# Occupational Disease in Connecticut, 2025



This report covers data for 2023
and was prepared under contract for the
State of Connecticut Workers' Compensation Commission
Stephen M. Morelli, Chairperson
As part of the Occupational Disease Surveillance Program, in cooperation with the Connecticut Department of Labor and the Connecticut
Department of Public Health

By

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# A. Executive Summary

This report focuses on occupational *disease* reports for 2023 and recent trends in reported cases. It does not address traumatic occupational *injuries*; data for Connecticut injuries can be found at the national Bureau of Labor Statistics (<a href="https://www.bls.gov/iif/oshstate.htm">https://www.bls.gov/iif/oshstate.htm</a>). 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), Physician Report of Occupational Disease under the Occupational Illnesses and Injury Surveillance System (OIISS), and the Bureau of Labor Statistics/Connecticut Dept. of Labor Annual Survey (BLS/CTDOL).

Table A-1: Summary of Diseases Reported by Systems, 2021-2023

Type of Disease	isease BLS/CTDOL		wcc			OllSS (Physicians)			Unique Cases* (WCC and OllSS)			
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Lung & poisonings	4,100	5,300	1,800	169	269	382	127	187	197	277	434	547
Lead **							160	178	202	160	178	202
Skin	200	200	300	152	176	156	91	76	104	217	224	239
Musculoskeletal***	***	***	***	2,246	2,535	2,552	558	502	587	2,694	2,930	3,013
Infectious				2,107	2,173	1,120	934	1,036	927	2,919	3,100	1,918
Hearing loss	300	300	400	98	112	110	12	15	14	105	118	122
Other***	600	600	1,000	849	933	868	120	189	232	954	1,091	1,063
Total****	5,200	6,400	3,500	5,621	6,198	5,188	2,002	2,183	2,263	7,326	8,075	7,104

There were also an **additional 343 COVID-19 reports** to workers' compensation in 2022 (4,304 in 2021) from a unique database separate from the First Report of Injury database traditionally used for this report.

Sources: BLS: Bureau of Labor Statistics/CTDOL survey; WCC: CT Workers' Compensation Commission (First Report of Injury); OllSS: Occupational Injury and Illness Surveillance System (physician reports primarily reported through occupational health clinics)

Table A-1 summarizes the data from the three different sources for the past three years. The BLS/CTDOL survey rounds to the nearest 100, so the subcategories do not always sum exactly to the total and yearly changes should be viewed with caution. The OIISS draws from the Physician's Report of Occupational Disease for known or suspected occupational illnesses and are required of all physicians but in practice are mostly from the network of occupational health clinics (and therefore are likely to greatly undercount cases seen in other hospitals or by community physicians).

Data from 2021-2022 was heavily affected by the COVID-19 pandemic and resulted in dramatic changes in the workplace including shutdowns, remote work, masking, social distancing, and supply chain issues. COVID-19 reports were handled differently in the three databases: BLS coded them primarily under lung conditions or infectious diseases (depending on reporting system); workers' compensation under infectious disease (which also had a supplemental database detailed below); and physician reports from occupational health clinics did not include most COVID-19 cases which instead went through other areas such as emergency departments and special testing sites.

Approximately 3,500 cases of occupational disease were reported under the BLS/CTDOL survey, 5,188 through the workers' compensation first report of injuries, and 2,263 reported by physicians for 2023. The number of reports were dramatically higher starting in 2020 for both the BLS system and workers' compensation systems due to COVID-19 reports. Reports for COVID-19 decreased considerably from 2021-2023 for Workers'

<sup>\*</sup>Unique cases are the combined total of workers' compensation cases and physician reports, adjusted for cases reported to both systems.

<sup>\*\*</sup>Laboratory reports of adult blood lead levels are from the Connecticut Adult Blood Lead Epidemiology and Surveillance (ABLES) program

<sup>\*\*\*</sup> Musculoskeletal Disorders (MSD) definitions vary somewhat between systems. MSD is included in the "Other" category for BLS/CTDOL data.

<sup>\*\*\*\*</sup>BLS data sometimes does not sum to total due to rounding errors in the survey reporting.

Compensation (they continued to largely not be reflected in the physician reports from occupational health clinics).

Overall, excluding COVID-19 cases, both workers' compensation and physician reports had increases in 2023, but the BLS survey decreased dramatically reflecting a steep drop in COVID-19 reports. After case matching between the workers' compensation and physician reports with adjustments made for reporting to both systems, there were 7,104 unique reports made to either or both of those two systems (BLS is a survey and individual-level data is not available for matching).

**Musculoskeletal disorders** (MSD) such as Carpal Tunnel Syndrome and tendonitis was the largest category of workers' compensation occupational conditions, accounting for 49% of reports and 26% of physician reports. BLS/CTDOL has not separately reported MSDs since 2002, but it is presumed that MSDs make up the main portion of the "other illness" category in their survey data.

**Infectious disease** was the second-largest category of occupational disease reports from workers' compensation (22% of reports) and the largest category of physician reports (41%). COVID-19 accounted for 15% of infectious disease workers' compensation reports, a dramatic decline from previous years. BLS has different coding, for example with COVID-19 coming under lung conditions and bloodborne illness such as needlesticks under a separate category, and infectious disease is only broken out in the BLS system for lost/restricted time cases.

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 7% of cases reported to workers' compensation, 51% of BLS reports (mainly from COVID-19 cases) and 9% of physician reports. "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 physician reports, accounted for 19% (WCC), 12% of physician reports, and 17% of BLS. Skin conditions accounted for 3% (WCC), 5% (OIISS), and 9% of BLS reports. Lead poisoning is tracked separately and is based on laboratory reports submitted to the Connecticut Department of Public Health and is maintained in the Adult Blood Lead Epidemiology and Surveillance (ABLES) surveillance system; there were 202 reports of lead poisoning in 2023; very few of those cases are reported to the other systems.

There was an overall illness rate of 26.9 cases per 10,000 workers based on the BLS survey, 46% lower than the previous year (primarily due to the drop in COVID-19 cases). The CT rate was 24% higher than the average national rate of 52.0 and was the 10<sup>th</sup> highest out of the 45 states reporting data.

Based upon workers' compensation data, the rate of illness in 2023 was 31.1 cases per 10,000 workers, 18% lower than the 37.7 cases per 10,000 in 2022. The highest illness rates by industry sector were for Government (82.8 per 10,000 workers, over double the overall rate) and Manufacturing (51.8), with all other sectors below the average rate. Patterns differed by the type of illness, although Government, Manufacturing and Education/Health were relatively high in most categories. The specific industries with the highest rates were Utilities, Local Government, State Government, Computer and Electronic Product Manufacturing, Chemical Manufacturing, Transportation Equipment Manufacturing, Plastics and Rubber Products Manufacturing, Fabricated Metal Product Manufacturing, and Support activities for transportation.

Overall, 47% of workers compensation reports were for women, but this varied by type of case, with a much higher proportion than average for infectious diseases (70% women), but lower for all other types of illness. Based on workers' compensation reports, occupational illnesses were fairly evenly distributed across age categories between the ages of 25 to 64.

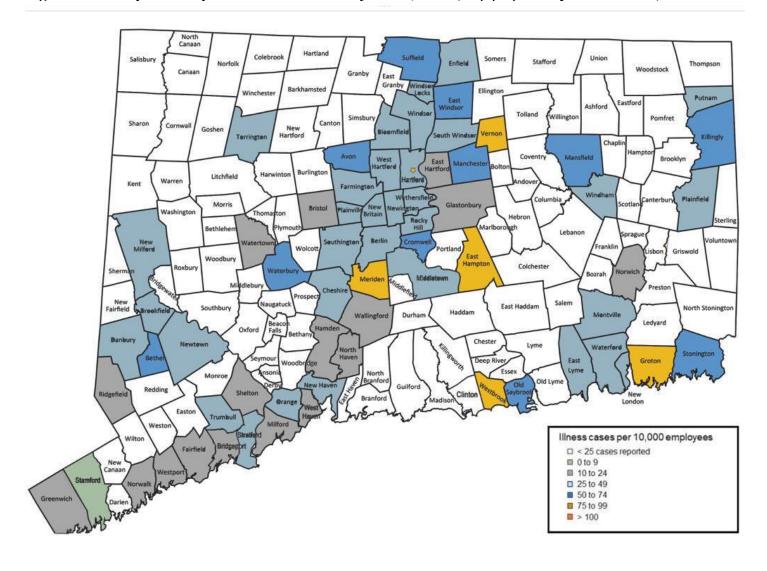
There was a dramatic decline in COVID-19 cases reported in 2023, dropping from 1,851 reports in 2022 to only 164 in 2023. Other infectious disease and exposures, based on workers' compensation reports, included 859 reports of potential exposure to bloodborne pathogens (including reports of exposure to HIV/AIDS and Hepatitis C), accounting for 77% of all infectious disease reports, including 285 needlestick or sharps exposures. There were 8 cases of tuberculosis infection and 38 reports of tick bites, rashes from tick bites and/or a diagnosis of Lyme disease attributed to occupational exposures.

Rates of illness varied widely by **municipality** based on workers' compensation reports. Towns with the highest rates often have large employers in industries associated with higher risk of occupational illnesses. There were 67 towns and cities with at least 20 cases of occupational disease reported to workers' compensation, and the overall state mean (average) was 31.1 cases per 10,000 employees. For towns with at least 20 cases, East Hampton had the highest rate of 91.6 per 10,000 workers (though with only 20 cases), compared to the state rate of 31.1. The other towns with the highest 10 rates were Meriden (79.0), Vernon (77.8), Westbrook (75.8), Groton (75.1), Stonington (71.1), Manchester (68.5), Suffield (60.2), East Windsor (57.0), Cromwell (54.4), and Bethel (52.1). Overall, 38 towns had rates higher than the state average of 31.1.

Figure A-1, a map of the rates by town is below, with rates listed in Table D-6. The map is based on a minimum of 20 or more cases per town.

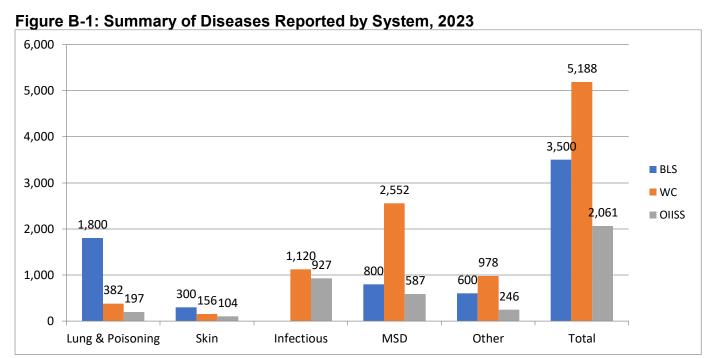
Special thanks to Ivan Cherniack and Neo Deloreto at the CT Dept of Public Health, Erin Wilkins at the CT Dept. of Labor, and Martin Resto and Richard Eighme at the CT Workers' Compensation Commission for their assistance in compiling and reviewing the data. The map of towns was created by Adam Morse.

Figure A-1: Map of Occupational Illness Rates by Town, 2023 (map prepared by Adam Morse)



# **B. Summary of Diseases**

Figure B-1 shows the totals by disease category for 2023 for the three reporting systems: the Bureau of Labor Statistics/CT Dept. of Labor (BLS) survey, the Occupational Injury and Illness Surveillance System (OIISS, based on physician reports) and the Workers' Compensation (WC) First Reports of Injury. Categories have been combined to make comparisons as close as possible; however, differences in the systems' definitions make comparisons complex. For example, Workers' Compensation only requires reporting for lost time or restricted duty cases; the BLS system requires all occupational illnesses to be reported, although the BLS data is based on only a sample of employers. The BLS/CTDOL 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%. COVID-19 cases were classed under lung conditions for the BLS system and infectious for workers' compensation; the OIISS system did not receive most COVID-19 reports since patients were not typically seen in occupational health clinics. See Appendix 1 for a complete description of methods.



**Notes:** BLS=Bureau of Labor Statistics/ConnOSHA survey; WC=Workers' Compensation First Report of Injury Database; OIISS= Occupational Illness and Injury Surveillance System (physician reports). MSD for the BLS database was estimated using prior proportions from "other" (80%) since they are no longer broken out by BLS.

OllSS does not contain most COVID-19 reports, which were classed as lung conditions by BLS and infectious for WCC. OllSS does not include the 204 cases of lab-based reports of lead poisoning

The BLS (Bureau of Labor Statistics/OSHA) survey estimated 3,500 total cases reported, 5,188 for the WC (employer reports to the Workers' Compensation Commission), and 2,061 for the OIISS (physician reports from the Occupational Injury and Illness Surveillance System). COVID-19 cases dominated reports in the BLS system (contained in the 1,800 lung and poisoning category), MSD reports (2,552) in workers' compensation and infectious disease (927 cases, predominately bloodborne disease exposures and illnesses) in the OIISS.

## 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 by employers and by physicians to the Health and Labor department, although in theory they should generally be reported to both. 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 OIISS 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 BLS and lead reports are not included.

Table B-1: Matched, Unique, and Estimated Total Cases of Occupational Illness, CT, 2023

Illness Type	Matched	WC Only	OIISS Only	Unique Cases	Estimated Unreported	Estimated Total
Infectious	129	991	798	1,918	6,130	8,048
Lung	32	350	165	547	1,805	2,352
MSD	126	2,426	461	3,013	8,876	11,889
Other	39	939	207	1,185	4,984	6,169
Skin	21	135	83	239	534	773
Subtotal*	347	4,841	1,714	6,902	23,912	30,814
Lead (lab report data)	NA	0	202	202		202
Total*	347	4,841	1,916	7,104	23,912	31,016

<sup>\*</sup>Total is different than the sum of the categories due to rounding errors in estimating subcategories. Lead data is from a separate reporting system from laboratories.

There was a total of 347 cases that were reported to **both** workers' compensation (WC) and by physicians to OIISS; 1,714 cases were reported only to the physician report (OIISS) system, and an additional 4,841 cases were reported only to the workers' compensation system. This gives a total of 6,902 unique cases that were reported to at least one of the two systems, with 1,918 infectious cases (including COVID-19), 547 lung cases, 3,013 musculoskeletal (MSD) cases, 239 skin conditions, and 1,185 "other" cases. Using a statistical method called "capture-recapture" analysis, an estimate was made of the unreported cases (cases not reported to workers' compensation nor by physicians), which was 23,912 estimated unreported cases. When combined with the unique cases, this provides an estimate of 30,814 occupational illness cases in the capture-recapture analysis (plus an additional 202 lead cases reported by labs). This gives a combined estimate of 31,016 cases of occupational illness in Connecticut for 2023.

Longer term trends in the number of reports are complex (Figure B2) and should be interpreted with caution due to some changing definitions as well as incomplete data for some years (see notes for Figure B-2). Up to the dramatic increase with COVID-19 cases starting in 2020, **BLS** reports had plateaued since 2015 after almost two decades of decline. **Workers' Compensation** (WCC-FRI) data generally declined between 2008-15 (the Workers' Compensation database was incomplete in 2003 and 2005-2007) and was level between 2015-2019, then rising dramatically with COVID-19 cases in 2020 with a decline back to pre-COVID-19 levels in 2021. **Physician reports** (OIISS) have had more fluctuation but generally increased between 2010 and 2014 and then leveled off since 2015; COVID-19 cases were typically not reported by occupational health clinics so there was not an increase starting in 2020 as in the other datasets.

The Connecticut Poison Control Center takes calls for potentially poisonous ingestions and other exposures (such as airborne or skin contact). While only 2.1% of the calls from adults were considered occupational, this totaled to 361 cases, with 94 of these considered severe. Where identified, the major categories of chemicals were cleaners, solvents, pesticides, degreasers, and acids.

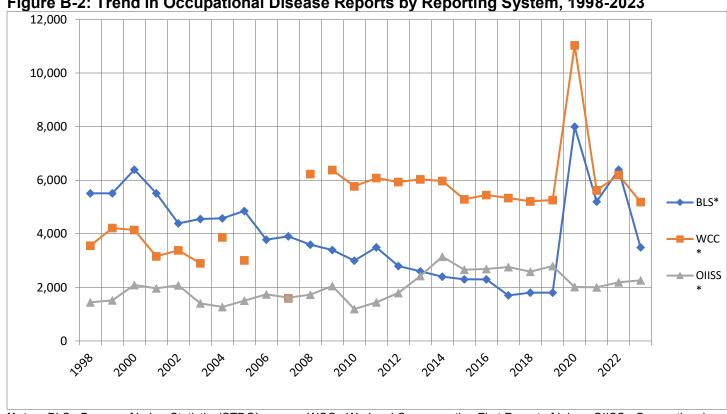
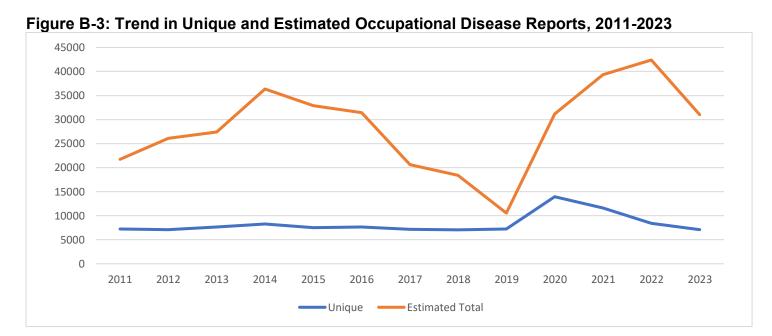


Figure B-2: Trend in Occupational Disease Reports by Reporting System, 1998-2023

Notes: BLS= Bureau of Labor Statistics/CTDOL survey; WCC= Workers' Compensation First Report of Injury; OIISS= Occupational Illness and Injury Surveillance System (physician reports). BLS figures starting in 2002 not comparable to prior years due to changes in data collection. WCC data was not complete for 2003 and 2005-2007. OIISS was not complete for 2010 and did not include most bloodborne infectious diseases/exposures in 2011.

Figure B-3 shows the trends since 2011 in unique (cases reported either to workers' compensation or to OIISS) and estimated totals based on an estimate of unreported cases using capture-recapture methods. Unique cases stayed fairly flat (7,000-8,000) over time until the COVID-19 increase shown for 2020-21. Estimated cases peaked in 2014 and declined until the increase in 2020-22 due primarily to COVID-19.



# C. Bureau of Labor Statistics/Connecticut Dept. of Labor Surveys

In cooperation with the U.S. Bureau of Labor Statistics (BLS), the Connecticut Department of Labor's (CTDOL) Office of Research conducts an annual survey of employers for job-related injuries and illnesses; data on **injuries** in Connecticut can be accessed through the national Bureau of Labor Statistics website at https://www.bls.gov/iif/oshstate.htm. This report focuses on **illnesses** and includes data from CTDOL 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/CTDOL survey under-counts occupational diseases, particularly chronic diseases, since these are frequently not recognized nor reported.

## **Occupational Illnesses in 2023**

There were approximately 3,500 reported cases of occupational illnesses in 2023 (Table C-1 and Figure C-1) with an overall rate of 26.9 per 10,000 workers, a 47% decrease in rates from the prior year. The decrease was due entirely to a 67% decrease in respiratory conditions due to a dramatic decrease in COVID-19 reports. All other categories increased in 2023, including skin conditions (30% increase) "other" conditions (which include repetitive trauma/musculoskeletal conditions), 47% increase, and hearing loss (40% increase). Numbers of poisonings were too low to be reliably reported.

Table C-1: Occupational Disease by Type, BLS/CTDOL 2022-2023

	202	22	202	23	% Change
	Cases	Rates	Cases	Rates	in Rate
Respiratory	5,300	41.4	1,800	13.8	-67%
Skin	200	2.0	300	2.6	30%
Hearing Loss	300	2.0	400	2.8	40%
Poisonings	**	**	**	**	**
Other*	600	5.1	1,000	7.5	47%
Total	6,400	50.6	3,500	26.9	-47%

**Source:** BLS/CTDOL; Rates are per 10,000 workers, adjusted for hours worked. The data includes public sector. Total Illnesses may differ from sum due to rounding errors.

Overall rates for Connecticut in 2023 were 24% higher than U.S. rates (Figure C-1), with higher rates of skin, respiratory, and hearing loss cases and lower rates for other illnesses (mainly musculoskeletal conditions).

Connecticut's illness rate of 26.9 cases per 10,000 workers ranked 10<sup>th</sup> highest out of 45 states and territories with publishable data (9 states had higher rates and 35 had lower rates). Maine had the highest rate of 49.2 and Louisiana had the lowest at 6.0. The U.S. average was 21.7.

Private sector rates for occupational illness were 27.7 in Connecticut and 19.0 nationally. The U.S. rate for the public sector was approximately twice as high as Connecticut: the Connecticut public sector rate was 20.1 vs. the U.S. rate of 40.8.

In Connecticut, the rate of illnesses increased slightly from 2002-2005, generally decreased through 2019 (except for 2011) with a dramatic increase starting in 2020 due to COVID-19 cases (Figures C-2 and C-3).

<sup>\*</sup>Musculoskeletal disorders (MSD) are categorized under the "Other" category by BLS.

<sup>\*\*</sup> Numbers are too small or unreliable to publish.

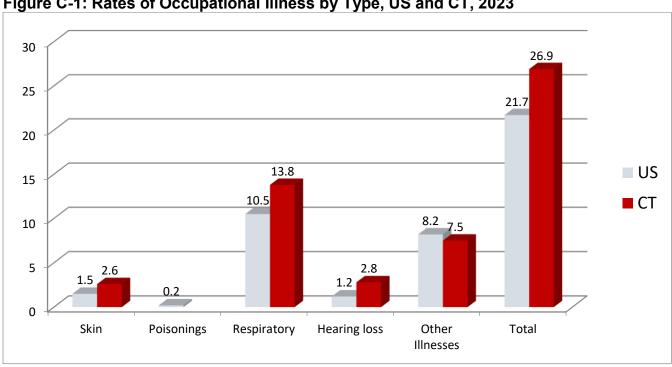
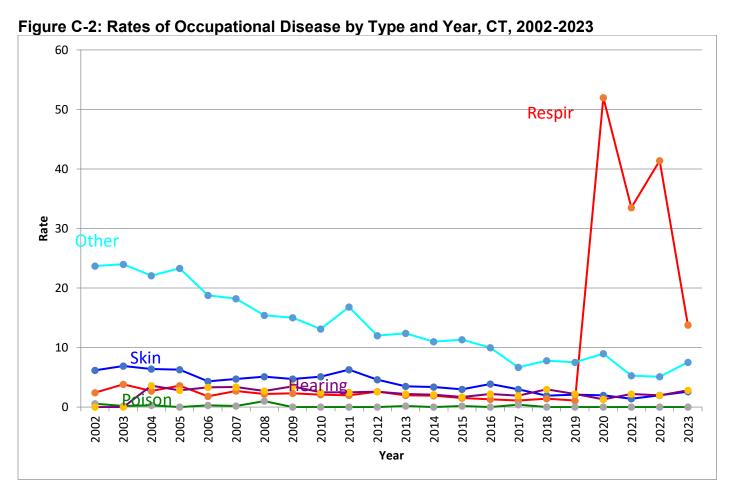


Figure C-1: Rates of Occupational Illness by Type, US and CT, 2023

Source: BLS and CTDOL. Rates per 10,000 workers, adjusted for hours worked. Source: https://data.bls.gov/cgi-bin/dsrv



Source: BLS and CTDOL. Rates per 10,000 workers, adjusted for hours worked.

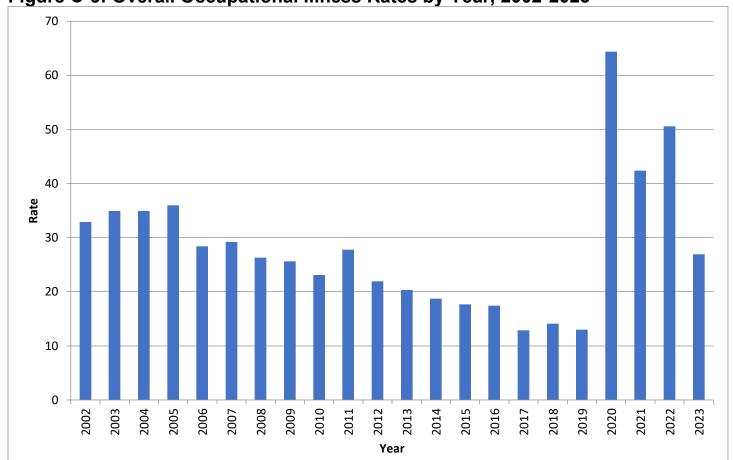


Figure C-3: Overall Occupational Illness Rates by Year, 2002-2023

## **Illnesses by Industry**

Numbers and rates by industry sector for 2023 are presented in Table C-2. Overall, the adjusted rate was 26.9 cases of occupational illness per 10,000 CT workers. The overall private sector rate was 27.7, with a government rate of 20.1. Blank spaces indicate too few cases for reliable estimates from the survey.

Overall rates were dominated by respiratory illnesses which includes COVID-19 as well as bloodborne and other infectious conditions at 13.8 cases per 10,000 workers, followed by Other Illnesses (which includes chronic musculoskeletal conditions) at 7.5.

Industries are broken down by major industry sector (in blue) and detailed sector. By far, the highest major industry sector rate was Educational and Health Services at 82.3, with the sub-category of Health Care at 98.4. This was followed by the major industry category of Goods-producing at 31.5 (including Manufacturing at 43.2) and Government at 20.1 (including State Government at 28.0).

Other Illnesses, which includes musculoskeletal conditions due to repetitive exposures, was highest in the large sectors of Education and Health Services (13.2) and Government (12.7). Hearing loss was primarily reported in Goods Producing (16.8), including Manufacturing (23.3). Skin conditions was led by Government (5.9), Education and Health (4.6) and Goods Producing (3.4). There were no industries with reportable numbers for Poisonings.

Table C-2: Illnesses by Industry Sector and Type of Illness, CT, 2023

_	То	tal	SI	cin .	Respi	ratory	Poiso	nings	Hearin	g Loss	Other III	Inesses
Industry sector	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
All Industries	3.5	26.9	0.3	2.6	1.8	13.8			0.4	2.8	1.0	7.5
Private Industry	3.3	27.7	0.3	2.2	1.8	15.4			0.4	3.1	0.8	6.9
Goods producing	0.7	31.5	0.1	3.4		1.5			0.4	16.8	0.2	9.8
Manufacturing	0.7	43.2	0.1	4.5		1.9			0.4	23.3	0.2	13.5
Service providing	2.6	26.8	0.2	2.0	1.8	18.5					0.6	6.2
Trade, transportation, and utilities	0.2	9.9		1.4		1.3					0.2	6.9
Retail Trade	0.1	9.2				2.5					0.1	5.9
Transportation and warehousing	0.1	19.7									0.1	17.2
Finance, insurance, and real estate												
Professional and business services												
Educational and health services	2.1	82.3	0.1	4.6	1.6	64.4					0.3	13.2
Education		6.9										3.7
Health care and social assistance	2.1	98.4	0.1	5.4	1.6	77.8					0.3	15.2
Leisure, entertainment, and hospitality	0.1	5.7										2.8
Accommodation and food services		5.7										2.9
Other services (except public administration)		5.4										4.2
State and Local Government	0.3	20.1	0.1	5.9							0.2	12.7
State Government	0.1	28.0	0.1	16.2							0.1	10.9
Local Government	0.2	16.2									0.1	13.6

**Source:** CTDOL; Rates are adjusted for hours worked and are per 10,000 full-time workers. Number of cases are in thousands (i.e 0.2 means 200 cases). Blanks indicate too little data for reliable estimates. Detailed subcategories with no publishable data are omitted.

## **Lost-Time Illnesses**

BLS has changed their reporting system for lost time illnesses to consolidate survey responses for every two years, and so data was combined for 2021-2022; data will not be available for 2023-2024 until next year. This included some changes in the definitions of reportable illnesses (see below), so data on lost time illnesses (this section) is not directly comparable to previous years' data. BLS obtains additional data for the subset of cases that result in lost or restricted worktime and provides 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). There have been some data collection changes in relation to lost time, so comparisons over time (such as Figure C-3) need to be done with caution. Starting in 2021, BLS began coding data on cases with job transfer/restriction as well as days away from work.

#### **Infectious Disease**

COVID-19 cases could be classified under several different categories, primarily under respiratory and viral cases. For BLS lost time cases (this section), COVID cases are coded under "other diseases due to viruses, nec". In the OSHA Summary section above, they are counted under Respiratory Conditions. Viral diseases with lost time increased dramatically in 2020 due to COVID-19. Connecticut had a rate of viral disease of 32.0 cases per 10,000 workers in 2021-22, almost identical to the U.S. rate of 31.7, with 7,970 estimated cases reported in that category in Connecticut and an average of 9 days lost time.

### **Musculoskeletal Conditions**

The rate of musculoskeletal disorders (MSD) with lost time in Connecticut increased from 40.6 in 2020 to 64.6 for the combined 2021-22 years. The Connecticut rate is 29% higher than the national MSD rate of 50.0. MSD rates in Connecticut had generally decreased over the prior seven years. National rates for all private and public employees have only been available since 2008.

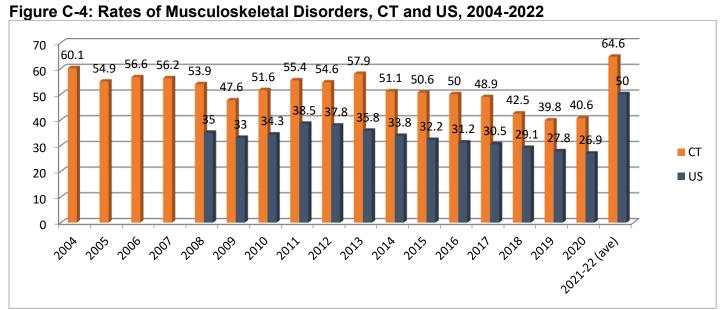
Musculoskeletal conditions are the most common category of specific injury and illness conditions and is a category that includes both chronic conditions and sprains and strains from overexertion. BLS defines this fairly complex category as "includes cases where the nature of the injury or illness is 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."

The rate of tendonitis in CT dropped in half from 0.6 cases per 10,000 workers in 2020 to 0.3 in 2021-22 (Figure C-4), while carpal tunnel syndrome (CTS) increased from 0.5 cases to 0.7 cases per 10,000. The rate of CTS in CT was 40% higher than the national rate but equal for tendonitis. CTS had a very high number of lost workdays, with a median of 39 days of lost time per case. Tendonitis (and related soft-tissue disorders) was also high at 14 days, and musculoskeletal disorders had 15.

Connecticut lost time cases coded as "**repetitive motion**" for cause increased to 5.0 cases per 10,000 workers from 2.3 in the previous year (Table C-3). Grasping was the largest specific cause of repetitive motion, followed by microtasks, tool use, and computer use. The CT rate was 25% higher than the national rate of 4.0.

## **Lost Time Illnesses**

Average amounts of lost time for illnesses that had lost time in Connecticut varied widely and are categorized into days away from work and restricted duty days (https://data.bls.gov/cgi-bin/dsrv?cb). Skin conditions averaged 3 lost days and/or 4 restricted days, Carpal Tunnel Syndrome 39/134 days, tendonitis and related conditions 42/39 days, musculoskeletal conditions 33/39 days, viral diseases 9/6 days, inhalation of harmful substances 5/8, and repetitive motions 27/38 days. Overall, for all injuries and illnesses resulting in lost time, there were 10 lost days and 14 restricted days.



**Source:** U.S. Bureau of Labor Statistics (Customized Tables); https://data.bls.gov Rates are cases per 10.000 full time employees, public and private

Definitions of lost-time cases changed for 2021-22 so are not directly comparable to prior years.

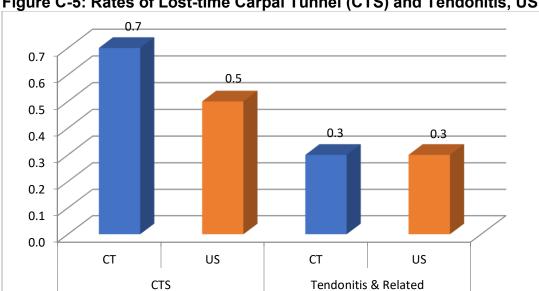


Figure C-5: Rates of Lost-time Carpal Tunnel (CTS) and Tendonitis, US & CT, 2021-22

Source: BLS Website <a href="http://www.bls.gov">http://www.bls.gov</a> customized tables, private and public, cases per 10,000 full time employees.

Table C-3: Rates Involving Repetitive Motion by Type, 2020-2022

Repetitive Motion Injuries	2020	2021-22 CT	2021-22 US
Microtasks (unspecified)	0.6	1.4	1.2
Typing and computer	0.3	0.7	0.5
Tools	0.5	1.2	0.9
Grasping, placing, moving	0.5	1.5	1.3
All repetitive with microtasks (total)	2.3	5.0	4.0

# D. Workers' Compensation First Report of Injury Data

There was a total of 5,188 reports in the Workers' Compensation First Report of Injury (FRI) Database for 2023 (Table D-1), a drop of 16% since the previous year, almost entirely due to the sharp drop in reported COVID-19 cases. There were 164 COVID-19 cases reported through the FRI data, a drop of 89% from 2022. In addition, there was no supplemental COVID database (these are cases reported to workers' compensation through other reporting such as employee notice of claims or from hearings) in 2023, so there was a 21% drop using all databases.

Other infectious conditions besides COVID-19 were up substantially from 2022, with a 44% increase in other infectious diseases as well as a 42% increase in lung conditions. Musculoskeletal conditions remained essentially unchanged, skin disorders decreased by 11%, and other illnesses (such as heart conditions, stress, and hearing loss) decreased 6%.

Musculoskeletal disorders (MSD) were 41% of total cases, infectious disease (including COVID-19) 22%, Other illnesses 19%, lung conditions 7%, and skin disorders 3%.

Table D-1: Occupational Disease by Type, WCC, 2022-2023

	2022	20		
Illness type	Cases	Cases	% of Total	% Change
Musculoskeletal Disorders (MSD)	2,535	2,552	49%	1%
Infectious Disease (w/o COVID)	665	956	18%	44%
COVID-19*	1,508	164	3%	-89%
Lung Disorders	269	382	7%	42%
Skin Disorders	176	156	3%	-11%
Other Illnesses	1,045	978	19%	-6%
Total	6,198	5,188	100%	-16%
Additional COVID-19 cases*	343			-100%
Total	6,541	5,188		-21%

<sup>\*</sup>There were an additional 343 cases of COVID-19 reported to the Workers' Compensation Commission through other reporting mechanisms in 2022, but there was no separate recordkeeping in 2023.

Overall, 47% of reports were for women, but this varied by type of case, with a much higher proportion than average for infectious diseases (70% women), but lower for all other types of illness (Figure D-1), particularly for lung disease (28%) and skin conditions (29%). Women comprised approximately 48% of the overall Connecticut workforce in 2021, so occupational disease rates appear approximately the same for women and men.

Reported occupational illnesses was distributed evenly across most age groups (Table D-2), with approximately 20% for each decile for workers between 25 and 54, and slightly higher (23%) for those between 55-64. Rates of illness (adjusted for the size of the workforce) vary by age, with the highest rate for workers between 55 and 64 (36.5 per 10,000 workers). Both the percentage of cases as well as rates were lower for the youngest workers (16-24).

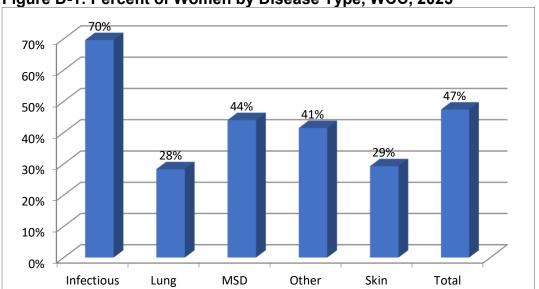


Figure D-1: Percent of Women by Disease Type, WCC, 2023

Table D-2: Occupational Illnesses and Rates per 10,000 Workers by Age, 2023

Age	Cases	Percent	Workforce*	Rate
16-24	386	7%	207,496	18.6
25-34	1,082	21%	336,195	32.2
35-44	1,050	20%	345,896	30.4
45-54	1,049	20%	324,439	32.3
55-64	1,175	23%	321,725	36.5
65-80	399	8%	139,970	28.5
Age Unknown	47	1%		
Total	5,188	100%	1,668,477	31.1

<sup>\*</sup>Workforce data obtained from the Census Quarterly Workforce Indicators based on the 4 quarter average adjusted to labor department seasonably adjusted totals (https://ledextract.ces.census.gov/static/data.html)

Numbers and rates of occupational illnesses by industry sector are presented by major North American Industry Classification System (NAICS) classifications in Figure D-2 and Table D-3. Ninety-nine percent (99%) of reported cases were able to be coded for major industry sector. The largest sectors in terms of overall numbers were Government (35% of all cases, combined local and state), Trade (14%), Education/Health<sup>1</sup> (16%), and Manufacturing (16%).

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). Overall, the rate of illness in 2023 was 31.1 cases per 10,000 workers, 18% lower than the 37.7 cases per 10,000 in 2022. The highest illness rates by industry sector were for Government (82.8 per 10,000 workers, over double the overall rate) and Manufacturing (51.8), with all other sectors below the average rate.

<sup>&</sup>lt;sup>1</sup> Some health and education cases are classified under government, such as employees in public schools, so this figure is for private sector schools and healthcare.



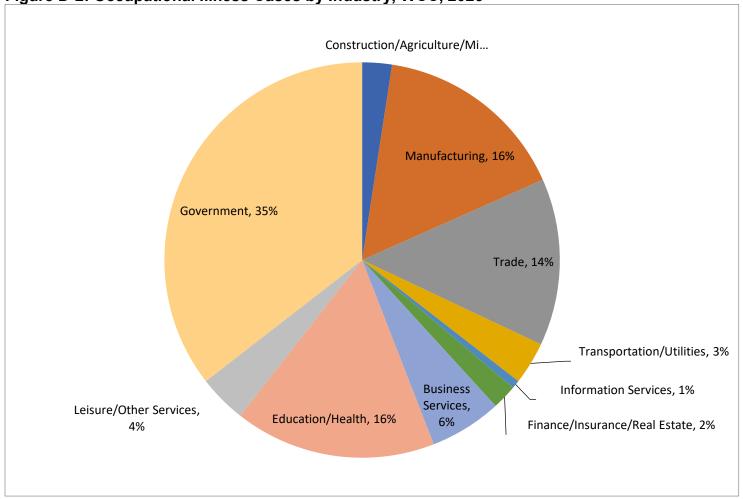


Table D-3: Rates of Occupational Disease by Major Industry Sector, WCC, 2023

Industry Sector	Cases	%	Employment	%	Rate
Government	1,822	35%	220,084	13%	82.8
Manufacturing	816	16%	157,532	9%	51.8
Trade	703	14%	227,582	14%	30.9
Transportation/Utilities	179	3%	69,693	4%	25.7
Education/Health	847	16%	345,611	21%	24.5
Construction/Agriculture/Mining	124	2%	67,323	4%	18.4
Business Services	302	6%	221,330	13%	13.6
Information Services	34	1%	31,092	2%	10.9
Leisure/Other Services	201	4%	208,003	12%	9.7
Finance/Insurance/Real Estate	104	2%	116,095	7%	9.0
Unknown	56	1%	4,331		
Total	5,188	100%	1,668,477	100%	31.1

**Notes:** Employment is adjusted for hours worked. A small number of reports that could not be coded for industry are categorized as unknown. Rates are illnesses per 10,000 workers. Total employment and percent do not equal the sum of components due to rounding errors. Government sector includes cases that could alternately be classified under health and education (i.e. public schools). NAICS is the North American Industry Classification System. Employment is based on the CT Labor Dept. QCEW (https://www1.ctdol.state.ct.us/lmi/202/202\_annualaverage.asp)

Table D-4 provides the detail of industry sector by type of condition. Patterns differed by the type of illness, although Government, Manufacturing and Education/Health were relatively high in most categories. Table D-4 shows **numbers** of cases and not **rates**, so they are not adjusted for employment size in the different sectors (rates are shown in Tables D-3 and D-5).

Table D-4: Number of Diseases by Industry Sector, WCC, 2023

	O	ther	Lu	Lung		tious	MS	SD Skin		kin	Total	
Construction/Agric/Mining	18	2%	16	4%	1	0%	87	3%	2	1%	124	2%
Manufacturing	138	14%	51	13%	4	0%	594	24%	29	19%	816	16%
Trade	149	15%	29	8%	25	2%	484	19%	16	11%	703	14%
Transport/Utilities	28	3%	7	2%	9	1%	127	5%	8	5%	179	3%
Information Services	6	1%	2	1%	2	0%	22	1%	2	1%	34	1%
Finance/Insurance/RE	30	3%	11	3%	5	0%	56	2%	2	1%	104	2%
Business Services	50	5%	21	6%	63	6%	158	6%	10	7%	302	6%
Education/Health	103	11%	38	10%	380	34%	311	12%	15	10%	847	17%
Leisure/Other Services	55	6%	11	3%	11	1%	112	4%	12	8%	201	4%
Government	394	41%	195	51%	614	55%	564	22%	55	36%	1,822	36%
Subtotal	971	100%	381	100%	1,114	100%	2,515	100%	151	100%	5,132	100%
Unknown	7		1		6		37		5		56	
Total	978		382		1,120		2,552		156		5,188	

Infectious diseases were concentrated in Government (55%) and Education/Health (34%). Lung diseases were concentrated in Government (51%), Manufacturing (13%) and Education/Health (10%). Musculoskeletal disorders (MSD) were spread across Manufacturing (24%), Government (22%), Trade (19%), and Education/Health (12%). Skin disorders were spread across Government (36%), Manufacturing (19%) Trade (11%) and Education/Health (10%). "Other" illnesses, including heart conditions and hypertension, stress, and hearing loss cases were most common in Government (41%), Trade (15%), Manufacturing (14%), and Education/Health (11%).

Table D-5 shows those specific industry subsectors (3-digit NAICS code) that reported 20 or more cases of occupational illness in 2023, ordered by the highest *rate* of illness. Utilities were highest with 99.3 cases per 10,000 workers, followed by Local Government (91.5), State Government (88.2), and Computer Manufacturing (84.9).

Overall, 20 sectors were above the state average of 31.1 cases per 10,000. In addition to the four mentioned above these were Chemical Manufacturing, Transportation Equipment Manufacturing, Plastics and Rubber Products Manufacturing, Fabricated Metal Product Manufacturing, Support activities for transportation, Electrical Equipment & Appliance Manufacturing, Food and Beverage Stores, Merchant Wholesalers (Nondurable Goods), Trucking, General Merchandise Stores, Telecommunications, Food Products, Nursing and Residential Care Facilities, Waste management and remediation services, Couriers and Messengers, and General Purpose Machinery Manufacturing. The last column shows the change from 2022, showing, for example, the large decrease in rates for nursing homes (79%) due to the huge change in COVID-19 reports.

Table D-5: Specific Industry Sectors, 20 or more Cases of Occupational Disease, WCC, 2023

Table D-5: Specific Industry Sectors, 20 or mo	NAICS	2023#	Employed	2023 Rate	2022 Rate	Change
Utilities	221	50	5,034	99.3	64.8	53%
Local Government	LGvt	1,273	139,175	91.5	79.7	15%
State Government	SGvt	549	62,226	88.2	74.3	19%
Computer and Electronic Product Manuf	334	88	10,361	84.9	59.9	42%
Chemical Manufacturing	325	52	7,990	65.1	55.9	16%
Transportation Equipment Manuf	336	282	46,521	60.6	62.6	-3%
Plastics and Rubber Products Manuf.	326	27	4,985	54.2	54.4	0%
Fabricated Metal Product Manufacturing	332	138	27,415	50.3	45.8	10%
Support activities for transportation	488	19	3,795	50.1	77.0	-35%
Electrical Equip, Appliance Manuf	335	34	6,837	49.7	30.6	62%
Food and Beverage Stores	445	185	41,023	45.1	61.7	-27%
Merchant Wholesalers, Nondurable Goods	424	95	21,760	43.7	51.0	-14%
Trucking	484	34	8,375	40.6	46.4	-13%
General Merchandise Stores	452	117	29,276	40.0	62.0	-36%
Telecommunications	517	22	6,048	36.4	49.6	-27%
Food Products	311	34	9,044	37.6	56.3	-33%
Nursing and Residential Care Facilities*	623	193	55,094	35.0	169.9	-79%
Waste management and remediation services	562	21	6,222	33.8	34.8	-3%
Couriers and Messengers	492	42	12,489	33.6	38.1	-12%
General Purpose Machinery Manuf	333	44	13,729	32.0	50.6	-37%
Connecticut	Ave.	5,188	1,668,477	31.1	37.7	-18%
Educational Services*	611	191	63,152	30.2	27.1	11%
Performing arts and spectator sports	711	11	3,987	27.6	68.7	-60%
Hospitals*	622	186	62,710	29.7	45.1	-34%
Accommodation	721	26	9,529	27.3	30.6	-11%
Miscellaneous manufacturing	339	24	8,895	27.0	23.8	14%
Clothing and clothing accessories	448	33	12,760	25.9	34.9	-26%
Physician Offices	621	234	96,071	24.4	32.8	-26%
Motor Vehicle Dealers	441	50	21,135	23.7	24.2	-2%
Misc. Retail Stores	453	32	14,520	22.0	19.5	13%
Administrative and Support Services	561	173	82,981	20.8	27.5	-24%
Health and personal care stores	446	26	12,716	20.4	19.3	6%
Transit and Ground Passenger Transport	485	26	12,888	20.2	30.4	-34%
Non-store Retailers	455	57	29,276	19.5	54.0	-64%
Residential Building Leasing	531	27	14,548	18.6	19.9	-7%
Specialty Trade Contractors	238	78	43,176	18.1	21.6	-16%
Religious and civic	813	26	15,324	17.0	14.7	15%
Non-residential Construction	236	18	11,479	15.7	39.2	-60%

Merchant Wholesalers, Durable Goods	423	51	32,831	15.5	24.1	-35%
Repair and maintenance	811	20	13,408	14.9	17.8	-16%
Hardware Stores	444	23	15,689	14.7	76.5	-81%
Credit and Banks	522	25	20,105	12.4	8.2	51%
Amusement, gambling, and recreation	713	23	21,004	11.0	10.1	9%
Professional, Scientific, and Technical Services	541	88	100,681	8.7	8.6	2%
Personal and laundry services	812	18	21,348	8.4	11.5	-27%
Management of Companies (Holding)	551	20	31,247	6.4	4.5	42%
Food Services and Drinking Places	722	69	115,920	6.0	6.5	-8%
Social Assistance	624	40	68,584	5.8	14.8	-61%
Insurance Carriers and Related Activities	524	24	53,805	4.5	5.0	-11%

<sup>\*</sup>Excludes government workers, who are listed under government.

Note: Rates are cases per 10,000 employees.

## 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 A-1 in the Summary section) show the rates of illness per 10,000 employees per town (based on total employment by town of employment, provided by the CT Dept. of Labor) for all towns and municipalities with at 20 or more cases of occupational illness reported in 2023. The table is ordered by rates, with the highest rates first. Rates of illness varied widely by municipality; often high-rate towns appear to have large employers in high-rate industries. The overall state average was 31.1 cases per 10,000 employees.

For towns with at least 20 cases, East Hampton had the highest rate of 91.6 per 10,000 workers (though with only 20 cases), compared to the state rate of 31.1. The other towns with the highest 10 rates were Meriden (79.0), Vernon (77.8), Westbrook (75.8), Groton (75.1), Stonington (71.1), Manchester (68.5), Suffield (60.2), East Windsor (57.0), Cromwell (54.4), and Bethel (52.1).

Overall, 38 towns had rates higher than the state average of 31.1.

Table D-6: Illnesses by Town/Municipality, 20 or more cases, WCC, 2023

Town	Employment	Cases	Rate per 10,000	Rank*
East Hampton	2,184	20	91.6	1
Meriden	20,767	164	79.0	2
Vernon	7,838	61	77.8	3
Westbrook	3,296	25	75.8	4
Groton	30,226	227	75.1	5
Stonington	8,013	57	71.1	6
Manchester	26,999	185	68.5	7
Suffield	4,319	26	60.2	8
East Windsor	6,321	36	57.0	9
Cromwell	7,163	39	54.4	10
Bethel	7,103	37	52.1	11
Avon	8,256	43	52.1	12
Killingly	8,744	45	51.5	13

Waterbury	36,495	186	51.0	14
Old Saybrook	5,938	30	50.5	15
Mansfield	11,938	60	50.3	16
Farmington	30,809	153	49.7	17
South Windsor	13,860	68	49.1	18
Plainfield	4,504	22	48.8	19
Newtown	8,868	42	47.4	20
New London	12,821	60	46.8	21
Rocky Hill	16,638	76	45.7	22
Middletown	29,511	129	43.7	23
East Lyme	5,491	24	43.7	24
Cheshire	17,349	75	43.2	25
Torrington	14,649	63	43.0	26
Stratford	25,317	106	41.9	27
Plainville	8,929	37	41.4	28
Berlin	11,314	45	39.8	29
Windsor	24,895	99	39.8	30
New Britain	23,947	88	36.7	31
Enfield	17,516	64	36.5	32
New Milford	7971	29	36.4	33
Southington	17,891	65	36.3	34
Orange	10,940	38	34.7	35
Putnam	5,851	20	34.2	36
Newington	16,505	54	32.7	37
Bloomfield	20,713	65	31.4	38
Connecticut	1,668,107	5,188	31.1	Ave
Wethersfield	9,883	30	30.4	39
Windsor Locks	12,572	38	30.2	40
Brookfield	7,348	22	29.9	41
Windham	9,703	29	29.9	42
Trumbull	14,400	40	27.8	43
Danbury	42,935	119	27.7	44
Waterford	10,194	28	27.5	45
New Haven	89,586	241	26.9	46
Hartford	109,150	278	25.5	47
Montville	10,325	26	25.2	48
West Hartford	28,648	72	25.1	49
Bridgeport	41,439	103	24.9	50
Norwich	16,226	40	24.7	51
Bristol	21,188	49	23.1	52
Watertown	8857	20	22.6	53
Norwalk	40,337	87	21.6	54

Glastonbury	17,567	37	21.1	55
Wallingford	26,748	55	20.6	56
West Haven	15,225	31	20.4	57
North Haven	26,690	52	19.5	58
Ridgefield	10614	20	18.8	59
Greenwich	34,151	61	17.9	60
Westport	15,296	27	17.7	61
Hamden	20,593	36	17.5	62
Milford	26,217	39	14.9	63
East Hartford	31,328	46	14.7	64
Shelton	25,458	32	12.6	65
Fairfield	26,837	28	10.4	66
Stamford	74,398	52	7.0	67
Total Towns, 20+ cases	1,365,802	4,401	32.2	NA
Total Towns, <20 cases	248,776	635	25.5	NA

<sup>\*</sup>The town ranked first has the highest rate of illness. Ranks are based on the towns with at least 20 cases of illness reported for the year. Employment figures are based on the town of employment. The Connecticut rate is the average of all towns, not just those with 20 or more cases.

## **Musculoskeletal Disorders (MSD)**

"Musculoskeletal disorders" are conditions also known as cumulative trauma disorders or repetitive strain injuries. There were 2,552 cases of MSD reported to Workers' Compensation in 2023, a very slight (1%) increase from 2022 (Table D-7). MSD accounted for 49% of the reported occupational diseases to the Workers' Compensation First Report of Injury (FRI) database. MSD do not include cases for conditions determined to be injuries caused from sudden events. This is a different definition than that used by BLS/CTDOL for lost time MSD shown earlier in the report, which includes some acute injuries. Since the descriptions of back conditions are typically insufficient to be able to distinguish between acute injuries and cumulative back injuries, most cases for the lower back are not included unless they specifically noted that they were due to repetitive exposures. To be eligible for workers' compensation, a claim must be filed within one year of the accident date for injuries or three years from the first symptom of an occupational disease. The one-year deadline also applies to repetitive trauma injuries and runs from the date of the last exposure to the trauma, not from when the injury is first noticed.

Strains and sprains (which do not include acute strains or sprains such as those from single events/accidents and is a generic name for a type of MSD) was the most common category of MSD, with 77% of reports (Table D-7). Carpal Tunnel Syndrome (CTS), which is a very debilitating pinching of the median nerve at the wrist, accounted for 8% of total MSD reports. Other nerve-related problems (with descriptions such as numbness or tingling) accounted for an additional 4% of cases. Tendon-related problems including tendonitis and tenosynovitis, epicondylitis ("tennis elbow" or "golfer's elbow"), trigger finger, and rotator cuff accounted for 2% of cases. Many cases did not have a specific description other than inflammation, swelling, pain or no specific description.

Almost two-thirds (60%) of the cases of MSD were in the upper limbs of the body such as hands, arms, elbows, and shoulders (Table D-8). Another 18% were for the lower extremity (legs, knees and feet), and 16% for the neck, upper back, and torso (note that lower back cases were excluded from these figures unless they explicitly indicated they were due to cumulative exposures).

Table D-7: Musculoskeletal Disorders (MSD) by Type, WCC, 2022-2023

	2022	2022 2023		
MSD Type	Cases	Cases	%	Change
Sprain/strain	1,738	1,955	77%	12%
Carpal Tunnel Syndrome	239	204	8%	-15%
Numbness	111	112	4%	1%
Inflammation	155	50	2%	-68%
Tendonitis/tenosynovitis	20	22	1%	10%
Trigger finger	17	17	1%	0%
Epicondylitis	14	12	0%	-14%
Rotator cuff	25	11	0%	-56%
Ganglion cyst	8	8	0%	0%
Arthritis/bursitis	6	4	0%	-33%
Other/Unknown	202	157	6%	-22%
Total	2,535	2,552	100%	1%

Table D-8: Musculoskeletal Disorders by Part of Body, WCC, 2023

Part of body	Cases	Percent
Lower Arm, Wrist, Hand	793	31%
Upper Arm, Shoulder, Upper Extremity	604	24%
Legs, Knees, and Feet	448	18%
Neck, Back, Torso	413	16%
Elbow	135	5%
Multiple	147	6%
Other/Unknown	12	0%
Total	2,552	100%

Causes of conditions were often incomplete, overlapping, and not consistently coded nor described. Approximately 86% of MSD cases had enough description to show some cause. Of the MSD that could be classified (Table D-9), the most frequently mentioned cause was the broad category of "repetitive" or "cumulative" (33% of cases). This term is often used as a general description to describe any chronic musculoskeletal problem. Repetitive motion was followed by lifting and carrying (21%), tool use (including references specifically to pneumatic tools or vibration exposure; 9%), pushing or pulling (6%), walking/running (5%), and computing and clerical tasks (5%).

Table D-9: Musculoskeletal Disorders (MSD) with Identified Cause, WCC, 2023

Cause of MSD	Reports	%
Repetitive/cumulative	724	33%
Lifting/carrying	458	21%
Tools/vibration	206	9%
Push/pull	128	6%
Walking/running/moving	108	5%
Computer/clerical	101	5%
Assembly	73	3%
Bending/kneeling/crawling	58	3%
Reaching/overhead/posture	58	3%
Twisting	55	2%
Machine	41	2%
Driving	43	2%
Grasping/gripping/squeezing	39	2%
Cleaning/mopping/sweeping	32	1%
Patient care	25	1%
Climbing	22	1%
Sitting/standing	19	1%
Shoveling/raking	9	0%
Scanning/cashier	5	0%
Sub-Total	2,204	100%
Unknown/other	348	
Total	2,552	

#### **Infectious Diseases**

There were 1,120 reports of infectious diseases or exposures in the "First Report of Injury" (FRI) database for 2023 (Table D-10) including 164 reports of COVID-19 illness and/or exposure, dramatically lower than 2022. Infectious disease reports can include both actual disease and exposure to infectious agents. There wasn't a separate COVID database in 2023, so there were no additional reports (compared to the 343 additional COVID-19 cases in 2022). This was a dramatic (89%) decrease from the 1,508 COVID cases in the 2022 database and resulted in an overall drop of 48% in infectious disease cases.

The 164 COVID-19 cases accounted for 15% of infectious disease reports. If COVID-19 reports are excluded, there were 956 other infectious diseases reported, an increase of 44% from 2022.

There were 859 reports of exposure to bloodborne pathogens (including reports of exposure to HIV/AIDS and Hepatitis C), accounting for 77% of all infectious disease reports and a 45% increase from the previous year (mainly due to a large increase in the reports of human bites). These included 285 needlestick injuries or cuts from sharps or surgical instruments that may have resulted in exposure to a patient's blood (a 16% increase from the prior year), 459 reports of exposures to human bites (cases were excluded if they specifically indicated the skin was not broken), an 82% increase, and 115 reports of skin or eye exposure to blood or bodily fluids (a

20% increase). There were additional reports of exposure to "spit" or "sputum" that are not reported here, since risks tend to be extremely low from such exposures. Diseases that can be contracted through blood and body fluid exposures include hepatitis B, hepatitis C and HIV.

Human bites are 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). Sharps (i.e., scalpels) and needlesticks are considered the highest risk (especially if they are deep cuts or injections). Incidents concerning prisoners or clients (including special needs students) accounted for most 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 reported incidents will have little or no actual risk of disease transmission. However, preventive efforts focus on universal precautions, so it is important to reduce these incidents regardless of whether patients/clients are known to be infected.

Table D-10: Infectious Diseases and Exposures by Type, WCC, 2022-2023

	2022		2023		
Illness	Cases	%	Cases	%	Change
COVID	1,508	69%	164	15%	-89%
Bloodborne: Sharp and needlestick exposures	246	11%	285	25%	16%
Bloodborne: Human bite	252	12%	459	41%	82%
Bloodborne: Blood/body fluids	96	4%	115	10%	20%
TB/ppd conversion/exposure	11	1%	8	1%	-27%
Lyme Disease/Tick bite	29	1%	38	3%	31%
Other infectious	31	1%	51	5%	65%
Total	2,173	100%	1,120	100%	-48%
COVID: Additional cases from 30C data	343				-100%
Total	2,516		1,120		-55%

There were 8 cases of tuberculosis (TB) infection (usually determined by PPD conversion, a skin test based on immune response to TB) or exposure to clients with TB. There were 38 reports of tick bites, rashes from tick bites and/or a diagnosis of Lyme disease attributed to occupational exposures, a 31% increase. There were 51 cases of other infectious diseases (often just listed as infectious without a specific illness).

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 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**

There were 256 cases of respiratory illnesses (mostly nonspecific respiratory illness from relatively acute chemical or biological exposures) for 2023 (Table D-12), a 79% increase from 2022. Smoke or fire were the most common cause of respiratory illness (47% of cases), followed by chemical exposures (28%), dust or fumes (11%), and general indoor air quality (IAQ) or mold (9%).

In addition to the more general categories of smoke, construction dust and mold, specific substances connected to the respiratory cases included cleaning fumes/bleach (10), faulty air conditioning unit/coils (8), Goo Be Gone (2), pepper spray (2), burning poison ivy, smoking foam, laundry detergent powder, hydrochloric acid, glue, sulfuric acid, an exploding battery, a diffuser, glue, paint, waste treatment fumes, autoclave fumes, peroxide,

and new carpeting. The smoke inhalation cases include 52 firefighter exposures to a very large fire in Meriden, and an additional 26 cases at a fire in Mystic.

There were 26 cases of poisonings from carbon monoxide, other gases, mercury, or lead, a 44% increase from the previous year; 54% of which were from carbon monoxide or exposure to gas/fumes. There were 11 reports of lead poisoning in the workers' compensation database; refer to the lab reporting of lead cases in the physician report section for a more complete accounting. *Chronic* lung disease such as asbestos-related illnesses, asthma, and lung cancer are addressed in the following section.

Table D-11: Respiratory Conditions and Poisonings by Cause, WCC, 2022-2023

Cause	202	2022		23	
Respiratory	Cases	%	Cases	%	Change
Smoke, Fire	71	50%	121	47%	70%
Chemical Exposure	41	29%	72	28%	76%
Dust/fumes	10	7%	27	11%	170%
IAQ/mold/odor	4	3%	24	9%	500%
Other Respiratory	17	12%	12	5%	-29%
Respiratory subtotal	143	100%	256	100%	79%
Poisoning	Cases	%	Cases	%	Change
Carbon monoxide/gas	10	56%	14	54%	40%
Lead	2	11%	11	42%	450%
Other Poisoning	6	33%	1	4%	-83%
Poisoning Subtotal	18	100%	26	100%	44%
Total Respiratory and Poisoning	161	100%	282	100%	75%

# **Chronic Lung Conditions**

There were 100 cases of chronic lung conditions in 2023, a 14% decrease from the previous year (Table D-13).

Table D-12: Chronic Lung Diseases by Type, WCC, 2022-2023

Illness	2022	2023	Change
Asbestos-related	20	44	120%
Allergies	8	12	50%
Asthma/bronchitis	7	6	-14%
Other lung	73	38	-48%
Total	108	100	-7%

There were 44 reports of asbestos-related disease or exposures in 2023, a 120% increase from the prior year. The descriptions of the cases often make it difficult to determine whether the cases are actual disease or 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"). 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. Diseases caused by

asbestos exposure are known to be under-reported by traditional surveillance sources such as Workers' Compensation.

There were 6 cases of occupational asthma or bronchitis, 12 lung-related allergies, and 38 other chronic lung conditions. Acute respiratory illnesses are classified under respiratory conditions and poisonings (above).

## **Skin Conditions**

There were 156 skin condition reports in 2023 (Table D-14), a decrease of 11% from the previous year. These included 41 cases of contact dermatitis from poison ivy or other plants (26% of all skin cases), down 31% from the previous year. There were 50 cases of skin conditions caused by chemicals, as well as 12 additional cases attributed specifically to cleaning chemicals. There were 9 cases caused by allergic reactions to clothing, gloves, or latex. There were 44 cases of poorly defined skin conditions, frequently just described as rashes.

Table D-13: Skin Diseases by Cause, WCC, 2022-2023

Category	2022	2023	%	Change
Poison Ivy/plants	59	41	26%	-31%
Chemical	59	50	32%	-15%
Soap/Cleaning	7	12	8%	71%
Gloves/Latex/clothing	15	9	6%	-40%
Rash/Other/Unknown	36	44	28%	22%
Total	176	156	100%	-11%

In addition to cleaning chemicals, bleach and latex, specific chemicals associated with skin conditions included mold, machine chemicals, chemical stripper, using a power washer, and debris from a bus vent.

## **Stress and Heart Conditions**

#### **Heart and Hypertension**

There were 269 cases involving heart conditions, stroke, chest pain, hypertension, or stress in the database for 2023 (Table D-15), a decrease of 6% from the previous year. Reports noted 119 cases of heart attacks, myocardial infarctions or acute heart events and 13 reported strokes or blood clots, often associated with emergency care at a hospital. There were 15 cases that described the condition as hypertension or "heart and hypertension" (the usual legal term for heart or hypertension cases that are covered under workers' compensation for police and fire fighters).

Over half of the heart cases (68% of cases) appeared to involve police or firefighters or other municipal (69 cases) and state employees (12 cases) who are frequently covered under heart and hypertension laws that presume those conditions to be work-related for Workers' Compensation purposes.

Table D-14: Heart, Hypertension and Stress Conditions by Type, WCC, 2022-2023

Category	2022	2023	%	Change
Heart attack/severe symptoms	130	119	44%	-8%
Hypertension/other heart	27	15	6%	-44%
Stroke/clots	7	13	5%	86%
Stress/anxiety/depression	121	122	45%	1%
Total	285	269	100%	-6%

#### **Mental Stress**

There was a total of 122 stress-related claims in the database in 2023, essentially the same as the previous year. Over half (66 cases, or 54%) of the cases referred to violence or post-traumatic stress disorders after experiencing or observing violence or auto accidents (Table D-16), 13 cited either harassment or a hostile work environment, 8 noted conflicts with supervisors, co-workers, or customers, and 5 noted excessive work demands. There were no reported stress conditions attributed to experiencing or observing COVD-19 cases.

Table D-15: Stress Conditions by Cause, WCC, 2022-2023

Sources of Stress Conditions	2022	2023	%	Change
Violence/robbery/trauma/auto accident	52	66	54%	27%
Harassment/hostile work environment	10	13	11%	30%
Supervisor/co-worker/customer	13	8	7%	-38%
Excessive work demands	3	5	4%	67%
COVID	1	0	0%	-100%
Unknown/other	42	30	25%	-29%
Total	121	122	100%	1%

Stress-related claims that are not also associated with a physical injury are typically not compensable under the Workers' Compensation statute, so it is likely that there are additional unreported (non-compensable) 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.

## **Other Occupational Diseases**

## **Hearing Loss**

There were 110 reports of hearing loss in 2023 (Table D-17), essentially the same as the previous year. Most (77%) were from chronic exposure to noise. The acute (single incident) cases included sudden noises such as explosions (3), a loud close scream/shout (5), a bursting high pressure line, firearms, cell phone, a close horn (3), an air compressor, an amplifier, and a fire alarm.

### **Other Disease Conditions**

There were 195 reports of workers becoming dizzy, fainting, or seizures, a 3% increase. Some of these are likely from pre-existing conditions that occurred while at work (such as epilepsy or diabetes) and some of these were accompanied by an injury from a fall. Some may reflect more serious conditions such as heart attacks but are just described based on initial symptoms. There were 114 reports of chemical exposures to the eyes (this does not include other physical acute eye injuries such as particles or dust), a 27% decrease. There were 62 cases of cancer reported, which included asbestos-related cancers, an increase of 24% from the prior year. There were 59 reports of temperature-related problems from heat or cold, a 13% decrease from the previous year. There were 44 cases of allergic reactions reported in addition to those noted above under respiratory and skin conditions, a 20% decrease from the previous year. There were 125 "other" conditions that were difficult to classify, usually due to incomplete information.

Table D-16: Other Occupational Illnesses, WCC, 2022-2023

Type of illness	2022	2023	%	Change
Dizziness/fainting/seizure	189	195	28%	3%
Chemicals in eye	156	114	16%	-27%
Hearing loss	112	110	16%	-2%
Cancer	50	62	9%	24%
Cold/heat related conditions	68	59	8%	-13%
Allergic	55	44	6%	-20%
Other conditions	130	125	18%	-4%
Total	760	709	100%	-7%

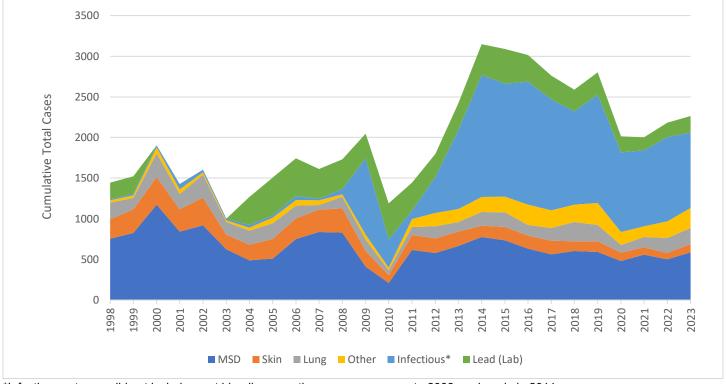
# E. Occupational Illnesses and Injury Surveillance System (OHSS)

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 from Connecticut's occupational health clinics and industrial medicine programs. Information on blood lead level laboratory reports is received from the Connecticut Adult Blood Lead Epidemiology and Surveillance (ABLES) program. Most COVID-19 cases were not reported through occupational health clinics since there were separate diagnostic and reporting mechanisms (such as Emergency Departments and testing locations) which do not appear in this database.

Table E-1: Occupational Disease Case Reports by Type, OIISS and ABLES, 2014-2023

Category	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2022- 23
MSD	774	734	633	562	603	590	480	558	502	587	17%
Skin	140	166	158	168	118	134	104	91	76	104	37%
Lung	171	178	133	155	241	198	92	127	187	197	5%
Other	184	195	250	220	210	274	161	132	204	246	21%
Infectious	1500	1,390	1,513	1,365	1,148	1,329	979	934	1,036	927	-11%
Sub-total	2,769	2,663	2,687	2,470	2,320	2,525	1,816	1,842	2,005	2,061	3%
Lead (Lab)	379	425	330	292	268	275	199	160	178	202	13%
Total	3,148	3,088	3,017	2,762	2,588	2,800	2,015	2,002	2,183	2,263	4%

Figure E-1: Occupational Disease Case Reports by Type, OIISS and ABLES, 1998-2023



<sup>\*</sup>Infectious category did not include most bloodborne pathogen exposures up to 2008, and again in 2011.

<sup>\*</sup>Infectious category does not include most COVID-19 cases

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

In general, 2020-2022 were very different years for occupational illnesses due to the COVID-19 pandemic, which resulted in dramatically different workplace patterns including widespread workplace closures, working from home where possible, mask wearing, social distancing, and disruptions to the supply chain. Therefore, comparisons to prior and subsequent years must be viewed with these patterns in mind and the potential for dramatically different exposures to workplace hazards (for example, skin and musculoskeletal problems from reduced work and telework and other infectious diseases from mask wearing and social distancing). Reports in 2023 began to move back to pre-COVID 19 patterns as people returned to more normal work characteristics.

There were 2,061 occupational illness reports received from physicians for 2023 (Table E-1). Physician reports increased 3% in 2023 compared to the prior year. Infectious disease such as bloodborne diseases and exposures was the largest category, accounting for 45% of the reports. These were followed by musculoskeletal conditions (MSD) such as tendonitis and carpal tunnel syndrome (28%). Lung conditions, including respiratory conditions, asthma, and other lung diseases, comprised 10% of the physician reports. Skin disorders, including poison ivy and chemicals as causes, accounted for 5%. "Other" conditions, including heart disease, stress, and noiseinduced hearing loss, accounted for 12%. There were 202 laboratory-reported adult blood lead levels of 10 micrograms per deciliter (ug/dL) or greater (a 13% increase from the prior year), giving a total of 2,263 occupational illnesses reported by physicians or laboratories in 2023.

In 2023, 96 physicians from 23 clinics/clinic networks reported at least one case of occupational illness to the OIISS. Sixteen of the physicians reported 50 or more cases, accounting for 57% of the reports. Eight clinics reported 100 or more cases and contributed 76% of the cases.

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) within 48 hours, in practice the majority of reporters are from the academic and auxiliary occupational health clinics that are funded under the state occupational disease surveillance network. Therefore, these reports should be viewed as a small portion of the physician-diagnosed occupational diseases in Connecticut.

Where certainty was reported, 86% of the cases were classed as "high certainty" for being an occupationally related disease, 8% were "moderate certainty," and 8% "low certainty". There was a low amount of reporting on whether exposure was continuing or if others are likely to be exposed (only 24% of reports), but 27% of those reported that the exposure that caused the illness was continuing, and 16% reported other workers were likely to be exposed to the same hazard.

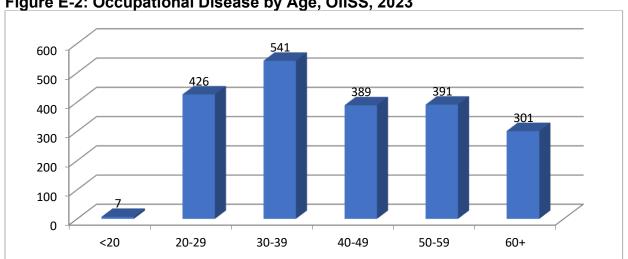


Figure E-2: Occupational Disease by Age, OIISS, 2023

Of the reports where race or ethnicity were known/reported, 16% were identified as black and 11% were identified as Hispanic. Figure E-2 shows the age distribution of reported cases where data was available. The most common age was workers in their 30's with 29% of cases, followed by 20's (23%), 50's (21%), and 40's (21%).

State
Govt, 9%

Const, Agric., 1%

Trade, 4%

Info, 0%

Fin/Insur/RE, 0%

Business Serv, 2%

Educ/Health, 46%

Service, 2%

Figure E-3: Occupational Disease by Industry Sector, OIISS, 2023

Table E-2: Rates of Illness by Industry Sector (NAICS\*), OIISS, 2023, (per 10,000 worker)

Table E-2. Rates of lilless by illuustry sector					(NAICO ), Olioo, 2020, (per 10,000 worker)							
Industry	Α	.II	Infectious		Lung		MSD		Other		Skin	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Construction/ Agric.	17	2.53	<5		<b>&lt;</b> 5	-	7	1.04	6	0.89	<b>&lt;</b> 5	
Manufacturing	221	14.03	5	0.32	34	2.16	128	8.13	42	2.67	12	0.76
Trade	76	3.34	<5		8	0.35	52	2.28	12	0.53	<b>&lt;</b> 5	
Transport/Utilities	38	5.45	5	0.72	<b>&lt;</b> 5	-	17	2.44	11	1.58	<b>&lt;</b> 5	
Information Services	<5		<5		<b>&lt;</b> 5	-	<5	I	<b>&lt;</b> 5	I	<b>&lt;</b> 5	
Finance/Insur/Real Est.	9	0.78	<5		5	0.43	<5	I	<b>&lt;</b> 5	I	<b>&lt;</b> 5	
Business Service	46	2.08	14	0.63	9	0.41	13	0.59	6	0.27	<b>&lt;</b> 5	
Education/Health	956	27.66	611	17.68	43	1.24	177	5.12	80	2.31	45	1.30
Other Services	33	1.59	12	0.58	<5		11	0.53	5	0.24	<5	
Local Govt	455	31.22	203	13.93	33	2.26	132	9.06	57	3.91	30	2.06
State Govt	194	31.81	69	11.31	52	8.53	41	6.72	25	4.10	7	1.15
Unknown	15		6		<5		<5	1	<5	1	<5	
Total	2,061	12.35	927	5.56	197	1.18	587	3.52	246	1.47	104	0.62

<sup>\*</sup> North American Industry Classification System. OIISS is the CT Occupational Illness and Injury Surveillance System.

The Education and Health sector had the most cases (46%), followed by Local Government (22%), Manufacturing (11%), and State Government (9%); see Figure E-3 and Table E-2. It should be noted that the Education and Health sector workplaces that were also government workers, such as public schools or hospitals, were counted as government.

Industry distribution was somewhat different by condition (Table E-2), although Education and Health was prominent in all the categories of illness. **Infectious** disease was highly concentrated in Education and Health (66%), with Local Government contributing another 22%. **MSD** (musculoskeletal disorders) were primarily from Education and Health (30%), Manufacturing (22%), and Local Government (22%). **Dermatitis** (skin disorders) was primarily from Education and Health (43%) and Local Government (29%). **Respiratory** cases ("Lung") were primarily from State Government (26%), Education and Health (22%), Manufacturing (17%), and Local Government (17%). "**Other**" illnesses were from Education and Health (33%), Local Government (23%), Manufacturing (17%), and State Government (10%).

Rates of illness by industry sector (adjusted for the size of the sector) are shown in Table E-2. The overall rate of physician-reported illnesses for all industries combined was 12.35 per 10,000 workers. Highest overall rates are in State Government (31.81), Local Government (31.22), Education/Health (27.66) and Manufacturing (14.03). Infectious disease was highest in Education/Health and Local and State Government. Lung disease was highest in State Government, Local Government, and Manufacturing. Musculoskeletal disorders (MSD) were highest in Local Government, Manufacturing, State Government, and Education/Health. Other illnesses were highest in State and Local Government and Manufacturing. Skin disorders were highest in Local and State Government and Education/Health.

## **Musculoskeletal Disorders (MSD)**

There was a total of 587 reports of musculoskeletal disorders (MSD) in 2023, an increase of 17% from the previous year (Table E-3). This table does not include MSD caused by acute incidents such as falls or individual lifts and also excludes all lower back diagnoses unless specifically defined as caused by cumulative strain. The most common specific diagnoses for musculoskeletal disorders were strains and sprains (21%), epicondylitis (tennis elbow) with 13% of the cases, other nerve disorders (12%), rotator cuff syndrome (8%), tendonitis (8%), and carpal tunnel syndrome (6%),

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, 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 (median and ulnar nerves can also be pinched in the elbow, shoulder, or neck)

## Circulatory/Combined/Other

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

Table E-3: Musculoskeletal Disorders (MSD) by Type, OIISS, 2022-2023

Illness	2022	2023	Percent	Change
Strain/Sprain	89	125	21%	40%
Epicondylitis	72	74	13%	3%
Other Neuropathy & Radiculopathy (nerve disorder)	54	70	12%	30%
Tendonitis	28	49	8%	75%
Rotator Cuff	39	47	8%	21%
Carpal Tunnel Syndrome (CTS)	54	37	6%	-31%
DeQuervains syndrome	25	32	5%	28%
Bursitis/Arthritis	15	26	4%	73%
Trigger Finger	18	16	3%	-11%
Tenosynovitis	14	12	2%	-14%
Ganglion	5	11	2%	120%
Plantar fasciitis	8	6	1%	-25%
Other MSD	81	82	14%	1%
Total	502	587	100%	17%

Table E-4: Common causes of MSD, OllSS, 2022-2023

Cause	2022	2023	Percent	Change
Repetitive	136	98	49%	-28%
Lifting	55	30	15%	-45%
Push/pull	21	24	12%	14%
Tools, Machines & Vibration	26	11	6%	-58%
Computer/clerical	14	10	5%	-29%
Gripping/grasping/reaching	10	9	5%	-10%
Patient-related	10	9	5%	-10%
Bending/twisting/kneel/posture	14	7	4%	-50%
Sitting/walking/climbing	4	2	1%	-50%
Assembly/scanning	7	0	0%	-100%
Sub-Total	297	200	100%	0%
Unknown	205	387		
Total	502	587		17%

The most common specific causes noted for MSD (Table E-4) were lifting (30 cases), pushing or pulling (24), tool and machine use (11 cases), and computer use and data entry (10). Ninety-eight (98) additional cases were attributed to the general description of "repetitive".

## **Skin Conditions**

There were 104 reports of skin disorders in 2023 (Table E-5), a 37% increase from the previous year. The largest single cause was poison ivy or other plant exposures (20% of all cases). Specific causes of dermatitis or other skin conditions included gloves/latex (7), essential oil fragrances, deglosser, phenol chloroform, water in a pond, and a surgical scrub solution.

Table E-5: Skin Conditions by Type, OIISS, 2022-2023

Illness	2022	2023	Percent	Change
Poison ivy & other plants	21	21	20%	0%
Allergic	20	44	42%	120%
Dermatitis/rash	28	35	34%	25%
Other skin conditions	7	4	4%	-43%
Total	76	104	100%	37%

### **Lung/Respiratory Diseases and Poisonings**

There were 197 cases of respiratory and other lung diseases and poisonings reported by physicians in 2023 (Table E-6), an increase of 5% from the previous year. Cough and shortness of breath accounted for 20% of the reports, followed by asthma or reactive airways dysfunction syndrome (RADS) 15%, nonspecific respiratory illnesses 11%, fibrosis or interstitial lung disease, including asbestos-related cases (4%; cancers caused by asbestos are categorized under "other diseases"; below). Cases of poisoning such as carbon monoxide and lead are in the "other diseases" section below. There were 100 cases of lung disease that did not have enough information to be classified more specifically.

Causes of lung conditions included chemicals (54 cases), mold or indoor air quality (15 cases), smoke (11 cases), and asbestos (7 cases). Specific chemicals mentioned included reagents, brake cleaner, pesticide, methylene chloride, lab chemicals, beryllium, and glass fumes.

Table E-6: Respiratory Diseases and Poisoning by Type, OIISS, 2022-2023

Illness	2022	2023	Percent	Change
Cough/dyspnea/bronchiolitis/rhinitis	51	39	20%	-24%
Asthma/RADS	11	29	15%	164%
Respiratory	53	22	11%	-58%
Asbestos exposure/fibrosis/interstitial	11	7	4%	-36%
Other Lung	61	100	51%	64%
Total	187	197	100%	5%

# **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 adult cases are reported here), with most of adult cases being attributed to an individual's occupation (although some cases occur in individuals engaged in activities such as home paint removal or recreational indoor shooting range use). Up to a third or more of cases in recent years are related to the use of indoor shooting ranges. The numbers are based on the highest level 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 (and require a reduction to 40 ug/dl before return to work). Lead can have neurological, reproductive, and other negative effects on health at much lower levels of exposure.

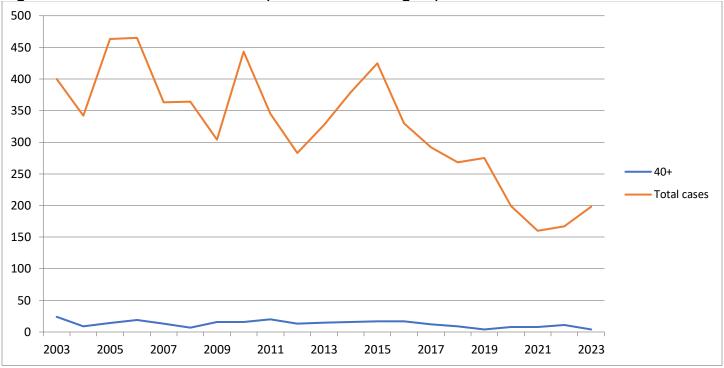
The 202 lead poisoning reports in 2023 increased 13% from the previous year. The lowest category (10-24 ug/dL) of recorded elevated lead levels accounted for 85% of all cases (Table E-7) and increased by 28%. Thirty-six percent (36%) were under 40 years old, 40% were between 40 and 59, and 24% were age 60 or older.

Table E-7: Lead Cases by Level of Blood Lead, CT ABLES, 2022-2023

Blood lead level*	2022	2023	Percent	Change
10-24	134	171	85%	28%
25-39	33	27	13%	-18%
40-49	7	<5		
50-59	<5	<5		
>=60	<5	<5		
Total	178	202	100%	13%

**Source:** Connecticut Adult Blood Lead Epidemiology and Surveillance (ABLES program), CT Dept. of Public Health
\* Micrograms per deciliter (ug/dl) of whole blood. Number of individuals with elevated lead levels (multiple tests for individuals were eliminated.)

Figure E-4: Lead Cases 2003-2023 (cases above 10 ug/dL)



Lead cases in Connecticut have mostly declined since 2003, with a high of 465 cases in 2006 and a low of 160 cases in 2021, and 202 in 2023. Cases at or above the OSHA level of 40 ug/dl stayed relatively constant at 15 to 20 cases since 2004 (Figure E-5) but have dropped since 2016 to a low of 4 in 2019 and 2023. High levels of reporting in the past have been observed due to lead screening programs and special bridge maintenance projects involving the removal of lead paint.

NIOSH (The National Institute of Occupational Safety and Health) has lead level data for 26 states for 2023 (see NIOSH Elevated Blood Levels Charts at <a href="https://wwwn.cdc.gov/NIOSH-WHC/chart/ables-ab/exposure?OU=L03&T=ZS&V=C">https://wwwn.cdc.gov/NIOSH-WHC/chart/ables-ab/exposure?OU=L03&T=ZS&V=C</a>). Connecticut was the 15<sup>th</sup> highest among those states for the rate of lead levels above 10 ug/dl, with a rate of 1.04 per 10,000 employed adults (compared to the mean of 1.23 for all states). Connecticut was the 11th highest for rates of higher lead levels (equal or above 25 ug/dl) with a rate of 0.17, equal to the overall mean rate.

### **Poison Control Center Cases**

Cases reported to the Connecticut Poison Control Center (CPCC) are primarily non-occupational and include many childhood poisonings. Work-related exposures represent a minority of these cases. In 2023, there were 361 work-related exposures reported to the CPCC, which was 2.1% of all Poison Center calls from adults (over 18 years old). Work-related calls were an average of 36 years old.

Of these 361 work-related exposures, 94 cases (26%) were classified by the CPCC as having "moderate to major medical effects", while the remaining 267 were considered minor or had no effects. Although some cases were lost to follow-up, prior reviews typically describe these as involving minimal potential toxicity.

Among the 94 moderate to major cases, 47 unique substances were identified. However, certain substances were more frequently reported. Cleaning agents—including common household and industrial products such as industrial cleaners, disinfectants, chlorine-based cleaners, bleach, soaps, and detergents—were involved in moderate to major effects in 20 workers. Along with pesticides (7 workers), degreasers (6 workers), and strong acids (i.e. sulfuric or hydrochloric acid affected 8 workers); these substances accounted for 41 worker CPCC cases, representing 38% of the 109 cases with moderate to major effects.

Exposure routes varied, with some cases involving multiple routes. Inhalation was the most common route, accounting for 138 cases (38%), while the remaining 223 cases (62%) involved non-inhalation exposures, primarily through dermal and ocular contact, which occurred at similar rates.

# **Infectious and Other Diseases**

Occupational disease reports from physicians primarily come from occupational health clinics. Most COVID-19 cases that occurred in 2020-2022 were seen in other healthcare settings (such as Emergency Departments, testing sites or home testing) and so most were not reported through occupational health clinics Overall, reported infectious diseases decreased 11% to 927 cases in 2023. 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 875 reports in 2023, a 9% decrease from 2022. 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. Over a third (38%) of the bloodborne disease reports involved needlesticks or other exposures to sharps such as scalpels, while 36% were from blood or body fluids and 25% were from bites. These reports do not generally specify whether the source patient/client was infected with a bloodborne illness such as HIV or Hepatitis B or C. Bites often do not have a description on whether these bites penetrated the skin; cases were not counted if it was noted that there was no skin penetration or bleeding or if they were described as contusions. Exposure to saliva is not included in these numbers, since the risk of disease transmission is very low in those cases.

Table E-8: Infectious and Other Illnesses. 2022-2023

Illness	2022	2023	Percent	% Change
Bloodborne	964	875	94%	-9%
TB/PPD	26	9	1%	-65%
COVID-19	23	8	1%	-65%
Lyme/tick bite	10	4	0%	-60%
Scabies	7	10	1%	43%
Other infectious	6	21	2%	250%
Subtotal: Infectious	1,036	927	100%	-11%
Other Illnesses	2022	2023	Percent	% Change

Chemicals in eyes	81	66	27%	-19%
Headache/dizzy	13	22	9%	69%
Stress/heart/stroke	14	20	8%	43%
Poisoning	0	20	8%	
Hearing loss	15	14	6%	-7%
Allergic	14	13	5%	-7%
Heat/cold	8	6	2%	-25%
Cancer	2	4	2%	100%
Other	57	81	33%	42%
Total Other Illnesses	204	246	100%	21%
Total	1,240	1,173		-5%

There was a 65% decrease in reports of potential exposure to tuberculosis (TB) or positive PPD tests for TB with 9 cases in 2023. There were 4 cases of Lyme disease or tick bites. Most of the "Other Infectious" cases were not well-defined in the database and may include additional cases of the more common reports (such as COVID-19, bloodborne or TB). Infectious disease reports such as TB and meningitis also may reflect exposures rather than actual illness.

In addition to the infectious diseases, there were 246 other occupational illnesses reported by physicians in 2023 (Table E-8), an increase of 21%. This included 66 cases of chemical exposures to the eyes (a 19% decrease), 22 cases of headache, dizziness, or similar symptoms, 20 cases of poisoning from carbon monoxide, lead, or other sources, 20 cases of heart, stroke or stress-related conditions, 14 cases of hearing loss, 13 cases of allergic reactions to substances or foods, and 6 exposures to heat or cold (such as heat stroke). There were 81 cases of occupational illnesses that were difficult to classify due to lack of detailed descriptions.

# F. Appendix 1: Databases and Methods

Determining the incidence of occupational illness 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 (WCC), the Bureau of Labor Statistics/Connecticut Dept. of Labor Survey of Occupational Injuries and Illnesses (BLS), the Occupational Illnesses and Injury Surveillance System (OIISS), and the Connecticut Adult Blood Level Epidemiology Surveillance Program (ABLES). 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 survey data was provided in table form from the Connecticut Department of Labor and derived from the U.S. BLS website at https://www.bls.gov/iif/#data.

# **Assumptions and Conventions**

The Workers' Compensation Commission's First Reports of Injury database and the Occupational Illnesses and Injury Surveillance System (OIISS, referred to as Physicians' Reports) were reviewed in depth. A rationale for the data review was developed to differentiate occupational *illnesses* from acute traumatic *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. 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 vs. 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 Physician Reports are organized differently. Numerical ICD10 (International Classification of Disease) and "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 indicators 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 objects in the eye (other than chemical exposures), lower back problems (including sciatica) unless clearly and specifically labeled as a cumulative injury, 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. Several approaches were utilized to eliminate duplicate records such as line by line review and matching on first and last name, date of birth and employer (to identify reports with misspellings or reversed first and last names), etc.
- 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. This coding was categorized into illness types (i.e.

- skin, lung, infectious, MSD, other), specific illness (i.e. Carpal Tunnel Syndrome, heart conditions, asthma), and cause (i.e. chemical exposure, computer use, needlesticks).
- 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). Employers who could not be found from previous datasets from the Dept. of Labor were coded based on an internet search using such databases as Manta or naics.com. Physician reports were coded by the Connecticut Dept. of Labor. Rates were calculated using employment figures from the U.S. Bureau of Labor Statistics based on Connecticut Dept. of Labor figures.
- 5) Data was cleaned, tabulated and put into presentation form using Microsoft Excel and Word software. Breakdowns of conditions with fewer than 5 cases in the physician report databases (OIISS and lead) are not detailed in agreement with CT Dept. of Health policy. Cases were matched between the workers' compensation and physician report databases to eliminate duplicates based upon comparison of birthdates, names, and employers; multiple reports of similar conditions on or near the same date of injury were considered duplicates.
- 6) The report is reviewed and approved by the Connecticut Workers' Compensation Commission prior to publication.

Appendix 2: Cases of Occupational Disease, by Type, BLS/CT Dept. of Labor, 1979 – 2023

						<del>, , , po,</del>		_	
	Employ.*	All III	Skin	MSD	Lung- dust	Respir.	Poison	Physical	Other
1979	1,358,000	3,322	1,716	471	25	317	175	250	368
1980	1,394,000	3,066	1,586	513	88	214	66	199	400
1981	1,409,000	3,214	1,509	701	38	290	89	192	395
1982	1,400,000	2,549	1,130	580	31	223	31	216	323
1983	1,419,000	2,930	1,236	665	20	154	152	176	519
1984	1,490,000	2,735	1,109	665	24	273	65	162	432
1985	1,528,000	2,809	928	727	44	233	51	130	693
1986	1,567,000	2,719	808	761	39	274	65	235	538
1987	1,607,000	4,643	1,352	1,430	31	300	62	704	754
1988	1,637,000	4,364	1,257	405	35	332	56	405	733
1989	1,634,000	5,844	1,248	2,629	57	277	74	468	1,087
1990	1,593,000	5,307	1,032	2,535	93	457	54	496	641
1991	1,518,000	6,094	946	3,454	62	422	113	501	591
1992	1,483,000	6,458	1,084	3,852	37	471	53	349	612
1993	1,487,000	8,369	965	5,526	52	512	166	346	802
1994	1,501,800	7,319	957	4,482	74	410	97	313	986
1995	1,520,000	6,787	884	4,220	80	323	35	349	896
1996	1,538,000	6,021	827	3,711	40	418	34	235	756
1997	1,570,500	5,419	620	3,335	21	287	70	150	936
1998	1,596,900	5,510	989	3,398	10	459	45	92	517
1999	1,630,100	5,513	793	3,306	20	386	71	265	671
2000	1,653,000	6,396	897	3,827	65	438	29	137	1,003
2001	1,571,000	5,514	916	3,220	10	630	29	118	591
	Employ.*	All III	Skin			Respir.	Poison	Hearing	Other
2002	<b>Employ.*</b> 1,602,000	<b>All III</b> 4,387	<b>Skin</b> 831			Respir.	Poison 78	Hearing	<b>Other</b> 3,159
2002						_		Hearing	
	1,602,000	4,387	831			320	78	Hearing 466	3,159
2003	1,602,000 1,605,000	4,387 4,559	831 903			320 490	78 32		3,159 3,132
2003 2004	1,602,000 1,605,000 1,603,100	4,387 4,559 4,572	831 903 832			320 490 354	78 32 35	466	3,159 3,132 2,886
2003 2004 2005	1,602,000 1,605,000 1,603,100 1,614,100	4,387 4,559 4,572 4,850	831 903 832 848			320 490 354 480	78 32 35 8	466 381	3,159 3,132 2,886 3,134
2003 2004 2005 2006	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700	4,387 4,559 4,572 4,850 3,787	831 903 832 848 575			320 490 354 480 235	78 32 35 8 38	466 381 439	3,159 3,132 2,886 3,134 2,500
2003 2004 2005 2006 2007	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600	4,387 4,559 4,572 4,850 3,787 3,904	831 903 832 848 575 624			320 490 354 480 235 358	78 32 35 8 38 22	466 381 439 457	3,159 3,132 2,886 3,134 2,500 2,443
2003 2004 2005 2006 2007 2008	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,666,600	4,387 4,559 4,572 4,850 3,787 3,904 3,562	831 903 832 848 575 624 690			320 490 354 480 235 358 293	78 32 35 8 38 22	466 381 439 457 360	3,159 3,132 2,886 3,134 2,500 2,443 2,088
2003 2004 2005 2006 2007 2008 2009	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,666,600 1,675,000	4,387 4,559 4,572 4,850 3,787 3,904 3,562 3,400	831 903 832 848 575 624 690 600			320 490 354 480 235 358 293 300	78 32 35 8 38 22	466 381 439 457 360 500	3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000
2003 2004 2005 2006 2007 2008 2009 2010	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,666,600 1,675,000 1,639,300	4,387 4,559 4,572 4,850 3,787 3,904 3,562 3,400 3,000	831 903 832 848 575 624 690 600 700			320 490 354 480 235 358 293 300 300	78 32 35 8 38 22	466 381 439 457 360 500 300	3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700
2003 2004 2005 2006 2007 2008 2009 2010 2011	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,666,600 1,675,000 1,639,300 1,578,200	4,387 4,559 4,572 4,850 3,787 3,904 3,562 3,400 3,000 3,500	831 903 832 848 575 624 690 600 700 800			320 490 354 480 235 358 293 300 300 300	78 32 35 8 38 22	466 381 439 457 360 500 300 300	3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700 2,100
2003 2004 2005 2006 2007 2008 2009 2010 2011 2012	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,675,000 1,639,300 1,578,200 1,628,028	4,387 4,559 4,572 4,850 3,787 3,904 3,562 3,400 3,000 3,500 2,800	831 903 832 848 575 624 690 600 700 800 600			320 490 354 480 235 358 293 300 300 300 300	78 32 35 8 38 22	466 381 439 457 360 500 300 300 300	3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700 2,100 1,500
2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,666,600 1,675,000 1,639,300 1,578,200 1,628,028 1,640,223	4,387 4,559 4,572 4,850 3,787 3,904 3,562 3,400 3,000 3,500 2,800 2,600	831 903 832 848 575 624 690 600 700 800 600 500			320 490 354 480 235 358 293 300 300 300 300 300	78 32 35 8 38 22	466 381 439 457 360 500 300 300 300 300	3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700 2,100 1,500 1,600
2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,675,000 1,639,300 1,578,200 1,628,028 1,640,223 1,653,547	4,387 4,559 4,572 4,850 3,787 3,904 3,562 3,400 3,000 3,500 2,800 2,600 2,400	831 903 832 848 575 624 690 600 700 800 600 500 400 400 500			320 490 354 480 235 358 293 300 300 300 300 200 200 200	78 32 35 8 38 22	466 381 439 457 360 500 300 300 300 300 200	3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700 2,100 1,500 1,600 1,400
2003 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,675,000 1,639,300 1,578,200 1,628,028 1,640,223 1,653,547 1,662,822	4,387 4,559 4,572 4,850 3,787 3,904 3,562 3,400 3,000 3,500 2,800 2,600 2,400 2,300	831 903 832 848 575 624 690 600 700 800 600 500 400			320 490 354 480 235 358 293 300 300 300 300 200 200	78 32 35 8 38 22	466 381 439 457 360 500 300 300 300 200 200	3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700 2,100 1,500 1,600 1,400 1,500
2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,666,600 1,675,000 1,639,300 1,578,200 1,628,028 1,640,223 1,653,547 1,662,822 1,666,580	4,387 4,559 4,572 4,850 3,787 3,904 3,562 3,400 3,500 2,800 2,600 2,400 2,300 2,300	831 903 832 848 575 624 690 600 700 800 600 500 400 400 500			320 490 354 480 235 358 293 300 300 300 300 200 200 200	78 32 35 8 38 22	466 381 439 457 360 500 300 300 300 200 200 200 300	3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700 2,100 1,500 1,600 1,400 1,500 1,300
2003 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2017	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,666,600 1,675,000 1,639,300 1,578,200 1,628,028 1,640,223 1,653,547 1,662,822 1,666,580 1,669,766	4,387 4,559 4,572 4,850 3,787 3,904 3,562 3,400 3,000 2,800 2,800 2,600 2,400 2,300 2,300 1,700	831 903 832 848 575 624 690 600 700 800 600 500 400 400			320 490 354 480 235 358 293 300 300 300 300 200 200 200 100	78 32 35 8 38 22	466 381 439 457 360 500 300 300 300 200 200 200 200	3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700 2,100 1,500 1,600 1,400 1,500 1,300 900
2003 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2017 2018	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,666,600 1,675,000 1,639,300 1,578,200 1,628,028 1,640,223 1,653,547 1,662,822 1,666,580 1,669,766 1,673,867	4,387 4,559 4,572 4,850 3,787 3,904 3,562 3,400 3,000 2,800 2,600 2,400 2,300 2,300 1,700 1,800	831 903 832 848 575 624 690 600 700 800 600 500 400 400 500 400 300			320 490 354 480 235 358 293 300 300 300 300 200 200 200 20	78 32 35 8 38 22	466 381 439 457 360 500 300 300 300 200 200 200 200 400	3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700 2,100 1,500 1,600 1,400 1,500 1,300 900 1,000
2003 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,666,600 1,675,000 1,639,300 1,578,200 1,578,200 1,628,028 1,640,223 1,653,547 1,662,822 1,666,580 1,669,766 1,673,867 1,670,639	4,387 4,559 4,572 4,850 3,787 3,904 3,562 3,400 3,500 2,800 2,600 2,400 2,300 2,300 1,700 1,800 1,700	831 903 832 848 575 624 690 600 700 800 600 400 400 400 300 300			320 490 354 480 235 358 293 300 300 300 300 200 200 200 20	78 32 35 8 38 22	466 381 439 457 360 500 300 300 300 200 200 200 400 300	3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700 2,100 1,500 1,600 1,400 1,500 1,300 900 1,000 1,000
2003 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,666,600 1,675,000 1,639,300 1,578,200 1,628,028 1,640,223 1,653,547 1,662,822 1,666,580 1,669,766 1,673,867 1,670,639 1,545,731	4,387 4,559 4,572 4,850 3,787 3,904 3,562 3,400 3,500 2,800 2,800 2,400 2,300 2,300 1,700 1,800 1,700 8,000	831 903 832 848 575 624 690 600 700 800 600 500 400 400 500 400 300 300 200			320 490 354 480 235 358 293 300 300 300 300 200 200 200 100 200 100 6,400	78 32 35 8 38 22	466 381 439 457 360 500 300 300 300 200 200 200 400 300 200	3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700 2,100 1,500 1,600 1,400 1,500 1,300 900 1,000 1,000 1,100
2003 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021	1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,666,600 1,675,000 1,639,300 1,578,200 1,628,028 1,640,223 1,653,547 1,662,822 1,666,580 1,669,766 1,673,867 1,670,639 1,545,731 1,591,837	4,387 4,559 4,572 4,850 3,787 3,904 3,562 3,400 3,000 2,800 2,600 2,400 2,300 2,300 1,700 1,800 1,700 8,000 5,200	831 903 832 848 575 624 690 600 700 800 600 500 400 400 300 300 300 200			320 490 354 480 235 358 293 300 300 300 300 200 200 200 20	78 32 35 8 38 22	466 381 439 457 360 500 300 300 300 200 200 200 400 300 200 400 300 300	3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700 2,100 1,500 1,600 1,400 1,500 1,300 900 1,000 1,000 1,100 600

Source: U.S. Bureau of Labor Statistics (BLS) and the Connecticut Dept. of Labor, Office of Research. Data collection methods and categories changed in 2002 and are not comparable to prior years (for example, MSD was combined with "Other"). Employment in thousands. Since this data is based on a weighted survey, some of these numbers (particularly the smaller numbers) are not reliable. Blanks indicates not available or too small to report.

Table G-2: Rate per 10,000 Workers of Occupational Disease, by Type, Bureau of Labor Statistics/CT Dept. of Labor, 1979-2023

				ot. of Labor,				_
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		22.0
1981	1,409,000	10.7	5.0	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	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	0.4	10.0		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	0.5	26.0		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	26.0	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	39.0		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	0.2	30.8		39.1
1997	1,570,500	3.9	21.2	2.0	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	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	24.0	*	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	36.0
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	1.0	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	*	2.0	*	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
2013	1,653,547	3.4	*	1.9	V.Z	11.0	2.1	18.7
			*		0.0		1	
2015	1,662,822	3.0	*	1.5	0.2	11.3	1.7	17.7
2016	1,666,580	3.9		1.3	*	10.0	2.2	17.4
2017	1,669,766	2.9	*	1.1	0.4	6.7	1.9	12.9
2018	1,673,867	1.9	*	1.4	*	7.8	3.0	14.1
2019	1,670,639	2.1	*	1.1	*	7.5	2.2	13.0
2020	1,545,731	2.0	*	52.0	*	9.0	1.3	64.4
2021	1,591,837	1.4	*	33.5	*	5.3	2.2	42.4
2022	1,642,657	2.0	*	41.4	*	5.1	2.0	50.6
2023	1,668,477	2.6	*	13.8	*	7.5	2.8	26.9
				i e	•	•	•	

**Source:** U.S. Bureau of Labor Statistics (BLS) and the Connecticut Dept. of Labor, Office of Research. "Other" includes the pre-2002 categories of MSD, Physical, Lung-dust, and Other. \*Data collection methods and categories changed in 2002 and are not comparable to prior years.

# Appendix 3: Internet Resources for Job Safety and Health: 2025

# **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, worker rights, employer assistance, sector-specific and topic-specific standards and advice, a searchable index of standards, etools, COVID-19 guidelines and many other resources. <a href="http://www.osha.gov">http://www.osha.gov</a>

To look up **OSHA citations** by company or industry: <a href="http://www.osha.gov/pls/imis/establishment.html">http://www.osha.gov/pls/imis/establishment.html</a>

OSHA funds **training programs for workers**, community groups and managers across the U.S. through their Susan Harwood Training grants at <a href="https://www.osha.gov/dte/sharwood">https://www.osha.gov/dte/sharwood</a>.

OSHA has a resource page for medical clinicians at <a href="https://www.osha.gov/dts/oom/clinicians/index.html">https://www.osha.gov/dts/oom/clinicians/index.html</a>

**OSHA eTools and Safety and Health Topics**. A collection of interactive, industry-specific safety tools and detailed information on a wide variety of workplace hazards. https://www.osha.gov/etools

**OSHA Alliance Program**. A partnership network generating best practices, safety guidance, and training resources through collaborations with national organizations. <a href="https://www.osha.gov/alliances">https://www.osha.gov/alliances</a>

**Safe + Sound Campaign (OSHA)**. An initiative to help businesses implement effective safety and health programs year-round. <a href="https://www.osha.gov/safeandsound">https://www.osha.gov/safeandsound</a>

The **Bureau of Labor Statistics** tracks occupational injuries and illnesses as well as fatalities. Both summaries and the actual data are available at <a href="https://www.bls.gov/iif">https://www.bls.gov/iif</a>.

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, including personal protective equipment tests and advice. There are also resources on health hazard evaluations, conferences, state-based materials, rulemaking, chemicals, disease statistics, and many other topics. <a href="https://www.cdc.gov/niosh/index.html">https://www.cdc.gov/niosh/index.html</a>

NIOSH supports **Education and Research Centers (ERCs)** based at universities across the US. Expert centers also include **agriculture, construction, and total worker health centers** (for example, see the link for the UConn CPH-NEW program below). ERCs primary purpose is to train health and safety professionals, so the various ERCs host a broad array of training programs for safety experts, industrial hygienists, ergonomists, occupational physicians and nurses and other professionals. In addition, the programs provide extensive inservice training programs for professionals already in the field as well as occasional programs for workers, health and safety committee members, and managers. They are also home to extensive research programs and consultation programs. The list of ERC's and related centers can be found at <a href="https://www.cdc.gov/niosh/extramural-programs/php/about/ercs.html">https://www.cdc.gov/niosh/extramural-programs/php/about/ercs.html</a>

**NIOSH** has a **workplace health promotion** website which includes tools for assessing health and health promotion programs at <a href="https://www.cdc.gov/niosh/twh/index.html">https://www.cdc.gov/niosh/twh/index.html</a>

**EPA** (the Environmental Protection Agency) has a number of sites relevant to occupational health on indoor air quality, office and school environments, climate change, and other topics. <a href="www.epa.gov/iaq/">www.epa.gov/iaq/</a>

**American Family Physician** also has a number of articles on occupational health for clinicians at <a href="https://www.aafp.org/pubs/afp/topics/by-topic.occupational-health.html">https://www.aafp.org/pubs/afp/topics/by-topic.occupational-health.html</a>

The Veterans Administration (VA) occupational health department has resources on safe patient handling, wellness, and workplace violence prevention. https://www.publichealth.va.gov/about/occhealth/index.asp

The Council of State and Territorial Epidemiologists (CSTE) has links to reports, contacts and resources in occupational health <a href="https://www.cste.org/page/CSTEPublications">https://www.cste.org/page/CSTEPublications</a>. Occupational health indicators are posted at <a href="https://www.cste.org/group/OHIndicators">https://www.cste.org/group/OHIndicators</a>

The Canadian Centre for Occupational Health and Safety has hundreds of resources on their health and safety internet resource list, including Cheminfo, occupational mental health and stress, climate change impacts and much more. http://www.ccohs.ca

### ILO International Labour Organization – Occupational Safety and Health.

Global OSH data, international conventions, guidelines, and multilingual resources from the UN's labor agency. https://www.ilo.org/global/topics/safety-and-health-at-work/lang--en/index.htm

World Health Organization – Occupational Health. A global view of workplace health risks and strategies, including chemical exposures and health promotion. <a href="https://www.who.int/health-topics/occupational-health">https://www.who.int/health-topics/occupational-health</a>

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.ni.us/rtkhsfs/indexfs.aspx

**MSDSonline** is a commercial website but has free searches for Safety Data Sheets (SDS) under the Globally Harmonized system at https://www.msdsonline.com/sds-search.

### Several safety organizations have useful websites:

www.nsc.orgThe National Safety Councilwww.aiha.orgThe American Industrial Hygiene Associationwww.assp.orgAmerican Society of Safety Professionalswww.nfpa.orgNational Fire Protection Associationhttps://safetyequipment.orgInternational Safety Equipment Association

http://www.hfes.org Human Factors and Ergonomics Society

The **national AFL-CIO** includes a health and safety page. http://www.aflcio.org/Issues/Job-Safety

COSH (Coalitions for Occupational Safety and Health) are labor-oriented nonprofit groups based in many states, including Connecticut, with information on a variety of hazards. They can all be accessed through the National Council for Occupational Safety and Health <a href="https://www.nationalcosh.org/">https://www.nationalcosh.org/</a>

Center for Construction Research and Training (CPWR). A national leader in construction safety research, CPWR offers comprehensive training materials, toolbox talks, data dashboards, and sector-specific research. https://www.cpwr.com

SafeWork USA (Washington State Department of Labor & Industries). Research and practical tools from Washington State's occupational health program. <a href="https://lni.wa.gov/safety-health/safety-research">https://lni.wa.gov/safety-health/safety-research</a>

**Harvard Center for Work, Health, & Well-being**. A leading Total Worker Health research center focused on workplace policies that improve employee health and productivity. <a href="https://centerforworkhealth.sph.harvard.edu/">https://centerforworkhealth.sph.harvard.edu/</a>

The Cal-OSHA Reporter (California OSHA) carries current stories on job health and safety. <a href="http://www.cal-osha.com">http://www.cal-osha.com</a>

### 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 <a href="https://www.facebook.com/USMWF">https://www.facebook.com/USMWF</a> or <a href="https://www.usmwf.org">www.usmwf.org</a>

Workers' compensation issues are covered at the **Workers' Compensation Research Institute** at <a href="https://www.wcrinet.org">https://www.wcrinet.org</a> and at the insider publication <a href="https://workerscompinsider.com">https://workerscompinsider.com</a>.

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. <a href="http://www.sustainableproduction.org/">http://www.sustainableproduction.org/</a>

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

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

OSHA has a discussion of the US program that responds to the International Globally Harmonized System for Hazard Communication. <a href="http://www.osha.gov/dsg/hazcom/global.html">http://www.osha.gov/dsg/hazcom/global.html</a>.

ACOEM (American College of Occupational and Environmental Medicine has an occupational health guide for clinicians <a href="https://acoem.org/Practice-Resources/Basic-Occupational-Health-Guide">https://acoem.org/Practice-Resources/Basic-Occupational-Health-Guide</a>

### **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. <a href="https://portal.ct.gov">https://portal.ct.gov</a>

The **CT Department of Public Health** occupational health program has database access, health alerts and fact sheets on a variety of occupational health topics including lead. <a href="http://www.ct.gov/dph/occupationalhealth">http://www.ct.gov/dph/occupationalhealth</a>

The **CT Department** of **Labor** includes an occupational health services site which includes information on their free Conn-OSHA consultation program and a great set of links to other health and safety sites including regulations, training, and Spanish publications. <a href="https://www.connosha.com">www.connosha.com</a>

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. <a href="https://www.congress.gov/">https://www.congress.gov/</a>

Search the medical literature at US National Library of Medicine. <a href="http://www.ncbi.nlm.nih.gov/pubmed/">http://www.ncbi.nlm.nih.gov/pubmed/</a>

Search general academic literature through Google Scholar. <a href="http://scholar.google.com/schhp?tab=ws">http://scholar.google.com/schhp?tab=ws</a>

UConn Health's Division of Occupational and Environmental Medicine has information and links on job health and safety. <a href="http://health.uconn.edu/occupational-environmental">http://health.uconn.edu/occupational-environmental</a>

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/

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/

## Apps for occupational health

There are a number of apps developed for smart phones (both Android and Apple) that have been developed by government agencies (and a lot of private companies and insurers) that can be quite useful. Some useful apps include:

- The **NIOSH Sound Level Meter** is a free, non-ad app developed by NIOSH that lets you use your phone as a sound level meter. IPhones now also have a sound level meter built in.
- The NIOSH Lifting Equation Calculator (NLE Calc) lets you evaluate jobs based on characteristics of the lifting hazards guidance issued by NIOSH (the International Centre for Safety Ergonomics and Human Factors also has a free NIOSH lifting equation calculator called MMH Calculator and Liberty Mutual has the ErgoValuator).
- The **OSHA-NIOSH Heat Safety Tool** combines local weather with NIOSH and OSHA guidance on heat stress.
- Chemical hazards can be evaluated using the **Chemical Safety Data Sheets ICSC** app which calls up 2-page independently developed chemical data sheets (similar to material safety data sheets) from the UN, the International Labor Office (ILO) and the World Health Organization (WHO).
- NIOSH Mobile Pocket Guide to Chemical Hazards. Key information for 677 common workplace chemicals can help in quick identification and control, including PPE, exposure limits, and symptoms.
- **CCOHS Safe Work** from the Canadian Centre for Occupational Health and Safety provides OSH Answers factsheets on many workplace hazards, chemicals, job stress, ergonomics and more.
- iAuditor by SafetyCulture is a proprietary app designed for employers and safety committees to design and evaluate safety programs and internal inspections. It includes checklists and training resources.

There are also a wide number of commercial apps on occupational health. **Searching in the app store** on your phone or tablet using terms such as the ergonomics, chemicals, job safety, OSHA, NIOSH, or similar terms will bring up apps which you can sort by customer ratings.

# **Ergonomic Sites and Links**

Thomas 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 and heat stress, including apps. <a href="https://health.usf.edu/publichealth/tbernard">https://health.usf.edu/publichealth/tbernard</a>

Ergoweb has good factsheets, documents, and news. <a href="https://ergoweb.com">https://ergoweb.com</a>

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. <a href="http://www-personal.umich.edu/~tja">http://www-personal.umich.edu/~tja</a>

**Cornell University's Alan Hedge** has an active ergonomics program, with reports posted on graduate student projects and evaluation of ergonomic products. <a href="http://ergo.human.cornell.edu">http://ergo.human.cornell.edu</a>

The National Ergonomics Conference & Ergo Expo has provided a forum on ergonomics, safety and wellness programs. <a href="http://www.ergoexpo.com">http://www.ergoexpo.com</a>

The National Health Service/UK has information about repetitive strain injuries/RSI <a href="http://www.nhs.uk/conditions/Repetitive-strain-injury/Pages/Introduction.aspx">http://www.nhs.uk/conditions/Repetitive-strain-injury/Pages/Introduction.aspx</a>

Paul Landsbergis has a good website on job stress. <a href="http://unhealthywork.org/about-us/team/paul-a-landsbergis">http://unhealthywork.org/about-us/team/paul-a-landsbergis</a>

The European Agency for Health and Safety at Work's Job Stress Network has info on to increasing job stress and its impact on health <a href="https://osha.europa.eu/data/links/795">https://osha.europa.eu/data/links/795</a>

Internet Resources for Job Safety and Health is compiled by Tim Morse, Ph.D., at UConn Health. To update or add a listing, please contact Tim at <a href="mailto:tmorse@uchc.edu">tmorse@uchc.edu</a>.

# Appendix 4: Who's Who: Resources in Connecticut on Job Safety and Health

### **OSHA**

# Connecticut Department of Labor's Division of Occupational Safety and Health/CTDOL

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:** John Rosa

Address: 38 Wolcott Hill Rd., Wethersfield, CT 06109

Phone: (860) 263-6900 Fax: (860) 263-6940 Email: John.Rosa@ct.gov Web: www.connosha.com

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 has information and pamphlets.

National Website: https://www.osha.gov

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

Area Director: Catherine Brescia

**Address:** 915 Lafayette Blvd, Room 309, Bridgeport, Connecticut 06604 **Phone:** (203) 579-5581; National Hotline after hours: (800) 321-OSHA (6742)

Fax: (203) 579-5516

e-mail: oshabridgeport@dol.gov

**OSHA Hartford Office Area Director:** Dale Varney

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

e-mail: oshahartford@dol.gov

### **Organizations**

### **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: 1224 Mill Street, Bldg B, Suite 17, East Berlin, CT 06023

Phone: (860) 232-6232

e-mail: ahulick@cleanwater.org

Web: https://safehealthyct.wordpress.com

### 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 and Pamela Puchalski (Co-Executive Directors)

**Address:** 683 No. Mountain Rd, Newington, CT 06111 **Phone:** (860) 953-COSH (2674); **Fax:** (860) 953-1038

e-mail: mike@ctcosh.org
Web: http://connecticosh.org

### The Ergonomic Technology Center (ErgoCenter) at UConn Health

The ErgoCenter is a center for prevention of work-related musculoskeletal injuries based at UConn Health which does training, research, and clinical care.

Contact: Thomas Varghese, M.S., CPE

Address: 263 Farmington Ave, Farmington, CT 06030-2940

**Phone**: (860) 679-4096; **Fax**: (860) 679-1349

e-mail: tvarghese@uchc.edu

Web: https://health.uconn.edu/occupational-environmental/consultation-and-outreach/ergonomics-consultation/

### 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 by UConn Health with UMass Lowell and UConn Storrs.

Center co- Director & Total Teacher Health PI: Jennifer Cavallari, Sc.D., CIH

Address: 263 Farmington Ave, Farmington, CT 06030-2940

Phone: (860) 679-4720; Fax: (860) 679-1349

e-mail: cavallari@uchc.edu

Web: <a href="http://health.uconn.edu/occupational-environmental/academics-and-research/cph-new/">http://health.uconn.edu/occupational-environmental/academics-and-research/cph-new/</a>
Web: <a href="http://health.uconn.edu/occupational-environmental/academics-and-research/cph-new/">http://health.uconn.edu/occupational-environmental/academics-and-research/cph-new/</a>
Web: <a href="http://health.uconn.edu/occupational-environmental/academics-and-research/cph-new/">http://health.uconn.edu/occupational-environmental/academics-and-research/cph-new/</a>
Web: <a href="https://health.uconn.edu/occupational-environmental/academics-and-research/cph-new/">https://health.uconn.edu/occupational-environmental/academics-and-research/cph-new/</a>
Web: <a href="https://health.uconn.edu/occupational-environmental/academics-and-research/">https://health.uconn.edu/occupational-environmental/academics-and-research/</a>
UMass Lowell (uml.edu)

### **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.

Director: Paula Schenck, MPH

Address: 263 Farmington Ave, Farmington, CT 06030-2940

Phone: (860) 679-2368; Fax: (860) 679-1349

e-mail: schenck@uchc.edu

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

# **Academic Occupational Health Clinics**

**UConn Occupational and Environmental Medicine Clinic** 

Clinic Director: Timothy LeDean, D.O., M.P.H.

Address: UCONN Health, 300 UConn Health Blvd, Farmington, CT 06032-2940 Clinic address: UCONN Main Building (Hospital Entrance), Room CG228

**Phone:** (860) 679-2893 **Fax:** (860) 679-4587

e-mail: occmedehs@uchc.edu

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

### Yale Occupational & Environmental Medicine

Director: Carrie A Redlich, MD, MPH

**Address:** 367 Cedar Street, ESHA 2nd Floor, New Haven, CT 06510 **Clinic address:** 135 College St. Rm. 392, New Haven, CT 06510 **Phone:** (203) 785-4197 or 203-785-6434; **Fax:** (203) 785-7391

e-mail: Carrie.Redlich@yale.edu

Web: http://medicine.yale.edu/intmed/occmed/ or https://www.yalemedicine.org/departments/occupational-

environmental-medicine-program

# **Other Occupational Health Clinics**

**Connecticut Occupational Medicine Partners** 

Vice President: Tina Robinson, <u>Tina.Robinson@TrinityHealthOfNE.org</u>

Business Representative: Mallory Davis, Mallory. Davis@trinityhealthofne.org, 860-714-2773

Address: St. Francis Hospital and Medical Center, 1000 Asylum Avenue, Suite 4310, Hartford, CT 06105

Phone: (860) 714-2801; Fax: (860) 714-8291 Email: <a href="mailto:tina.robinson@trinityhealthofne.org">tina.robinson@trinityhealthofne.org</a>

Web: compllc.org

**Network Practice Sites:** 

St Francis Hospital & Med Ctr: 1000 Asylum Ave, Suite 4320, Hartford, CT 06105, Phone: 860-714-4270 St Francis Hospital & Medical Center: 100 Deerfield Road, Windsor, CT 06095, Phone: 860-714-9444

St. Mary's Hospital: 1312 West Main St, Waterbury, CT 06708, (203) 709-3740

Johnson Memorial Occupational Medicine Center: 155 Hazard Avenue, Suite 6, Enfield, CT 06082, Phone:

(860) 763-7668

MedWorks (Bristol Hospital): 975 Farmington Avenue, Bristol, CT 06010, Phone: (860) 589-0114 CorpCare (ECHN); 2800 Tamarack Avenue, Suite 001, South Windsor, CT 06074, Phone: (860) 647-4796 Mercy Hospital (Work Wise): 299 Carew St, Suite 323, Springfield, MA 01104, Phone: (413) 748-6870

#### Concentra

Medical Director: Varun Nagarajan, MD, MBA

Operations Manager: Lori Lamson, MSOL, lori.lamson@concentra.com

**Address:** 701 Main Street, East Hartford, CT 06108 **Phone:** (860) 289-5561; **Fax:** (860) 291-1895

e-mail: vaNagarajan@concentra.com

Web: https://www.concentra.com/occupational-health/

Other Offices: 972 West Main Street, New Britain (860) 827-0745: 1080 Day Hill Road, Windsor (860) 298-

8442; 900 Northrop Rd, Wallingford, (203) 949-1534; 8 South Commons Rd, Waterbury (203) 759-

1229; 333 Kennedy Drive, Suite 202, Torrington (860) 482-4552; 315 West Main St, Norwich, (860) 859-

5100; 370 James Street, Suite 304, New Haven (203) 503-0482; 60 Watson Blvd, Stratford (203) 380-

5945; 15 Commerce Road, 3rd Floor, **Stamford**, (203) 324-9100

# **Griffin Hospital Occupational Medicine Center**

Medical Director: Amir Mohammad, MD, MPH

Clinic Director: Garrie Krueger e-mail: gkrueger@griffinhealth.org

**Address:** 10 Progress Drive, Shelton, CT 06484 **Phone:** (203) 944-3718; **Fax**: (203) 929-3068

### Hartford HealthCare Medical Group—Occupational Medicine

**Business Development Director**: Suzanne Cutter **Admin e-mail**: <a href="mailto:hhcmgocc.health@hhchealth.org">hhcmgocc.health@hhchealth.org</a>

**Phone**: (860) 524-2690

Web: https://hartfordhealthcaremedicalgroup.org/specialties/primary-care/occupational-medicine

East Region HHCMG Occ Medical Director: William H. Hernandez III MD

Fairfield Region HHCMG Occ and UC Medical Director: Syed Z. Hussain MD, MBA, MRO

Clinic Offices: Wethersfield: 1025 Silas Deane Highway, 06109, 860.696.2400; Norwich: 112 Lafayette Street, Norwich, 06360, 860-848-1297; Fairfield: 1262 Post Rd, 06824, 203.259.3440 and 1305 Post Rd, Suite

102, 06824, 203.254.2046; **Shelton**: 15 Armstrong Rd, Shelton, 06484, 203.929.1109; **Torrington**: 220

Kennedy Drive, 2<sup>nd</sup> Floor, 06790, 860.496.4190; Stratford: 3272 Main St, Stratford, CT 06614, 203.380.3920;

Westport: 374 Post Road East, Westport, 203-221-3390; Monroe: 401 Monroe Tpk, Monroe 06468, 203.268.2501; West Hartford: 445 South Main Street, West Hartford, 06110, 860.696.2200, option 5; Trumbull: 900 White Plains Rd, Trumbull, 06611, 203.696.3500, option 5; Stamford: 950 High Ridge Rd,

06905

The Hospital of Central Connecticut (THOCC) - Occupational Health Network Hospital of Central CT

OHN Medical Director: Sandor Nagy Jr., MD

**Phone**: (860) 827-6910

Practice Manager: Michelle Cadiz

**Plainville**: 440 New Britain Ave, Plainville, 06062 **Web**: https://thocc.org/services/occupational-health

Email: OHNPlainville@hhchealth.org

Yale New Haven Health Occupational Medicine and Wellness Services (5 Campuses)

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

Yale-New Haven Hospital (York Street Campus (YSC)/YNHHS)

Asst. Mgr of Clinical Operations (YNHH): Joelle Buntin Senior Medical Director (YSC): Raj Ahsan, MD, MPH

YNHH, 20 York St., New Haven, 203-688-2462

2080 Whitney Ave., Suite 150, Hamden (203) 789-6240

Email: OMWSYORK@ynhh.org OMWSHAMDEN@ynhh.org

Yale New Haven Hospital (St Raphael's Campus)

Asst. Mgr. of Clinical Operations (St. Raphaels Campus (SRC)/YNHHS) Tara DiCapua

Senior Medical Director (SRC): Raj Ahsan, MD, MPH

**Phone:** (203) 789-3721

175 Sherman Avenue, 5th Flr. New Haven, CT 06511

Email: OMWSSHERMAN@ynhh.org

Yale New Haven Occupational Medicine and Wellness Services

Bridgeport Hospital Campus (Bridgeport (BH)/Milford Hospital Campus (MC)/YNHHS

Asst. Mgr. of Clinical Operations (Bridgeport Hospital/YNHHS) Tara DiCapua

**Regional Medical Director (BH):** Ryan Pastena, MD, MPH 226 Mill Hill Ave, LL Ahlbin Center **Bridgeport**, CT 06610

**Phone:** 203-384-3613

Email: OMWSBRIDGEPORT@ynhh.org

Yale New Haven Occupational Medicine and Wellness Services

**Greenwich Hospital (GH/YNHHS)** 

Asst. Mgr. of Clinical Operations (Greenwich Hospital/YNHHS) Tara DiCapua

Regional Medical Director (GH): Ryan Pastena, MD, MPH

49 Lake Avenue 2<sup>nd</sup> Flr room 201, **Greenwich**, CT 06830

**Phone:** (203) 863-3402

Email: OMWSGREENWICH@ynhh.org

Yale New Haven Health Occupational Medicine and Wellness Services (L&M Hospital/Groton/Pequot/YNHHS)

Asst. Mgr. of Clinical Operations (L&M Hospital, Groton/Pequot/YNHHS): Serena Kenyon

Regional Medical Director (L&M/YNHHS): Cullen Taplin, DO

**Address:** 52 Hazelnut Hill Rd., Groton, CT 06340 **Phone:** (860) 446-5175; **Fax:** (860) 448-6961

Email: OMWSLMH@ynhh.org

**Middlesex Hospital Occupational Medicine** 

**Director:** Matthew Lundquist, MD, MPH

Address: 534 Saybrook Rd., Middletown, CT 06457

Phone: (860) 358-2750; Fax: (860) 358-2757

e-mail: occmed@midhosp.org

Web: <a href="https://middlesexhealth.org/occmed">https://middlesexhealth.org/occmed</a>

Other Office: Essex Medical Building, 252 Westbrook Road, Essex (860) 358-3840

# **Academic Programs and Courses**

Central Connecticut State University, School of Engineering, Science, and Technology

Type of Degrees: Graduate Certificate Program in Environmental and Occupational Safety and

Bachelor of Science in Manufacturing Management, with EH&S Program Option

Faculty contact: Haoyu Wang

Address: Applied Innovation Hub - Room 214-08, CCSU, 1615 Stanley Rd., New Britain, CT 06050

Phone: 860-832-1824 e-mail: wanghao@ccsu.edu

Web: https://www.ccsu.edu/programs/official-certificate-program-environmental-and-occupational-safety

https://www.ccsu.edu/programs/manufacturing-management-bs

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

Type of Degree and Program: Bachelor in Allied Health Sciences (Occupational and Environmental Health

and Safety Concentration); Online OSH Post-Baccalaureate Certificate Program

Faculty contact: Paul Bureau, MS CIH

Address: Koons Hall Room 100-H, 358 Mansfield Road, Unit 1101, Storrs, CT 06269-1101

**Phone:** 860-486-8816

e-mail: paul.bureau@uconn.edu
Web: http://osh.uconn.edu

**UConn Health, Department of Public Health Sciences** 

Type of Degree: Masters in Public Health program with ergonomic/occupational health courses Online course on Total Worker Health for OSH Professionals: https://www.uml.edu/research/cph-

new/education-training/intro-to-twh-for-osh

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@uchc.edu
Web: https://mph.uconn.edu

**UConn Health, Department of Public Health Sciences** 

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

Faculty Contact: Helen Swede, Ph.D.

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

**Phone**: (860) 679-5568; **Fax**: (860) 679-1581

e-mail: swede@uchc.edu

Web: https://phd.publichealth.uconn.edu

### Professional Associations

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

AIHA is a professional association for industrial hygienists.

President: Kristen Cramer Phone: (203) 929-3473 ext. 2 Email: crvaiha@wildapricot.org Web: https://crvaiha.wildapricot.org President-Elect: Robert Levandoski

### **American Society of Safety Professionals (ASSP)**

American Society of Safety Professional members are dedicated to creating safe work environments by preventing workplace fatalities, injuries and illnesses. Sound safety practices are a legal requirement, socially responsible and good business, leading to increased productivity, a better reputation and higher employee satisfaction.

Connecticut Valley Chapter

President: Gabriella Gajowiak, CSP, ASP

President-Elect: David Garner, CSP, CHMM, SMP

e-mail: president@ctvalley.assp.org

Web: http://ctvalley.assp.org

### Connecticut Trial Lawyers Association, Workers' Compensation Committee

CTLA is a professional association of attorneys whose mission reads "*Trial lawyers protecting individual rights through fair laws and access to justice*". The purpose of this section is to ensure that workers who have been injured or suffered illness arising out of and in the course of their employment are provided the benefits to which they are entitled under the Connecticut Workers' Compensation Act.

Chief Executive Officer: Joan D. Maloney

Workers' Compensation Section Co-Chairs: Jill Morrissey Rydzik and J. Paul Vance, Jr.

Address: 100 Pearl St, FL-10, Hartford, CT 06103

**Phone:** (860) 522-4345 **Fax:** (860) 522-1027

**e-mail**: <u>jmaloney@cttriallawyers.org</u> **Web**: <u>https://www.cttriallawyers.org</u>

#### New England College of Occupational and Environmental Medicine/NECOEM

The New England component of ACOEM, a physician-led non-profit organization of occupational & environmental health professionals for improving the health and safety of workplaces, and environments by providing clinical care, professional education, and encouragement of research to advance the specialty. Has an annual conference for occupational medicine professionals.

**Executive Director:** Michela Capobianco, MBA **Address:** 2 Goddu Avenue, Winchester, MA 01890

**Phone:** (508) 259-1018

e-mail: executive.director@necoem.org

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

### Connecticut Bar Association, Workers' Compensation Section

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

**Chair:** Christopher Buccini **Phone:** (203) 389-7000

**E-mail:** cbuccini@ctworkcomp.com

Web: https://www.ctbar.org/members/sections-and-committees/sections/workers'-compensation

### **Northeast Association of Occupational Health Nurses**

NEAOHN is an association of occupational health nurses, including most of the nurses working in industry. The Connecticut association has been dissolved, so it has moved to the Northeast Association.

**President**: Nancy Clover, RN, BSN, COHN-S **e-mail**: nancy@occhealthconnections.com

Web: https://neaohn.nursingnetwork.com and https://ctaohn.nursingnetwork.com

### **Connecticut State Agencies**

### Department of Public Health (DPH), Occupational Health Program

This Program conducts surveillance and investigates clusters of occupational diseases.

DPH also has programs that work on radon, asbestos, drinking water, lead, asthma, toxic hazards, TB control and infectious disease.

Director: Neo Deloreto, MPH

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

**Phone:** (860) 509-7740 **Fax:** (860) 509-7785

e-mail: Neo.DeLoreto@ct.gov

Web: http://www.ct.gov/dph/occupationalhealth

### **State Department of Emergency Services and Public Protection**

The Department of Emergency Services and Public Protection (DESPP) is comprised of the Commission on Fire Prevention and Control, the CT State Police, Emergency Management and Homeland Security, the Police Officers Standards and Training Council, Scientific Services, and Statewide Emergency Telecommunications.

Address: 1111 Country Club Rd, Middletown, CT 06457

**Director of Communications:** Rick Green

**Phone**: 860-539-0159

Email: richard.green@ct.gov Phone: 860-685-8000

Web: https://portal.ct.gov/despp

### 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 the Emergency Planning and Community Right to Know Act. Contact information for town Local Emergency Planning Committees (LEPC) is at <a href="https://portal.ct.gov/-/media/serc/lepc/lepc-contacts-updated-as-of-01092024.pdf">https://portal.ct.gov/-/media/serc/lepc/lepc-contacts-updated-as-of-01092024.pdf</a>

Chairman: Gerard P. Goudreau

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

Phone: (860) 424-3373 e-mail: deep.ctepcra@ct.gov Web: https://portal.ct.gov/SERC

### Connecticut Fire Academy, Commission on Fire Prevention & Control

Safety training & standards compliance

Training Director: P.J. Norwood, Training Director

**Address**: 34 Perimeter Road, Windsor Locks, CT 06096-1069 **Phone:** 860-627-6363 or toll free (877) 5CT-FIRE (only in CT);

Fax: (860) 654-1889

e-mail: paul.norwood@ct.gov

Web: <a href="http://www.ct.gov/cfpc/site/default.asp">http://www.ct.gov/cfpc/site/default.asp</a>

### Connecticut Department of Environmental Protection, Radiation Safety Unit

**Director:** Jeff Semancik

**Phone:** (860) 424-3029; (860) 424-3333 24/7 Emergency; **Fax:** (860) 706-5339

e-mail: jeffrey.semancik@ct.gov

Web: https://portal.ct.gov/deep/radiation/radiation

# **Workers' Compensation Commission**

# Office of the Chairperson 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 wage loss benefits and appropriate medical treatment. To this end, the Commission approves voluntary agreements, adjudicates disputes, issues findings and awards, hears and rules on appeals, and closes out pending cases through full and final stipulated agreements.

The WCC Education, 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."

Chairperson: Stephen M. Morelli

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: <a href="http://portal.ct.gov/wcc">http://portal.ct.gov/wcc</a>

### **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. 24 Washington St., New Britain, CT 06051; (860) 827-7180; Fax: (860) 827-7913
- 7. 111 High Ridge Rd., Stamford, CT 06905; (203) 325-3881; Fax: (203) 967-7264
- **8.** 649 South Main St., **Middletown**, CT 06457; (860) 344-7453; Fax: (860) 344-7487

The Who's Who is compiled by Tim Morse, Ph.D., at UConn Health. To update or add a listing, please contact Tim at tmorse@uchc.edu.