# Occupational Disease in Connecticut, 2024



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State of Connecticut Workers' Compensation Commission
Stephen M. Morelli, Chairperson
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Department of Public Health

By

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# A. Executive Summary

This report focuses on occupational *disease* reports for 2022 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, 2020-2022

Type of Disease	BI	BLS/CTDOL			wcc			OllSS (Physicians)			Unique Cases* (WCC and OllSS)		
	2020	2021	2022	2020	2021	2022	2020	2021	2022	2020	2021	2022	
Lung & poisonings	6,400	4,100	5,300	414	169	269	92	127	187	478	277	434	
Lead **							199	160	178	199	160	178	
Skin	200	200	200	230	152	176	104	91	76	306	217	224	
Musculoskeletal***	***	***	***	2,861	2,246	2,535	480	558	502	3,198	2,694	2,930	
Infectious				6,485	2,107	2,173	979	934	1,036	7,280	2,919	3,100	
Hearing loss	200	300	300	144	98	112	15	12	15	159	105	118	
Other***	1,100	600	600	907	849	933	146	120	189	1,009	954	1,091	
Total****	8,000	5,200	6,400	11,041	5,621	6,198	2,015	2,002	2,183	12,629	7,326	8,075	

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 2020-2022 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 6,400 cases of occupational disease were reported under the BLS/CTDOL survey, 6,198 through the workers' compensation first report of injuries (and an additional 343 COVID-19 cases reported through the supplemental database), and 2,183 reported by physicians for 2022. The number of reports were dramatically higher starting in 2020 for both the BLS system and workers' compensation systems due to COVID-19 reports.

<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.

Reports for COVID-19 decreased considerably in 2021 and 2022 for Workers' Compensation (they continued to largely not be reflected in the physician reports from occupational health clinics).

Overall, all three reporting systems had increases in 2022. After case matching between the workers' compensation and physician reports with adjustments made for reporting to both systems, there were 8,075 unique reports (plus the 343 supplemental COVID-19 reports for a grand total of 8,418 reports) made to either or both of those two systems (BLS is a survey and individual-level data is not available for matching).

Infectious disease was the second-largest category of occupational disease reports from workers' compensation, with COVID-19 accounting for approximately one-quarter (24%) of cases reported through the FRI (First Report of Injury) database. Other infectious diseases add an additional 11% of cases. Infectious disease accounted for 52% of physician reports even though only 23 COVID-19 cases were in the database. Infectious disease is only broken out in the BLS system for lost/restricted time cases.

Musculoskeletal disorders (MSD) such as Carpal Tunnel Syndrome and tendonitis was the largest category of workers' compensation occupational conditions, accounting for 41% of reports and 25% of physician reports. MSDs have not been broken out by BLS since 2002, but MSD cases are presumed to be the main portion of the "other illness" category. Respiratory diseases and poisonings, which include respiratory conditions and lung disease such as asthma, as well as poisonings such as from carbon monoxide and lead, accounted for 4% of cases reported to workers' compensation, 83% 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 17% (WCC), 10% of physician reports, and 9% of BLS. Skin conditions accounted for 3% (WCC), 4% (OIISS), and 3% 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 178 reports of lead poisoning in 2022; very few of those cases are reported to the other systems.

There was an overall illness rate of 50.6 cases per 10,000 workers based on the BLS survey, 19% higher than the previous year. The CT rate was approximately equal to the average national rate of 52.0 and was the 15<sup>th</sup> highest out of the 46 states reporting data.

Based upon workers' compensation data, the rate of illness in 2022 was 42.8 cases per 10,000 workers, 21% higher than the 35.3 cases per 10,000 in 2021. The highest illness rates by industry sector were for Government (71.5 per 10,000 workers, approximately double the overall rate), Education and Health (52.5), Manufacturing (48.9), and Trade (41.9), with all other sectors below the average rate. Nursing and Residential Care Facilities was highest with 169.1, an increase of 52% from the prior year. Local Government was next highest with a rate of 79.7, followed by Support Activities for Transportation (primarily airports) with 77.0 (though with a small number of cases at 28), Hardware Stores (76.5), and State Government (74.3).

Overall (based on workers' compensation reports) 53% of reports were for women, but this varied by type of case, with a higher proportion than average for infectious diseases (72% 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, but the rates increased gradually with age.

While the broad term of "strains and sprains" accounted for two-thirds (69%) of workers' compensation reports of chronic musculoskeletal disorders (MSD), the most common specific types were Carpal Tunnel Syndrome (9%), inflammation (6%), numbness (4%), and various types of tendonitis (3%). The most common specific **causes** (aside from the commonly used terms "repetition" or "cumulative") for MSD in workers' compensation reports were lifting and carrying, tool use, pushing or pulling, and computer use.

Nonspecific respiratory illnesses were the most common type of lung condition, with 48% of reports, followed by asbestos disease or exposures (7%) and poisonings such as from carbon monoxide, lead, or mercury (7%). In addition to the more general categories of smoke, construction dust and mold, specific substances connected to the respiratory cases included cleaning fumes/bleach (8), pepper spray (2), hydrofluoric acid, degreaser, spray deodorizer, Hexafluorosilicic acid, fire extinguisher (2), construction fumes, insecticides, gasoline/fuel (2), welding fumes, wax stripping, battery fumes, floor wax, lacquer, and glycol.

There were 1,508 **COVID-19** cases reported through the FRI (First Report of Injury) employer reports and an additional 343 reports from a special COVID-19 database based on worker reports and requests for hearings. COVID-19 cases accounted for 69% of infectious cases in the FRI data. Almost three-quarters (73%) of COVID-19 cases were in the Education/Health sector with 9% in wholesale and retail trade and 6% in Local Government. When the sectors are broken down into more detail (Table D-11) for subsectors with 10 or more cases, by far the largest rate (and number) is for Nursing and Residential Care Facilities with a rate of 148.5 cases per thousand (and 791 cases), followed by Hardware Stores (60.4), Support Activities for Transportation (primarily airports), with a rate of 41.2 (but only 15 reported cases), Hospitals (17.1), Clothing Stores (14.3), and Physician Offices (13.2). All reported cases from hardware store were from one large chain, so there are likely more cases that were not reported by other stores. Nursing home chains were also relatively concentrated, with the largest system accounting for 57% of COVID reports and the top 5 chains accounting for 79% of reports (out of approximately 38 reporting nursing homes or chains).

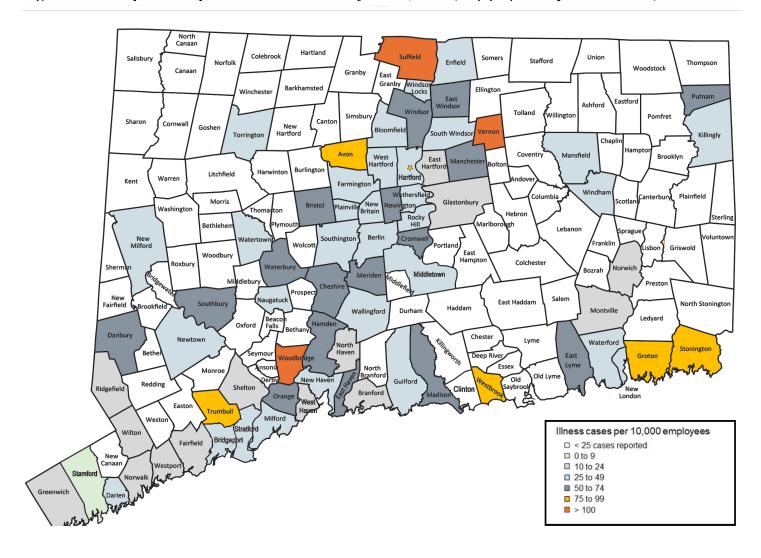
Other infectious disease and exposures, based on workers' compensation reports, included 594 reports of potential exposure to bloodborne pathogens (including reports of exposure to HIV/AIDS and Hepatitis C), accounting for 27% of all infectious disease reports, including 246 needlestick or sharps exposures. There were 11 cases of tuberculosis infection and 29 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. Often the highest rates appear to be related to having large employers in high-rate industries. There were 71 towns and cities with at least 20 cases of occupational disease reported to workers' compensation, and the overall state mean (average) was 37.7 cases per 10,000 employees. For towns with at least 20 cases, Woodbridge had the highest rate of 176.1 per 10,000 workers, over 4 times the state rate of 37.7. The other towns with the highest 10 rates were Vernon (129.6), Suffield (122.0), Stonington (93.8), Westbrook (88.2), Trumbull (85.6), Groton (82.0), Avon (77.0), Madison (74.8), and Southbury (74.4). Overall, 38 towns had rates higher than the state average of 37.7.

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.

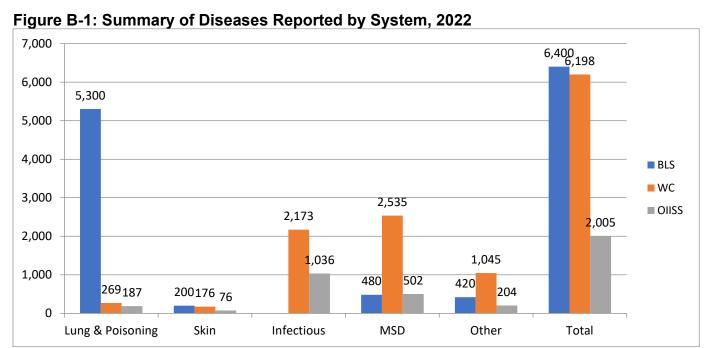
Special thanks to Ivan Cherniack and Neo Deloreto at the CT Dept of Public Health, Erin Wilkins at the CT Dept. of Labor, and Martin Resto and Richard Eighme at the CT Workers' Compensation Commission for their assistance in compiling and reviewing the data. The map of towns was created by Adam Morse.

Figure A-1: Map of Occupational Illness Rates by Town, 2022 (map prepared by Adam Morse)



# **B. Summary of Diseases**

Figure B-1 shows the totals by disease category for 2022 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.

The BLS (Bureau of Labor Statistics/OSHA) survey showed the highest number of cases, with an estimated 6,400 total cases reported, 6,198 for the WC (employer reports to the Workers' Compensation Commission), and 2,005 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 5,300 lung and poisoning category) and workers' compensation (contained in the 2,173 infectious disease reports). MSD reports were dramatically higher for the workers' compensation system than the other two sources.

# 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, nor are the additional cases reported in the special workers' compensation COVID-19 dataset.

Table B-1: Matched, Unique, and Estimated Total Cases of Occupational Illness, CT, 2022

Illness Type	Matched WC Only OIIS		OllSS Only	Unique Cases	Estimated Unreported	Estimated Total	
Infectious	109	556	904	1,569	4,611	6,180	
Lung	22	247	165	434	1,853	2,287	
MSD	107	2,428	395	2,930	8,963	11,893	
Other	40	1,005	164	1,209	4,121	5,330	
Skin	28	148	48	224	254	478	
Subtotal*	306	4,384	1,676	6,366	24,012	30,378	
COVID-19 (FRI & OIISS)	0	1,508	23	1,531		1,531	
Additional COVID Cases*	NA	343	NA	343		343	
Lead (lab report data)	NA	0	178	178		178	
Total*	306	6,235	1,877	8,418	24,012	32,430	

<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. Additional COVID cases are those reported to the Workers' Compensation Commission in other ways than the First Report of Injury from employers, such as from employee reports or requests for hearings.

COVID-19 cases were not included in the capture-recapture estimates since reporting by physicians did not primarily go through occupational medicine physicians but are included in the totals.

There was a total of 306 cases that were reported to **both** workers' compensation (WC) and by physicians to OIISS; 1,699 cases were reported only to the physician report (OIISS) system, and an additional 5,892 cases were reported only to the workers' compensation system. This gives a total of 7,897 unique cases that were reported to at least one of the two systems, with 3,100 infectious cases (including COVID-19), 434 lung cases, 2,930 musculoskeletal (MSD) cases, 224 skin conditions, and 1,209 "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 24,012 unreported cases. When combined with the unique cases, this provides an estimate of 30,378 occupational illness cases in the capture-recapture analysis.

There were also 1,851 COVID-19 cases reported to workers' compensation through all data sources (FRI and s employee reports or requests for hearings), as well as 23 reported by physicians through occupational disease reports. There were also 178 lead poisoning cases reported by testing labs, for a final total of 8,418 unique reported cases and an estimate of 32,430 combined reported and unreported cases of all occupational illnesses.

Longer term trends in 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 was generally declining between 2008-15 (the Workers' Compensation database appears incomplete in 2003 and 2005-2007) and was level between 2015-2019, then rising dramatically with COVID-19 cases in 2020 with a decline 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.

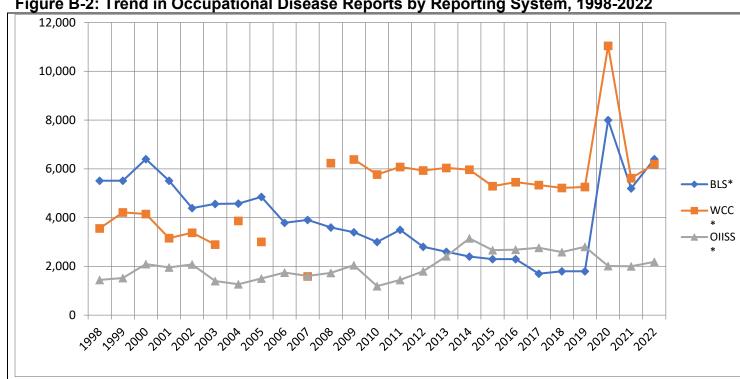


Figure B-2: Trend in Occupational Disease Reports by Reporting System, 1998-2022

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 2020-22. Estimated cases peaked in 2014 and declined until the increase in 2020-22 due primarily to COVID-19.

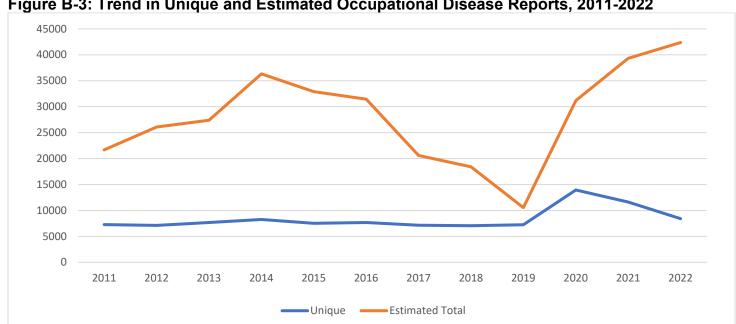


Figure B-3: Trend in Unique and Estimated Occupational Disease Reports, 2011-2022

# 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 2022

There were approximately 6,400 reported cases of occupational illnesses in 2022 (Table C-1 and Figure C-1) with an overall rate of 50.6 per 10,000 workers, a 19% increase in rates from the prior year. The increase was due primarily to a 24% increase in respiratory conditions (including COVID-1 after a 36% decrease in 2021 and an almost 50 times increase in 2020). Skin conditions increased by 43% while "other" conditions (which include repetitive trauma/musculoskeletal conditions) decreased 4% and hearing loss decreased 9%.

Table C-1: Occupational Disease by Type, BLS/CTDOL 2021-2022

_	202	21	202	22	% Change
	Cases	Rates	Cases	Rates	in Rate
Respiratory	4,100	33.5	5,300	41.4	23.6%
Skin	200	1.4	200	2.0	42.9%
Hearing Loss	300	2.2	300	2.0	-9.1%
Poisonings					
Other*	600	5.3	600	5.1	-3.8%
Total	5,200	42.4	6,400	50.6	19.3%

**Source:** BLS/CTDOL; Rates are per 10,000 workers, adjusted for hours worked. The data includes public sector. Blanks indicate numbers that are too small or unreliable to publish. Total Illnesses may differ from sum due to rounding errors. \*Musculoskeletal disorders (MSD) are categorized under the "Other" category by BLS.

Overall rates for Connecticut in 2022 were approximately equal to U.S. rates (Figure C-1) across most categories of disease.

Connecticut's illness rate of 42.4 cases per 10,000 workers ranked 15<sup>th</sup> highest out of 46 states and territories with publishable data (15 states had higher rates and 30 had lower rates). California had the highest rate of 121.7 and Georgia had the lowest at 11.2. The U.S. average was 52.0. Since these rates were driven primarily from COVID-19 and reporting may have been highly variable in relation to work-related COVID-19, these national comparisons should be viewed with caution.

Private sector rates for occupational illness were 54.3 in Connecticut and 45.2 nationally. The U.S. rate for the public sector was approximately 5 times as high as Connecticut: The Connecticut public sector rate was 20.7 vs. the U.S. rate of 100.7.

In Connecticut, the rate of illnesses increased slightly from 2002-2005, generally decreased through 2017 (with the exception of 2011) then generally level through 2019, with a dramatic increase starting in 2020 due to COVID-19 cases (Figure C-2).

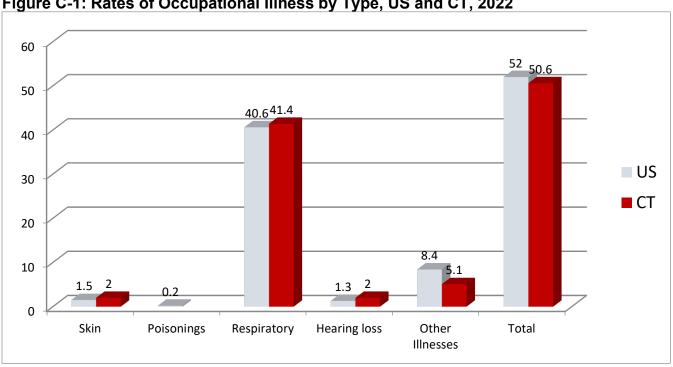
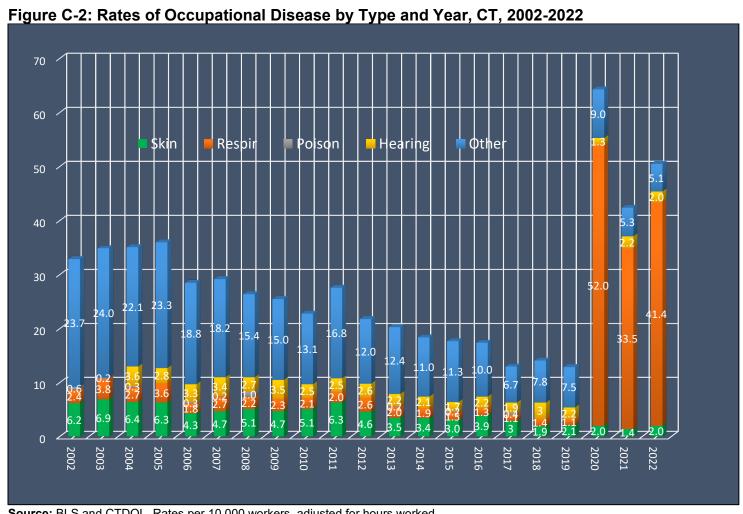


Figure C-1: Rates of Occupational Illness by Type, US and CT, 2022

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.

## **Illnesses by Industry**

Numbers and rates by industry sector for 2022 are presented in Table C-2. Overall, the adjusted rate was 50.6 cases of occupational illness per 10,000 CT workers. The overall private sector rate was 54.3, with a government rate of 20.7. Blank spaces indicate too few cases for reliable estimates from the survey.

Table C-2: Illnesses by Industry Sector and Type of Illness, CT, 2022

	To	tal	Sk	in	Respi	ratory	Poiso	Poisonings Hearing Loss			Other III	Inesses
Industry sector	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
All Industries	6.4	50.6	0.2	2.0	5.3	41.4			0.3	2.0	0.6	5.1
Private Industry	6.1	54.3	0.1	1.1	5.2	46.2			0.2	2.0	0.6	5.0
Goods producing	0.6	28.3		1.5	0.3	13.6			0.2	10.2	0.1	3.0
Manufacturing	0.6	39.2		2.0	0.3	19.1			0.2	14.2	0.1	3.9
Service providing	5.5	60.3	0.1	0.9	4.9	53.7					0.5	5.5
Trade, transportation, and utilities	0.6	26.6		1.2	0.4	16.2					0.2	9.0
Retail Trade	0.4	37.5		2.1	0.3	26.1					0.1	9.3
Transportation and warehousing	0.1	20.8				3.5						16.5
Finance, insurance, and real estate												
Professional and business services												1.1
Educational and health services	4.3	184.9		1.2	4.0	173.4					0.2	10.2
Education		12.7										
Health care and social assistance	4.2	220.0		1.3	4.0	206.7					0.2	11.9
Leisure, entertainment, and hospitality		5.1										
Other services (except public administration)												
State and Local Government	0.3	20.7	0.1	9.4		2.8					0.1	5.9
State Government	0.1	21.8	0.1	16.2								
Local Government	0.2	20.1	0.1	5.9		2.7					0.1	7.4

**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.

As would be expected with numbers still so driven by COVID-19, overall rates were dominated by respiratory illnesses (BLS generally categorizes COVID-19 as a respiratory condition rather than infectious disease except for lost-time reporting as noted below). Industries are broken down by industry sector (in blue), major industry (in bold), and detailed sector.

By far, the highest overall industry sector rate was Educational and Health Services at 184.9, with the subcategory of Health Care at 220.0. This was followed by the major industry category of Service-Providing industries (60.3), Manufacturing (39.2), and Retail Trade (37.5). These were driven by high rates of Respiratory Conditions.

Other Illnesses, which includes musculoskeletal conditions due to repetitive exposures, was highest in Education and Health Services (10.2), Trade, Transportation, and Utilities (9.0, including 16.5 in Transportation and Warehousing), Local Government (7.4), and Manufacturing (3.9). Hearing loss was primarily reported in Manufacturing (14.2). Skin conditions was led by State Government (16.2) and Local Government (5.9). There were no industries with reportable numbers for Poisonings.

## **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 and 2022. 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."

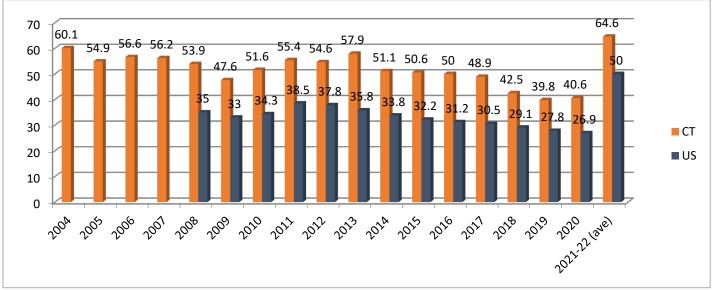
The rate of tendonitis in CT dropped in half from 0.6 cases per 10,000 workers in 2020 to 0.3 in 2021-22 (Figure C-4), while carpal tunnel syndrome (CTS) increased from 0.5 cases to 0.7 cases per 10,000. The rate of CTS in CT was 40% higher than the national rate but equal for tendonitis. CTS had a very 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**

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.

Figure C-3: Rates of Musculoskeletal Disorders, CT and US, 2004-2022

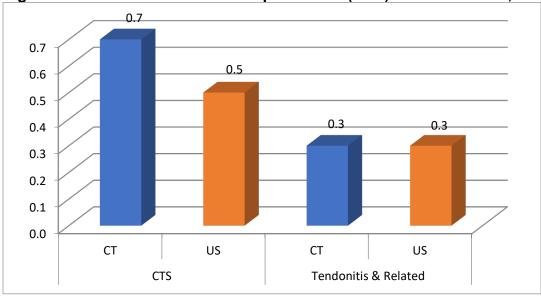


**Source:** U.S. Bureau of Labor Statistics (Customized Tables); https://data.bls.gov

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-4: 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 6,198 reports in the Workers' Compensation First Report of Injury (FRI) Database for 2022 (Table D-1), a rise of 10% since the previous year. There were 1,508 COVID-19 cases reported through the FRI data, approximately the same as 2021. However, there was a steep drop in COVID reports through the supplemental COVID database maintained by the Workers' Compensation Commission (these are cases reported to workers' compensation through other reporting such as employee notice of claims or from hearings), going from 4,304 in 2021 to just 21 in 2022.

This resulted in a total of 6,219 cases reported to workers compensation through some means in 2022, a decrease of 37% from 2021. Other conditions besides COVID-19 were up substantially from 2021, with a 13% increase in musculoskeletal disorders, a 16% increase in skin disorders, a 59% increase in lung conditions, a 13% increase in infectious diseases besides COVID-19, and a 10% increase in other conditions such as heart conditions, stress, and hearing loss. These 2022 increases mirror similar sized decreases in 2021.

Excluding the extra COVID-19 cases reported through other means, COVID-19 accounted for 24% of all occupational illness FRI reports, with an additional 11% from other infectious diseases. Musculoskeletal disorders (MSD) were 41% of total cases, other illnesses 17%, lung conditions 4%, and skin disorders 3%.

Table D-1: Occupational Disease by Type, WCC, 2021-2022

	2021	20	022	
Illness type	Cases	Cases	% of Total	% Change
Musculoskeletal Disorders (MSD)	2,246	2,535	41%	13%
Infectious Disease (w/o COVID)	586	665	11%	13%
COVID-19*	1,521	1,508	24%	-1%
Lung Disorders	169	269	4%	59%
Skin Disorders	152	176	3%	16%
Other Illnesses	947	1,045	17%	10%
Total	5,621	6,198	100%	10%
Additional COVID-19 cases*	4,304	343		-92%
Total	9,925	6,541		-34%

<sup>\*</sup>There were an additional 343 cases of COVID-19 reported to the Workers' Compensation Commission through other reporting mechanisms in 2022, including worker notice of claim (Form 30-c) or requests for hearing, resulting in a combined total of 1,851 COVID-19 cases.

Overall, 53% of reports were for women, but this varied by type of case, with a much higher proportion than average for infectious diseases (72% women), but lower for all other types of illness (Figure D-1). Women comprised approximately 47% of the overall Connecticut workforce in 2021, so occupational disease rates appear higher for women than men, but this is almost entirely driven by infectious disease (particularly COVID-19).

Reported occupational illnesses was distributed evenly across most age groups (Table D-2), with approximately 20% for workers between 25 and 54, and slightly higher (24%) for those between 55-64. Rates of illness (adjusted for the size of the workforce) gradually go up as workers age, with the highest rate for workers between 55 and 64 (53.6 per 10,000 workers). Both the percentage of cases as well as rates were lower for the youngest workers (16-24).

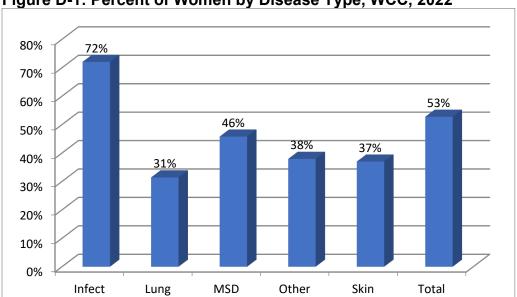


Figure D-1: Percent of Women by Disease Type, WCC, 2022

Table D-2: Occupational Illnesses and Rates per 10,000 Workers by Age, 2022

Age	Cases	Percent	Workforce*	Rate/10,000
16-24	448	7%	199,370	22.5
25-34	1,226	20%	300,951	40.7
35-44	1,232	20%	289,539	42.6
45-54	1,282	21%	273,159	46.9
55-64	1,465	24%	273,523	53.6
65-80	477	8%	113,243	42.1
Unknown	68	1%		
Total	6,198	100%	1,449,784	42.8

Workforce data obtained from the Census Quarterly Workforce Indicators bases on the 3<sup>rd</sup> Quarter of 2022 (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-eight percent (98%) of reported cases were able to be coded for major industry sector. The largest sectors in terms of overall numbers were Education/Health<sup>1</sup> (28% of all cases), Government (25%, combined local and state), Trade (15%), and Manufacturing (12%). The number of cases in Education and Health were driven largely by COVID-19 cases in the healthcare sector (see below).

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 2022 was 37.7 cases per 10,000 workers, 7% higher than the 35.3 cases per 10,000 in 2021. The highest illness rates by industry sector were for Government (71.5 per 10,000 workers, approximately double the overall rate), Education and Health (52.5), Manufacturing (48.9), and Trade (41.9), 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.



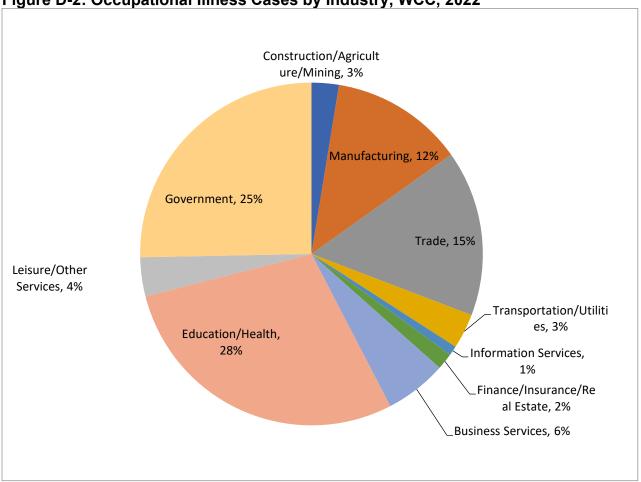


Table D-3: Rates of Occupational Disease by Major Industry Sector, WCC, 2022

Industry Sector	Cases	%	Employment	%	Rate
Construction/Agriculture/Mining	157	3%	66,313	4%	23.7
Manufacturing	766	12%	156,492	10%	48.9
Trade	954	15%	227,558	14%	41.9
Transportation/Utilities	201	3%	68,901	4%	29.2
Information Services	55	1%	31,177	2%	17.6
Finance/Insurance/Real Estate	95	2%	116,454	7%	8.2
Business Services	355	6%	221,512	13%	16.0
Education/Health	1,744	28%	332,183	20%	52.5
Leisure/Other Services	224	4%	201,690	12%	11.1
Government	1,542	25%	215,804	13%	71.5
Unknown	105	2%	4,544	0%	
Total	6,198	100%	1,642,657	100%	37.7

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 and Education/Health were relatively high in all 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, 2022

	Otl	her	Lu	Lung		Infectious		MSD		Skin		Total	
Construction/Agric/Mining	24	2%	9	3%	4	0%	118	5%	2	1%	157	3%	
Manufacturing	132	13%	44	17%	22	1%	539	22%	29	17%	766	13%	
Trade	189	18%	18	7%	150	7%	575	23%	22	13%	954	16%	
Transport/Utilities	30	3%	11	4%	38	2%	116	5%	6	3%	201	3%	
Information Services	8	1%	2	1%	4	0%	40	2%	1	1%	55	1%	
Finance/Insurance/RE	25	2%	4	2%	11	1%	54	2%	1	1%	95	2%	
Business Services	60	6%	15	6%	103	5%	165	7%	12	7%	355	6%	
Education/Health	96	9%	19	7%	1286	60%	311	13%	32	19%	1,744	29%	
Leisure/Other Services	61	6%	13	5%	38	2%	102	4%	10	6%	224	4%	
Government	404	39%	124	48%	504	23%	453	18%	57	33%	1,542	25%	
Subtotal	1,029	100%	259	100%	2,160	100%	2,473	100%	172	100%	6,093	100%	
Unknown	16		10		13		62		4		105		
Total	1,045		269		2,173		2,535		176		6,198		

Government had a high number of cases in all categories of illnesses. Infectious diseases were concentrated in Education/Health (60%) primarily due to the very high number of COVID-19 cases, followed by Government (23%). Lung diseases were concentrated in Government (48%) and Manufacturing (17%). Musculoskeletal disorders (MSD) were spread across Trade (23%), Manufacturing (22%), Government (18%), and Education/Health (13%). Skin disorders were spread across Government (3%), Education/Health (19%), Manufacturing (17%) and Trade (13%). "Other" illnesses, including heart conditions and hypertension, stress, and hearing loss cases (see below) were most common in Government (39%), Trade (18%), and Manufacturing (13%).

Table D-5 shows those specific industry subsectors (3-digit NAICS code) that reported 20 or more cases of occupational illness in 2022, ordered by the highest *rate* of illness. Industries with the highest rates again largely reflect the incidence of COVID-19. Nursing and Residential Care Facilities was highest with 169.1, an increase of 52% from the prior year. Local Government was next highest with a rate of 79.7, followed by Support Activities for Transportation (primarily airports) with 77.0 (though with a small number of cases at 28), Hardware Stores (76.5), and State Government (74.3).

Overall, 23 sectors were above the state average of 37.7 cases per 10,000. In addition to the five mentioned above these were Performing Arts and Spectator Sports, Utilities, Transportation Equipment Manufacturing, General Merchandise Stores, Food and Beverage Stores, Computer and Electronic Product Manufacturing, Food Products, Chemical Manufacturing, Plastics and Rubber Products Manuf., Non-store Retailers, Merchant Wholesalers, (Nondurable Goods), General Purpose Machinery Manufacturing, Telecommunications, Trucking, Fabricated Metal Product Manufacturing, Hospitals, Non-residential Construction, and Couriers and Messengers.

Table D-5: Specific Industry Sectors, 20 or more Cases of Occupational Disease, WCC, 2022

Specific Industry Sectors, 20 of	NAICS	2022#	Employed	2022	2021	Change
, ,			. ,	Rate	Rate	
Nursing and Residential Care Facilities*	623	905	53,254	169.9	111.7	52%
Local Government	Local	1097	137,669	79.7	76.8	4%
Support activities for transportation	488	28	3,637	77.0	47.8	61%
Hardware Stores	444	124	16,216	76.5	114.9	-33%
State Government	State	445	59,859	74.3	71.4	4%
Performing arts and spectator sports	711	26	3,784	68.7	21.7	217%
Utilities	221	32	4,942	64.8	24.1	169%
Transportation Equipment Manuf	336	282	45,035	62.6	67.2	-7%
General Merchandise Stores	455	178	28,720	62.0	37.2	67%
Food and Beverage Stores	445	254	41,181	61.7	58.8	5%
Computer and Electronic Product Manuf	334	62	10,348	59.9	72.9	-18%
Food Products	311	49	8,700	56.3	37.0	52%
Chemical Manufacturing	325	45	8,053	55.9	53.6	4%
Plastics and Rubber Products Manuf.	326	28	5,145	54.4	38.7	41%
Non-store Retailers	454	45	8,327	54.0	60.0	-10%
Merchant Wholesalers, Nondurable Goods	424	109	21,363	51.0	52.8	-3%
General Purpose Machinery Manuf	333	68	13,427	50.6	37.3	36%
Telecommunications	517	30	6,047	49.6	46.2	7%
Trucking	484	39	8,397	46.4	33.9	37%
Fabricated Metal Product Manufacturing	332	128	27,919	45.8	41.8	10%
Hospitals	622	269	59,710	45.1	57.2	-21%
Non-residential Construction	236	45	11,493	39.2	23.1	69%
Couriers and Messengers	492	49	12,858	38.1	48.6	-22%
Clothing and clothing accessories	458	44	12,605	34.9	27.3	28%
Waste mngt. and remediation services	562	22	6,328	34.8	21	66%
Physician Offices	621	311	94,805	32.8	29.6	11%
Electrical Equip, Appliance Manuf	335	22	7,188	30.6	42.2	-27%
Accommodation	721	28	9,150	30.6	39.6	-23%
Transit and Ground Passenger Transport	485	38	12,516	30.4	18.9	61%
Administrative and Support Services	561	234	85,100	27.5	26.2	5%
Educational Services*	611	164	60,407	27.1	90.8	-70%
Motor Vehicle Dealers	441	51	21,040	24.2	23.5	3%
Merchant Wholesalers, Durable Goods	423	78	32,387	24.1	23.2	4%
Miscellaneous manufacturing	339	21	8,841	23.8	4.8	395%
Specialty Trade Contractors	238	92	42,621	21.6	18.3	18%
Residential Building Leasing	531	29	14,563	19.9	18.5	8%
Misc. Retail Stores	459	29	14,851	19.5	47.1	-59%
Health and personal care stores	456	24	12,456	19.3	16.6	16%

Repair and maintenance	811	23	12,910	17.8	21.4	-17%
Social Assistance	624	95	64,007	14.8	10.3	44%
Religious and civic	813	22	14,923	14.7	17.8	-17%
Personal and laundry services	812	24	20,815	11.5	9.9	16%
Amusement, gambling, and recreation	713	20	19,882	10.1	5.5	83%
Prof, Scientific, and Technical Services	541	85	99,153	8.6	8.5	1%
Food Services and Drinking Places	722	73	112,979	6.5	8.1	-20%
Insurance Carriers and Related Activities	524	27	54,171	5.0	4.6	8%
Connecticut	Ave.	6,198	1,642,657	37.7	35.5	6%

<sup>\*</sup>Excludes government workers

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 2022. 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 (and for 2022, this includes large healthcare workplaces such as hospitals and nursing homes). The overall state average was 37.7 cases per 10,000 employees.

For towns with at least 20 cases, Woodbridge had the highest rate of 176.1 per 10,000 workers, over 4 times the state rate of 37.7. The other towns with the highest 10 rates were Vernon (129.6), Suffield (122.0), Stonington (93.8), Westbrook (88.2), Trumbull (85.6), Groton (82.0), Avon (77.0), Madison (74.8), and Southbury (74.4). Overall, 38 towns had rates higher than the state average of 37.7.

Table D-6: Illnesses by Town/Municipality, 20 or more cases, WCC, 2022

Town	Employment	Cases	Rate per 10,000	Rank*
Woodbridge	3,691	65	176.1	1
Vernon	7,719	100	129.6	2
Suffield	4,015	49	122.0	3
Stonington	7,784	73	93.8	4
Westbrook	3,288	29	88.2	5
Trumbull	14,375	123	85.6	6
Groton	28,899	237	82.0	7
Avon	7,927	61	77.0	8
Madison	5,216	39	74.8	9
Southbury	7,395	55	74.4	10
Cromwell	6,789	45	66.3	11
East Lyme	5,273	34	64.5	12
Manchester	26,597	165	62.0	13
Waterbury	36,718	219	59.6	14
Bristol	21,150	123	58.2	15
Hamden	20,211	115	56.9	16

Windsor	25,748	146	56.7	17
Putnam	5,738	32	55.8	18
Danbury	41,842	223	53.3	19
Newington	16,470	86	52.2	20
Orange	11,005	56	50.9	21
East Windsor	6,099	31	50.8	22
Cheshire	16,961	86	50.7	23
Meriden	20,774	104	50.1	24
East Haven	6,201	31	50.0	25
New London	12,707	63	49.6	26
Windham	9,744	46	47.2	27
Bloomfield	20,380	95	46.6	28
South Windsor	14,585	67	45.9	29
Farmington	30,797	140	45.5	30
Enfield	17,331	75	43.3	31
Torrington	14,503	62	42.7	32
New Milford	7,808	32	41.0	33
Mansfield	11,810	48	40.6	34
Middletown	28,646	116	40.5	35
Killingly	8,675	35	40.3	36
Wallingford	26,797	103	38.4	37
Rocky Hill	16,199	62	38.3	38
Southington	17,689	65	36.7	39
Windsor Locks	12,534	46	36.7	40
Guilford	8,388	30	35.8	41
Milford	26,367	93	35.3	42
New Haven	87,148	303	34.8	43
Waterford	10,234	35	34.2	44
Naugatuck	6,695	22	32.9	45
Hartford	107,107	350	32.7	46
Wethersfield	9,852	32	32.5	47
Bridgeport	40,678	132	32.4	48
West Hartford	28,191	91	32.3	49
New Britain	23,699	75	31.6	50
Darien	8,233	26	31.6	51
Newtown	8,673	27	31.1	52
Stratford	25,509	78	30.6	53
Plainville	8,833	27	30.6	54
Berlin	11,161	34	30.5	55
Watertown	8,958	25	27.9	56
Norwalk	40,568	98	24.2	57
Westport	14,955	36	24.1	58

North Haven	25,789	61	23.7	59
Greenwich	33,380	72	21.6	60
Ridgefield	10,441	22	21.1	61
Norwich	16,161	34	21.0	62
Branford	12,557	26	20.7	63
Montville	10,215	21	20.6	64
Shelton	25,540	52	20.4	65
Glastonbury	17,204	35	20.3	66
West Haven	15,001	30	20.0	67
East Hartford	30,579	59	19.3	68
Fairfield	25,452	46	18.1	69
Wilton	13,068	23	17.6	70
Stamford	73,576	70	9.5	71
Total Towns, >20 cases	1,392,302	5,447	39.1	NA
Total Towns, <20 cases	250,206	751	30.0	NA
Connecticut	1,642,508	6,198	37.7	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 2,535 cases of MSD reported to Workers' Compensation in 2022, a 13% increase from 2021 (Table D-7). MSD accounted for 41% 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 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) was the most common category of MSD, with 69% of reports (Table D-7). Carpal Tunnel Syndrome (CTS), which is a very debilitating pinching of the median nerve at the wrist, accounted for 9% of total MSD reports. Other nerve-related problems (with descriptions of 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 3% of cases. Many cases did not have a specific description other than inflammation, swelling, pain or no specific description.

Almost two-thirds (63%) of the cases of MSD were in the upper limbs of the body such as hands, arms, elbows, and shoulders (Table D-8). Another 16% were for the lower extremity (legs, knees and feet), and 15% 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, 2021-2022

	2021	20	22	
MSD Type	Cases	Cases	%	Change
Sprain/strain	1,498	1,738	69%	16%
Carpal Tunnel Syndrome	233	239	9%	3%
Inflammation	136	155	6%	14%
Numbness	80	111	4%	39%
Tendonitis/tenosynovitis	25	20	1%	-20%
Trigger finger	26	17	1%	-35%
Ganglion cyst	7	8	0%	14%
Rotator cuff	17	25	1%	47%
Epicondylitis	16	14	1%	-13%
Arthritis/bursitis	8	6	0%	-25%
Other/Unknown	200	202	8%	1%
Total	2,246	2,535	100%	13%

Table D-8: Musculoskeletal Disorders by Part of Body, WCC, 2022

Part of body	Cases	Percent
Lower Arm, Wrist, Hand	838	33%
Upper Arm, Shoulder, Upper Extremity	627	25%
Legs, Knees, and Feet	398	16%
Neck, Back, Torso	387	15%
Elbow	139	5%
Multiple	112	4%
Other/Unknown	34	1%
Total	2,535	100%

Causes of conditions were often incomplete, overlapping, and not consistently coded nor described. Approximately 85% 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" (35% 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 (20%), tool use (including references specifically to pneumatic tools or vibration exposure; 10%), pushing or pulling (7%), and computing and clerical tasks (6%).

Table D-9: Musculoskeletal Disorders (MSD) with Identified Cause, WCC, 2022

Cause of MSD	Reports	%
Repetitive	757	35%
Lifting/carrying	426	20%
Tools/vibration	205	10%
Push/pull	150	7%
Computer/clerical	128	6%
Assembly	71	3%
Walking/running/moving	59	3%
Machine	49	2%
Driving	43	2%
Bending/kneeling/crawling	42	2%
Reaching/overhead	42	2%
Twisting	36	2%
Cleaning/mopping/sweeping	34	2%
Patient care	28	1%
Grasping/gripping/squeezing	21	1%
Climbing	20	1%
Sitting/standing	19	1%
Shoveling/raking	10	0%
Scanning/cashier	8	0%
Sub-Total	2,148	100%
Unknown/other	387	
Total	2,535	

#### **Infectious Diseases**

There were 2,173 reports of infectious diseases or exposures in the "First Report of Injury" (FRI) database (the primary database used here) for 2022 (Table D-10) including 1,508 reports of COVID-19 illness and/or exposure, essentially the same as the previous year. Infectious disease reports can include both actual disease and exposure to infectious agents. In addition, there were 343 additional COVID-19 cases that were reported through a separate workers' compensation database of worker reports through 30-C "Notice of Claim" and related reports. This was a dramatic decrease from the 4,304 in the 2021 database. Cases were matched between the databases to exclude duplicate reports. Adding in the COVID-19 cases from both databases results in a total of 2,516 unique cases of infectious disease reported to workers' compensation. This was a 61% reduction from 2021 and it was completely attributable to the dramatic drop in COVID reports from the supplemental dataset.

The 1,508 COVID-19 cases in the FRI database accounted for 69% of infectious disease reports (details of COVID-19 reports are given below). If COVID-19 reports are excluded, there were 665 other infectious diseases reported, an increase of 13% from 2021.

There were 594 reports of exposure to bloodborne pathogens (including reports of exposure to HIV/AIDS and Hepatitis C), accounting for 27% of all infectious disease reports and a 21% increase from the previous year.

These included 246 needlestick injuries or cuts from sharps or surgical instruments that may have resulted in exposure to a patient's blood (a 17% increase from the prior year), 252 reports of exposures to human bites (cases were excluded if they specifically indicated the skin was not broken), a 17% increase, and 96 reports of skin or eye exposure to blood or bodily fluids (a 48% 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, 2021-2022

·	202	21	202		
Illness	Cases	%	Cases	%	Change
COVID	1,521	72%	1,508	69%	-1%
Bloodborne: Sharp and needlestick exposures	211	10%	246	11%	17%
Bloodborne: Human bite	215	10%	252	12%	17%
Bloodborne: Blood/body fluids	65	3%	96	4%	48%
TB/PPD conversion/exposure	29	1%	11	1%	-62%
Lyme Disease/Tick bite	35	2%	29	1%	-17%
Chicken pox, measles, whooping cough	1	0%	1	0%	0%
Other infectious	31	1%	30	1%	-3%
Total	2,108	100%	2,173	100%	3%
COVID: Additional cases from 30C data	4,304		343		-92%
Total	6,412		2,516		-61%

There were 11 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; this was a large decrease of 62% from 2021. There were 29 reports of tick bites, rashes from tick bites and/or a diagnosis of Lyme disease attributed to occupational exposures, a 17% decrease.

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).

## COVID-19

COVID-19 cases again dominated all categories of illness in 2022, accounting for 69% of all FRI-reported infectious disease cases.

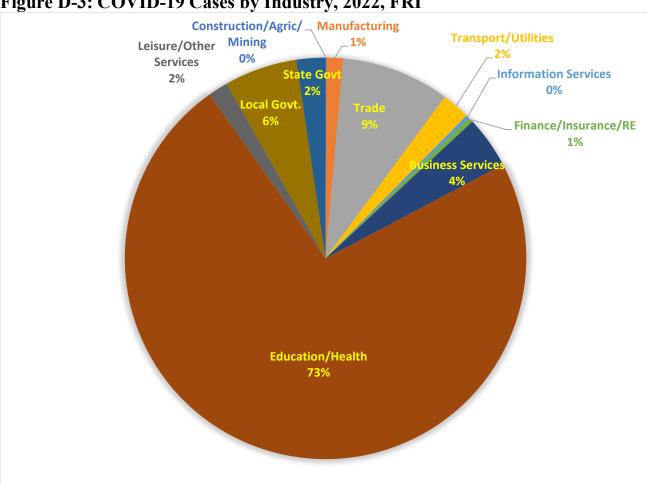


Figure D-3: COVID-19 Cases by Industry, 2022, FRI

Workers' compensation reports of COVID-19 cases and exposures were very likely affected by changes in the law in 2020 and 2021. Pursuant to the Workers' Compensation Act, Governor Lamont's Executive Orders and case law, the Workers' Compensation Commission administered COVID-19 claims in the same manner as claims for other occupational illnesses. Executive Order 7JJJ<sup>2</sup> stated that "Whereas, health care professionals, grocery store clerks, first responders and other essential workers kept others safe and well throughout height of the COVID-19 pandemic, and it is essential to their health and the broader public health to ensure that they have a timely, straightforward opportunity to claim benefits they may be due through the workers compensation system".

It established a "rebuttable presumption" that a claim was compensable in the situation where an employee missed a day or more of work between March 10, 2020 and May 20, 2020 due to a lab-confirmed diagnosis of COVID-19 provided that the employee worked outside the home and that the employer was defined as essential under other executive orders. While other "non-essential" workers who were exposed and/or contracted COVID-19 at work would be potentially eligible for workers' compensation, they would need to establish that

<sup>2</sup> https://portal.ct.gov/-/media/Office-of-the-Governor/Executive-Orders/Lamont-Executive-Orders/Executive-Order-No-7JJJ.pdf

the workplace was likely to have been the source of the infection. These legal definitions likely affected the statistics presented here.

Table D-11: COVID-19 Cases/Rates by Industry, 2021-2022, 10 or More Cases, FRI Only

Specific Industry Sector	NAICS	2022 #	Employed	2022 Rate	2021 Rate	Change
Nursing and Residential Care Facilities*	623	791	53,254	148.5	82.2	81%
Hardware Stores	444	98	16,216	60.4	100.6	-40%
Support activities for transportation	488	15	3,637	41.2		NA
Hospitals	622	102	59,710	17.1	24.5	-30%
Clothing and clothing accessories stores	458	18	12,605	14.3	4.1	248%
Physician Offices	621	125	94,805	13.2	12.7	4%
Social Assistance	624	63	64,007	9.8	1.8	447%
Machinery Manufacturing	333	13	13,427	9.7	8.5	14%
Couriers and Messengers	492	12	12,858	9.3	26.7	-65%
Connecticut	Ave.	1,529	1,642,657	9.3	9.5	-2%
Local Government	Local	92	137,669	6.7	20.7	-68%
Administrative and Support Services	561	56	85,100	6.6	5.6	18%
State Government	State	36	59,859	6.0	7.8	-23%
Educational Services*	611	20	60,407	3.3	1.6	107%

Sources: Workers' Compensation First Report of Injury (FRI). NAICS is the North American Industry Classification System. \*Excludes government employees

In addition, the Connecticut Legislature passed the Essential Workers' COVID-19 Assistance Fund (<a href="https://www.ctessentialworkerrelief.org">https://www.ctessentialworkerrelief.org</a>) which provided for lost wages, out-of-pocket medical expenses, and burial expenses for essential workers who lived in Connecticut, contracted COVID-19, became ill and were unable to work (or died) between March 10, 2020 and July 20, 2021. For the most part, "essential workers" were defined based on the categories established by the U.S. CDC for vaccination priority and related issues.

While both the Executive Order and Essential Workers' COVID-19 Relief fund were no longer in effect in 2022, they should be considered when comparing 2022 with previous years' data.

Almost three-fourths (73%) of cases were in the Education/Health sector (see Figure D-3), with 6% in Local Government and 9% in wholesale and retail trade. When the sectors are broken down into more detail (Table D-11) for subsectors with 10 or more cases, by far the largest rate (and number) is for Nursing and Residential Care Facilities with a rate of 148.5 cases per thousand (and 791 cases), followed by Hardware Stores (60.4), Support Activities for Transportation (primarily airports), with a rate of 41.2 (but only 15 reported cases), Hospitals (17.1), Clothing Stores (14.3), and Physician Offices (13.2).

All of the reported cases from hardware store were from one large chain, so there are very likely more cases that were not reported by other stores. Nursing home chains were also relatively concentrated, with the largest system accounting for 57% of COVID reports and the top 5 chains accounting for 79% of reports (out of approximately 38 reporting nursing homes or chains).

COVID-19 cases in Table D-11 were analyzed for industry using only the FRI (First Report of Injury) dataset due to the dramatic change in the supplemental database which makes comparisons unstable if due primarily to changes in data collection rather than actual illness. If the supplemental reports had been included,

the 2021 rates in Table D-11 would have been much higher, and therefore the rates would have gone down in virtually all sectors in 2022.

## **Respiratory Illness and Poisonings**

There were 143 cases of respiratory illnesses (mostly nonspecific respiratory illness from relatively acute chemical or biological exposures) for 2022 (Table D-12), a 91% increase from 2021 after a 66% decrease from 2020. There were 18 cases of poisonings from carbon monoxide, other gases, mercury, or lead, a 13% increase from the previous year, 75% of which were from carbon monoxide or exposure to gas. There were only 2 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.

Smoke or fire were the most common cause of respiratory illness (50% of cases), followed by chemical exposures (29%), dust or fumes (7%), and general indoor air quality (IAQ) or mold (3%).

In addition to the more general categories of smoke, construction dust and mold, specific substances connected to the respiratory cases included cleaning fumes/bleach (8), pepper spray (2), hydrofluoric acid, degreaser, spray deodorizer, fluorosilicic acid, fire extinguisher (2), construction fumes, insecticides, gasoline/fuel (2), welding fumes, wax stripping, battery fumes, floor wax, lacquer, and glycol.

Table D-12: Respiratory Conditions and Poisonings by Cause, WCC, 2021-2022

Cause	202		202	22	
Respiratory	Cases	%	Cases	%	Change
Smoke, Fire	26	35%	71	50%	173%
Chemical Exposure	23	31%	41	29%	78%
Dust/fumes	10	13%	10	7%	0%
IAQ/mold/odor	3	4%	4	3%	33%
Other Respiratory	13	17%	17	12%	31%
Respiratory subtotal	75	100%	143	100%	91%
Poisoning	Cases	%	Cases	%	Change
Carbon monoxide/gas	12	75%	10	56%	-17%
Lead	1	6%	2	11%	100%
Other Poisoning	3	19%	6	33%	100%
Poisoning Subtotal	16	100%	18	100%	13%
Total Respiratory and Poisoning	91	100%	161	100%	77%

# **Chronic Lung Conditions**

There were 108 cases of chronic lung conditions in 2022, a 38% increase from the previous year (Table D-13).

There were 20 reports of asbestos-related disease or exposures in 2021, a 9% decrease 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 7 cases of occupational asthma or bronchitis, 8 lung-related allergies, and 73 other chronic lung conditions. Acute respiratory illnesses are classified under respiratory conditions and poisonings (above).

Table D-13: Chronic Lung Diseases by Type, WCC, 2021-2022

Illness	2021	2022	Change
Asthma/bronchitis	11	7	-36%
Asbestos-related	22	20	-9%
Allergies	6	8	33%
Other lung	39	73	87%
Total	78	108	38%

#### **Skin Conditions**

There were 176 skin condition reports in 2022 (Table D-14), an increase of 16% over the previous year. These included 59 cases of contact dermatitis from poison ivy or other plants (34% of all skin cases), up 51% from the previous year. There were 59 cases of skin conditions caused by chemicals, as well as 7 additional cases attributed specifically to cleaning chemicals. There were 15 cases caused by allergic reactions to clothing, gloves, or latex. There were 36 cases of poorly defined skin conditions, frequently just described as rashes.

Table D-14: Skin Diseases by Cause, WCC, 2021-2022

Category	2021	2022	%	Change
Poison Ivy/plants	39	59	34%	51%
Chemical	52	59	34%	13%
Soap/cleaning	12	7	4%	-42%
Gloves/latex/clothing	10	15	9%	50%
Rash/other/unknown	39	36	20%	-8%
Total	152	176	100%	16%

In addition to cleaning chemicals, bleach and latex, specific chemicals associated with skin conditions included: Flu shot, Dryene, Polymeg 1000, coolant (2), phenol chloroform, laundry detergent, magnesium, sulfur, antifreeze, fiberglas, Paradox, degreaser, Sanidate, R290, pepper spray, drain cleaner, pool shock, acetone, battery acid, potassium hydroxide, and Virex,

#### **Stress and Heart Conditions**

Table D-15: Heart, Hypertension and Stress Conditions by Type, WCC, 2021-2022

Category	2021	2022	%	Change
Heart attack/severe symptoms	141	130	46%	-8%
Hypertension/other heart	17	27	9%	59%
Stroke/clots	13	7	2%	-46%
Stress/anxiety/depression	99	121	42%	22%
Total	270	285	100%	6%

## **Heart and Hypertension**

There were 285 cases involving heart conditions, stroke, chest pain, hypertension, or stress in the database for 2022 (Table D-15), an increase of 6% from the previous year. Reports noted 130 cases of heart attacks, myocardial infarctions or acute heart events and 7 reported strokes or blood clots, often associated with emergency care at a hospital. There were 27 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 (60% of cases) appeared to involve police or firefighters or other municipal (74 cases) and state employees (21 cases) who are frequently covered under heart and hypertension laws that presume those conditions to be work-related for Workers' Compensation purposes.

#### **Mental Stress**

There was a total of 121 stress-related claims in the database in 2022, a 22% increase over the previous year. Two-thirds (52 cases, or 43%) of the cases referred to violence or post-traumatic stress disorders after experiencing or observing violence or auto accidents (Table D-16), 13 noted conflicts with supervisors, coworkers, or customers, 10 cited either harassment or a hostile work environment, and 3 noted excessive work demands. There was only 1 reported stress condition attributed to experiencing or observing COVD-19 cases.

Table D-16: Stress Conditions by Cause, WCC, 2021-2022

Sources of Stress Conditions	2021	2022	%	Change
Violence/robbery/trauma/auto accident	28	52	43%	86%
Supervisor/co-worker/customer	9	13	11%	44%
Harassment/hostile work environment	6	10	8%	67%
COVID		1	1%	NA
Excessive work demands	7	3	2%	-57%
Unknown/other	49	42	35%	-14%
Total	99	121	100%	22%

Stress-related claims that are not lso 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 112 reports of hearing loss in 2022 (Table D-17), a 14% increase from the previous year. Most (73%) were from chronic exposure to noise. The acute (single incident) cases included sudden noises such as Alarms (4), a whistle, sirens, firearms (4), loud phone/headset (2), a loud pop in an amplified speaker, a loud close scream/shout (5), a burst test, a air line (2), and an inadvertent vehicle sound.

#### **Other Disease Conditions**

There were 189 reports of workers becoming dizzy, fainting, or seizures, a 4% decrease. 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 156 reports of chemical exposures to the eyes (this does not include other physical acute eye injuries such as particles or dust), an 25% increase. There were 68

reports of temperature-related problems from heat or cold, a 15% increase from the previous year. There were 50 cases of cancer reported, which included asbestos-related cancers, an increase of 213% after a decrease of 76% in the prior year. There were 55 cases of allergic reactions reported in addition to those noted above under respiratory and skin conditions, approximately the same as the previous year. There were 130 "other" conditions that were difficult to classify, usually due to incomplete information.

Table D-17: Other Occupational Illnesses, WCC, 2021-2022

Type of illness	2021	2022	%	Change	
Dizziness/fainting/seizure	196	189	25%	-4%	
Hearing loss	98	112	15%	14%	
Chemicals in eye	125	156	21%	25%	
Cold/heat related conditions	59	68	9%	15%	
Cancer	16	50	7%	213%	
Allergic	58	55	7%	-5%	
Other conditions	125	130	17%	4%	
Total	677	760	100%	12%	

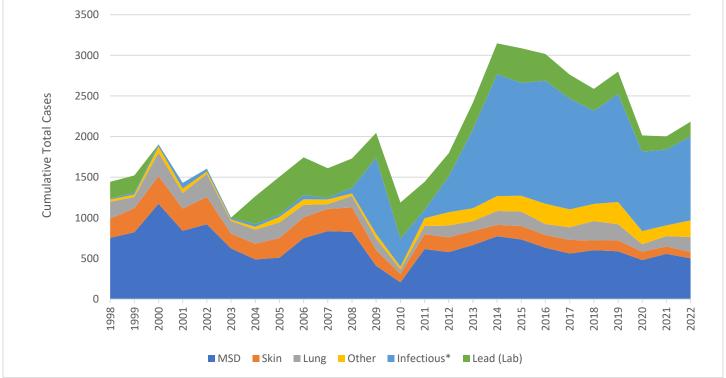
# E. Occupational Illnesses and Injury Surveillance System (OHSS)

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, 2013-2022

Category	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	% change 2021- 22
MSD	666	774	734	633	562	603	590	480	558	502	-10%
Skin	174	140	166	158	168	118	134	104	91	76	-16%
Lung	120	171	178	133	155	241	198	92	127	187	47%
Other	159	184	195	250	220	210	274	161	132	204	55%
Infectious	973	1500	1,390	1,513	1,365	1,148	1,329	979	934	1,036	11%
Sub-total	2,092	2,769	2,663	2,687	2,470	2,320	2,525	1,816	1,842	2,005	9%
Lead (Lab)	327	379	425	330	292	268	275	199	160	178	11%
Total	2,419	3,148	3,088	3,017	2,762	2,588	2,800	2,015	2,002	2,183	9%





<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).

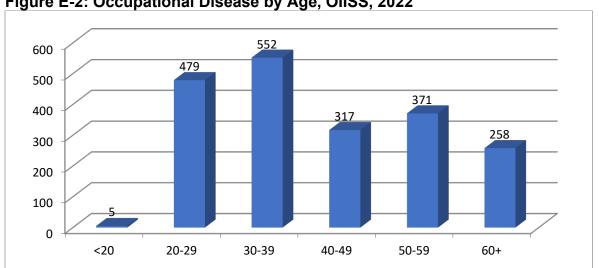
In general, 2020-2022 were very different years for occupational illnesses due to the COVID-19 pandemic, which resulted in dramatically different workplace patterns including widespread workplace closures, working from home where possible, mask wearing, social distancing, and disruptions to the supply chain. Therefore, comparisons to prior 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).

There were 2,005 occupational illness reports received from physicians for 2022 (Table E-1). Physician reports increased 9% in 2022 compared to the prior year. Infectious disease such as bloodborne diseases and exposures was the largest category, accounting for 52% of the reports; however, most COVID-19 cases were not included in these reports. These were followed by musculoskeletal conditions (MSD) such as tendonitis and carpal tunnel syndrome (25%). Lung conditions, including respiratory conditions, asthma, and other lung diseases, comprised 9% of the physician reports. Skin disorders, including poison ivy and chemicals as causes, accounted for 4%. "Other" conditions, including heart disease, stress, and noise-induced hearing loss, accounted for 10%. There were 178 laboratory-reported adult blood lead levels of 10 micrograms per deciliter (ug/dL) or greater (a 11%) increase from the prior year), giving a total of 2,183 occupational illnesses reported by physicians or laboratories in 2022.

In 2022, 94 physicians from 22 clinics/clinic networks reported at least one case of occupational illness to the OIISS. Eleven of the physicians reported 50 or more cases, accounting for 50% of the reports. Six clinics reported 100 or more cases and contributed 73% 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, 80% of the cases were classed as "high certainty" for being an occupationallyrelated disease, 11% were "moderate certainty," and 9% "low certainty". There was a fairly low amount of reporting on whether exposure was continuing or if others are likely to be exposed, but 20% 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.



Of the reports where race or ethnicity were known/reported, 19% were identified as black and 12% 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 30% of cases, followed by 20's (26%), 50's (20%), and 40's (17%).

The Education and Health sector had the most cases (52%), followed by Local Government (17%), Manufacturing (10%), and State Government (7%); 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.

State Govt, 7%

Trade, 4%

Manuf,
9%

Info, 0%

Fin/Insur/RE, 0%

Business Serv, 3%

Educ/Health, 52%

Figure E-3: Occupational Disease by Industry Sector, OIISS, 2022

Table E-2: Rates of Illness by Industry Sector (NAICS\*), OIISS, 2022

Table L-2. Nates of filless by fillustry sector					NAICS J, OIISS, 2022							
Industry	Α	.II	Infectious		Lung		MSD		Other		Skin	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Construction/ Agricult.	22	3.32	<5		12	1.81	7	1.06	<5		<5	
Manufacturing	184	11.76	7	0.45	32	2.04	113	7.22	25	1.60	7	0.45
Trade	76	3.34	15	0.66	11	0.48	39	1.71	10	0.44	<5	
Transport/Utilities	49	7.11	7	1.02	<5		29	4.21	9	1.31	<5	
Information Services	<5		<5		<5		<5		<5		<5	
Finance/Insur/Real Est.	10	0.86	<5		6	0.52	<5		<5		<5	
Business Service	57	2.57	17	0.77	11	0.50	19	0.86	7	0.32	<5	
Education/Health	1,047	31.52	736	22.16	44	1.32	153	4.61	80	2.41	34	1.02
Other Services	37	1.83	<5		13	0.64	18	0.89	4	0.20	<5	
Local Govt	370	26.88	173	12.57	31	2.25	84	6.10	54	3.92	28	2.03
State Govt	150	25.06	79	13.20	22	3.68	37	6.18	10	1.67	<5	
Unknown	<5		<5		<5		<5		<5		<5	
Total	2,005	12.21	1,036	6.31	187	1.14	502	3.06	204	1.24	76	0.46

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

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 (71%), with Local Government contributing another 17%. **MSD** (musculoskeletal disorders) were primarily from Education and Health (30%), Manufacturing (23%), and Local Government (17%). **Dermatitis** (skin disorders) was primarily from Education and Health (45%) and Local Government (37%). **Respiratory** cases ("Lung") were primarily from Education and Health (24%), Manufacturing (17%), Local Government (17%), and State Government (12%). "**Other**" illnesses were from Education and Health (39%), Local Government (26%) and Manufacturing (12%).

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 12.21 per 10,000 workers. Highest overall rates are in Education/Health (31.52), Local Government (26.88), State Government (25.06) and Manufacturing (11.76). Infectious disease was highest in Education/Health and State and Local Government. Lung disease was highest in State Government, Local Government, and Manufacturing. Musculoskeletal disorders (MSD) was highest in Manufacturing, State and Local Government, and Transportation/Utilities. Other illnesses were highest in Local Government, as were skin disorders.

## **Musculoskeletal Disorders (MSD)**

There was a total of 502 reports of musculoskeletal disorders (MSD) in 2022, a decrease of 10% 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 (18%), epicondylitis (tennis elbow) with 14% of the cases, carpal tunnel syndrome (11%), other nerve disorders (11%), rotator cuff syndrome (8%), and tendonitis (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

Table E-3: Musculoskeletal Disorders (MSD) by Type, OllSS, 2021-2022

Tubio E of intecented control (interpretation of the property											
Illness	2021	2022	Percent	Change							
Strain/Sprain	154	89	18%	-42%							
Epicondylitis	72	72	14%	0%							
Carpal Tunnel Syndrome (CTS)	50	54	11%	8%							
Other Neuropathy & Radiculopathy (nerve disorder)	46	54	11%	17%							
Rotator Cuff	15	39	8%	160%							
Tendonitis	42	28	6%	-33%							
DeQuervains syndrome	26	25	5%	-4%							

Trigger Finger	17	18	4%	6%
Bursitis/Arthritis	25	15	3%	-40%
Tenosynovitis	7	14	3%	100%
Plantar fasciitis	12	8	2%	-33%
Ganglion	10	5	1%	-50%
Other MSD	82	81	16%	1%
Total	558	502	100%	-10%

#### 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-4: Common causes of MSD, OIISS, 2021-2022

Cause	2021	2022	Percent	Change
Repetitive	99	136	46%	37%
Lifting	62	55	19%	-11%
Tools, Machines & Vibration	36	26	9%	-28%
Computer/clerical	28	14	5%	-50%
Push/pull	26	21	7%	-19%
Gripping/grasping/reaching	14	10	3%	-29%
Patient-related	14	10	3%	-29%
Bending/twisting/posture	10	14	5%	40%
Sitting/walking/climbing	10	4	1%	-60%
Assembly/scanning	7	7	2%	0%
Medication	6	0	0%	-100%
Sub-Total	312	297	100%	-5%
Unknown	246	205		
Total	558	502		

The most common specific causes noted for MSD (Table E-4) were lifting (55 cases), tool and machine use (26 cases), computer use and data entry (14), and pushing or pulling (21). One hundred thirty-six (136) additional cases were attributed to the general description of "repetitive".

### **Skin Conditions**

There were 76 reports of skin disorders in 2022 (Table E-5), a 16% decrease from the previous year. The largest single cause was poison ivy or other plant exposures (28% of all cases). Specific causes of dermatitis or other skin conditions included cleaning chemicals, solvents, oil or coolants, fiberglass, formic acid, latex gloves, face masks, and other chemicals.

Table E-5: Skin Conditions by Type, OllSS, 2021-2022

Illness	2021	2022	Percent	Change
Poison ivy & other plants	32	21	28%	-34%
Allergic	13	20	26%	54%
Dermatitis/rash	36	28	37%	-22%
Other skin conditions	10	7	9%	-30%
Total	91	76	100%	-16%

# **Lung/Respiratory Diseases and Poisonings**

There were 187 cases of respiratory and other lung diseases and poisonings reported by physicians in 2022 (Table E-6), an increase of 46% from the previous year. Nonspecific respiratory illnesses were the most common type of condition, with 28% of reports, followed by poisoning (14%, 18 cases of which were carbon monoxide and 7 lead), asthma or reactive airways dysfunction syndrome (RADS; 6%), and fibrosis or interstitial lung disease, including asbestos-related cases (6%; cancers caused by asbestos are categorized under "other diseases"; below). There were 51 cases with the generic diagnosis of cough or dyspnea (shortness of breath).

In addition to asbestos and carbon monoxide, causes of lung conditions included chemicals (28 cases), cleaning and bleach (11 cases), smoke (13 cases), and mold or indoor air quality (36 cases), metal dust (6 cases), isocyanates (5 cases), polyurethane (3 cases), solvents (3 cases), paint (3 cases), pepper spray (2 cases), pesticide, perfume, formaldehyde, fiberglass, and spray foam.

Table E-6: Respiratory Diseases and Poisoning by Type, OIISS, 2021-2022

Illness	2021	2022	Percent	Change
Respiratory	25	53	28%	112%
Poisoning	21	27	14%	29%
Asthma/RADS	19	11	6%	-42%
Asbestos exposure/fibrosis/interstitial	15	11	6%	-27%
Cough/dyspnea	<5	51	27%	
Other Lung	47	34	18%	-28%
Total	127	187	100%	47%

# **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 measured for each individual during the calendar year; they do not include multiple tests on the same individual. OSHA medical removal protections apply at the level of 50 ug/dl of whole blood or above (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 178 lead poisoning reports in 2022 increased 11% from the previous year. The lowest category (10-24 ug/dL) of recorded elevated lead levels accounted for 75% of all cases (Table E-7) and increased by 8%. Almost all the reported lead poisoning cases (89% of cases) occurred in men; there were only 19 reports for

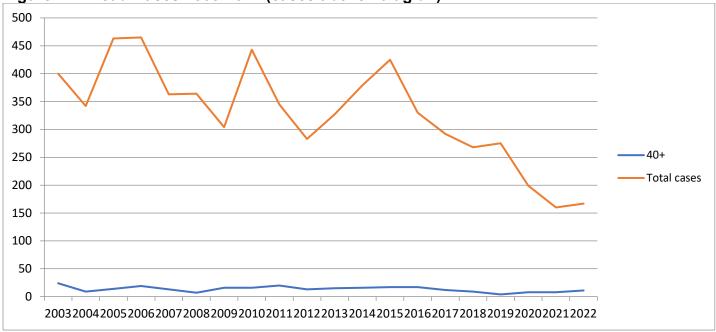
women. Thirty-nine percent (39%) were under 40 years old, 37% were between 40 and 59, and 24% were age 60 or older.

Table E-7: Lead Cases by Level of Blood Lead, CT ABLES, 2021-2022

Blood lead level*	2021	2022	Percent	Change
10-24	124	134	75%	8%
25-39	28	33	19%	18%
40-49	5	7	4%	40%
50-59	<5	<5		
>=60	<5	<5		
Total	160	178	100%	11%

**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 2003-2022 (cases above 10 ug/dL)



Lead cases in Connecticut have fluctuated since 2003, from 400 in 2003 to 199 in 2020, with a high of 465 cases in 2006 and a low of 160 cases in 2021. 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 (11 in 2022). Fluctuations 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 20 states for 2021 (most recent year available; 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 10<sup>th</sup> highest among those states for the rate of lead levels above 10 ug/dl, with a rate of 0.92 per 10,000 employed adults (compared to the mean of 1.13 for the states as a whole). Connecticut was 7th highest for rates of lead levels equal or above 25 ug/dl, with a rate of 0.21 compared to the overall mean of 0.15.

### **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 Additionally, in 2021-2022 there was not a Governor's emergency declaration that presumed a COVID-19 case in frontline workers was an occupational disease.

Despite these circumstances, there were still 23 cases that were reported by occupational health clinics in 2022. Overall, reported infectious diseases increased 5% to 1,036 cases in 2022. 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 964 reports in 2022, an 11% increase from 2021. 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 half (53%) of the bloodborne disease reports involved needlesticks or other exposures to sharps such as scalpels, while 20% were from bites and 27% from blood or body fluids. 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. 2021-2022

Illness	2021	2022	Percent	% Change
Bloodborne	865	964	93%	11%
TB/PPD	19	26	3%	37%
COVID-19*	29	23	2%	-21%
Lyme/tick bite	10	10	1%	0%
Scabies	<5	7	1%	
Rabies	<5	<5		
Other infectious	6	6	1%	0%
Subtotal: Infectious	934	1,036	100%	11%
Other Illnesses	2021	2022	Percent	% Change
Chemicals in eyes	44	81	40%	84%
Hearing loss	12	15	7%	25%
Stress/heart/stroke	9	14	7%	56%
Allergic	<5	14	7%	
Headache/dizzy	15	13	6%	-13%
Heat/cold	<5	8	4%	
Cancer	<5	<5	1%	
Other	46	57	28%	24%
Total Other Illnesses	132	204	100%	55%
Total	1,066	1,240		16%

<sup>\*</sup>Does not include most COVID-19 cases

There was a 37% increase in reports of potential exposure to tuberculosis (TB) or positive PPD tests for TB (after a large decrease the previous year) with 26 cases in 2022. In addition to bloodborne disease/exposures

and TB exposures, there were 10 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 204 other occupational illnesses reported by physicians in 2022 (Table E-8), an increase of 55%. This included 81 cases of chemical exposures to the eyes (an 84% increase), 13 cases of headache, dizziness, or similar symptoms, 15 cases of hearing loss, 14 cases of heart, stroke or stress-related conditions, 14 cases of allergic reactions to substances or foods, and 8 exposures to heat or cold (such as heat stroke). There were 57 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: Occupational Disease Detail by Type and Year Table G-1: Cases of Occupational Disease, by Type, BLS/CT Dept. of Labor, 1979 – 2022** 

				ai Disease,	<del>,,,</del>				<del></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	8369	965	5526	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
2001	1,57 1,000	0,017	310	3,220	10	000	23	110	J9 I
2001	Employ.*	All III	Skin	3,220	10	Respir.	Poison	Hearing	Other
2002				3,220	10				
	Employ.*	All III	Skin	3,220	10	Respir.	Poison		Other
2002	<b>Employ.*</b> 1,602,000	<b>All III</b> 4,387	<b>Skin</b> 831	3,220	10	Respir.	Poison 78 32 35		<b>Other</b> 3,159
2002 2003	Employ.* 1,602,000 1,605,000	4,387 4,559	<b>Skin</b> 831 903	0,220	10	<b>Respir.</b> 320 490	<b>Poison</b> 78 32	Hearing	Other 3,159 3,132
2002 2003 2004	Employ.* 1,602,000 1,605,000 1,603,100	4,387 4,559 4,572	<b>Skin</b> 831 903 832	0,220	10	320 490 354	Poison 78 32 35	Hearing 466	Other 3,159 3,132 2,886
2002 2003 2004 2005	Employ.* 1,602,000 1,605,000 1,603,100 1,614,100	4,387 4,559 4,572 4,850	831 903 832 848	0,220	10	320 490 354 480	Poison  78  32  35  8	Hearing 466 381	Other 3,159 3,132 2,886 3,134
2002 2003 2004 2005 2006	Employ.*  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	5,220	10	320 490 354 480 235	Poison  78  32  35  8  38	466 381 439	Other 3,159 3,132 2,886 3,134 2,500 2,443 2,088
2002 2003 2004 2005 2006 2007	Employ.*  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	0,220		320 490 354 480 235 358	Poison  78  32  35  8  38  22	466 381 439 457	Other 3,159 3,132 2,886 3,134 2,500 2,443
2002 2003 2004 2005 2006 2007 2008	Employ.* 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	0,220		320 490 354 480 235 358 293	Poison  78  32  35  8  38  22	466 381 439 457 360	Other 3,159 3,132 2,886 3,134 2,500 2,443 2,088
2002 2003 2004 2005 2006 2007 2008 2009	Employ.* 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	Skin           831           903           832           848           575           624           690           600	0,220		Respir. 320 490 354 480 235 358 293 300	Poison  78  32  35  8  38  22	466 381 439 457 360 500	Other 3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000
2002 2003 2004 2005 2006 2007 2008 2009 2010	Employ.*  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	0,220		320 490 354 480 235 358 293 300 300	Poison  78  32  35  8  38  22	466 381 439 457 360 500 300	Other 3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011	Employ.* 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	Skin           831           903           832           848           575           624           690           600           700           800	0,220		8espir. 320 490 354 480 235 358 293 300 300 300	Poison  78  32  35  8  38  22	466 381 439 457 360 500 300 300	0ther 3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700 2,100
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012	Employ.* 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	4,387 4,559 4,572 4,850 3,787 3,904 3,562 3,400 3,000 3,500 2,800	Skin           831           903           832           848           575           624           690           600           700           800           600	0,220		Respir.  320  490  354  480  235  358  293  300  300  300	Poison  78  32  35  8  38  22	466 381 439 457 360 500 300 300 300	0ther 3,159 3,132 2,886 3,134 2,500 2,443 2,088 2,000 1,700 2,100 1,500
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	Employ.*  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	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	Skin           831           903           832           848           575           624           690           600           700           800           600           500           400           400	0,220		Respir.  320 490 354 480 235 358 293 300 300 300 300 200 200	Poison  78  32  35  8  38  22	466 381 439 457 360 500 300 300 300 200 200	Other       3,159       3,132       2,886       3,134       2,500       2,443       2,088       2,000       1,700       2,100       1,500       1,400       1,500
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	Employ.* 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	Skin           831           903           832           848           575           624           690           600           700           800           600           500           400	0,220		Respir.  320  490  354  480  235  358  293  300  300  300  200  200  200	Poison  78  32  35  8  38  22	466 381 439 457 360 500 300 300 300 200	Other       3,159       3,132       2,886       3,134       2,500       2,443       2,088       2,000       1,700       2,100       1,500       1,400       1,500       1,300
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	Employ.* 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 2,800 2,600 2,400 2,300 2,300 1,700	Skin           831           903           832           848           575           624           690           600           700           800           600           500           400           400	0,220		Respir.  320 490 354 480 235 358 293 300 300 300 200 200 200 100	Poison  78  32  35  8  38  22	466 381 439 457 360 500 300 300 200 200 200 200	Other       3,159       3,132       2,886       3,134       2,500       2,443       2,088       2,000       1,700       2,100       1,500       1,400       1,500
2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	Employ.* 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 1,666,580	All III  4,387  4,559  4,572  4,850  3,787  3,904  3,562  3,400  3,000  2,800  2,800  2,400  2,300  2,300  1,700  1,800	Skin           831           903           832           848           575           624           690           600           700           800           600           500           400           400           300	0,220		Respir.  320 490 354 480 235 358 293 300 300 300 200 200 200 100 200	Poison  78  32  35  8  38  22	466 381 439 457 360 500 300 300 200 200 200 400	Other       3,159       3,132       2,886       3,134       2,500       2,443       2,088       2,000       1,700       2,100       1,500       1,400       1,500       1,300       900       1,000
2002 2003 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	Employ.*  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 2,600 2,400 2,300 2,300 1,700	Skin           831           903           832           848           575           624           690           600           700           800           600           500           400           400           300           300           300	0,220		Respir.  320 490 354 480 235 358 293 300 300 300 200 200 200 100	Poison  78  32  35  8  38  22	466 381 439 457 360 500 300 300 200 200 200 400 300	Other       3,159       3,132       2,886       3,134       2,500       2,443       2,088       2,000       1,700       2,100       1,500       1,400       1,500       1,300       900
2002 2003 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020	Employ.*  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  1,666,580  1,669,766  1,673,867  1,670,639  1,545,731	All III  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  1,800  1,700  8,000	Skin           831           903           848           575           624           690           600           700           800           600           500           400           400           300           300           200	0,220		Respir.  320 490 354 480 235 358 293 300 300 300 200 200 200 100 200 100 6,400	Poison  78  32  35  8  38  22	466 381 439 457 360 500 300 300 200 200 400 300 200	Other           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           1,100
2002 2003 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	Employ.* 1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,666,600 1,675,000 1,578,200 1,628,028 1,640,223 1,653,547 1,662,822 1,666,580 1,669,766 1,673,867 1,670,639	All III  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  1,700  1,800  1,700	Skin           831           903           832           848           575           624           690           600           700           800           600           500           400           400           300           300           300	5,220		Respir. 320 490 354 480 235 358 293 300 300 300 200 200 200 100 200 100	Poison  78  32  35  8  38  22	466 381 439 457 360 500 300 300 200 200 200 400 300	Other           3,159           3,132           2,886           3,134           2,500           2,443           2,088           2,000           1,700           2,100           1,500           1,600           1,500           1,300           900           1,000           1,000

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, 1979-2022

Duicat	J OI LADOI	Statistic	3/01 00	ept. of Labor	, 1919-202	_		
Year	Employed	Skin	MSD	Resp/Lung	Poisoning	Other	Hearing	Total
1979	1,358,000	12.6	3.5	2.5	1.3	8.2		24.5
1980	1,394,000	11.4	3.7	2.2	0.5	8.6		22
1981	1,409,000	10.7	5	2.3	0.6	9.4		22.8
1982	1,400,000	8.1	4.1	1.8	0.2	8.2		18.2
1983	1,419,000	8.7	4.7	1.2	1.1	9.7		20.6
1984	1,490,000	7.4	4.5	2	0.4	8.6		18.4
1985	1,528,000	6.1	4.8	1.8	0.3	10.4		18.4
1986	1,567,000	5.2	4.9	2	0.4	10.4		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	2.1	0.3	9.6		26.7
1989	1,634,000	7.6	16.1	2.2	0.5	26		35.8
1990	1,593,000	6.5	15.9	3.5	0.3	23.6		33.3
1991	1,518,000	6.2	22.8	3.2	0.7	30.4		40.1
1992	1,483,000	7.3	26	3.4	0.4	32.7		43.5
1993	1,487,000	6.5	37.2	3.8	1.1	45.2		56.3
1994	1,501,800	6.4	29.8	3.2	0.6	39		48.7
1995	1,520,000	5.8	27.8	2.7	0.2	36.5		44.7
1996	1,538,000	5.4	24.1	3	0.2	30.8		39.1
1997	1,570,500	3.9	21.2	2	0.4	28.3		34.5
1998	1,596,900	6.2	21.3	2.9	0.3	25.2		34.5
1999	1,630,100	4.9	20.3	2.5	0.4	26.1		33.8
2000	1,653,000	5.4	23.2	3	0.2	30.4		38.7
2001	1,571,000	5.8	20.5	4.1	0.2	25.1		35.1
2001 Year	1,571,000 <b>Employ</b>	5.8 <b>Skin</b>		4.1 Respiratory	0.2 <b>Poison</b>	25.1 <b>Other</b>	Hearing	35.1 <b>Total</b>
			20.5				Hearing *	
Year	Employ	Skin		Respiratory	Poison	Other	Hearing *	Total
<b>Year</b> 2002*	<b>Employ</b> 1,602,000	Skin 6.2	*	Respiratory 2.4	Poison 0.6	<b>Other</b> 23.7	*	Total 32.9
Year 2002* 2003	<b>Employ</b> 1,602,000 1,605,000	<b>Skin</b> 6.2 6.9	*	Respiratory 2.4 3.8	<b>Poison</b> 0.6 0.2	<b>Other</b> 23.7 24	*	<b>Total</b> 32.9 34.9
Year 2002* 2003 2004	1,602,000 1,605,000 1,603,100	6.2 6.9 6.4	* *	2.4 3.8 2.7	9.6 0.2 0.3	23.7 24 22.1	* * 3.6	32.9 34.9 34.9
Year 2002* 2003 2004 2005	Employ 1,602,000 1,605,000 1,603,100 1,614,100	6.2 6.9 6.4 6.3	* * *	2.4 3.8 2.7 3.6	9.6 0.6 0.2 0.3	23.7 24 22.1 23.3	* * 3.6 2.8	Total 32.9 34.9 34.9 36
Year 2002* 2003 2004 2005 2006	Employ 1,602,000 1,605,000 1,603,100 1,614,100 1,635,700	6.2 6.9 6.4 6.3 4.3	* * * * *	2.4 3.8 2.7 3.6 1.8	9.06 0.2 0.3 *	23.7 24 22.1 23.3 18.8	* 3.6 2.8 3.3	Total 32.9 34.9 34.9 36 28.4
Year 2002* 2003 2004 2005 2006 2007	Employ 1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600	6.2 6.9 6.4 6.3 4.3	* * * * * *	2.4 3.8 2.7 3.6 1.8 2.7	Poison  0.6  0.2  0.3  *  0.3  0.2	23.7 24 22.1 23.3 18.8 18.2	3.6 2.8 3.3 3.4	Total 32.9 34.9 34.9 36 28.4 29.2
Year 2002* 2003 2004 2005 2006 2007 2008	Employ 1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,666,600	6.2 6.9 6.4 6.3 4.3 4.7	* * * * * * * *	2.4 3.8 2.7 3.6 1.8 2.7 2.7	Poison  0.6  0.2  0.3  *  0.3  0.2  0.2	23.7 24 22.1 23.3 18.8 18.2 18.2	* 3.6 2.8 3.3 3.4 3.4	Total 32.9 34.9 34.9 36 28.4 29.2 29.2
Year 2002* 2003 2004 2005 2006 2007 2008 2009	Employ 1,602,000 1,605,000 1,603,100 1,614,100 1,635,700 1,666,600 1,666,600 1,675,000	6.2 6.9 6.4 6.3 4.3 4.7 4.7	* * * * * * * * *	2.4 3.8 2.7 3.6 1.8 2.7 2.7 2.7	Poison  0.6  0.2  0.3  *  0.3  0.2  0.2  1	Other       23.7       24       22.1       23.3       18.8       18.2       15.4	3.6 2.8 3.3 3.4 3.4 2.7	Total 32.9 34.9 34.9 36 28.4 29.2 29.2 26.3
Year 2002* 2003 2004 2005 2006 2007 2008 2009 2010	Employ 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	6.2 6.9 6.4 6.3 4.3 4.7 4.7 5.1	* * * * * * * * * * *	2.4 2.7 3.6 1.8 2.7 2.7 2.7 2.1	Poison  0.6  0.2  0.3  *  0.3  0.2  0.2  1  *	23.7 24 22.1 23.3 18.8 18.2 15.4 13.1	3.6 2.8 3.3 3.4 3.4 2.7 2.5	Total 32.9 34.9 34.9 36 28.4 29.2 29.2 26.3 23.1
Year 2002* 2004 2005 2006 2007 2008 2009 2010 2011	Employ 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	6.2 6.9 6.4 6.3 4.3 4.7 4.7 5.1 5.1 6.3	*  *  *  *  *  *  *  *  *  *  *  *	2.4 2.7 3.6 1.8 2.7 2.7 2.7 2.1 2.2	Poison  0.6  0.2  0.3  *  0.3  0.2  0.2  1  *  *	23.7 24 22.1 23.3 18.8 18.2 18.2 15.4 13.1 16.8	* 3.6 2.8 3.3 3.4 3.4 2.7 2.5 2.5	Total 32.9 34.9 34.9 36 28.4 29.2 29.2 26.3 23.1 27.8
Year 2002* 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013	Employ 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	6.2 6.9 6.4 6.3 4.3 4.7 5.1 5.1 6.3 4.6	* * * * * * * * * * * *	2.4 2.7 3.6 1.8 2.7 2.7 2.7 2.1 2.2 2.1 2.6 2.6	Poison  0.6  0.2  0.3  *  0.3  0.2  0.2  1  *  *  *	23.7 24 22.1 23.3 18.8 18.2 15.4 13.1 16.8 12	3.6 2.8 3.3 3.4 3.4 2.7 2.5 2.5 2.6 2.2	Total 32.9 34.9 34.9 36 28.4 29.2 29.2 26.3 23.1 27.8 21.9 20.3
Year 2002* 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014	Employ 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	6.2       6.9       6.4       6.3       4.7       5.1       6.3       4.6       3.5       3.4	* * * * * * * * * * * * * *	2.4 2.7 3.6 1.8 2.7 2.7 2.7 2.2 2.1 2.6 2.1 2.1 2	Poison  0.6  0.2  0.3  *  0.3  0.2  0.2  1  *  *  0.2  *  0.2  1  *  *  *  0.2  0.2  *	23.7 24 22.1 23.3 18.8 18.2 15.4 13.1 16.8 12 12.4 11.0	* 3.6 2.8 3.3 3.4 3.4 2.7 2.5 2.5 2.6 2.2 2.1	Total 32.9 34.9 34.9 36 28.4 29.2 29.2 26.3 23.1 27.8 21.9 20.3 18.7
Year 2002* 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015	Employ 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	6.2 6.9 6.4 6.3 4.3 4.7 4.7 5.1 6.3 4.6 3.5 3.4	*  *  *  *  *  *  *  *  *  *  *  *  *	Respiratory       2.4       3.8       2.7       3.6       1.8       2.7       2.7       2.2       2.1       2       2.6       1.9       1.5	Poison  0.6  0.2  0.3  *  0.3  0.2  0.2  1  *  *  *  0.2	23.7 24 22.1 23.3 18.8 18.2 18.2 15.4 13.1 16.8 12 12.4 11.0 11.3	* 3.6 2.8 3.3 3.4 3.4 2.7 2.5 2.5 2.6 2.2 2.1 1.7	Total 32.9 34.9 34.9 36 28.4 29.2 29.2 26.3 23.1 27.8 21.9 20.3 18.7 17.7
Year 2002* 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016	Employ 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 1,666,580	6.2       6.9       6.4       6.3       4.7       4.7       5.1       6.3       4.6       3.5       3.4       3.9	*  *  *  *  *  *  *  *  *  *  *  *  *	2.4 3.8 2.7 3.6 1.8 2.7 2.7 2.1 2.2 2.1 2.6 2.6 1.9 1.5 1.3	Poison  0.6  0.2  0.3  *  0.3  0.2  0.2  1  *  0.2  1  *  0.2  1  *  0.2  *  0.2  *	Other       23.7       24       22.1       23.3       18.8       18.2       15.4       13.1       16.8       12       12.4       11.0       11.3       10.0	* 3.6 2.8 3.3 3.4 3.4 2.7 2.5 2.5 2.6 2.2 2.1 1.7 2.2	Total 32.9 34.9 34.9 36 28.4 29.2 29.2 26.3 23.1 27.8 21.9 20.3 18.7 17.7
Year 2002* 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2017	Employ 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 1,666,580 1,669,766	Skin       6.2       6.9       6.4       6.3       4.7       4.7       5.1       6.3       4.6       3.5       3.4       3       3.9       2.9	*  *  *  *  *  *  *  *  *  *  *  *  *	2.4 3.8 2.7 3.6 1.8 2.7 2.7 2.2 2.1 2.6 2.6 2 1.9 1.5 1.3	Poison  0.6  0.2  0.3  *  0.3  0.2  0.2  1  *  0.2  1  *  0.2  0.2  1  0.2  0.2  0.2	23.7 24 22.1 23.3 18.8 18.2 15.4 13.1 16.8 12 12.4 11.0 11.3 10.0 6.7	* 3.6 2.8 3.3 3.4 3.4 2.7 2.5 2.5 2.6 2.2 2.1 1.7 2.2 1.9	Total 32.9 34.9 34.9 36 28.4 29.2 26.3 23.1 27.8 21.9 20.3 18.7 17.7 17.4 12.9
Year 2002* 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2017 2018	Employ 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 1,666,580 1,669,766 1,673,867	Skin       6.2       6.9       6.4       6.3       4.7       5.1       5.1       6.3       4.6       3.5       3.4       3       2.9       1.9	*  *  *  *  *  *  *  *  *  *  *  *  *	Respiratory  2.4  3.8  2.7  3.6  1.8  2.7  2.7  2.2  2.1  2  1.9  1.5  1.3  1.1	Poison  0.6  0.2  0.3  *  0.3  0.2  0.2  1  *  0.2  1  *  0.2  *  0.2  *  0.4	Other       23.7       24       22.1       23.3       18.8       18.2       15.4       13.1       16.8       12       12.4       11.0       11.3       10.0       6.7       7.8	* 3.6 2.8 3.3 3.4 3.4 2.7 2.5 2.5 2.6 2.2 2.1 1.7 2.2 1.9 3	Total 32.9 34.9 34.9 36 28.4 29.2 29.2 26.3 23.1 27.8 21.9 20.3 18.7 17.7 17.4 12.9 14.1
Year 2002* 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	Employ 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 1,666,580 1,669,766 1,673,867 1,670,639	Skin       6.2       6.9       6.4       6.3       4.3       4.7       5.1       6.3       4.6       3.5       3.4       3       2.9       1.9       2.1	*  *  *  *  *  *  *  *  *  *  *  *  *	Respiratory	Poison  0.6  0.2  0.3  *  0.3  0.2  0.2  1  *  0.2  0.2  1  *  0.2  *  0.2  *  0.4  *	Other           23.7           24           22.1           23.3           18.8           18.2           15.4           13.1           16.8           12           11.0           11.3           10.0           6.7           7.8           7.5	* 3.6 2.8 3.3 3.4 3.4 2.7 2.5 2.5 2.6 2.2 2.1 1.7 2.2 1.9 3 2.2	Total 32.9 34.9 34.9 36 28.4 29.2 29.2 26.3 23.1 27.8 21.9 20.3 18.7 17.7 17.4 12.9 14.1 13.0
Year 2002* 2004 2005 2006 2007 2008 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020	Employ 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 1,666,580 1,669,766 1,673,867 1,670,639 1,545,731	Skin       6.2       6.9       6.4       6.3       4.7       4.7       5.1       6.3       4.6       3.5       3.4       3       2.9       1.9       2.1       2.0	*  *  *  *  *  *  *  *  *  *  *  *  *	Respiratory       2.4       3.8       2.7       3.6       1.8       2.7       2.7       2.2       2.1       2       2.6       2       1.9       1.5       1.3       1.1       1.4       1.1       52.0	Poison  0.6  0.2  0.3  *  0.3  0.2  0.2  1  *  0.2  1  *  0.2  *  0.4  *  *  *  *  *  *  *  *  *  *  *  *  *	23.7 24 22.1 23.3 18.8 18.2 15.4 13.1 16.8 12 12.4 11.0 11.3 10.0 6.7 7.8 7.5 9.0	* 3.6 2.8 3.3 3.4 3.4 2.7 2.5 2.5 2.6 2.2 2.1 1.7 2.2 1.9 3 2.2 1.3	Total 32.9 34.9 34.9 36 28.4 29.2 29.2 26.3 23.1 27.8 21.9 20.3 18.7 17.7 17.4 12.9 14.1 13.0 64.4
Year 2002* 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019	Employ 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 1,666,580 1,669,766 1,673,867 1,670,639	Skin       6.2       6.9       6.4       6.3       4.3       4.7       5.1       6.3       4.6       3.5       3.4       3       2.9       1.9       2.1	*  *  *  *  *  *  *  *  *  *  *  *  *	Respiratory	Poison  0.6 0.2 0.3  * 0.3 0.2 0.2 1 * * * * 0.2 * 0.2 * 0.4 * * * * * * * * * * * * * * * * * * *	Other           23.7           24           22.1           23.3           18.8           18.2           15.4           13.1           16.8           12           11.0           11.3           10.0           6.7           7.8           7.5	* 3.6 2.8 3.3 3.4 3.4 2.7 2.5 2.5 2.6 2.2 2.1 1.7 2.2 1.9 3 2.2	Total 32.9 34.9 34.9 36 28.4 29.2 29.2 26.3 23.1 27.8 21.9 20.3 18.7 17.7 17.4 12.9 14.1 13.0

**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: 2024

# **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: http://www.osha.gov/pls/imis/establishment.html

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>

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. www.epa.gov www.epa.gov/iaq/

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

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

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. <a href="http://www.ccohs.ca">http://www.ccohs.ca</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.nj.us/rtkhsfs/indexfs.aspx

<u>πτρ.// wco.don.state.nj.us/1tkns1s/mdcx1s.aspx</u>

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

### Several safety organizations have useful websites:

www.nsc.org The National Safety Council

www.aiha.org
www.assp.org
American Industrial Hygiene Association
American Society of Safety Professionals
National Fire Protection Association

The national AFL-CIO includes a health and safety page. <a href="http://www.aflcio.org/Issues/Job-Safety">http://www.aflcio.org/Issues/Job-Safety</a>

**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>

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

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

The USMWF United Support and Memorial for Workplace Fatalities posts current stories about workers who have been killed on the job and their families <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. <a href="http://www.turi.org">http://www.turi.org</a>

**UMass-Lowell's Center for Sustainable Production** has information on changing chemical policies. http://www.sustainableproduction.org/

The **Health and Safety Executive of Great Britain** has extensive information on the 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. http://www.osha.gov/dsg/hazcom/global.html.

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. <a href="http://wcc.state.ct.us">http://wcc.state.ct.us</a>

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. www.connosha.com

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. <a href="http://www.cga.ct.gov">http://www.cga.ct.gov</a>

You can track national bills on the National Library of Congress site. https://www.congress.gov/

Search the medical literature at US National Library of Medicine. http://www.ncbi.nlm.nih.gov/pubmed/

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).

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 a large number of 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. https://ergoweb.com

Tom Armstrong at the University of Michigan runs one of the most respected university training programs for ergonomics, and has extensive information, tools, and lectures. http://www-personal.umich.edu/~tja

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

# 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 <a href="https://www.ctdol.state.ct.us/osha/Quarterly/coqtrly.htm">https://www.ctdol.state.ct.us/osha/Quarterly/coqtrly.htm</a>

OSHA (Occupational Safety and Health Administration): Federal OSHA inspects workplaces in the private

sector for violations of standards, and also 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: Jennifer Cavallari, Sc.D., CIH

Total Teacher Health Principal Investigator: Jennifer Cavallari, Sc.D., CIH

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

Phone: (860) 679-8946; Fax: (860) 679-4720

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/">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, LLC

Vice President: Tina Robinson, Tina.Robinson@TrinityHealthOfNE.org

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">trinityhealthofne.org</a>

Web: complic.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): 300 Stafford Street, Suite 256, Springfield, MA 01104, Phone: (413) 748-6869

#### 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: http://www.concentra.com/employers/occupational-health/

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

8442; 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**

Director: Myra Odenwaelder, DPT

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

e-mail: gkrueger@griffinhealth.org

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

#### 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: Fairfield: 1262 Post Rd, Fairfield, 06824, 203.259.3440; Monroe: 401 Monroe Tpk, Monroe 06468, 203.268.2501; Norwalk: 192 Westport Ave 06851, 203-853-2610; Norwich: 112 Lafayette Street, Norwich, 06360, 860-848-1297; Shelton: 15 Armstrong Rd, Shelton, 06484, 203.929.1109; Stratford: 3272 Main St, Stratford, CT 06614, 203.380.3920; Trumbull: 900 White Plains Rd, Trumbull, 06611, 203.696.3500;

West Hartford: 445 South Main Street, West Hartford, 06110, 860.696.2200, option 5; Westport: 374 Post

Road East, Westport, 203-221-3390; Wilton: 30 Danbury Road, Wilton 06897, 203-563-3500

**THOCC - Occupational Health Network Hospital of Central CT)** 

Web: <a href="https://thocc.org/services/occupational-health">https://thocc.org/services/occupational-health</a>
OHN Medical Director: Sandor Nagy Jr., MD

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

Practice Manager: Michelle Cadiz

Plainville: 440 New Britain Ave, Plainville, 06062

Email: OHNPlainville@hhchealth.org

Yale New Haven Health Occupational Health (3 Campuses)

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

**Yale-New Haven Health Systems** 

Asst. Mgr of Clinical Operations (YNHH): Joelle Buntin

E-mail: joelle.buntin@ynhh.org

YNHH, 20 York St., New Haven, 203-688-2462; 2080 Whitney Ave., Suite 150, Hamden (203) 789-6242

Asst. Mgr. for Clinical Operations (St. Raphael campus): Tara DiCapua

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

Phone: (203) 789-3721; Fax: (203) 789-5174

e-mail: tara.dicapua@ynhh.org

175 Sherman Avenue, New Haven, CT 06511, 5<sup>th</sup> Floor; 260 Long Ridge Rd, Suite 2140. Stamford, (203) 863-3483; Greenwich Hospital, 5 Perry Ridge Rd, 3<sup>rd</sup> Fl, Room 289, (203) 863-3402; 226 Mill Hill Ave,

**Bridgeport** Hospital, (203) 384-3613

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

Medical Director: 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: occupationalmedicine middletown@midhosp.org

Web: https://middlesexhealth.org/occmed

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: Dan Kirby, Department Chair

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

Phone: 860-832-1691 e-mail: kirbyerd@ccsu.edu

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

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: <a href="http://osh.uconn.edu">http://osh.uconn.edu</a>

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

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

Director: David Gregorio, PhD

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

Phone: (860) 679-5480; Fax: (860) 679-1581

e-mail: gregorio@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: Chandra Deeds Gioiello, MS, CIH, SDSRP (Jan 2023- Dec 2024)

**Phone:** (203) 929-3473 ext. 2

Email: c.gioiello@ih-sc.com or crvaiha@wildapricot.org

Web: https://crvaiha.wildapricot.org

President: Terri Dominguez, MSPH, CSP (Jan 2024- Dec 2025)

Email: terridcsp@gmail.com or crvaiha@wildapricot.org

### **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: Benjamin Weidman
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 Chair: Meghan Lyon

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>

### 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

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

NECOEM is a not-for-profit organized community of physicians that strives to improve the health and safety of workers, workplaces, and environments and holds an annual conference.

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

**Phone:** (978) 373-5597

e-mail: executive.director@necoem.org

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

# **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: Amanda 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: Amanda.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

**Phone:** 860-685-8000

Web: <a href="https://portal.ct.gov/despp">https://portal.ct.gov/despp</a>

### 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: 860-264-9272 or toll free (877) 5CT-FIRE (only in CT); Fax: (860) 654-1889

e-mail: paul.norwood@ct.gov

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

Connecticut Department of Environmental Protection, Radiation Safety Unit

**Director:** Jeff Semancik

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

e-mail: jeffrey.semancik@ct.gov

Web: http://www.ct.gov/deep/cwp/view.asp?a=2713&q=324824&deepNav GID=1639

## **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: http://portal.ct.gov/wcc

### **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.