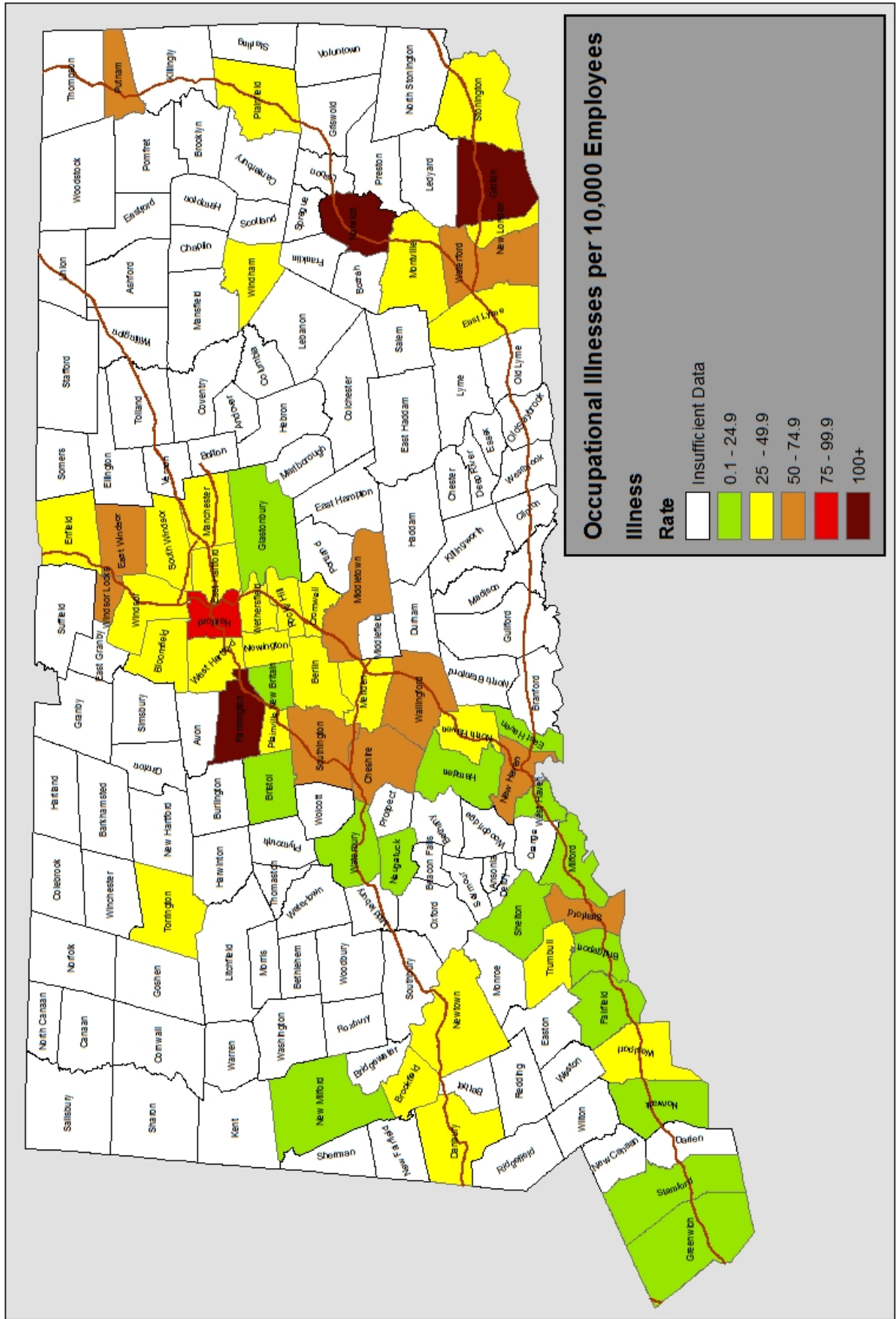
The most common physician diagnoses for musculoskeletal disorders were strain/sprain (19%), epicondylitis (tennis elbow) with 17% of the cases, tenosynovitis (17%), and carpal tunnel syndrome (11%). The most common specific causes for MSD in workers compensation reports were lifting (17%), pushing or pulling (13%), tool use (including references specifically to pneumatic tools or vibration exposure) (12%), and computing and clerical tasks (9%).

Nonspecific respiratory illnesses were the most common type of physician-reported lung condition, with 56% of reports, followed by asbestos exposure or disease (18%), and asthma or reactive airways dysfunction syndrome (RADS) with 14%. In addition to asbestos exposures, exposures associated with respiratory conditions included fumes (including gas or carbon monoxide), smoke, chemicals (including cleaning chemicals, fire extinguishers, oil, and “air fresheners”), exertion, mold or indoor air quality, and dust.

Infectious disease and exposures were reported primarily through workers’ compensation. There were 906 reports of potential exposure to bloodborne pathogens (including reports of exposure to HIV/AIDS and Hepatitis C), accounting for 70% of all infectious disease reports. There were 117 cases of tuberculosis infection (PPD conversion) or exposures to clients with TB (a decrease of 21% from the 2013, which had one particularly large outbreak), 79 reports of tick bites, rashes from tick bites and/or Lyme disease attributed to occupational exposures, 70 cases of scabies or lice exposures/illnesses, 13 cases of meningitis exposure, 8 cases of chicken pox, measles or whooping cough, 5 cases of exposure to rabies, and 33 reports of exposure or cases of MRSA (Methicillin-resistant *Staphylococcus aureus*, or staph infection that responds poorly to antibiotics) or other staph or strep infection.

Thirty-three (33) towns and municipalities had at least 50 cases of occupational illnesses based on workers’ compensation reports. Rates of illness varied widely by municipality; often these appear to be related to large employers in high rate industries. The state median (average) for towns with at least 10 reports was 28 cases per 10,000 employees. The highest rate for towns with at least 50 cases was for Farmington at 161 cases per 10,000 employees, which was over 5 times as high as the median. That was followed by Norwich (132), Groton (119), Hartford (79), Middletown (71), Southington (71), New Haven (55), Stratford (55), Wallingford (53), Cheshire (52), and New London (50). Figure A-1, a map of the rates by town is below, with rates listed in Table D-6 and Appendix 3 (which includes reports down to 10 cases per town). The map is based on 25 or more cases (prepared by Kevin Evringham of UConn).

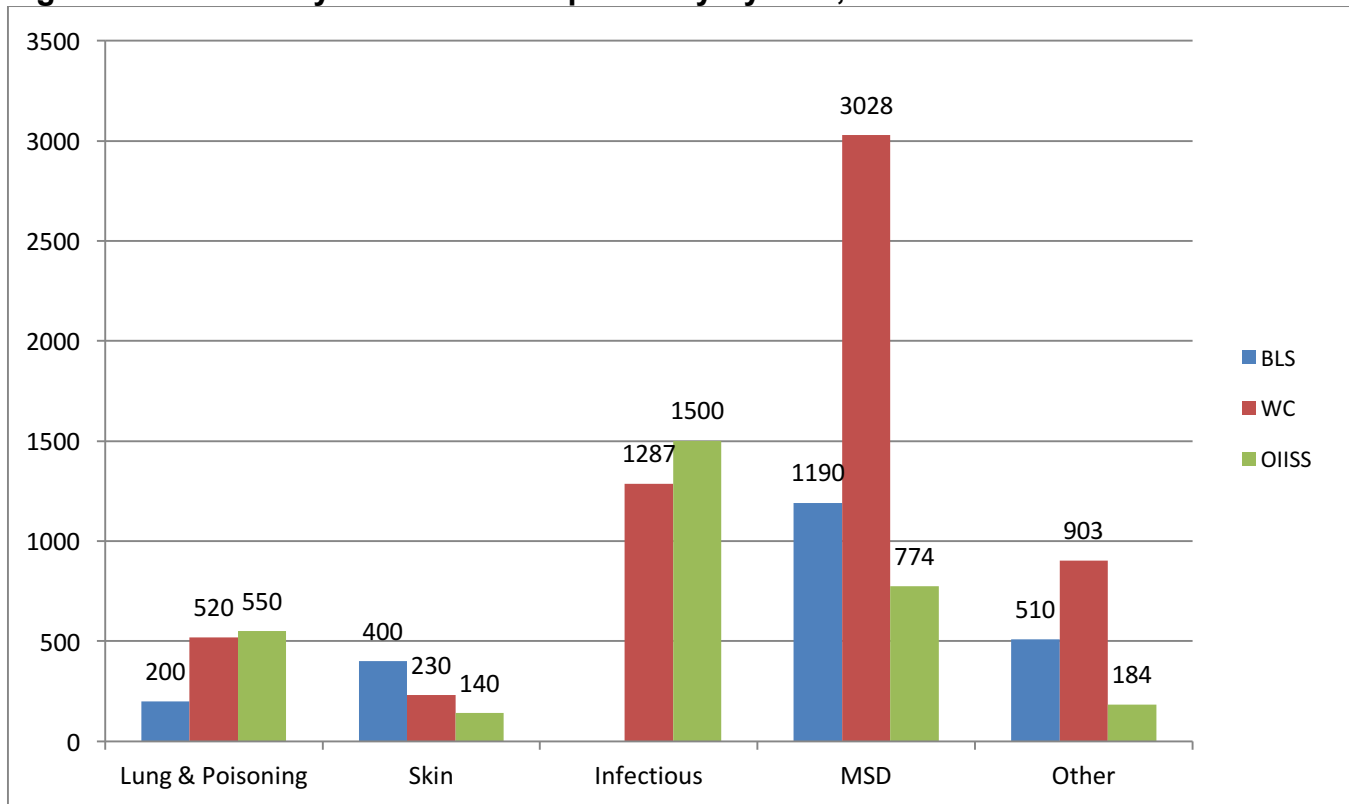
Figure A-1: Map of Occupational Illness Rates by Town, 2014 (following page)



B. Summary of Diseases

Figure B-1 shows the totals by disease category for 2014 for three reporting systems: the Bureau of Labor Statistics/Conn-OSHA (BLS) survey; Workers' Compensation (WC) First Reports of Injury; and the Occupational Illnesses and Injury Surveillance System (OIISS) physician reports. Categories have been combined to make comparisons as close as possible; however, differences in the three systems' definitions make comparisons incomplete. For example, Workers' Compensation only requires reporting for lost-time or restricted duty cases, while the other two reporting systems require all occupational illnesses to be reported. Although all physicians are legally required to report occupational disease, only a minority report. Lead reports from the laboratory reporting system are combined into "lung and poisoning" under the OIISS. The BLS/Conn-OSHA system discontinued collecting "repetitive trauma" as a category in 2002, so MSD has been estimated based on the proportion of "other illness" in the 2001 dataset, which was 85%. See Appendix 1 for a complete description of methods.

Figure B-1: Summary of Diseases Reported by System, 2014



Notes: BLS=Bureau of Labor Statistics/ConnOSHA survey; WC=Workers' Compensation First Report of Injury Database; OIISS=Physicians reports from the Occupational Illnesses and Injury Surveillance System combined with laboratory reports of lead poisoning. MSD for the BLS database was estimated using prior proportions from "other" (85%).

The Workers' Compensation database showed the highest number of cases, with 5,968 cases reported, followed by the physicians' reporting/laboratory database with 3,148 cases, and by the BLS survey with 2,400. There is a low amount of overlap between these systems, so total cases are higher than these figures might indicate.

The number of reports in 2014 decreased 8% from 2013 in the BLS system and 1% for workers' compensation, but increased by 30% for physicians' reports. Longer term trends in number of reports are complex (Figure B2), with BLS trends generally declining; Workers' Compensation data staying fairly even since 2008 (the Workers' Compensation database appears incomplete in 2003 and 2005-2007). Physician reports remaining fairly stable throughout the period, but with an increase over the past 5 years.

Case Matching and Total of Unique and Estimated Cases of Occupational Illness

There is a fairly low number of cases that are reported to both workers' compensation and by physicians. In order to get a better estimate of the total number of cases of occupational illness in Connecticut, cases were matched by name, employer, and type of illness for the WC and OISS reports (Table B-1). This allows a sum of unique cases that were reported to at least one of the two systems and an estimate of cases that were not reported to either. Individual level BLS/ConnOSHA data from their survey was not available for matching, and lab-based lead reports did not have enough detail to match, so lead reports are not included in Table B-1.

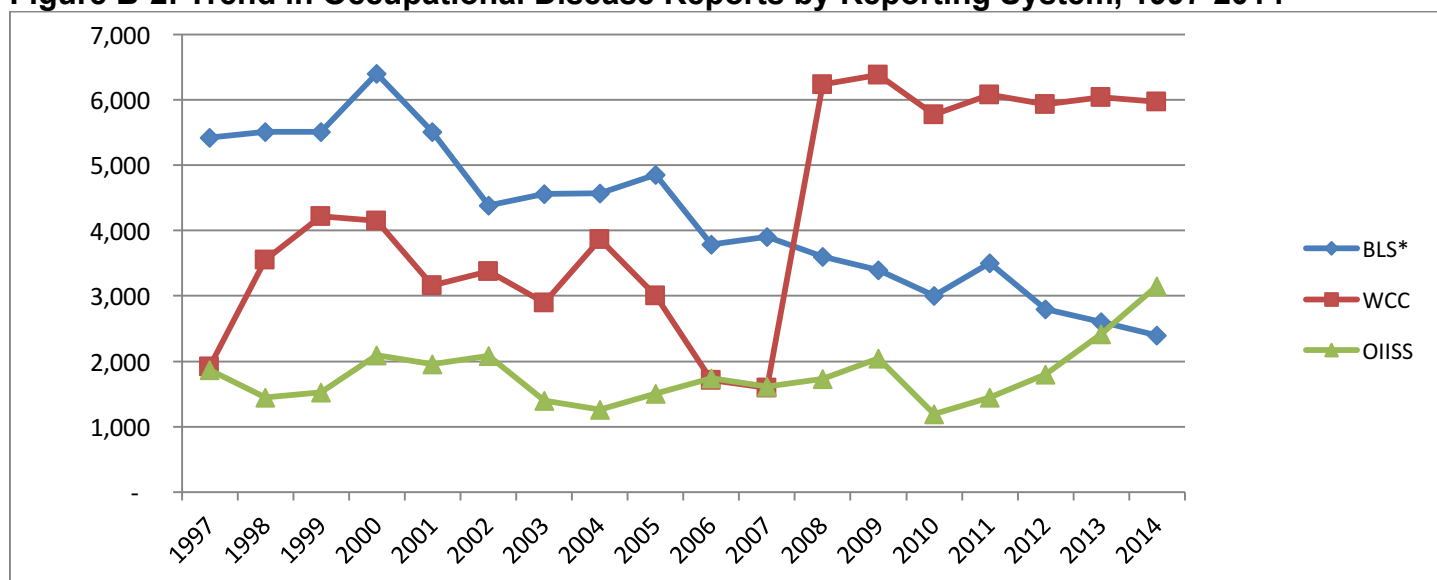
Table B-1: Matched, Unique, and Estimated Total Cases of Occupational Illness, CT, 2014

Illness Type	Matched	ODSS Only	WC Only	Unique	Estim Unreported	Estimated Total
Infectious	215	1285	1072	2,572	6,407	8,979
Lung	31	140	489	660	2,208	2,868
MSD	192	582	2836	3,610	8,597	12,207
Other	15	169	888	1,072	10,005	11,077
Skin	27	113	203	343	850	1,193
Total	480	2,289	5,488	8,257	28,066	36,323

There were a total of 480 cases that were reported to **both** workers' compensation (WC) and by physicians (OISS system); 2,289 cases were reported only by the physician report system, and an additional 5,488 cases were reported only to the workers' compensation system. This gives a total of 8,257 unique cases that were reported to at least one of the systems, with approximately 2,500 infectious cases, 650 lung cases, over 3,500 musculoskeletal (MSD) cases, almost 400 skin conditions, and over 1,000 other cases.

Using a statistical method called "capture-recapture" analysis, an estimate was made of the unreported cases, which was about 30,000 cases. When combined with the unique cases, this provides an estimate of approximately 35,000 occupational illness cases in Connecticut for 2014.

Figure B-2: Trend in Occupational Disease Reports by Reporting System, 1997-2014



Notes: BLS= Bureau of Labor Statistics/Conn-OSHA survey; WCC= Workers' Compensation First Report of Injury; OISS= Occupational Illness and Injury Surveillance System (physician reports).

***Note:** BLS figures in 2002 not comparable to prior years due to changes in data collection. WCC data may not be complete for 2003 and 2005-2007. OISS was not complete for 2010, and did not include most bloodborne infectious diseases/exposures in 2011.

C. Bureau of Labor Statistics/Connecticut Occupational Safety and Health Administration Surveys

In cooperation with the U.S. Bureau of Labor Statistics (BLS), Conn-OSHA conducts an annual survey of employers for job-related injuries and illnesses. Conn-OSHA issues an annual report that provides data on injuries (available at <http://www.ctdol.state.ct.us/osha/shstats.htm>). Our report focuses on illnesses, and includes data from Conn-OSHA that is not published in that report. Since these statistics are based on a survey rather than a census, numbers and rates are estimated and rounded. The Connecticut Department of Labor acknowledges that the BLS/Conn-OSHA survey under-counts occupational diseases, particularly chronic diseases, since these are frequently not recognized nor reported.

Occupational Illnesses in 2014

There were approximately 2,400 reported cases of occupational illnesses in 2014 (Table C-1 and Figure C-1) with an overall rate of 18.7 per 10,000 workers, approximately an 8% decrease from the prior year. While data for poisonings in Connecticut did not meet publication standards for 2014, the rate in 2013 was 0.2 per 10,000 workers.

Table C-1: Occupational Disease by Type, BLS/Conn-OSHA 2013-2014

	2013		2014		% Change in Rate
	Cases	Rates	Cases	Rates	
Respiratory	300	2.0	200	1.9	-5%
Skin	500	3.5	400	3.4	-3%
Hearing Loss	300	2.2	300	2.1	-5%
Poisonings	--	0.2	--	--	--
Other*	1,600	12.4	1,400	11.0	-11%
Total	2,600	20.3	2,400	18.7	-8%

Source: BLS/Conn-OSHA; Rates are per 10,000 workers, adjusted for hours worked. Total differs from individual sum due to rounding for the survey. Includes public sector. Blanks indicate numbers too small or unreliable to publish. Total Illnesses may differ from sum due to rounding errors

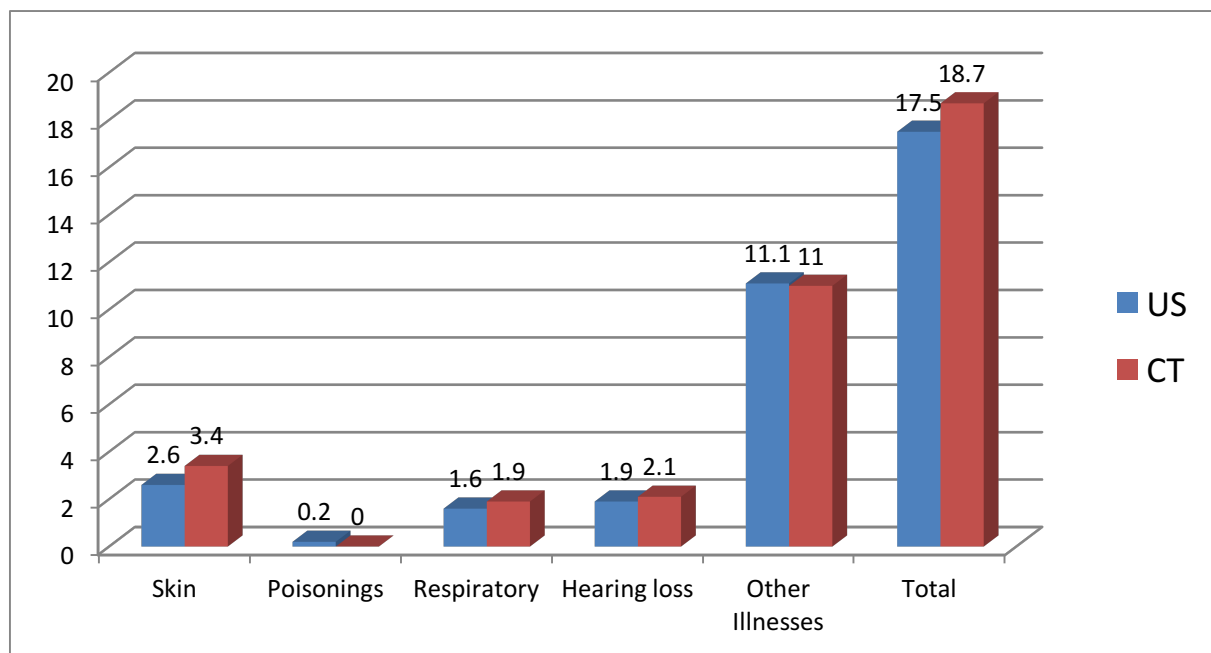
*Musculoskeletal disorders (MSD) is categorized under "Other" by BLS..

Overall rates for Connecticut in 2014 were higher than the U.S. rates for all types of illness except for poisonings and marginally for all other illnesses (Figure C-1). The overall Connecticut rate (18.7 cases per 10,000 workers) was 7% higher than the U.S. rate of 17.5. Rates decreased in 2014 for both Connecticut and the U.S.

Connecticut's illness rate ranked 18th highest out of 41 states with publishable data. Seventeen states had higher rates and 23 had lower rates. Maine had the highest rate of 37.3 and Ohio had the lowest at 10.2. Private sector rates were 15.8 in Connecticut and 15.3 nationally. Connecticut's public sector rate was 40.9; the U.S. public sector rate was 31.8.

In Connecticut, the rate of illnesses increased slightly from 2002-2005, then generally decreased through 2014 with the exception of 2011 (Figure C-2).

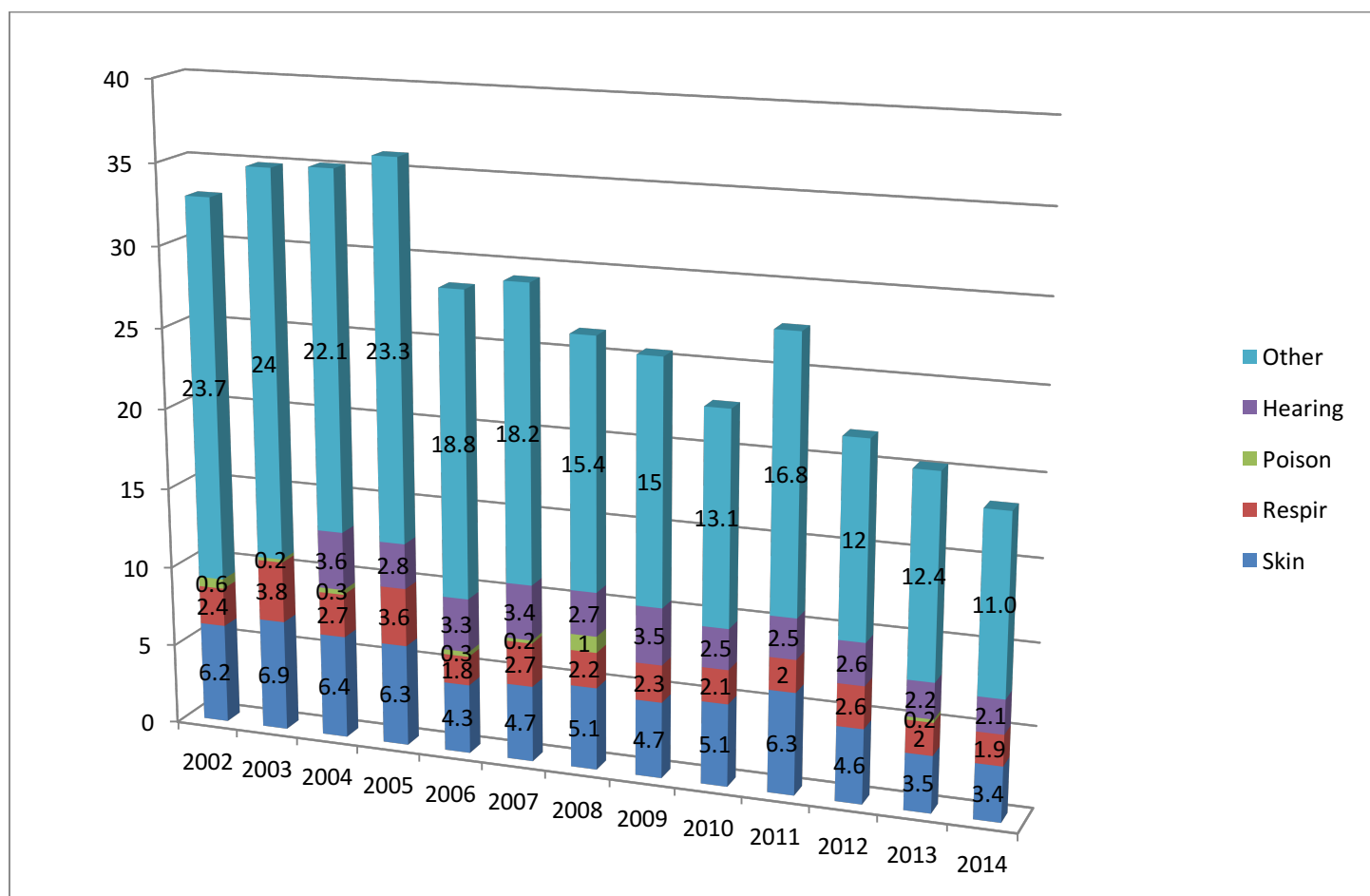
Figure C-1: Rates of Occupational Illness by Type, US and CT, 2014



Source: BLS and Conn-OSHA. Rates per 10,000 workers, adjusted for hours worked.

Figure C-2: Rates of Occupational Disease by Type and Year, CT, 2002-2014

Source: BLS/Conn-OSHA Survey; Rates are cases per 10,000 workers



Illnesses by Industry

Numbers and rates by industry sector for 2014 are presented in Table C-2. Overall, the adjusted rate was 18.7 cases of occupational illness per 10,000 CT workers, 8% lower than the 2013 rate of 20.3. The overall private sector rate was 15.8 (compared to 17.5 in 2013), with a government rate of 40.9 (more than double the private sector rate).

Table C-2: Illness Rates per 10,000 Workers by Industry and Type of Illness, CT, 2014

Industry	Total		Skin		Respiratory		Poison		Hearing		Other	
	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.
Total, all industries	18.7	2,400	3.4	400	1.9	200	--	--	2.1	300	11.0	1,400
Private Industry only	15.8	1,800	1.9	200	1.8	200	--	--	2.3	300	9.8	1,100
Goods Producing	28.4	600	2.7	100	1.0	--	--	--	9.6	200	15.0	300
Natural resources and mining	--	--	--	--	--	--	--	--	--	--	--	--
Construction	4.6	--	--	--	--	--	--	--	--	--	--	--
Manufacturing	35.1	600	2.9	--	--	--	--	--	12.7	200	18.6	300
Service Providing	12.9	1,200	1.7	200	2.0	200	--	--	0.6	100	8.6	800
Trade, transport, utilities	9.0	200	--	--	0.7	--	--	--	--	--	7.2	200
Information	29.2	100	--	--	--	--	--	--	--	--	18.3	100
Financial activities	4.4	100	--	--	--	--	--	--	--	--	3.8	--
Professional/business services	8.7	200	--	--	--	--	--	--	0.9	--	6.3	100
Education and health	25.7	600	5.2	100	5.8	100	--	--	--	--	14.7	300
Leisure and hospitality	9.5	100	2.1	--	--	--	--	--	--	--	7.1	100
Other services	--	--	--	--	--	--	--	--	--	--	--	--
Government total	40.9	600	15.1	200	2.9	--	--	--	--	--	20.7	300
State Government	60.0	300	32.6	200	--	--	--	--	--	--	24.6	100
Local Government	30.4	300	5.5	100	2.9	--	--	--	--	--	18.6	200

Source: Conn-OSHA; Rates are adjusted for hours worked, and are per 10,000 full-time workers.

Blanks indicate too little data for reliable estimates.

State government had the highest sector rate at 60.0 cases per 10,000 workers, with the highest rates for skin disorders (32.6) and other illnesses (24.6). The Manufacturing sector had the second highest specific sector rate at 35.1, with hearing loss cases accounting for the highest rate of occupational illness within the sector (12.7). Local Government was third highest at 30.4. Information's rate of 29.2 placed the sector in fourth place.

Lost-Time Illnesses

BLS obtains additional data for the subset of cases that result in lost worktime and provide additional detail on specific conditions and causes. The following draws from this data for conditions that are more chronic in nature (usually classified as occupational illness). (Restricted work cases are not included in this section, which is about half again the number of lost worktime cases.)

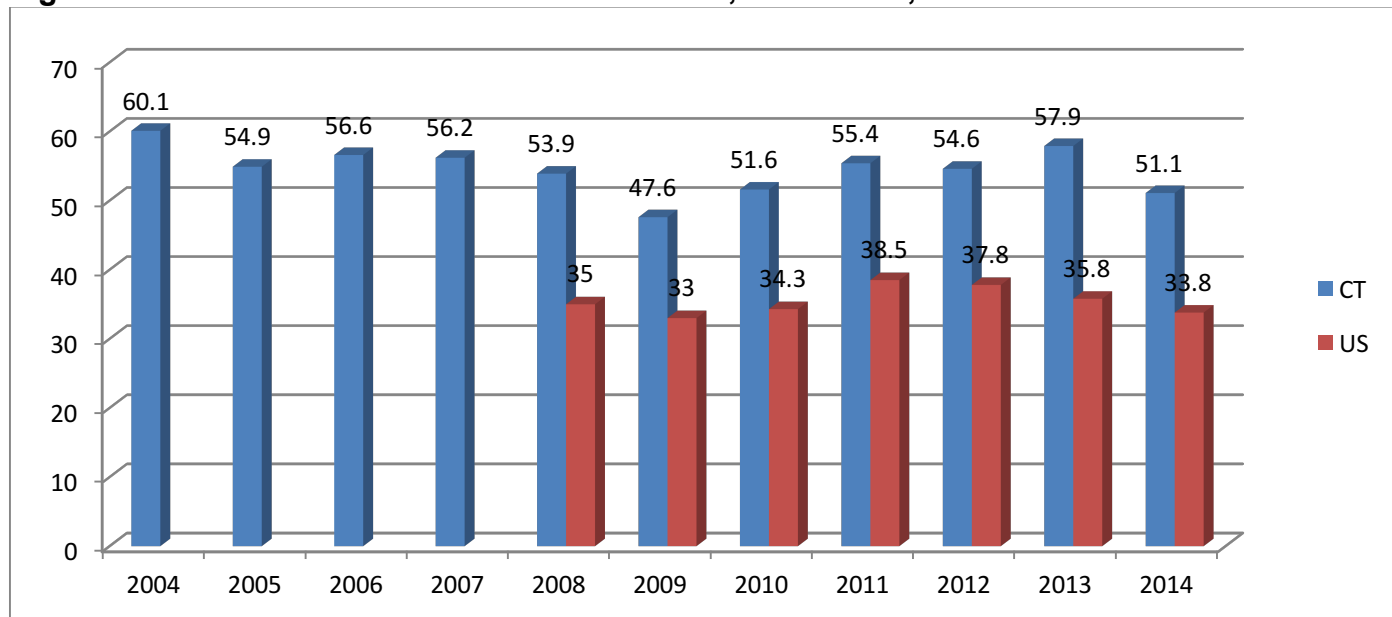
Musculoskeletal Conditions

The rate of musculoskeletal disorders (MSD) with lost time were 12% lower than the previous year at 6,590 cases (51.1 cases per 10,000 workers), (Figure C-3). The Connecticut rate is 51% higher than the national MSD rate of 33.8. MSD accounted for 36% of the total of 18,230 lost time injuries and illnesses in Connecticut. Rates in Connecticut decreased in 2014 after generally increasing the previous five years. National rates for all private and public employees have only been available since 2008.

Musculoskeletal conditions are the most common category of specific injury and illness conditions, and is a category that includes both chronic conditions and sprains and strains from overexertion. BLS defines this fairly

complex category as “includes cases where the nature of the injury or illness is pinched nerve; herniated disc; meniscus tear; sprains, strains, tears; hernia (traumatic and non-traumatic); pain, swelling, and numbness; carpal or tarsal tunnel syndrome; Raynaud’s syndrome or phenomenon; musculoskeletal system and connective tissue diseases and disorders, when the event or exposure leading to the injury or illness is overexertion and bodily reaction, unspecified; overexertion involving outside sources; repetitive motion involving microtasks; other and multiple exertions or bodily reactions; and rubbed, abraded, or jarred by vibration.”

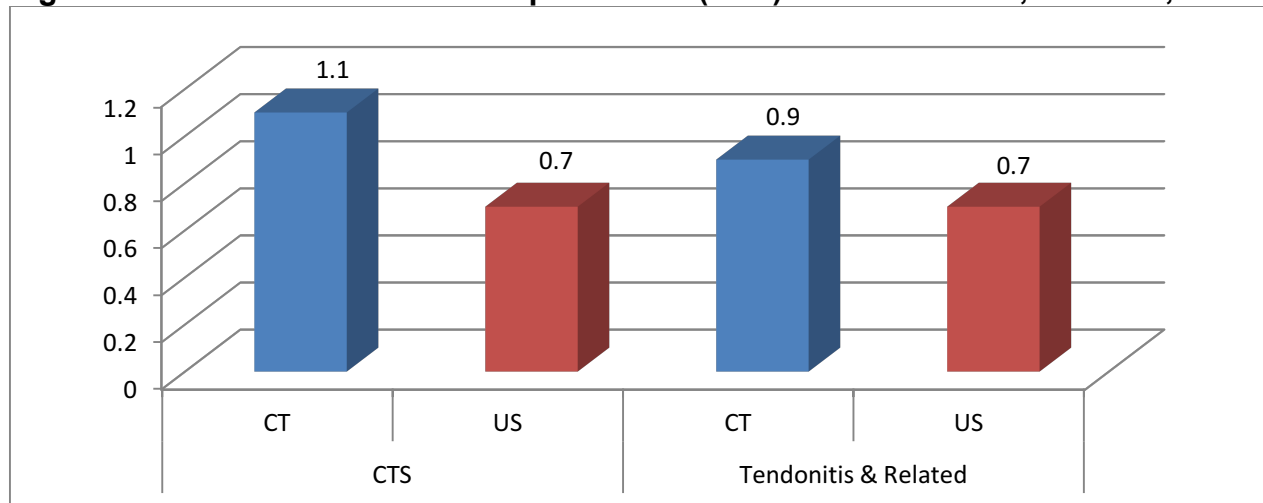
Figure C-3: Rates of Musculoskeletal Disorders, CT and US, 2004-2014



Source: BLS Website <http://data.bls.gov/gqt/ProfileState>
Rates are cases per 10,000 full time employees.

Carpal Tunnel Syndrome (CTS) was the most common specific illness in CT, with a rate of 1.1 cases per 10,000 workers in 2014 (Figure C-4), and 0.9 cases per 10,000 of **Tendonitis**. The rate of CTS in CT was 57% higher than the national rate, and 29% higher for tendonitis. CTS had a very high number of lost work days, with a median of 24 days of lost time per case (compared to 9 days for all cases of injury and illness) in CT. Tendonitis (and related soft-tissue disorders) was also high at 21 days.

Figure C-4: Rates of Lost-time Carpal Tunnel (CTS) and Tendonitis, US & CT, 2014



Source: BLS Website <http://www.bls.gov/iif/data.htm>; cases per 10,000 full time employees.

Connecticut lost time cases coded as “**repetitive motion**” for cause declined to 2.5 cases per 10,000 workers from 4.5 in the previous year. Computer tasks and Repetitive Hand Use (not using tools) were the two largest specific categories of repetitive motion (Table C-3). The CT rate was 7% lower than the national rate of 2.7. Repetitive motion lost time cases in CT had a median of 27 days away from work.

Table C-3: Injuries involving Repetitive Motion by Type, 2013-2014

Repetitive Motion Injuries	2013	2014
Microtasks (unspecified)	1.7	0.8
Typing and computer	0.7	0.6
Tools	0.5	0.2
Grasping, placing, moving	0.4	*
Hand use (not tools)	0.7	0.4
Multiple types of repetitive motions	0.4	0.3
Other microtasks	0.2	0.2
All repetitive with microtasks (total)	4.5	2.5

D. Workers' Compensation First Report of Injury Data

There were a total of 5,968 reports in the Workers' Compensation First Report of Injury Database for 2014 (Table D-1), a 1% decrease from 2013, driven by an 6% decrease in musculoskeletal disorders (MSD), an 11% decrease in skin disorders and a 2% decrease in "other" illnesses. There were increases in lung disorders (21%) and infectious disease (7%).

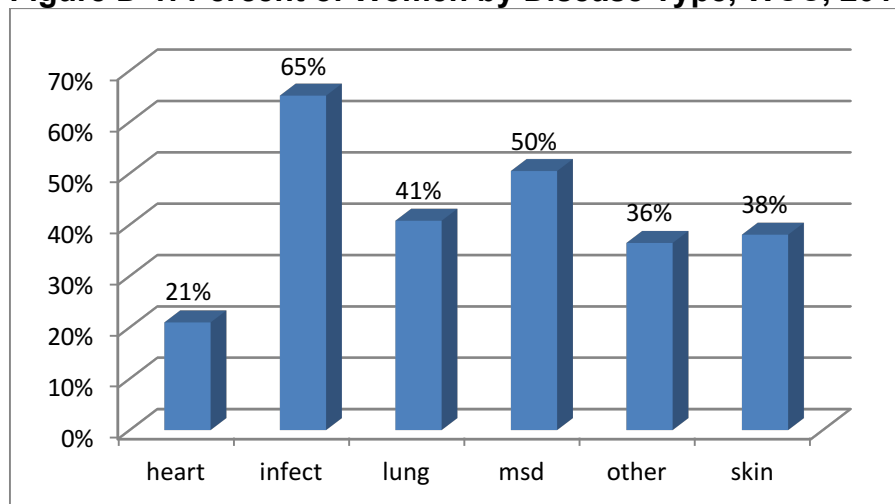
Over half (51%) of reports were due to chronic musculoskeletal disorders (MSD) such as Carpal Tunnel Syndrome and tendonitis. Infectious diseases accounted for 22% of the cases, lung diseases (including nonspecific respiratory illness and chronic lung conditions such as asthma and asbestos-related illnesses and exposures) 9%, skin diseases 4%, and "Other Illnesses" (which includes heart conditions, stress cases, noise-induced hearing loss, and other conditions) 15%.

Table D-1: Occupational Disease by Type, WCC, 2013-2014

Illness type	2013	2014		% Change
	Cases	Cases	% of total	
Musculoskeletal Disorders (MS)	3,232	3,028	51%	-6%
Infectious Diseases	1199	1287	22%	7%
Lung Disorders	429	520	9%	21%
Skin Disorders	259	230	4%	-11%
Other Illnesses	919	903	15%	-2%
Total	6,038	5,968	100%	-1%

Overall, 49% of reports were for women, but this varied by type of case (Figure D-1), with higher proportions than average for infectious disease (65% women) and about even for MSD, but lower for all other types of illness. Reported occupational illnesses occurred more in older workers, with over half involving workers between 40 and 59 years old (Table D-2).

Figure D-1: Percent of Women by Disease Type, WCC, 2014

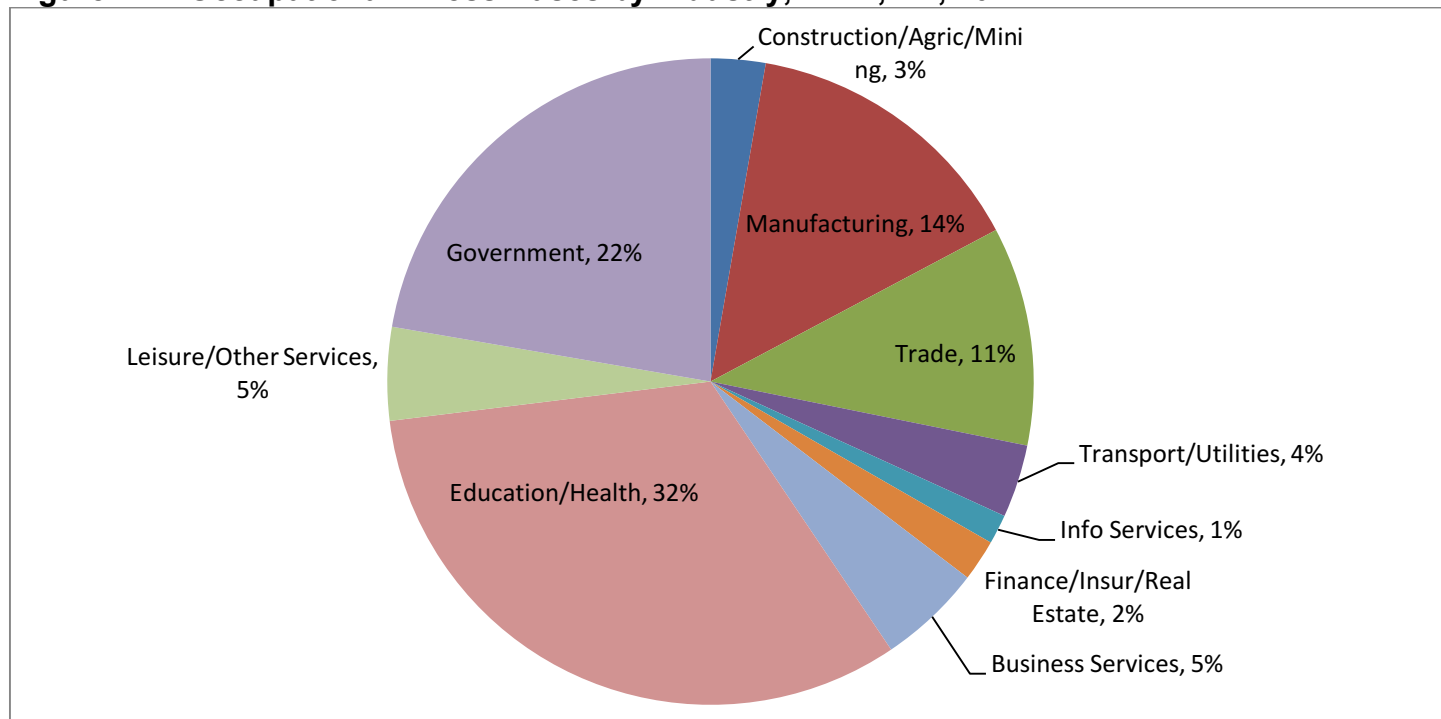


Numbers and rates of occupational illnesses by industry sector are presented by major North American Industry Classification System (NAICS) classifications in Figure D-3 and Table D-3. Ninety-eight percent (98%) of reported cases were able to be coded for major industry sector. The largest sectors in terms of overall numbers were Education/Health (32% of all cases), Government (22%), Manufacturing (14%), and Trade (11%). Additional government cases are counted in the Education and Health care sector, such as those for public schools and public hospitals.

Table D-2: Occupational Illness by Age Range, 2014

Age Range	Cases	Percent
Under 20	41	1%
20-29	922	15%
30-39	1057	18%
40-49	1471	25%
50-59	1678	28%
60-69	706	12%
70+	82	1%
Total	5957	100%

Figure D-2: Occupational Illness Cases by Industry, WCC, CT, 2014



The number of illnesses by industry may be compared to the size of employment in those industries to understand which industries are at higher risk for illness. Table D-3 shows these figures, excluding cases where the industry was unknown. Overall, the rate of illness is approximately 35.7 cases per 10,000 workers. The highest rate was for Education/Health care (59.7 cases per 10,000, or 67% higher than the overall rate), followed by Government (54.6, 53% higher), Manufacturing (50.8 or 42% higher), and Transportation and Utilities (44.3, 24% higher). The actual government rate is even higher because some government worker cases are classified under Education and Other sectors.

Table D-4 provides the detail of industry sector by type of condition. Patterns of illness by industry differed by the type of illness, although Government was relatively high in all categories, particularly when including those counted as part of the Education and Health sector. *Figures in Table D-4 are based on **numbers** of cases and not **rates**, so they are not adjusted for the employment size in the different sectors (rates are shown in Tables D-3 and D-5).*

Table D-3: Cases of Occupational Disease by Major Industry Sector, WCC, 2014

NAICS Sector	Cases	%	Employment	%	Rate
Construction/Agriculture/Mining	160	3%	61,592	4%	26.0
Manufacturing	846	14%	159,607	10%	53.0
Trade	639	11%	248,006	15%	25.8
Transport/Utilities	213	4%	48,094	3%	44.3
Info Services	86	1%	31,968	2%	26.9
Finance/Insurance/Real Estate	121	2%	126,872	8%	9.5
Business Services	303	5%	212,904	13%	14.2
Education/Health	1,897	32%	317,416	19%	59.8
Leisure/Other Services	272	5%	210,705	13%	12.9
Government	1,301	22%	235,827	14%	55.2
Unknown	130	--	556	--	
Total	5,968	100%	1,653,547	100%	36.1

Notes: Employment is adjusted for hours worked. Rows do not add up to total due to reports that could not be coded for industry. Rates are illnesses per 10,000 workers

*Government illness cases do not include some cases that are classified under other categories, such as those in public sector education and health services.

Infectious diseases were concentrated in Education/Health (67%) and Government (23%). **Lung diseases** were concentrated in Government (46%), Education/Health (26%), and Manufacturing (12%). **Musculoskeletal disorders** (MSD) were most prevalent in Education/Health (22%), Manufacturing (21%), Trade (17%), and Government (14%). **Skin disorders** were most common in Government (33%), Education/Health (28%), and Business Services (10%). **“Other” illnesses**, including heart and hypertension, stress, and hearing loss cases (see below) were most common in Government (32%), Education/Health (20%), and Manufacturing (16%).

Table D-4: Type of Disease by Industry Sector, WCC, 2014

	Other		Lung		Infectious		MSD		Skin		Total	
Construction/Agric/Mining	27	3%	11	2%	5	0%	110	4%	7	3%	160	3%
Manufacturing	143	16%	62	12%	8	1%	614	21%	19	9%	846	14%
Trade	82	9%	30	6%	20	2%	492	17%	15	7%	639	11%
Transport/Utilities	28	3%	3	1%	20	2%	160	5%	2	1%	213	4%
Information Services	12	1%	6	1%	2	0%	63	2%	3	1%	86	1%
Finance/Insurance/RE	21	2%	8	2%	3	0%	85	3%	4	2%	121	2%
Business Services	45	5%	13	3%	52	4%	170	6%	23	10%	303	5%
Education/Health	181	20%	135	26%	858	67%	661	22%	62	28%	1,897	32%
Leisure/Other Services	63	7%	9	2%	12	1%	176	6%	12	5%	272	5%
Government	284	32%	240	46%	296	23%	407	14%	74	33%	1,301	22%
Subtotal	886	100%	517	100%	1,276	100%	2,938	100%	221	100%	5,838	100%
Unknown	17		3		11		90		9		130	
Total	903		520		1,287		3,028		230		5,968	

Table D-5 shows those specific industry (3-digit NAICS code) sectors that reported 50 or more cases of occupational illness in 2013 or 2014. The highest rates for 2014 are listed first. “Other Local Government” had the highest rates of 195 per 10,000 workers, compared to the overall rate of 36 per 10,000 (this category excludes government workers listed under other categories such as fire, police, education and health; however, it is often difficult to determine the specific department). The next highest rates were Electric Power Generation (108 cases, 182 rate), “Other State Government” (240, 170), and Educational Services (622, 109). Although all

of these specific sectors had over 50 cases reported, 10 of them were at or below the average rate of 36 per 10,000 workers (primarily because they are sectors that employ relatively large numbers of workers).

Table D-5: Specific Industry Sectors with over 50 Cases of Occupational Disease, WCC, 2013-2014

Specific Industry Sector	NAICS	2014	Employ't	Rate	2013	Change
Other Local Government*	921	832	42,651	195.1	753	10%
Electric Power Generation	221	108	5,942	181.8	72	50%
Other State Government*	923	240	14,119	170.0	224	7%
Educational Services	611	622	56,936	109.2	680	-9%
Hospitals	622	550	59,221	92.9	406	35%
Transportation Equipment Manufacturing	336	363	40,146	90.4	345	5%
Police and fire	922	227	30,719	73.9	229	-1%
Computer and Electronic Product Manufacturing	334	64	12,545	51.0	111	-42%
Nursing and Residential Care Facilities	623	313	62,786	49.9	236	33%
Telecommunications	517	45	9,119	49.3	53	-15%
Health and personal care stores	446	57	13,154	43.3	51	12%
Merchant Wholesalers, Nondurable Goods	424	80	20,332	39.3	74	8%
Fabricated Metal Product Manufacturing	332	113	29,763	38.0	170	-34%
Ambulatory Health Care Services	621	314	87,008	36.1	306	3%
General Purpose Machinery Manufacturing	333	47	14,004	33.6	57	-18%
General Merchandise Stores	452	95	28,570	33.3	93	2%
Merchant Wholesalers, Durable Goods	423	90	28,878	31.2	122	-26%
Specialty Trade Contractors	238	112	39,024	28.7	116	-3%
Food and Beverage Stores	445	108	44,708	24.2	123	-12%
Administrative and Support Services	561	183	79,790	22.9	211	-13%
Social Assistance	624	98	51,465	19.0	87	13%
Professional, Scientific, and Technical Services	541	97	95,314	10.2	122	-20%
Food Services and Drinking Places	722	102	112,338	9.1	88	16%

*Government cases found in education, health, and police and fire are excluded from the Other Local and State Government categories. It is often difficult to determine which government classification to use since each town reports different categories (i.e. education may just be coded as general government by some towns).

Illnesses by Town/Municipality

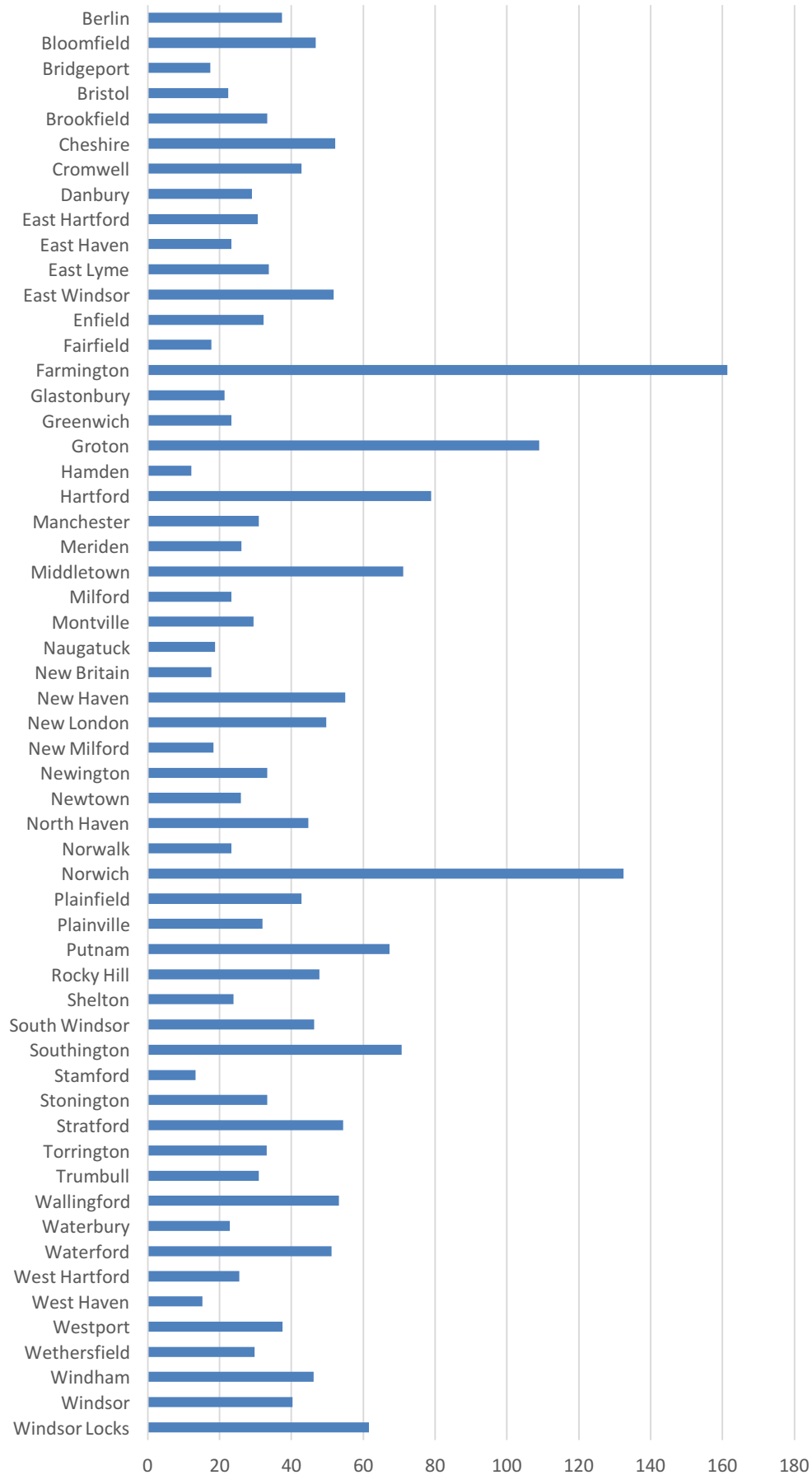
Occupational illnesses were coded by the town where the illness occurred (typically the town where the employer is located). Table D-6 and Figure D-3 shows the rates of illness per 10,000 employees per town (based on total employment by town of employment, provided by the CT Labor Department) for all towns and municipalities with at least 50 cases of occupational illness reported in 2013 or 2014; the table is alphabetical by town; a longer table for towns with at least 10 cases is located in the Appendix. The lower the rank, the higher the rate of illness. Rates of illness varied widely by municipality; often these appear to be related to large employers in high rate industries. The state median (average) for towns with at least 10 reports was 28 cases per 10,000 employees. The highest rate for towns with at least 50 cases was for Farmington at 161 cases per 10,000 employees, which was over 5 times as high as the median. That was followed by Norwich (132), Groton (119), Hartford (79), Middletown (71), Southington (71), New Haven (55), Stratford (55), Wallingford (53), Cheshire (52), and New London (50).

Table D-6: Illnesses by Town/Municipality, WCC, 2013-2014

Town	Workforce	# Cases 2013	# Cases 2014	Rate	Rank*	% Change
Farmington	13,207	216	213	161.28	1	-1%
Norwich	18,869	207	250	132.49	2	21%
Groton	17,435	206	208	119.30	3	1%
Hartford	47,895	278	379	79.13	4	36%
Middletown	24,459	177	174	71.14	5	-2%
Southington	22,660	64	160	70.61	6	150%
New Haven	58,871	334	326	55.38	7	-2%
Stratford	25,356	140	139	54.82	8	-1%
Wallingford	24,601	70	131	53.25	9	87%
Cheshire	14,564	64	76	52.18	10	19%
New London	11,066	46	55	49.70	11	20%
Rocky Hill	10,676	63	51	47.77	12	-19%
South Windsor	13,153	54	62	47.14	13	15%
Bloomfield	10,492	62	49	46.70	14	-21%
Windham	11,597	53	53	46.12	15	0%
North Haven	12,509	72	56	44.77	16	-22%
Windsor	15,404	73	62	40.25	17	-15%
Torrington	18,401	73	62	33.69	18	-15%
East Lyme	8,025	52	27	33.64	19	-48%
Newington	16,213	65	54	33.31	20	-17%
Enfield	21,404	72	69	32.24	21	-4%
Trumbull	17,108	90	54	31.56	22	-40%
Manchester	30,471	123	95	31.18	23	-23%
East Hartford	25,166	77	77	30.60	24	0%
Danbury	44,038	165	130	29.52	25	-21%
Meriden	29,612	89	77	26.00	26	-13%
Vernon	15,906	53	41	25.78	27	-23%
West Hartford	32,212	90	82	25.46	28	-9%
Shelton	20,580	66	49	23.81	29	-26%
Norwalk	47,113	91	112	23.77	30	23%
Milford	27,925	67	66	23.63	31	-1%
Greenwich	27,126	81	63	23.22	32	-22%
Waterbury	46,051	137	106	23.02	33	-23%
Bristol	30,367	78	68	22.39	34	-13%
Bridgeport	64,237	100	123	19.15	35	23%
Fairfield	27,175	52	49	18.03	36	-6%
New Britain	33,222	104	59	17.76	37	-43%
Stamford	64,440	81	87	13.50	38	7%

*Low ranks indicate higher rates of illness (i.e. the town ranked first has the highest rate of illness); Ranks are based on the towns with at least 50 cases of illness reported in either year. Median rate for the towns with at least 10 cases was 28 cases per 10,000 employees. Employment figures are based on the town of employment.

Figure D-3: Rate per 10,000 Employees, By Town



Musculoskeletal Disorders (MSD)

“Musculoskeletal disorders” is the currently-used term for conditions also known as cumulative trauma disorders or repetitive strain injuries. There were 3,028 MSD reported to Workers’ Compensation in 2014, an 6% decrease from 2013 (Table D-7). MSD accounted for just over half (51%) of the reported occupational diseases to Workers’ Compensation. MSD presented here do not include most cases for the lower back (since the descriptions of back conditions are typically not sufficient to be able to distinguish between acute and cumulative back injuries), nor do MSD include acute injury conditions from sudden events where they can be distinguished.

Strains and sprains (which does not include acute strains or sprains such as those from single events/accidents) was the most common category of MSD, with 73% of reports (Table D-7). Carpal Tunnel Syndrome (CTS), which is a very debilitating pinching of the median nerve at the wrist, accounted for 11% of total MSD reports. Other nerve-related problems (with descriptions of numbness or tingling) accounted for an additional 4% of cases. Tendon-related problems included tendonitis and tenosynovitis, epicondylitis (“tennis elbow” or “golfer’s elbow”), trigger finger, and rotator cuff, combining for 4% of cases. A large number of cases did not have a specific description other than “inflammation” or swelling, “pain”, or no specific description.

Table D-7: Musculoskeletal Disorders (MSD) by Type, WCC, 2013-2014

MSD Type	2013	2014		Change
	Cases	Cases	%	
Sprain/strain	2,042	2,203	73%	8%
Carpal Tunnel Syndrome	389	333	11%	-14%
Numbness	159	115	4%	-28%
Tendonitis/tenosynovitis	47	62	2%	32%
Trigger finger	32	25	1%	-22%
Epicondylitis	30	22	1%	-27%
Rotator cuff	19	21	1%	11%
Ganglion cyst	13	14	0%	8%
Arthritis/bursitis	12	9	0%	-25%
Other/Unknown	489	224	7%	-54%
Total	3,232	3,028	100%	-6%

Table D-8: Musculoskeletal Disorders by Part of Body, WCC, 2014

Part of body	Cases	Percent
Lower Arm, Wrist, Hand	1,298	43%
Upper Arm, Shoulder, Upper Extremity	646	22%
Legs, Knees, and Feet	410	14%
Neck, Back, Torso	241	8%
Elbow	215	7%
Multiple	194	6%
Other/Unknown	24	--
Total	3,028	100%

Approximately 2/3 of the cases of MSD were in the upper limbs of the body such as hands, arms and shoulders (note that lower back cases were excluded from these figures). Almost half (43%) of MSD cases were for the hand, wrist, and lower arm (Table D-8). Other affected parts of the body included 7% elbow, 22% for shoulder, neck, upper back and “upper extremity”, and 14% for the lower extremity (legs, knees and feet).

Causes of conditions were often incomplete, overlapping, and not consistently coded nor described. Approximately 80% of MSD cases had enough description to show some cause. Of the MSD that could be classified, the most frequently mentioned cause was the broad category of “repetitive” (20% of cases), although this was frequently just a general description often used to describe any chronic musculoskeletal problem (see Table D-9). This cause was followed by lifting (17%), pushing or pulling (13%), tool use (including references specifically to pneumatic tools or vibration exposure) (12%), and computing and clerical tasks (9%).

Table D-9: Reported Causes of Musculoskeletal Disorders (MSD), WCC, 2014

Cause of MSD	Reports	%
Repetitive	481	20%
Lifting	409	17%
Push/Pull	318	13%
Tools/vibration	298	12%
Computer/clerical	209	9%
Reaching	144	6%
Bending/kneeling/crawling	97	4%
Climbing	57	2%
Grasping/gripping/squeezing	53	2%
Walking/running/moving	50	2%
Assembly	47	2%
Shoveling/sweeping/mopping	42	2%
Driving	40	2%
Sitting/standing	39	2%
Twisting	37	2%
Patient care	35	1%
Machine	26	1%
Selecting/sorting/inspecting/packing	22	1%
Cleaning	20	1%
Scanning/cashier	7	0%
Sub-Total	2,431	100%
Unknown/other	597	--
Total	3,028	--

Infectious Diseases

There were 1,285 reports of infectious diseases or exposures in the database for 2014 (Table D-10), a 7% increase from the previous year. Infectious disease reports include both actual disease and exposure to infectious agents. There were 906 reports of exposure to bloodborne pathogens (including reports of exposure to HIV/AIDS and Hepatitis C), accounting for 71% of all infectious disease reports. These included 388 needlesticks or cuts from sharps or surgical instruments that may have resulted in exposure to a patient’s blood, 307 reports of exposures to human bites, and 211 reports of skin exposure to blood.

There were additional reports of exposure to “spit” or “sputum” that are not reported here, since risks tend to be very low from such exposures. Diseases that can be contracted through blood and body fluid exposures include hepatitis B, C and HIV. Human bites are considered to be relatively low risk exposures in terms of bloodborne disease transmission. Exposure to blood and fluids are somewhat higher risk (especially if the worker has open wounds or sores, with sharps (i.e. scalpels) and needlesticks considered the highest risk (especially if they are deep cuts or injections). Altercations or arrests with prisoners or clients (including special needs students) accounted for the vast majority of human bites as well as some of the other bloodborne exposures. The data does not have consistent information on whether the source patient is known to be infected with a bloodborne illness such as HIV or hepatitis, so many of these incidents will have no risk of transmission. However, preventive efforts focus on universal precautions, so it is important to reduce these incidents regardless of whether patients are known to be infected.

Table D-10: Infectious Diseases and Exposures by Type, WCC, 2013-2014

Illness	2013 Cases	%	2014 Cases	%	Change
Bloodborne: Sharp and needlestick exposures	282	24%	388	30%	38%
Bloodborne: Human bite	312	26%	307	24%	-2%
Bloodborne: Blood/body fluids	208	17%	211	16%	1%
TB/ppd conversion/exposure	149	12%	117	9%	-21%
Lyme Disease/Tick bite	66	6%	79	6%	20%
Scabies/lice	55	5%	70	5%	27%
MRSA/staph/strep	23	2%	33	3%	43%
Meningitis exposure	30	3%	13	1%	-57%
Chicken pox, measles, whooping cough	2	0%	8	1%	300%
Rabies	24	2%	5	0%	-79%
Other infectious	48	4%	54	4%	13%
Total	1,199	100%	1,285	100%	7%

There were 117 cases of tuberculosis infection, usually determined by PPD conversion (which is a skin test based on immune response) or based on exposure to clients with TB. This was a decrease of 21% from 2013, when there was one particularly large outbreak. In addition, there were 79 reports of tick bites, rashes from tick bites and/or Lyme disease attributed to occupational exposures, 70 cases of scabies or lice exposures/illnesses, 33 reports of exposure or cases of MRSA (Methicillin-resistant Staphylococcus aureus, or staph infection that responds poorly to antibiotics) or other staph or strep infection, 13 cases of meningitis exposure, 8 cases of chicken pox, measles or whooping cough, and 5 cases of exposure to rabies.

Court decisions have broadened the definition of compensable disease under Workers’ Compensation to include exposures, particularly where exposure requires medical treatment such as prophylactic treatments such as for tuberculosis (TB) and AIDS (HIV) exposures. It is often difficult to determine whether the first report of injury was actual disease or only exposure (for example, actual Lyme disease or only a report of a tick bite).

Respiratory Illness and Poisonings

Chronic lung disease such as asbestos-related, asthma, and lung cancer are addressed in the following section. In addition to these chronic conditions, there were 362 cases of respiratory illnesses (mostly nonspecific respiratory illness from relatively acute chemical or biological exposures) for 2014, a 25% increase, and there were 40 cases of poisonings from carbon monoxide, other gases, mercury, or lead (Table D-11), an overall increase of 21% from the previous year.

General indoor air quality (IAQ) or mold were the most common cause of respiratory illness, (33% of cases) followed by chemical exposures (25%), smoke or fire (17%), and dust or fumes (17%). There were 36 cases of poisoning from exposure to carbon monoxide or other gases and fumes, but no Workers' Compensation reports of lead or mercury poisoning or exposure in 2014.

Specific chemical exposures included paint (4), glacial acetic acid (4), pesticides/insecticides (4, including lice sprays, Raid), bleach (3), dishwasher detergent (3), solvents including benzene and toluene (2), carpet cleaner (2), floor cleaner (2), floor waxing (2), marker fumes (2), perfume (2), coolant, oven cleaner, spot cleaner, sanitizer, citrus cleaner, Lysol, sterilizing chemicals, rust remover, fire extinguisher discharge, ammonium hydroxide, caustic, methyl benzoate, calcium pellets, molding spray, arsenic, air freshener, formaldehyde, photo chemicals, acid, copier toner, and brake cleaner.

Table D-11: Respiratory Conditions and Poisonings by Cause, WCC, 2013-2014

Cause	2013		2014		
Respiratory	Cases	%	Cases	%	Change
IAQ/mold/odor	49	17%	118	33%	141%
Chemical Exposure	105	36%	92	25%	-12%
Dust/fumes	48	17%	61	17%	27%
Smoke, Fire	56	19%	61	17%	9%
Other Respiratory	32	11%	30	8%	-6%
Respiratory subtotal	290	100%	362	100%	25%
Poisoning					
Carbon monoxide/gas	20	61%	36	90%	80%
Mercury	1	3%	0	0%	
Lead	11	33%	0	0%	
Other Poisoning	1	3%	4	10%	
Poisoning Subtotal	33	100%	40	100%	21%
Total Respiratory and Poisoning	323	100%	402	100%	24%

Chronic Lung Conditions

There were 117 cases of chronic lung conditions in 2014, a 10% increase from the previous year (Table D-12). These included asbestos-related diseases and exposures, occupational asthma, and other chronic lung diseases. Acute respiratory illnesses are classified under respiratory conditions and poisonings (above).

Asbestos

There were 39 reports of asbestos-related disease or exposures in 2014. The descriptions of the cases often make it difficult to determine whether the cases are actual disease or current exposure to asbestos. (The notations may be either describing historic exposures that contributed to current disease, or current exposures that raise the risk of future disease.) Cancers, including those caused by asbestos, are noted below (under "other illnesses").

Table D-12: Chronic Lung Diseases by Type, WCC, 2013-14

Illness	2013	2014	Change
Asbestos-related	25	39	56%
Asthma/bronchitis	31	20	-35%
Allergies	23	25	9%
Other chronic lung	27	33	22%
Total	106	117	10%

Asbestos exposure is known to increase the risk of lung disease and cancer. If disease occurs as a result, it often appears between 10-40 years after exposure. Asbestos disease may be under-reported by traditional surveillance sources such as Workers' Compensation. The main industries for asbestos conditions were transportation equipment manufacturing (12 cases) and government (including fire departments and schools), 18 cases.

Other Chronic Lung Conditions

There were 20 occupational asthma cases reported in 2014 (a 35% decrease over the prior year), 25 lung-related allergies, and 33 other chronic lung conditions. The most common causes mentioned for asthma and other lung conditions were dust/fumes (12 cases), chemicals and cleaners (11 cases), indoor air quality or mold (4), and construction/renovations (4).

Skin Conditions

There were 230 skin conditions in the database in 2014 (Table D-13), a decrease of 11% over the previous year. There were 86 cases of contact dermatitis from poison ivy or other plants (37% of all skin cases). There were 45 cases of skin conditions caused by chemicals, as well 16 cases attributed specifically to cleaning chemicals. There were 14 cases caused by allergic reactions to clothing, gloves, or latex, and 18 other allergic skin conditions.

In addition to cleaning chemicals and latex, specific substances associated with skin conditions included coolants (9 cases), hand sanitizer (6), glue (3), animals, "Mr. Muscle", "cherry scatter deodorizer", antifreeze, EHC fluid, fungicide, Lidocaine, "Steri-fab", and "Blue Skies 2".

Table D-13: Skin Diseases by Cause, WCC, 2013-2014

Category	2013	2014	%	Change
Poison Ivy/plants	83	86	37%	4%
Chemical	53	45	20%	-15%
Allergic	11	18	8%	64%
Soap/Cleaning	16	16	7%	0%
Gloves/Latex/clothing	12	14	6%	17%
Rash/Other/Unknown	84	51	22%	-39%
Total	259	230	100%	-11%

Stress and Heart Conditions

Heart and Hypertension

There were 307 cases involving heart conditions, stroke, chest pain, hypertension, or stress in the database for 2014 (Table D-14), a 2% decrease from the previous year. Approximately 147 cases mentioned heart attacks, myocardial infarctions or acute heart events, 15 reported strokes or blood clots, and 17 mentioned angina, often associated with emergency care at a hospital. There were 26 cases that described the condition as hypertension

or “heart and hypertension” (the usual legal term for heart or hypertension cases that are covered for police and fire fighters).

Though not generally well described, causes of the heart cases included multiple cases attributed to stress (16 cases), exertion (including lifting and shoveling, 16 cases), driving (8), walking/running (2), and heat (2). Approximately half (55%) of the heart cases involved police or firefighters or other municipal employees who are frequently covered under heart and hypertension laws that consider those conditions to be work-related for Workers’ Compensation purposes.

Table D-14: Heart and Hypertension Conditions by Type, WCC, 2013-2014

Category	2013	2014	%	Change
Heart attack/severe symptoms	135	147	48%	9%
Hypertension	17	26	8%	53%
Angina	33	17	6%	-48%
Stroke/clots	9	15	5%	67%
Stress/anxiety/depression	118	102	33%	-14%
Total	312	307	100%	-2%

Mental Stress

There were a total of 102 stress-related claims in the database in 2014, a 14% decrease over the previous year. Over half of the cases where cause was noted referred to violence or post-traumatic stress disorders after violence (Table D-15). Cases included an insurance adjuster with a fire loss claim that was highly distressing, seeing a large amount of blood, a labor relations meeting, being threatened by another employee, altercations and assaults with students (5 cases), involved in auto accidents (4 cases), long work hours (3 cases), witnessing a hold up with a gun pointed at the worker (3 cases), working in close proximity to a shooting (2 cases), sexual harassment or assault (2 cases), verbal confrontations between employees (2 cases), being bullied by supervisor (2 cases), meetings on poor job performance, hostile work environment, witnessing supervisor having a heart attack, a pregnant employee held up at gunpoint, verbal threats from a client, encountering a dead body at a fire scene, a high speed chase with shooting, and a patient who died despite CPR.

Stress-related claims not associated with a physical injury are typically not compensable under the Workers’ Compensation statute, so it is likely that there are many unreported cases. It should be noted that this report is based on First Reports of Injury for compensation, and the number of cases that were ultimately awarded compensation was not determined.

Table D-15: Stress Conditions by Cause, WCC, 2014

Sources of Stress Conditions	2014	%
Violence/robbery/trauma	29	28%
Harassment/hostile environment	13	13%
Supervisor/co-worker	10	10%
Motor vehicle accident	4	4%
Excessive work demands	4	4%
Unknown/other	42	41%
Total	102	100%

Other Occupational Diseases

Hearing Loss

There were 138 reports of hearing loss in 2014 (Table D-16), 5% more than the previous year. Of these cases, 27 appeared to be caused by acute (single incident) noises or injuries such as sudden machine or tool sounds such as explosions, a dropped pallet nearby, very close gunshots (9 cases), a student screaming in ear, a screaming customer on phone call, vehicle air horn, truck or mower backfire (2 cases), burglar alarm, and a truck tire blow out. The rest (111 cases) appeared due to long-term exposure to noise, or were noted as being found on routine audiograms. Most cases were from manufacturing (78 cases), in particular transportation equipment manufacturing (60 cases), and schools/police/firefighting/government (32 cases).

Other Disease Conditions

There were 58 reports of temperature-related problems from heat or cold, a 28% decrease from the previous year. There were 84 reports of workers becoming dizzy, fainting, or similar conditions such as seizures, a 21% decrease. Some of these are likely from pre-existing conditions that occurred while at work (such as epilepsy or diabetes) and some of which were accompanied by an injury from a fall.

There were 87 cases of allergic reactions reported in addition to those noted above under respiratory and skin conditions, a 78% increase. There were 28 cases of cancer reported, which included asbestos-related cancers. There were 109 “other” conditions that were difficult to classify, often due to incomplete information.

Table D-16: Other Occupational Illnesses, WCC, 2013-2014

Type of illness	2013	2014	%	Change
Hearing loss	131	138	23%	5%
Chemicals in eye	74	92	15%	24%
Allergic	49	87	15%	78%
Dizziness/passing out/seizure	106	84	14%	-21%
Cold/heat related conditions	80	58	10%	-28%
Cancer	26	28	5%	8%
Other conditions	141	109	18%	-23%
Total	607	596	100%	-2%

E. Occupational Illnesses and Injury Surveillance System (OIISS)

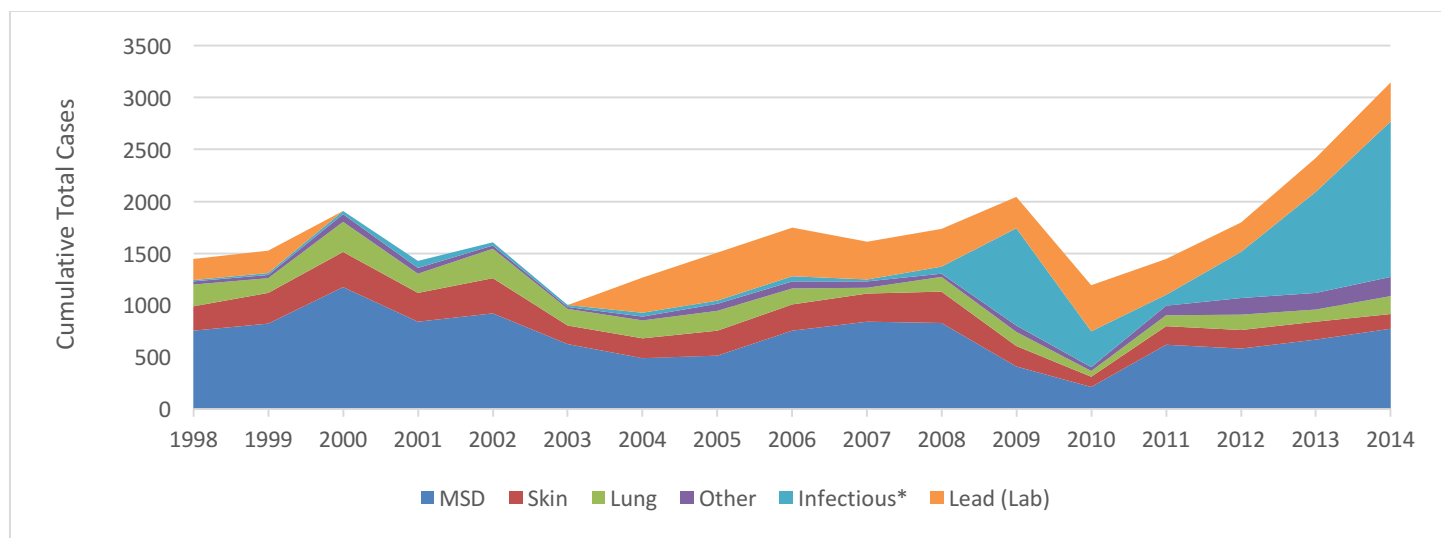
Physicians are required to report known and suspected occupational disease to the Occupational Illnesses and Injury Surveillance System (OIISS) that is maintained by the Department of Public Health. Although all physicians are required to report, most reports are received from Connecticut's occupational health clinics and industrial medicine programs. Information on blood lead level laboratory reports are taken from the Connecticut Adult Blood Lead Epidemiology and Surveillance (ABLES) program. Data for lead and infectious diseases were incomplete for certain years prior to 2012 (as noted for the table and figure below), so comparisons for total disease with earlier years should be made cautiously.

Table E-1: Occupational Disease Case Reports by Type, OIISS and ABLES, 2005-2014

Category	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	% change 2013-14
Infectious*	30	50	20	66	939	347	103	443	973	1500	54%
MSD	511	751	838	827	411	208	616	580	666	774	16%
Lung	191	154	59	142	140	56	101	146	120	171	43%
Skin	241	256	273	302	193	102	183	180	174	140	-20%
Other	70	69	58	31	59	33	96	164	159	184	16%
Sub-total	1,043	1,280	1,248	1,368	1,742	746	1,099	1,513	2,092	2,769	32%
Lead (Lab)	463	465	363	364	304	443	345	283	327	379	16%
Total	1,506	1,745	1,611	1,732	2,046	1,189	1,444	1,796	2,419	3,148	30%

*Infectious did not include most bloodborne pathogen exposures up to 2008, and again in 2011

Figure E-1: Occupational Disease Case Reports by Type, OIISS and ABLES, 1998-2014



*Infectious category did not include most bloodborne pathogen exposures up to 2008, and again in 2011.

** Lead values for 1998-99 did not include cases in the blood lead level range of 10-19 micrograms per deciliter (ug/dl).

There were 2,769 occupational illness reports received from physicians for 2014 (Table E-1). Physician reports rose sharply (32%) in 2014, driven by a large increase in Infectious Disease, particularly due to tuberculosis/Tb exposures in one hospital. Infectious disease (such as bloodborne diseases and exposure) was the largest category of reports, accounting for 54% of the reports, followed by musculoskeletal conditions (MSD) such as tendonitis and carpal tunnel syndrome (28%). Skin disorders (6% of reports), lung (including respiratory

conditions, asthma, and other lung diseases; 5%), and “other” conditions (including heart disease, stress, noise-induced hearing loss; 7%) were all substantially lower. There were 379 reports of blood lead levels in adults of 10 micrograms per deciliter (ug/dl) or more, giving a total of 3,184 occupational illnesses reported by physicians or laboratories in 2014.

In 2014, 107 physicians from 12 clinics (at 17 locations) reported at least one case into the OIIS. Eight clinic networks reported 100 or more cases, and contributed 96% of the cases. Thirty-one of the physicians reported 20 or more cases, and accounted for 87% of the reports; six reported 100 or more cases, and accounted for 39% of reports.

Many workers with occupationally-related illness seek care from their primary care providers. Although it is a state law that known and suspected occupational diseases diagnosed by any physician in the state must be reported to CT Departments of Labor and Public Health (CGS § 31-40a), the majority of reporters are from the academic occupational health clinics and auxiliary occupational health clinics. Therefore, these reports should be viewed as a small portion of physician-diagnosed occupational diseases in Connecticut.

Eighty-six percent (86%) of the cases were classed as “high certainty” for being an occupationally-related disease, 10% were “moderate certainty,” and 4% “low certainty,” where certainty was reported. There was a fairly low amount of reporting on whether exposure was continuing or if others are likely to be exposed, but 13% of those reported that the exposure that caused the illness was continuing, and 12% reported others were likely to be exposed to the same hazard.

Of the 1,488 reports where race was known, 247 (17%) were identified as black, and 185 (7%) of 2,663 (where ethnicity was known) were identified as Hispanic.

Figure E-2: Occupational Disease by Age Range, OIIS, 2014

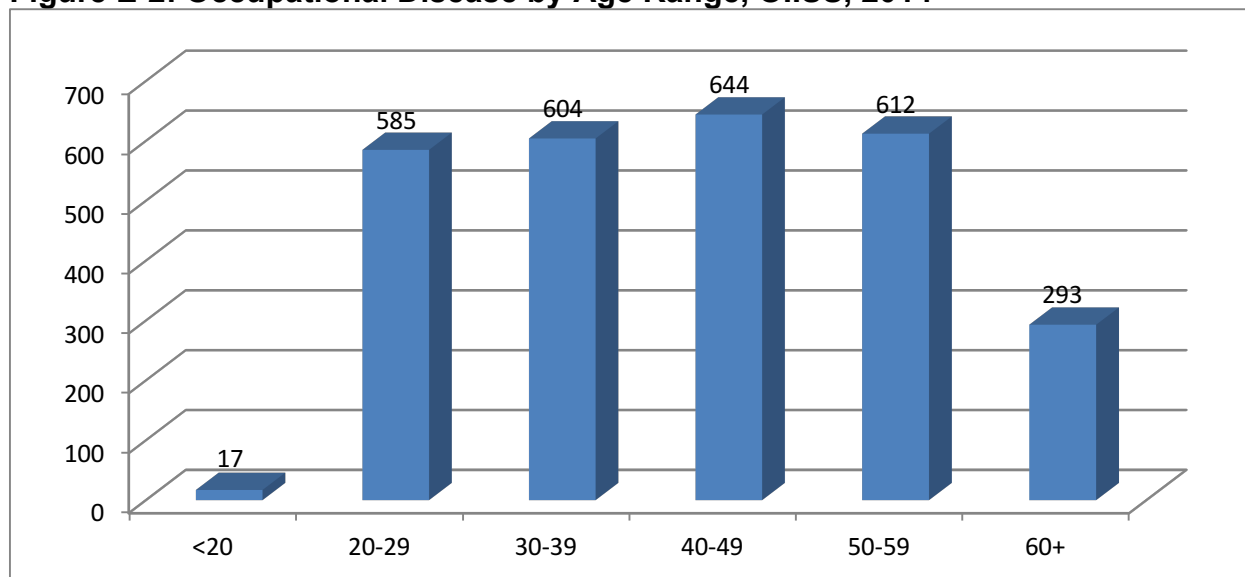
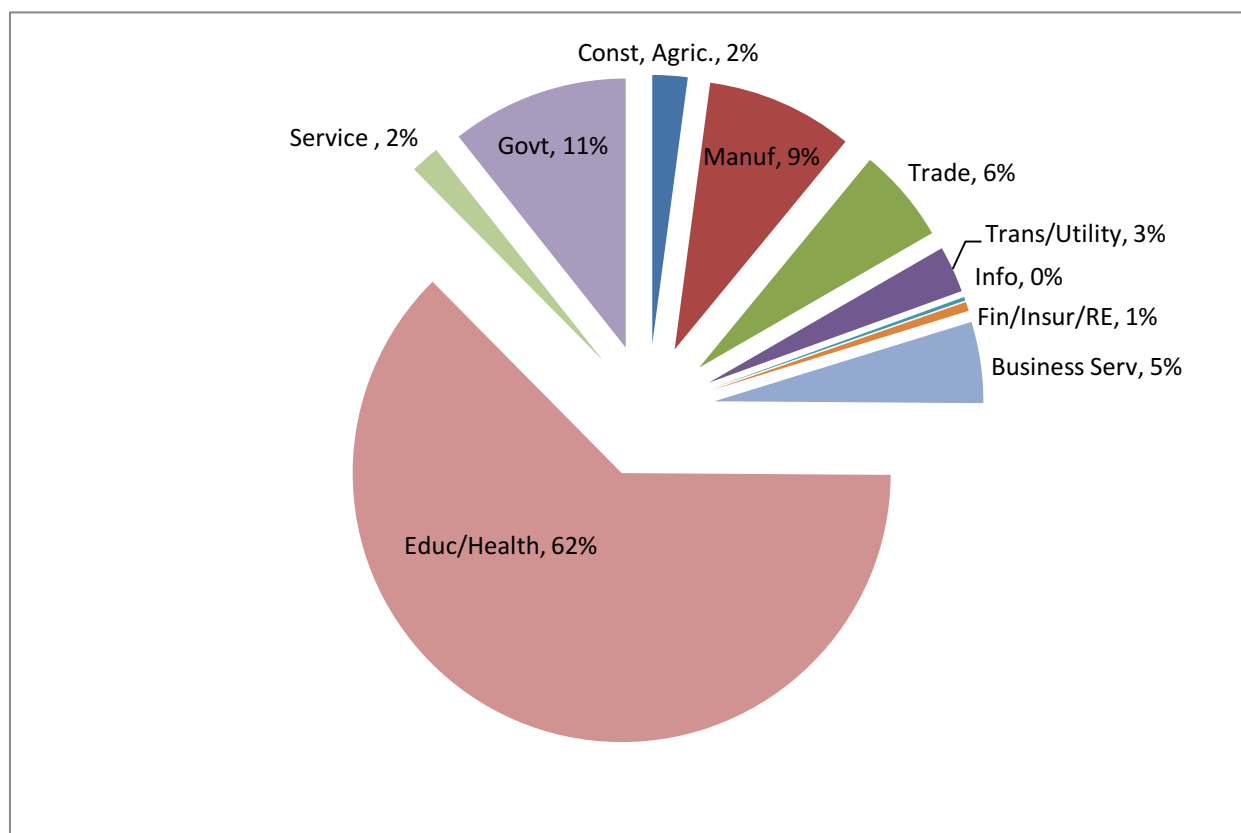


Figure E-2 shows the age distribution of reported cases (where data was available). There were similar proportions (between 21%-23%) for workers in their 20’s, 30’s, 40’s and 50’s. Only 11% were 60 or older, and only 17 cases (1%) were reported in workers less than 20 years of age.

The Education and Health sector had the most cases (62%), followed by Government (11%; the Education and Health sector also includes some government workers), Manufacturing (9%), Trade (6%) and Business Services (5%); see Figure E-3 and Table E-2).

Figure E-3: Occupational Disease by Industry Sector, OIISS, 2014



Industry distribution was somewhat different by condition (Table E-2), though Education and Health led all the categories of illness. Infectious disease was highly concentrated in Education and Health (87%). MSD were primarily from Education and Health (29%), Manufacturing (20%), Trade (15%), and Government (14%), Dermatitis (skin disorders) was primarily from Education and Health (29%), Manufacturing (21%), Government (18%), and Business Services (11%). Respiratory cases (“Lung”) were primarily from Education and Health (43%), Government (18%), Manufacturing (12%), and Trade (12%).

Table E-2: Type of Illness by Industry Sector (NAICS*), OIISS, 2014

Industry	All	Infectious	Lung	MSD	Other	Skin
Construction/ Agriculture	58	5	20	21	5	7
Manufacturing	243	4	20	156	33	30
Trade	157	11	5	115	19	7
Transport/Utilities	77	2	9	53	5	8
Information Services	6	1		4		1
Finance/Insurance/Real Estate	15		2	8	4	1
Business Service	134	57	5	49	8	15
Education/Health	1,717	1,300	73	223	81	40
Other Services	48	10	5	27	1	5
Government	293	105	31	108	24	25
Unknown	21	5	1	10	4	1
Total	2,769	1,500	171	774	184	140

*The North American Industry Classification System

Musculoskeletal Disorders (MSD)

There were a total of 774 reports of musculoskeletal disorders (MSD) in 2014, an increase of 16% from the previous year (Table E-3). This table excludes lower back diagnoses unless specifically defined as caused by cumulative strain, and does not include MSD caused by acute incidents such as falls or individual lifts. The most common specific diagnoses for musculoskeletal disorders were strain/sprain (19%), epicondylitis (tennis elbow) with 17% of the cases, tenosynovitis (17%), and carpal tunnel syndrome (11%). The largest number of MSD was from Education and Health (223), followed by Manufacturing (156), Trade (115) and Government (108; public education is included under Education and Health) (Figure E-4).

Table E-3: Musculoskeletal Disorders (MSD) by Type, OIIS, 2013-2014

Illness	2013	2014	Percent	Change
Strain/Sprain	88	148	19%	68%
Epicondylitis	111	133	17%	20%
Tenosynovitis	108	128	17%	19%
Carpal Tunnel Syndrome (CTS)	79	82	11%	4%
Tendonitis	47	47	6%	0%
Bursitis/Arthritis	29	42	5%	45%
Other Neuropathy (nerve disorder)	46	37	5%	-20%
Rotator Cuff	32	26	3%	-19%
Trigger Finger	20	23	3%	15%
Ganglion	22	19	2%	-14%
Plantar fasciitis	7	12	2%	71%
DeQuervains	2	0	0%	-100%
Other MSD	75	77	10%	3%
Total	666	774	100%	16%

Musculoskeletal disorders (also referred to as cumulative trauma disorders or repetitive strain injuries) include tendon-related conditions, nerve problems, circulatory, as well as combined conditions.

Tendon Disorders

- Tendonitis: swelling of the tendons
- Epicondylitis: tendon irritation in the elbow area, including “golfer’s elbow” and “tennis elbow”
- Rotator Cuff Syndrome: tendonitis in the shoulder area
- Tenosynovitis: inflammation of the tendon sheaths, lubricated covers that surround the tendons, particularly in the hand
- DeQuervain’s Syndrome: tendon sheath disorder of side of wrist and base of thumb
- Trigger Finger: a bump on the tendon that catches on the tendon sheath that makes the finger or thumb difficult to move
- Ganglion Cysts: swelling of the tendon sheaths from excess lubricating fluid
- Bursitis: inflammation of the fluid-filled sacs around ligaments and tendons

Nerve Disorders

- Carpal Tunnel Syndrome: pinching of the median nerve in the wrist, usually by swollen tendons that pass through the carpal tunnel (the median nerve can also be pinched in the elbow, shoulder, or neck areas)

Circulatory/Combined/Other

- Thoracic Outlet Syndrome: pinching of the nerves and blood vessels in the neck/ shoulder area

Figure E-4: Musculoskeletal Disorders by Industry Sector, OIIS, 2014

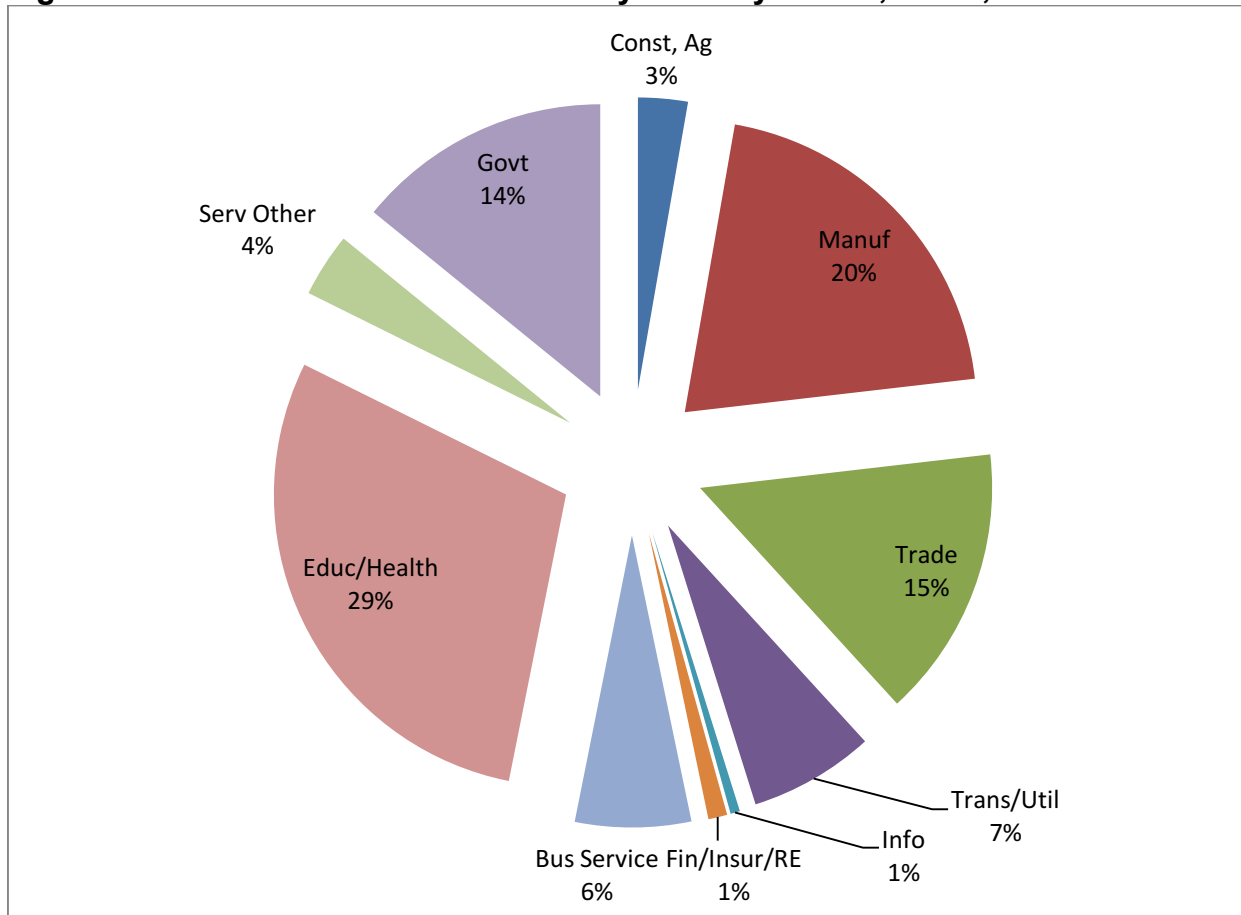


Table E-4: Common causes of MSD, OIIS, 2014

Cause	Cases	Cause	Cases
Lifting	47	Patient-related	6
Repetitive	22	Gripping/grasping	6
Computer/clerical	20	Climbing	6
Push/pull	18	Standing/walking	6
Tools & Vibration	16	Machine	4
Kneeling	7	Other	18

Causes for MSD are difficult to classify since they are frequently described differently by the various people recording the case, and most case reports do not describe cause. The most common specific cause noted for MSD (Table E-4) was lifting (47 cases), followed by computer use and data entry (20), pushing or pulling (18 cases), and tools and vibration (16 cases). An additional 22 cases were attributed to the general description of “repetitive”, and 18 cases had varied specific causes.

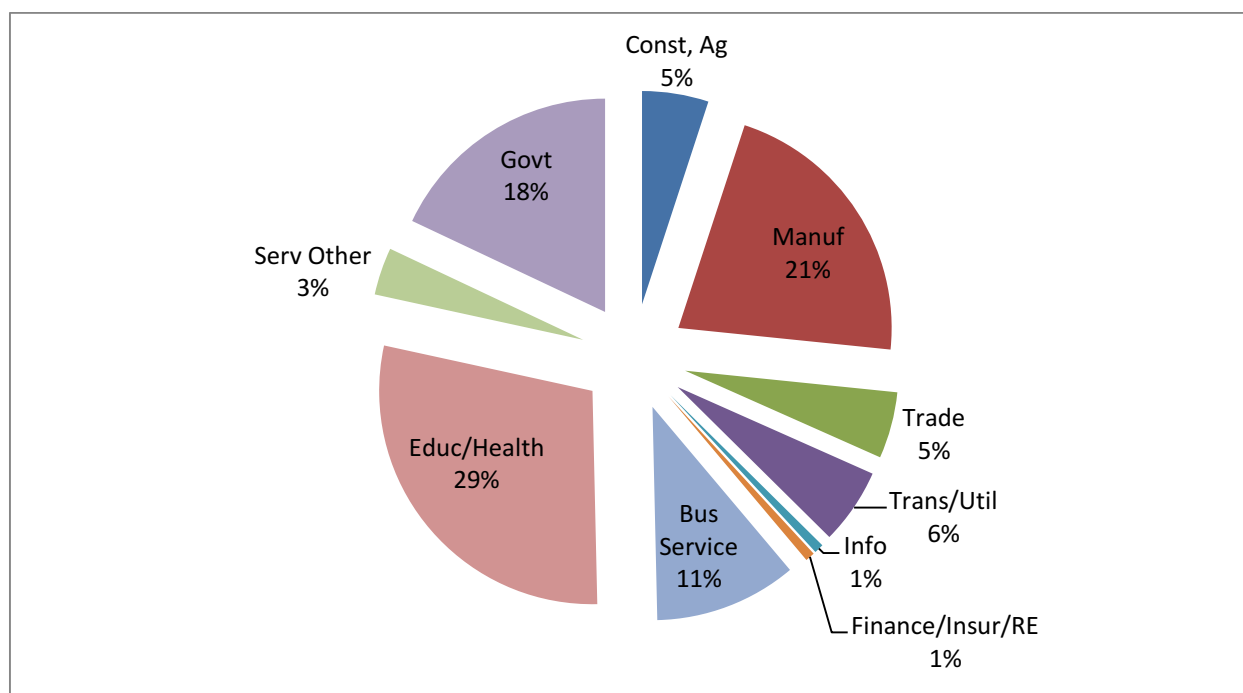
Skin Conditions

There were 140 reports of skin disorders in 2014 (Table E-5), a 20% decrease from the previous year. The largest single cause was poison ivy or other plant exposures (41% of all cases). Other causes included chemicals (16 cases) and latex or other types of gloves or clothing (5 cases).

Table E-5: Skin Conditions by Type, OIIS, 2013-2014

Illness	2013	2014	Percent	Change
Poison ivy & other plants	70	57	41%	-19%
Dermatitis	89	71	51%	-20%
Other skin conditions	15	12	9%	-20%
Total	174	140	100%	-20%

Skin conditions (Figure E-5) occurred most commonly in Education and Health (29%), Manufacturing (21%), State and Local Government (18%), Business Services (11%), Transportation and Utilities (6%), and Construction/Agriculture (5%).

Figure E-5: Skin Conditions by Industry Sector, OIIS, 2014

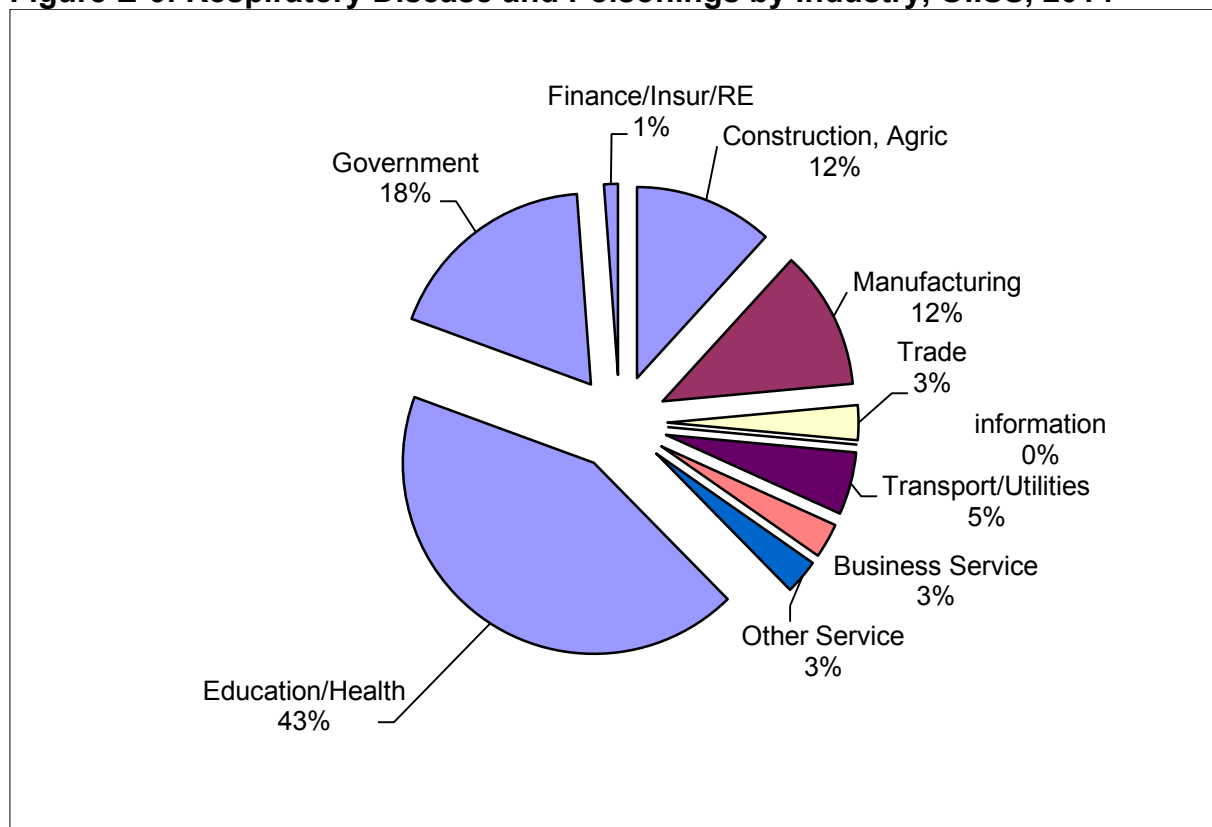
Lung/Respiratory Diseases and Poisonings

There were 171 cases of respiratory disease and poisonings reported by physicians in 2014 (Table E-6), an increase of 43% from the previous year. Nonspecific respiratory illnesses were the most common type of condition, with 56% of reports, followed by asbestos exposure or disease (18%), and asthma or reactive airways dysfunction syndrome (RADS) with 14%. In addition to asbestos (some of the asbestos cases appeared to be reports of exposures rather than asbestos-related disease) noted in Table E-6, exposures associated with respiratory conditions included fumes (including gas or carbon monoxide) with 33 cases, smoke (16 cases), chemicals (including cleaning chemicals, fire extinguishers, oil, and “air fresheners”; 10 cases), exertion (6 cases), mold or indoor air quality (6 cases), and dust (3 cases).

Table E-6: Respiratory Diseases and Poisoning by Type, OIIS, 2013-2014

Illness	2013	2014	Percent	Change
Respiratory	62	96	56%	55%
Asbestos exposure/disease	7	30	18%	329%
Asthma/RADS	15	24	14%	60%
Rhinitis		14	8%	
Poisoning	17	2	1%	-88%
Other Lung	19	5	3%	-74%
Total	120	171	100%	43%

Respiratory disease and poisoning cases mainly occurred in Education and Health (43% of cases), Government (18%), Manufacturing (12%), and Construction/Agriculture, (12%); (Figure E-6).

Figure E-6: Respiratory Disease and Poisonings by Industry, OIIS, 2014

Lead Poisoning (Laboratory Reports)

Connecticut requires laboratories to report all blood lead tests of 10 micrograms per deciliter (ug/dl) of whole blood or greater to the Connecticut Department of Public Health (CGS § 19a-110). These cases are classified into childhood (less than 16 years of age) and adult cases (only the latter are reported here), with the majority of adult cases being attributed to an individual's occupation (although some cases occur in individuals engaged in hobbies such as home improvement or target shooting). The numbers are based on the highest level measured for each individual during the calendar year; they do not include multiple tests on the same individual. OSHA medical removal protections apply at the level of 50 ug/dl of whole blood or above (40 ug/dl to return to work). Lead can have neurological and other negative effects on health at much lower levels of exposure.

The total number of lead poisoning reports in 2014 (379 cases) increased 16% from the previous year. The lowest category (10-24 ug/dl) of recorded elevated lead levels accounted for 83% of all cases (Table E-7).

There was an increase in all categories of lead levels. Almost all of the reported lead poisoning cases (92% of cases where gender was known) occurred in men; there were only 30 reports for women. Thirty percent (30%) were under 40 years old and 20% were age 60 or older.

Table E-7: Lead Cases by Level of Blood Lead, CT ABLES, 2013-2014

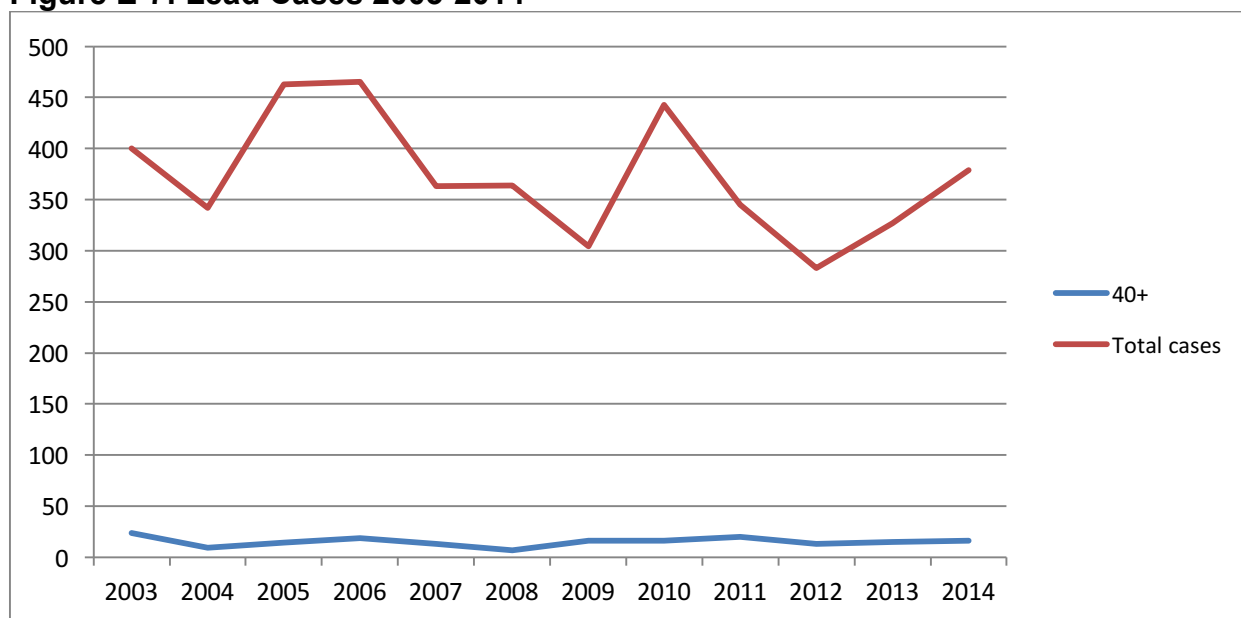
Blood lead level*	2013	2014	Percent	Change
10-24	267	316	83%	18%
25-39	45	47	12%	4%
40-49	9	11	3%	22%
50-59	3	4	1%	33%
>=60	3	1	0%	-67%
Total	327	379	100%	16%

Source: Connecticut Adult Blood Lead Epidemiology and Surveillance (ABLES program)

* micrograms per deciliter (ug/dl) of whole blood.

Overall, lead cases have fluctuated over the previous 12 years, from 400 in 2003 to 379 in 2014, with a high of 465 cases in 2006 and a low of 283 cases in 2012. Cases at or above the OSHA level of 40 ug/dl have stayed relatively constant at 15 to 20 cases since 2004 (Figure E-7).

Figure E-7: Lead Cases 2003-2014



Infectious and Other Diseases

Bloodborne pathogen exposures (to needlesticks, blood, body fluids or human bites) or diseases (such as HIV or Hepatitis) were the most common infectious diseases reported, with 1,000 reports in 2014, an 18% increase over 2013, which in turn was a 140% increase from 2012. Bloodborne exposures are of most concern when there is a needlestick or other sharp injury, particularly if there is an injection of blood into the caregiver's body. These reports do not specify whether the source patient/client was infected with a bloodborne illness such as HIV or Hepatitis B or C. Of the bloodborne exposures, 46% were due to a needlestick or sharps injury, despite OSHA regulations that require safe needle devices where available. Thirty-six percent (36%) of the reports were due to blood or body fluid exposures (exposure to saliva is not included in these numbers, since the risk of disease transmission is very low in those cases). Finally, 18% were from a human bite; typically there is not a description on whether these bites actually penetrated the skin.

There was a dramatic increase in reports of potential exposure to tuberculosis (TB), with 416 cases reported in 2014. The majority of the TB cases (62%) were reported from a single hospital employer. In addition to bloodborne disease/exposures and TB exposures, there were 22 cases of scabies and 20 cases of meningitis reported.

In addition to the infectious diseases, there were 184 other occupational illnesses reported by physicians in 2014 (Table E-8). This included 66 cases of chemical exposures to the eyes, 26 cases of headache, dizziness, or similar symptoms, 29 allergic reactions, and 12 cases of hearing loss.

Table E-8: Infectious and Other Illnesses, 2013-2014

Illness	2013	2014	% Change
Bloodborne	844	1,000	18%
TB/PPD	36	416	1056%
Scabies	58	22	-62%
Meningitis	4	20	400%
MRSA		8	
Measles		7	
Lyme/tick bite	4	5	25%
Other infectious	27	22	-19%
Subtotal: Infectious	973	1,500	54%
Chemicals in eyes	66	66	0%
Allergic	14	29	107%
Headache/dizzy	21	26	24%
Hearing loss	11	12	9%
Heat/cold	12	3	-75%
Stress/heart	1	2	100%
Other	34	46	35%
Subtotal: Other	159	184	16%
Total	1,132	1,684	49%

F. Appendix 1: Databases and Methods

Determining the incidence of occupational illness in Connecticut is difficult. The problem is two-fold: 1) occupationally-related illness is not consistently recognized as work-related; and 2) the cases reported to either the Department of Labor and/or the Occupational Health Surveillance Division of the Department of Public Health are not complete. Consequently, this assessment of occupational disease reviews a number of sources of information: the Workers' Compensation Commission's First Report of Injury database, the Bureau of Labor Statistics/Connecticut Occupational Safety and Health Administration Survey of Occupational Injuries and Illnesses, the Occupational Illnesses and Injury Surveillance System, and the Connecticut Adult Blood Level Epidemiology Surveillance Program. The Workers' Compensation database was provided in electronic form from the CT Workers' Compensation Commission and the physicians' reports from the CT Department of Public Health. The BLS/Conn-OSHA survey data was provided in table form from the Connecticut Department of Labor.

Assumptions and Conventions

The Workers' Compensation Commission's First Reports of Injury database and the Occupational Illnesses and Injury Surveillance System (OIIS, referred to as Physicians' Reports) were reviewed in depth. A rationale for the data review was developed to differentiate occupational illnesses from injuries and to classify the workplace reports by nature and cause of the illness. Each entry was reviewed for internal consistency and reasonableness. Specifically, the process employed the following steps:

- 1) **Clear acute injuries were eliminated** (approximately 90% of the Workers' Compensation database, and 30% of the Physicians Reports). In assessing the Workers' Compensation First Reports of Injury, a line by line review of injury descriptions, nature descriptions and codes, listed causes, and part of body were used to differentiate whether an injury or illness was described. The determination relied most heavily on the text description and then on the other data fields in the order listed above.

The Physicians' Reports are organized differently. Numerical "Nature of Injury or Illness" codes from the Bureau of Labor Statistics Occupational Injury and Illness Classification System (ANSI Z16.2-1995, American National Standard for Information Management for Occupational Safety and Health) were used as the primary indicator to evaluate the records. Cause, certainty, diagnosis, ICD codes, suspected agent and symptom fields were also reviewed in determining illness or injury. Categories that were eliminated included all burns, eye problems such as conjunctivitis or chemical exposures, lower back problems (including sciatica), hernias, infected wounds or burns, insect and animal bites (with the exception of tick bites because of the relationship with Lyme Disease), and electrical shocks.

- 2) **Validity of remaining records was determined.** Records were reviewed to be sure that the coding of types of disease was consistent with other information in the record. In addition, diseases were categorized by type of disease.
- 3) **Fields were either revised or added to the databases:** *Illness Type* and *Nature of Illness*. The *Nature of Illness* was based on the information in the databases, research, and general information about the illnesses. Then each entry was categorized by *Illness Type*. The specific nature categories were grouped into broader categories to support graphic representation. For the Workers' Compensation database, the description of injury was used as the key description of the illness if it disagreed with the coding for other variables.

- 4) **Employers were coded for industry** utilizing a comprehensive list of Connecticut employers from the CT Department of Labor and coded based on the NAICS (North American Industry Classification System) for the BLS and workers' compensation data. Rates were calculated using employment figures from the Occupational Safety and Health Statistics Division of the CT Labor Dept.
- 5) **Data was cleaned, tabulated and put into presentation form** using Microsoft Access, Excel, and Word software.
- 6) **The report is reviewed** by the Connecticut Workers' Compensation Commission prior to publication.

G. Appendix 2: Occupational Disease Detail by Type and Year

**Table G-1: Cases of Occupational Disease, by Type,
Bureau of Labor Statistics/Conn-OSHA, 1979 – 2014**

	Employ.*	All Ill	Skin	MSD	Lung- dust	Respir.	Poison	Physical	Other
1979	1,358	3,322	1,716	471	25	317	175	250	368
1980	1,394	3,066	1,586	513	88	214	66	199	400
1981	1,409	3,214	1,509	701	38	290	89	192	395
1982	1,400	2,549	1,130	580	31	223	31	216	323
1983	1,419	2,930	1,236	665	20	154	152	176	519
1984	1,490	2,735	1,109	665	24	273	65	162	432
1985	1,528	2,809	928	727	44	233	51	130	693
1986	1,567	2,719	808	761	39	274	65	235	538
1987	1,607	4,643	1,352	1,430	31	300	62	704	754
1988	1,637	4,364	1,257	405	35	332	56	405	733
1989	1,634	5,844	1,248	2,629	57	277	74	468	1,087
1990	1,593	5,307	1,032	2,535	93	457	54	496	641
1991	1,518	6,094	946	3,454	62	422	113	501	591
1992	1,483	6,458	1,084	3,852	37	471	53	349	612
1993	1,487	8369	965	5526	52	512	166	346	802
1994	1,502	7,319	957	4,482	74	410	97	313	986
1995	1,520	6,787	884	4,220	80	323	35	349	896
1996	1,538	6,021	827	3,711	40	418	34	235	756
1997	1,570	5,419	620	3,335	21	287	70	150	936
1998	1,597	5,510	989	3,398	10	459	45	92	517
1999	1,630	5,513	793	3,306	20	386	71	265	671
2000	1,653	6,396	897	3,827	65	438	29	137	1,003
2001	1,572	5,514	916	3,220	10	630	29	118	591
	Employ.*	All Ill	Skin			Respir.	Poison	Hearing	Other
2002	1,602	4,387	831			320	78		3,159
2003	1,605	4,559	903			490	32		3,132
2004	1,603	4,572	832			354	35	466	2,886
2005	1,614	4,850	848			480	8	381	3,134
2006	1,636	3,787	575			235	38	439	2,500
2007	1,667	3,904	624			358	22	457	2,443
2008	1,675	3,562	690			293	130	360	2,088
2009	1,629	3,400	600			300	--	500	2,000
2010	1,629	3,000	700			300		300	1,700
2011	1,578	3,500	800			300		300	2,100
2012	1,628	2,800	600			300		300	1,500
2013	1,640	2,600	500			300		300	1,600
2014	1,653	2,400	400			200		300	1,400

Source: BLS/Conn-OSHA. Data collection methods and categories changed in 2002, and are not comparable to prior years. Employment in thousands. Since this data is based on a weighted survey, some of these numbers (particularly the smaller numbers) are not reliable.

**Table G-2: Rate per 10,000 Workers of Occupational Disease, by Type,
Bureau of Labor Statistics/Conn-OSHA, 1979-2014**

Year	Employed	Skin	MSD	Resp/Lung	Poisoning	Other	Hearing	Total
1979	1,358,000	12.6	3.5	2.5	1.3	8.2		24.5
1980	1,394,000	11.4	3.7	2.2	0.5	8.6		22
1981	1,409,000	10.7	5	2.3	0.6	9.4		22.8
1982	1,400,000	8.1	4.1	1.8	0.2	8.2		18.2
1983	1,419,000	8.7	4.7	1.2	1.1	9.7		20.6
1984	1,490,000	7.4	4.5	2	0.4	8.6		18.4
1985	1,528,000	6.1	4.8	1.8	0.3	10.4		18.4
1986	1,567,000	5.2	4.9	2	0.4	10		17.4
1987	1,607,000	8.4	8.9	2.1	0.4	18.2		28.9
1988	1,637,000	7.7	2.5	2.2	0.3	9.6		26.7
1989	1,634,000	7.6	16.1	2	0.5	26		35.8
1990	1,593,000	6.5	15.9	3.5	0.3	23.6		33.3
1991	1,518,000	6.2	22.8	3.2	0.7	30.4		40.1
1992	1,483,000	7.3	26	3.4	0.4	32.7		43.5
1993	1,487,000	6.5	37.2	3.8	1.1	45.2		56.3
1994	1,501,800	6.4	29.8	3.2	0.6	39		48.7
1995	1,520,000	5.8	27.8	2.7	0.2	36.5		44.7
1996	1,538,000	5.4	24.1	3	0.2	30.8		39.1
1997	1,570,500	3.9	21.2	2	0.4	28.3		34.5
1998	1,596,900	6.2	21.3	2.9	0.3	25.2		34.5
1999	1,630,100	4.9	20.3	2.5	0.4	26.1		33.8
2000	1,653,000	5.4	23.2	3	0.2	30.4		38.7
2001	1,571,000	5.8	20.5	4.1	0.2	25.1		35.1
Year	Employ	Skin		Respiratory	Poison	Other	Hearing	Total
2002*	1,602,000	6.2	*	2.4	0.6	23.7	*	32.9
2003	1,605,000	6.9	*	3.8	0.2	24	*	34.9
2004	1,603,100	6.4	*	2.7	0.3	22.1	3.6	34.9
2005	1,614,100	6.3	*	3.6	*	23.3	2.8	36
2006	1,635,700	4.3	*	1.8	0.3	18.8	3.3	28.4
2007	1,666,600	4.7	*	2.7	0.2	18.2	3.4	29.2
2008	1,666,600	4.7	*	2.7	0.2	18.2	3.4	29.2
2009	1,675,000	5.1	*	2.2	1	15.4	2.7	26.3
2010	1,639,300	5.1	*	2.1	*	13.1	2.5	23.1
2011	1,578,200	6.3	*	2	*	16.8	2.5	27.8
2012	1,628,028	4.6	*	2.6	*	12.0	2.6	21.9
2013	1,640,223	3.5	*	2.0	0.2	12.4	2.2	20.3
2014	1,653,545	3.4		1.9	*	11.0	2.1	18.7

Source: BLS/Conn-OSHA

*Data collection methods and categories changed in 2002, and are not comparable to prior years.

"Other" includes the pre-2002 categories of MSD, Physical, Lung-dust, and Other.

H. Appendix 3: Occupational Illness Rates by Town/Municipality

Table H-1 Occupational Illness Rates by Town/Municipality: 2014 (10 or more cases)

Cases	Town	Employment	Rate	Rank*
20	Avon	8,791	22.75	60
41	Berlin	10,957	37.42	28
19	Bethel	10,040	18.92	69
49	Bloomfield	10,492	46.70	21
20	Branford	14,837	13.48	83
123	Bridgeport	64,237	19.15	68
68	Bristol	30,367	22.39	61
29	Brookfield	8,708	33.30	33
76	Cheshire	14,564	52.18	15
14	Colchester	8,829	15.86	77
32	Cromwell	7,474	42.82	24
130	Danbury	44,038	29.52	42
77	East Hartford	25,166	30.60	40
34	East Haven	14,623	23.25	56
27	East Lyme	8,025	33.64	31
42	East Windsor	5,993	70.08	8
15	Ellington	8,525	17.60	75
69	Enfield	21,404	32.24	35
49	Fairfield	27,175	18.03	72
213	Farmington	13,207	161.28	1
38	Glastonbury	17,780	21.37	63
63	Greenwich	27,126	23.22	57
21	Griswold	5,877	35.73	29
208	Groton	17,435	119.30	3
20	Guilford	12,122	16.50	76
40	Hamden	32,947	12.14	84
379	Hartford	47,895	79.13	5
10	Litchfield	4,526	22.09	62
16	Madison	8,521	18.78	70
95	Manchester	30,471	31.18	38
77	Meriden	29,612	26.00	45
174	Middletown	24,459	71.14	6
66	Milford	27,925	23.63	55
11	Monroe	9,606	11.45	85
26	Montville	8,814	29.50	43
32	Naugatuck	16,049	19.94	65
59	New Britain	33,222	17.76	73
20	New Canaan	7,871	25.41	50

326	New Haven	58,871	55.38	12
55	New London	11,066	49.70	17
27	New Milford	14,752	18.30	71
54	Newington	16,213	33.31	32
35	Newtown	13,518	25.89	46
56	North Haven	12,509	44.77	23
112	Norwalk	47,113	23.77	54
250	Norwich	18,869	132.49	2
34	Plainfield	7,954	42.75	25
31	Plainville	9,721	31.89	36
11	Plymouth	6,231	17.65	74
30	Putnam	4,459	67.28	9
22	Ridgefield	11,207	19.63	67
51	Rocky Hill	10,676	47.77	18
10	Salisbury	1,721	58.11	11
49	Shelton	20,580	23.81	53
17	Simsbury	12,133	14.01	81
15	Somers	4,826	31.08	39
62	South Windsor	13,153	47.14	20
19	Southbury	8,293	22.91	59
160	Southington	22,660	70.61	7
12	Sprague	1,507	79.63	4
16	Stafford	6,338	25.24	51
87	Stamford	64,440	13.50	82
30	Stonington	9,036	33.20	34
139	Stratford	25,356	54.82	13
18	Suffield	7,045	25.55	48
12	Thomaston	4,458	26.92	44
16	Tolland	8,086	19.79	66
62	Torrington	18,401	33.69	30
54	Trumbull	17,108	31.56	37
131	Wallingford	24,601	53.25	14
106	Waterbury	46,051	23.02	58
49	Waterford	9,575	51.17	16
18	Watertown	12,318	14.61	79
82	West Hartford	32,212	25.46	49
42	West Haven	27,704	15.16	78
16	Westbrook	3,374	47.42	19
44	Westport	11,708	37.58	27
39	Wethersfield	13,133	29.70	41
17	Wilton	8,049	21.12	64
14	Winchester	5,847	23.94	52

53	Windham	11,492	46.12	22
62	Windsor	15,404	40.25	26
42	Windsor Locks	6,823	61.56	10
13	Wolcott	9,248	14.06	80
10	Woodstock	3,880	25.77	47

*Ranking: #1 is the highest rate of illness; #86 is the lowest;

Only towns with at least 10 cases appear. Rates are based on workers' compensation reports based on the town of illness (employer location); workforce is based on total employment by town of employment, provided by the CT Labor Department.

I. Appendix 4: Internet Resources for Job Safety and Health; 2016

General Health and Safety Sites

One of the best sources of information for job health and safety on the internet is the **OSHA (Occupational Safety and Health Administration)** homepage, which includes an ergonomics homepage, a searchable index of standards, and many other resources.

<http://www.osha.gov>

To look up **OSHA citations** by company or industry:

<http://www.osha.gov/pls/imis/establishment.html>

NIOSH (the National Institute for Occupational Safety and Health) is another good general source. A searchable section on diseases and injuries briefly describes conditions with updates on current research and guidance on prevention.

<http://www.cdc.gov/niosh/homepage.html>

<http://www.cdc.gov/niosh/topics/diseases.html>

EPA (the Environmental Protection Agency) has a number of sites relevant to occupational health on indoor air quality, office and school environments, and other topics.

www.epa.gov

www.epa.gov/iaq/

The **North Carolina Occupational Safety and Health Education and Research Center** is the home for the occupational health forum (formerly based at Duke), directed particularly to health care professionals, with a good set of technical links to other occupational health resources.

<http://www.occhealthnews.net>

The **Canadian Centre for Occupational Health and Safety** has hundreds of resources on their health and safety internet resource list. Start at their home page, then choose “Free Resources” (on the side bar).

<http://www.ccohs.ca>

New Jersey Department of Health has 1,600 excellent **chemical hazard factsheets** that are free, independently researched, and clearly written (900 in Spanish) on hundreds of substances.

<http://web.doh.state.nj.us/rtkhsfs/indexfs.aspx>

Vermont Safety Information Resources, Inc. has a database of **material safety data sheets (MSDS)** from a large number of chemical companies.

<http://www.siri.org> <http://www.siri.org/msds/index.php>

Several safety organizations have useful websites:

www.nsc.org

The National Safety Council

www.aiha.org

The American Industrial Hygiene Association

www.asse.org

American Society of Safety Engineers

www.nfpa.org

National Fire Protection Association

www.safetycentral.org

International Safety Equipment Association

For a labor perspective, the **national AFL-CIO** includes a health and safety page.

<http://www.aflcio.org/Issues/Job-Safety>,

NYCOSH (New York Committee for Occupational Safety and Health) covers many news topics.

<http://www.nycosh.org>

The **Connecticut Business and Industry Association** has a health and safety page that helps businesses understand what OSHA laws apply to them, and provides information on upcoming conferences and events.

<http://www5.cbiam.com/hr/osh/>

The **Environmental Defense Fund** has a “pollution information site” called Scorecard with information about 11,200 chemicals and their recognized and suspected health effects. The site offers information with an interactive data based on the 2002 Toxics Release Inventory and is currently working on providing an update.

<http://www.scorecard.org/>

The Cal-OSHA Reporter carries current stories on job health and safety.

<http://www.cal-osh.com>.

Some **blogs carry job health and safety news and commentary.**

The USMWF United Support and Memorial for Workplace Fatalities posts current stories about workers who have been killed on the job and their families <https://www.facebook.com/USMWF> or www.usmwf.org

The Pump Handle connects to Facebook and Twitter, and continues the legacy of Jordan Barab’s blog <http://scienceblogs.com/thepumphandle/>.

Workers’ compensation issues are covered at <http://workerscompinsider.com>.

The **Toxic Use Reduction Institute** at UMass Lowell has extensive resources on safer alternatives to toxic substances, including a database on alternatives to solvents.

<http://www.turi.org>.

UMass-Lowell’s Center for Sustainable Production has information on changing chemical policies.

<http://www.sustainableproduction.org/>

The **Health and Safety Executive of Great Britain** has extensive information on the new European Union’s REACH (Registration, Evaluation, and Authorization of Chemicals).

<http://www.hse.gov.uk/reach/index.htm>.

OSHA has a discussion of the US program that responds to the International Globally Harmonized System for Hazard Communication.

<http://www.osha.gov/dsg/hazcom/global.html>.

State of Connecticut and Select Other Resources

The **Connecticut Workers’ Compensation Commission** has an excellent website, including information on the locations of offices, a searchable version of the workers’ compensation statutes, new decisions, and other information.

<http://wcc.state.ct.us>

The **Connecticut (CT)** website allows access to all branches of state government including agencies.

<http://www.state.ct.us>

The **CT Department of Public Health** includes a site for the occupational health program, including Occupational Health Fast Facts, Health Alerts and Fact Sheets.

<http://www.ct.gov/dph/occupationalhealth>

The **CT Department of Labor** includes an occupational health services site, which includes information on their free consultation program and a great set of links to other health and safety sites. CONN-OSHA offers a variety of consulting services to both public and private employers in Connecticut, available at no charge.

<http://www.ctdol.state.ct.us/osha/osha.htm> <https://www.ctdol.state.ct.us/osha/consulti.htm>

The **Connecticut General Assembly** website lets you search for any bill being considered, or get information about relevant committees such as Labor and Public Employees or Public Health.

<http://www.cga.ct.gov>

You can track national bills on the **National Library of Congress** site.

<https://www.congress.gov/>

You can search the medical literature at **US National Library of Medicine PubMed**.

<http://www.ncbi.nlm.nih.gov/pubmed/>

You can search general academic literature through **Google Scholar**.

<http://scholar.google.com/schhp?tab=ws> .

UConn HEALTH's Division of Occupational and Environmental Medicine has information and links on job health and safety.

<http://health.uconn.edu/occupational-environmental>

The **Center for the Promotion of Health in the New England Workplace (CPH-NEW)** is a research-to-practice initiative led by investigators from the UMASS Lowell and UConn HEALTH.

<http://health.uconn.edu/occupational-environmental/academics-and-research/cph-new/>

The **UConn HEALTH's Center for Indoor Environments and Health** provides guidance on environmental exposures in indoor settings including schools and office buildings

<http://health.uconn.edu/occupational-environmental/consultation-and-outreach/cieh/>

Ergonomic Sites and Links

Information on ergonomic consultations and musculoskeletal disease is accessible at the **UConn HEALTH Division of Occupational and Environmental Medicine** site.

<http://health.uconn.edu/occupational-environmental/consultation-and-outreach/ergonomics-consultation/>

Ergoweb has good factsheets, documents, and news.

<https://ergoweb.com/>

Tom Bernard's website at **University of South Florida** has many of the standards and excellent free electronic ergonomic analysis tools such as the NIOSH lifting equation.

<http://personal.health.usf.edu/tbernard/ergotools/index.html>.

Tom Armstrong at the **University of Michigan** runs one of the most respected university training programs for ergonomics, and has extensive information, tools, and lectures.

<http://www-personal.umich.edu/~tja>

Cornell University's Alan Hedge has an active ergonomics program, with reports posted on graduate student projects and evaluation of ergonomic products.

<http://ergo.human.cornell.edu>

The University of Virginia has ergonomics training and resources.

<http://ehs.virginia.edu/ehs/ehs.ergo/ergo.html>.

Human Factors and Ergonomics Society is the main professional association in ergonomics.

<http://www.hfes.org>

Since 1994, the **National Ergonomics Conference & Ergo Expo** has provided a forum on ergonomics, safety and wellness programs.

<http://www.ergoexpo.com/>

The **Typing Injury FAQ** has links and information on repetitive strain injuries from user and injured workers groups.

<http://www.tifaq.org/>

The National Health Service/UK has information about repetitive strain injuries/RSI

<http://www.nhs.uk/conditions/Repetitive-strain-injury/Pages/Introduction.aspx>

The **European Agency for Health and Safety at Work's Job Stress Network** web page is dedicated to increasing communication among researchers and others interested in job stress and its impact on health

<https://osha.europa.eu/data/links/795>

Internet Resources for Job Safety and Health is compiled by Tim Morse, Ph.D., and Paula Schenck, MPH at UCONN HEALTH. To update or add a listing, please contact them at tmorse@uchc.edu, schenck@uchc.edu.

J. Appendix 5: Who's Who: Resources in Connecticut on Job Safety and Health

Academic Programs and Courses

Central Connecticut State University, School of Technology

Type of Degree: Certificate Program in Environmental and Occupational Safety

Faculty contact: Jacob Kovel, Department Chair

Address: Copernicus Hall - Room 2120900, CCSU, 1615 Stanley Rd., New Britain, CT 06050

Phone: 860-832-0192

e-mail: KovelJ@ccsu.edu

Web: <http://www.ccsu.edu/mcm/environmentalOccupationalSafetyOCP.html>

UCONN College of Agriculture, Health and Natural Resources, Department of Allied Health Sciences

Type of Degree and Program: Bachelor in Allied Health Sciences with an Occupational Environmental Health Sciences Concentration; and an Online Occupational Safety and Health Post-Baccalaureate Certificate Program

Faculty contact: Paul Bureau, MS MS CIH

Address: Koons Hall Room 306, 358 Mansfield Road, Unit 1101, Storrs, CT 06269-1101

Phone: (860) 486-0040

e-mail: : paul.bureau@uconn.edu

Web: <http://www.alliedhealth.uconn.edu/majors/oshConcentration.php>

UCONN HEALTH, Department of Community Medicine

Type of Degree: Masters in Public Health program with ergonomic/occupational health courses.

Director: David Gregorio, PhD

Address: UCONN Health, 263 Farmington Ave., Farmington, CT 06030-6325

Phone: (860) 679-5480

Fax: (860) 679-1581

e-mail: gregorio@nso.uchc.edu

Web: <http://commed.uchc.edu/education/mph/index.html>

UCONN HEALTH, Department of Medicine

Type of Degree: Ph.D. in Public Health with a concentration in Occupational and Environmental Health Sciences

Faculty Contact: Jennifer Cavallari, ScD, CIH

Address: UCONN Health, 263 Farmington Ave., Farmington, CT 06030-6210

Phone: (860) 679-4720

Fax: (860)-679-1349

e-mail: cavallari@uchc.edu

Web: <http://commed.uchc.edu/education/phd/index.html>

OSHA

Connecticut Department of Labor's Division of Occupational Safety and Health/CONN-OSHA: CONN-OSHA enforces state occupational safety and health regulations as they apply to state and municipal employees, and offers free consultations to public agencies, school districts and private companies.

Director: Kenneth C. Tucker III

Address: 200 Folly Brook Boulevard, Wethersfield, CT 06109

Phone: (860) 263-6900

Fax: (860) 263-6940

Web: <http://www.ctdol.state.ct.us/osha/osha.htm>

Publications: ConnOSHA Quarterly <https://www.ctdol.state.ct.us/osha/Quarterly/coqtrly.htm>

OSHA (Occupational Safety and Health Administration): Federal OSHA inspects workplaces in the private sector for violations of standards, and also has information and pamphlets.

Web: <https://www.osha.gov/> (national)

OSHA Bridgeport Office (Fairfield, New Haven, and Middlesex counties).

Area Director (until September 2016): Robert W. Kowalski

Address: 915 Lafayette Blvd

Bridgeport, Connecticut 06604

Phone: (203) 579-5581; National Hotline after hours, etc.: (800) 321-OSHA (6742)

Fax: (203) 579-5516

OSHA Hartford Office

Director: Warren Simpson

Address: 135 High Street, Suite 361, Hartford, CT 06103

Phone: (860) 240-3152; National Hotline after hours, etc.: (800) 321-OSHA (6742)

Fax: (860) 240-3155

Academic Occupational Health Clinics

UConn Occupational and Environmental Medicine Clinic

Clinic Director: Marc Croteau, MD MPH

Address: UCONN Health, 263 Farmington Ave, Farmington, CT 06032-8077

Clinic address: UCONN Health Outpatient Pavilion, 2nd floor East

Phone: (860) 679-3744

Fax: (860) 679-1349

e-mail: croteau@uchc.edu

Web: <http://health.uconn.edu/occupational-environmental/clinical-services/>

Yale Occupational and Environmental Medicine Program

Director: Carrie A Redlich, MD, MPH

Address: 367 Cedar Street, ESHA 2nd Floor, New Haven, CT 06510

Clinic address: 135 College St. Rm. 366, New Haven, CT 06510

Phone: (203) 785-4197

Fax: (203) 785-7391

e-mail: Carrie.Redlich@yale.edu

Web: <http://medicine.yale.edu/intmed/occmed/>

Occupational Health Clinics

Concentra

Medical Director: David Feinstein, MD

Address: 701 Main Street, East Hartford, CT 06108

Phone: (860) 289-5561

Fax: (860) 291-1895

e-mail: david_feinstein@concentra.com

Web: <http://www.concentra.com/employers/occupational-health/>

Other Offices: 972 West Main Street, New Britain (860) 827-0745; 1080 Day Hill Road, Windsor (860) 298-8442; 8 South Commons Rd, Waterbury (203) 759-1229; 333 Kennedy Drive, Torrington (860) 482-4552; 900 Northrup Rd, Wallingford (203) 949-1534; 370 James Street, New Haven (203) 503-0482; 60 Watson Blvd, Stratford (203) 380-5945; 15 Commerce Road, 3rd Floor, Stamford, (203) 324-9100; 10 Connecticut Avenue, Norwich, (860) 859-5100.

Connecticut Occupational Medicine Partners, LLC, St. Francis Hospital and Medical Center

President, CEO and Administrative Director: Derrick Amato

Address (corporate): 675 Tower Avenue, Suite 404B, Hartford, CT 06112

Phone: (860) 714-6188

Fax: (860) 714-2775

Web: <http://compllc.org/>

Clinics: St Francis; 114 Woodland Street Hartford: 860-714-4270; 1598 East Main St, Torrington, (860) 482-3467; 100 Deerfield Road, Windsor, 860-714-9444

ECHN Corporate Care; 2800 Tamarack Ave., Suite 001, South Windsor, CT 06074, (860) 647-4796

MedWorks of Bristol Hospital; 975 Farmington Ave. Bristol (860) 589-0114

MedWorks, LLC; 375 East Cedar St., Newington (860) 667-4418 prusso@bristolhospital.org

Johnson Memorial Medical Center: Director, Clinical Services: Kathy Heim, RN, MSN 140 Hazard Ave., Suite 101. Enfield, CT 06082, (860) 763-7668

Griffin Hospital Occupational Medicine

Director: Dave Maffei, PA-C; Barry Ostroff, MD, FACOEM

Address: 100 Commerce Drive. Shelton, CT 06484

Phone: (203) 944-3718

Fax: (203) 929-3068

e-mail: dmaffei@griffinhealth.org

Web: <http://www.griffinhealth.org/locations/shelton/griffin-hospital-occupational-medicine-center>

Hartford HealthCare Rehabilitation Network

Director: Eric Smullen, PT

Address: 181 Patricia M Genova Drive, Newington, CT 06111

Phone: (860) 696-2500

Fax: (860) 696-2525

Web: <https://hartfordhealthcare.org/locations-partners/hartford-healthcare-rehabilitation-network>

Hartford Medical Group—Occupational Medicine

Business Development Director: Peter Kowalski

Address: 1025 Silas Deane Highway, Wethersfield, CT 06109

Phone: (800) 557-8389

e-mail: pkowalski@harthosp.org

Web: http://www.hartfordmedicalgroup.com/specialties_occupational_medicine.php

Other Offices: 339 West Main Street Avon, (860) 696-2150; 256 North Main Street, Manchester, (860) 696-2300; 445 South Main Street, West Hartford, (860) 696-2200, 1025 Silas Deane Highway, Wethersfield, CT (860) 696-2400; 1060 Day Hill Road, Windsor (860) 696-2450.

Lawrence and Memorial Occupational Health Center

Medical Director: Geraldine Ruffa, MS, MPH, MD (860) 446-8265 x 7074

Director, Occupational Health Services: Ruth E. Moreau, RN, MS, COHN-S

Address: 52 Hazelnut Hill Rd., Groton, CT 06340

Phone: (860) 446-8265 x7082

Fax: (860) 448-6961

Email: rmoreau@lmhosp.org

Web: <http://www.lmhospital.org/services/occupational-health-center.aspx>

Other site: Outpatient Rehabilitation Services, 40 Boston Post Road, Waterford, CT 06385, (860) 271-4900

Middlesex Hospital Occupational Medicine

Director: Thomas J. Danyliw, MD

Address: 534 Saybrook Rd., Middletown, CT 06457

Phone: (860) 358-2750

Fax: (860) 348-2757

e-mail: tom_danyliw_md@midhosp.org

Web: <http://middlesexhospital.org/our-services/hospital-services/occupational-medicine/overview/occupational-medicine-at-middlesex-hospital>

Other Office: Physical Rehabilitation Center, 192 Westbrook Road, Essex (860) 358-3840

St. Mary's Hospital Occupational Health and Diagnostic Center

Medical Director: Erica Martinucci, MD

Address: 1312 West Main Street, Waterbury, CT

Phone: (203) 709-3740

Fax: (203) 709-3741

Web: <http://www.stmh.org/services/occupational-medicine>

Western Connecticut Health Network, Norwalk Hospital Occupational and Environmental Health

Contact: Raj Ahsan, MD MPH

Address: 520 West Avenue, Norwalk, CT 06850

Phone: (203) 852-2417

Fax: (203) 852-2310

e-mail: Raj.Ahsan@wchn.org

Web: <http://www.norwalkhospital.org/departments/occupational-and-environmental-health-services/occupational-health>

Western Connecticut Health Network, Danbury Hospital Corporate Health Care

Contact: Dr. Rita Ohene-Adjei, MD, MPH

Address: 79 Sandpit Rd, Suite 302, Danbury

e-mail: : Rita.Ohene-Adjei@wchn.org

Phone: (203) 739-7860

Web: <http://www.danburyhospital.org/departments/corporate-health-care/contact-and-hours>

Yale-New Haven Health

Manager for Clinical Operations: Andrea Santerre, RN

Address: 175 Sherman Avenue, New Haven, CT 06511

Phone: (203) 789-6216

Fax: (203) 789-5174

e-mail: andrea.santerre@ynhh.org

Web: <https://www.ynhh.org/services/occupational-health.aspx>

Other Offices: 84 North Main Street, Suite 200, Branford (203) 789-5195; 2080 Whitney Ave., Suite 150 Hamden (203) 789-6240

Organizations

American Lung Association (ALA) of Northeast Connecticut

The ALA is a non-profit association geared towards preventing lung disease, including occupational lung disease.

Director Medical and Scientific Branch: Michelle Caul

Connecticut Address: 45 Ash St., East Hartford, CT 06108

Phone: (860) 838-4379

e-mail: Michelle.Caul@lung.org

Web: <http://www.lung.org/associations/charters/northeast/> <http://www.lung.org/associations/states/connecticut/>

Coalition for a Safe and Healthy Connecticut

This is a community-based coalition of environmental, public health, and labor organizations providing resources and advocacy for reducing the use of toxic chemicals through substitution of safer alternatives.

Coordinator: Anne B. Hulick, RN MS JD

Address: c/o Clean Water Action, 2074 Park Street, Suite 308, Hartford, CT, 06106

Phone: (860) 232-6232

Fax: (860) 232-6334

e-mail: ahulickl@cleanwater.org

Web: <http://www.safehealthyct.org>

Connecticut Safety Council/Safety Roundtable

The Safety Council is associated with the Connecticut Business and Industry Association and offers seminars, training courses, consulting, and policy discussions on safety and regulations.

Contact: Phillip Montgomery

Address: 350 Church St. Hartford, CT 06103-1126

Phone: (860) 244-1900

e-mail: phillip.montgomery@cbia.com

Web: <http://www.cbia.com/cbia-councils/>

ConnectiCOSH (The Connecticut Council for Occupational Safety and Health)

CTCOSH is a union-based non-profit organization for education and political action on job safety and health. They have conferences, fact sheets, and speakers.

Director: Mike Fitts

Address: 683 No. Mountain Rd, Newington, CT 06111

Phone: (860) 953-COSH (2674)

Fax: (860) 953-1038

e-mail: mike.ctcosh@snet.net

Web: <http://connecticosh.org>

The Center for the Promotion of Health in the New England Workplace (CPH-NEW)

CPH-NEW is a NIOSH-funded center for scientific research and education, based in participatory action research, integrating occupational health and safety with worksite health that is administered jointly by UMASS Lowell and UCONN Health.

Director: Martin Cherniack, MD, MPH

Address: 263 Farmington Ave, Farmington, CT 06030-8077

Phone: (860) 679-4916

Fax: (860) 679-1349

e-mail: cherniack@uchc.edu

Web: <http://health.uconn.edu/occupational-environmental/academics-and-research/cph-new/>

The Ergonomic Technology Center (ErgoCenter) at UCONN Health

The ErgoCenter is a center for prevention of repetitive strain injuries based at UCONN Health, which does training, research, consulting, and clinical care.

Contact: Jennifer Garza, ScD, Ergonomist

Address: 263 Farmington Ave, Farmington, CT 06030-8077

Phone: (860) 679-4916

Fax: (860) 679-1349

Phone: 860-679-5418

Email: garza@uchc.edu

Web: http://doem.uchc.edu/consultation_outreach/ergonomics.

UCONN Health- Center for Indoor Environments and Health (CIEH)

The CIEH at the University of Connecticut Health Center works with public health agencies, companies, clinics and individuals to promote indoor environments which protect the health of building occupants and provide productive, creative spaces for learning and work. The website HURRICANE-WEATHER-HEALTH.DOEM.UCONN.EDU/ Hurricanes: What You Need to Know About Mold/Moisture/Bioaerosols & Human Health provides educational materials on protecting workers from exposures when addressing flooded buildings after severe wet weather.

Director: Paula Schenck, MPH

Address: 263 Farmington Ave, Farmington, CT 06030-8077,

Phone: (860) 679-2368

Fax: (860) 679-1349

e-mail: schenck@uchc.edu

Web: <http://health.uconn.edu/occupational-environmental/consultation-and-outreach/cieh/>

<http://hurricane-weather-health.doem.uconn.edu/>

Professional Associations

American Industrial Hygiene Association (AIHA), Connecticut River Valley Section

AIHA is a professional association for industrial hygienists.

Contact: Brian Bethel, CIH (Sikorsky Aircraft)

Phone: (203) 232-9993

e-mail: Brian.Bethel@sikorsky.com

Web: <https://www.aiha.org/get-involved/LocalSections/ConnecticutRiverValley/Pages/default.aspx>

Connecticut Safety Society

This society is a professional association for safety inspectors

Contact: James Benway

Phone: (203) 260-3444

e-mail: info@ctsafety.org

Web: <http://www.ctsafety.org>

American Society of Safety Engineers (ASSE)

ASSE is a non-profit association for enhancing the competence and knowledge of the safety profession.

Connecticut Valley Chapter (Northern CT)

Address: Box 106, 1131-0 Tolland Turnpike, Manchester, CT 06040

President: Nathan Fague

e-mail: nathanfague@gmail.com

Web: <http://ctvalley.asse.org>

Air & Waste Management Association (AWMA), Connecticut Chapter

AWMA provides training, information, and networking opportunities to environmental professionals. The Connecticut Chapter, New England Section, provides periodic forums for discussion and sponsors an annual student scholarship.

Vice Chair: David Krochko

Phone: (888) 265-8969

e-mail: dkrochko@woodardcurran.com

Web: http://www.awmanewengland.org/connecticut_chapter.htm

Connecticut Trial Lawyers Association, Workers' Compensation Committee

This is an association of attorneys specializing in workers' compensation, mostly for claimants.

Executive Director: Neil Ferstand

Address: 150 Trumbull Street, 2nd Floor, Hartford, CT 06103

Phone: (860) 522-4345

Fax: (860) 522-1027

Web: https://www.cttriallawyers.org/public/workers_compensation.cfm

Connecticut Bar Association, Workers' Compensation Section

This is a professional association of attorneys who concentrate in workers' compensation.

Chair: Joseph Passaretti

Phone: (860)659-1341

E-mail: jpassaretti@montmaylaw.com

Web: <http://www.ctbar.org/?page=WorkersCompensation>

New England College of Occupational and Environmental Medicine/NECOEM

NECOEM is an association for occupational medicine doctors.

Executive Director: Dianne Plantamura, MSW

Address: 22 Mill Street, Groveland, MA 01834

Phone: (978) 373-5597

e-mail: necoem@comcast.net

Web: <http://www.necoem.org/>

Northeast Association of Occupational Health Nurses /NEAOHN

NEAOHN is an association of occupational health nurses, including most of the nurses working in industry.

CT Director: Richard John Sandrib, NP

Address: 5 Research Pkwy, Wallingford, CT 06492

Phone: (203) 677-6441

Web: <http://www.neaohn.org/>

Connecticut State Agencies

Department of Public Health (DPH), Occupational Health Unit

This unit investigates clusters of occupational diseases. Programs for radon, asbestos, AIDS, lead, asthma, CT Schools Environmental Resource Team, TB control and infectious disease are also at the DPH.

Director: Thomas St. Louis, MSPH

Address: DPH/ OHP, 410 Capitol Ave, MS #11EOH, PO Box 340308, Hartford, CT 06134-0308

Phone: (860) 509-7740

Fax: (860) 509-7785

Email: Thomas.st.louis@ct.gov

Web: http://www.ct.gov/dph/cwp/view.asp?a=3140&q=387472&dphNav_GID=1828

State Department of Emergency Services and Public Protection

Public Information Officer: Scott Devico

Phone: (860) 685-8246

Fax: (860) 685-8354

e-mail: scott.devico@ct.gov

Web: <http://www.ct.gov/demhs/site/default.asp>

State Emergency Response Commission, Department of Energy and Environmental Protection

This commission oversees plans for response to chemical accidents and collects chemical information for the public under Community Right to Know.

Chairman: Gerard P. Goudreau

Address: 79 Elm St, Hartford, CT 06106-5127

Phone: (860) 424-3373

Fax: (860) 424-4062

e-mail: deep.ctepcra@ct.gov

Web: <http://www.ct.gov/serc>

Connecticut Fire Academy, Commission on Fire Prevention & Control

Safety training & standards compliance.

Training Director: Bill Higgins

Address: 34 Perimeter Road, Windsor Locks, CT 06096-1069

Phone: 860-264-9272 or toll free (877) 5CT-FIRE (only in CT)

Fax: (860) 654-1889

Email: william.higgins@ct.gov

Web: <http://www.ct.gov/cfpc/site/default.asp>

Connecticut Department of Environmental Protection, Radiation Safety Unit

Director: Jeff Semancik

Phone: (860) 424-4190; (860) 424-3333 24/7 Emergency

Fax: (860) 706-5339

e-mail: jeffrey.semancik@ct.gov

Web: http://www.ct.gov/dep/cwp/view.asp?a=2713&q=324824&depNav_GID=1639&depNav=|

Workers' Compensation Commission

Chairman's Office and Compensation Review Board

The Workers' Compensation Commission (WCC) administers the workers' compensation laws of the State of Connecticut with the ultimate goal of ensuring that workers injured on the job receive prompt payment of lost work time benefits and attendant medical expenses. To this end, the Commission holds hearings on disputed matters, facilitates voluntary agreements, makes findings and awards, hears and rules on appeals, and closes out cases through full and final stipulated settlements.

The WCC Safety & Health Services unit assists employers with implementation of the workers' compensation regulations regarding "Establishment and Administration of Safety and Health Committees at Work Sites."

Chairman: John A. Mastropietro

Address: 21 Oak St., 4th Floor, Hartford, CT 06106-8011

Phone: (860) 493-1500

Information: (800) 223-WORK (9675)

Fax: (860) 247-1361

e-mail: wcc.chairmansoffice@po.state.ct.us

Web: <http://wcc.state.ct.us/>

Workers' Compensation District Offices

1. 999 Asylum Ave., Hartford, CT 06105; (860) 566-4154; Fax: (860) 566-6137
2. 55 Main St., Norwich, CT 06360; (860) 823-3900; Fax: (860) 823-1725
3. 700 State St., New Haven, CT 06511; (203) 789-7512; Fax: (203) 789-7168
4. 350 Fairfield Ave., 2nd Floor, Bridgeport, CT 06604; (203) 382-5600; Fax: (203) 335-8760
5. 55 West Main St., Waterbury, CT 06702; (203) 596-4207; Fax: (203) 805-6501
6. 233 Main St., New Britain, CT 06051; (860) 827-7180; Fax: (860) 827-7913
7. 111 High Ridge Rd., Stamford, CT 06905-5111; (203) 325-3881; Fax: (203) 967-7264
8. 90 Court St., Middletown, CT 06457; (860) 344-7453; Fax: (860) 344-7487

The Who's Who is compiled by Tim Morse, Ph.D., and Paula Schenck, MPH at the UConn Health Center. To update or add a listing, please contact them at tmorse@uchc.edu, schenck@uchc.edu.