

Massachusetts Survey of **Occupational Injuries and Illnesses Report**

2021



Compiled by:
Executive Office of Labor and Workforce Development
Department of Labor Standards,
Occupational Safety and Health Statistics Program





2021 Massachusetts Survey of Occupational Injuries and Illnesses Report

Total Number of Recordable Cases (TRC) and Incidence rates: In 2021, there were approximately 73,600 work-related injuries and illnesses reported by employers across the private and public sector workforce in Massachusetts. This resulted in a Total Recordable Incidence Rate of 2.8 cases per 100 full-time equivalent workers (FTEs).

Private Sector Workforce

Of the total number of cases, 57,900 nonfatal work-related injuries and illnesses were reported by Massachusetts' Private Sector workforce. This total translates into an incidence rate of 2.4 cases per 100 FTE workers. In the private sector, there were 37,700 cases that resulted in either days away from work and/or job transfer or restriction, also referred to as DART cases. Of that total there were 32,600 cases with Days Away from Work (DAFW), and approximately 5,100 cases that resulted in Days with Job Transfer or Restriction (DJTR). There were also 20,200 recordable cases that were less severe but recordable under the OSHA recordkeeping requirements.

Public Sector Workforce

State and local government employers reported an estimated 15,700 recordable cases in 2021. The corresponding TRC incidence rate was 5.4 incidents per 100 FTEs.

- **State Government**

There was an estimated total of 3,200 recordable incidents in the State government workforce in 2021. This translates to an incidence rate of 3.3 incidents per 100 FTEs.

- **Local Government**

There were an estimated 12,600 recordable work-related incidents involving local government workers. The total recordable incidence rate was 6.3 incidents per 100 FTEs.

Year to Year Comparisons:

Statistically Significant Changes in the Total Number of Injuries and Illnesses:

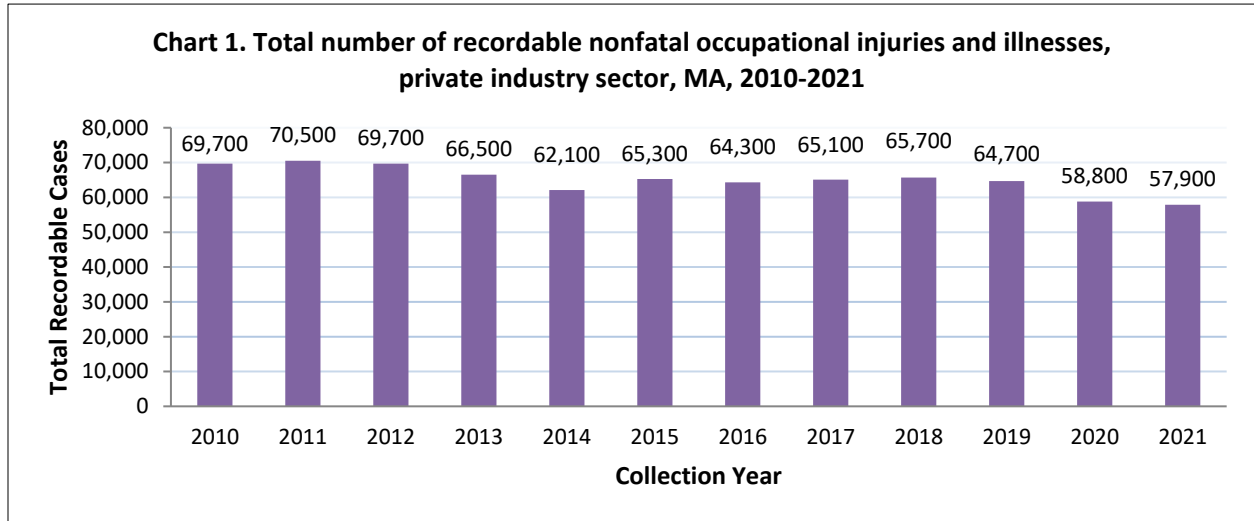
- The total number trade, transportation, and utilities cases increased from 11,000 to 15,500 cases in 2021.
- The total number of cases in the financial activities industry increased from 400 to 1,600 cases in 2021.
- The total number of cases in the education and health services industry decreased from 27,500 to 21,100 in 2021.
- The total number of cases in state and local government increased from 10,600 to 15,700 in 2021.

Statistically Significant Changes in the Total Recordable Case Rate:

- There was an increase in all industries rate, which includes public sector, from 2.5 to 2.8 incidents per 100 FTEs in 2021.
- The trade, transportation, and utilities saw an increase in every case category (DART, DAFW, DJTR, and ORC (Other Recordable Cases)). The TRC rate increased from 2.6 to 3.7 incidents per 100 FTEs in 2021.

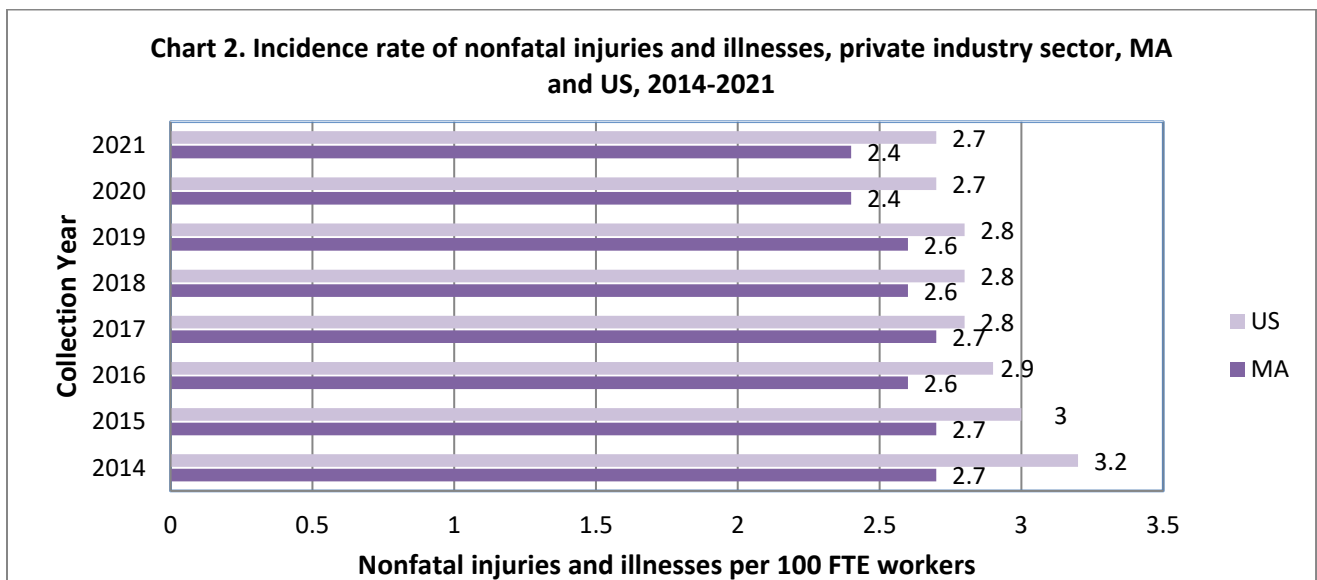
- There was an increase in the financial activities TRC rate, it increased from 0.2 to 0.8 incidents per 100 FTEs in 2021.
- There was an increase in all case categories of the professional and business services industry.
- The state and local government TRC rate increase from 3.5 to 5.4 incidents per 100 FTEs.
- The state government TRC rate increased from 2.5 to 3.3 incidents in 2021.
- The local government TRC rate increased from 4.0 to 6.3 incidents in 2021.

Chart 1 shows the total number of nonfatal injuries and illnesses from 2010-2021 for employees working in the private industry sector of Massachusetts.



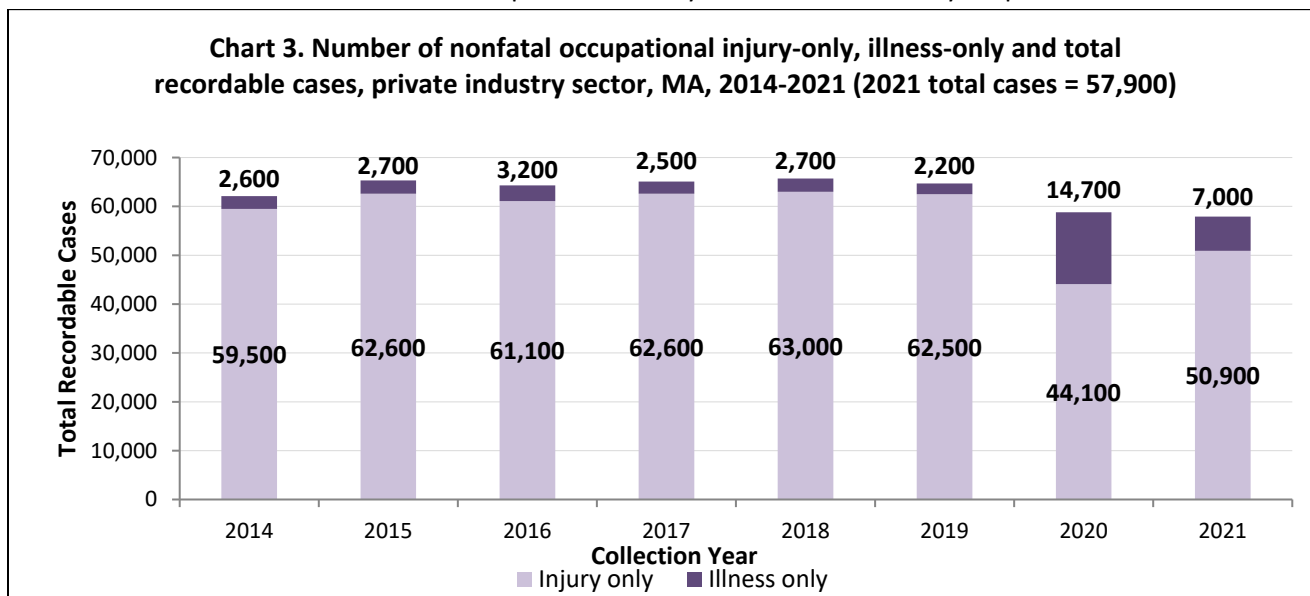
Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor, 2021

Chart 2 compares the incidence rates between the U.S. and Massachusetts private industry sector workforce from 2014 to 2021.



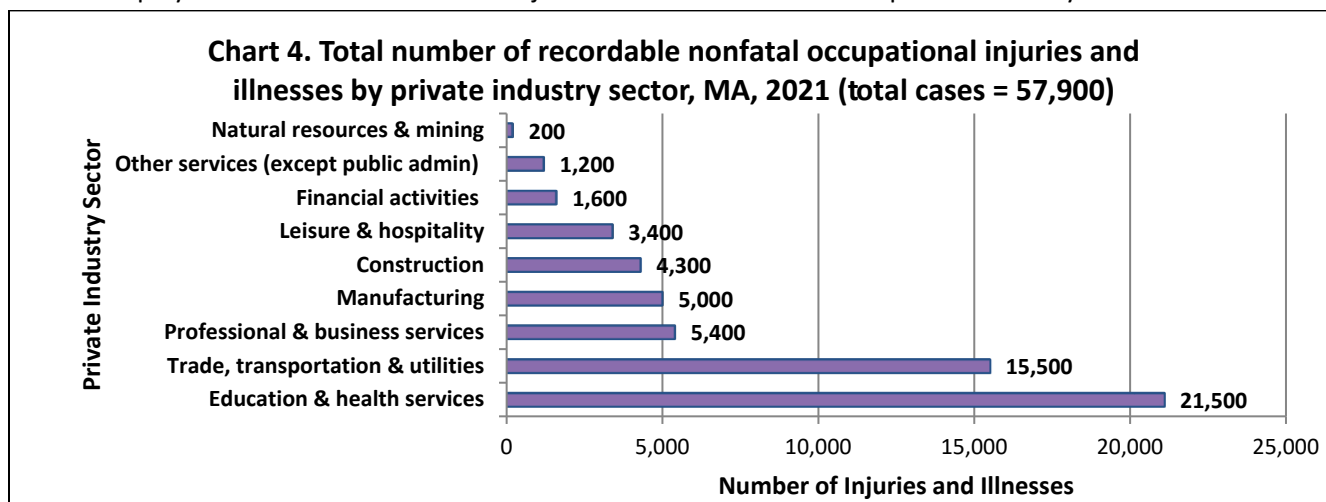
Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor, 2021

Chart 3 shows a comparison of the total number of injury-only to illness-only cases in relation to the total number of incidents in the Massachusetts private industry sector over a seven-year period.



Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor, 2021

Chart 4 displays the TRC numbers of both injuries and illnesses within the private industry sector in Massachusetts.



Note: Data for the Information industry is unavailable for 2021. Also, because of rounding and data exclusion of non-classifiable responses, data may not sum to totals.

Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor, 2021

Table 1 below illustrates the total number of recordable occupational illnesses within the private sector, and their respective incidence rates based on the type of illness sustained. There was a total of 7,000 illness-only cases in the private sector in 2021. This translates to a total recordable case (TRC) incidence rate of 29.4 illnesses per 10,000 full-time equivalent workers (FTEs). There were an estimated 5,400 respiratory illnesses reported in 2021, compared to 12,900 work-related respiratory condition illness cases in 2020. The breakdown of illness type by category is the following: skin diseases or disorders, respiratory conditions, poisonings, hearing loss, and all other illnesses.

Table 1. Incidence rate and number of illness-only cases, private industry sector, MA, 2021		
Type of Illness	Incidence rate (per 10,000 FTE)	Number of Illnesses (n=7,000)
Respiratory conditions	22.8	5,400
All other illnesses	4.8	1,100
Hearing loss	1.2	300
Skin disorders	0.6	100
Poisonings	*	*

*Data was unpublishable

Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor, 2021

Table 2 below compares the 2021 TRC incidence rates by major industry sector for Massachusetts and the United States.

Table 2. Incidence rate of nonfatal occupational injuries and illnesses per 100 FTEs, by major private industry sector and public sector, MA and US, 2021		
Industry	Massachusetts	US
All Industries (Private and Public)	2.8	2.9
All Private Industry	2.4	2.7
Goods-producing sector	2.5	3.0
Natural Resources and Mining	2.5	3.4
Construction	2.8	2.5
Manufacturing	2.3	3.3
Service-providing sector	2.4	2.6
Trade, Transportation, and Utilities	3.7	3.5
Information	*	0.7
Financial Activities	0.8	0.8
Professional and Business Services	1.0	1.1
Educational and Health Services	4.0	4.0
Leisure and Hospitality	2.3	2.9
Other Services (except public administration)	1.7	1.6
State Government	3.3	3.2
Local Government	6.3	5.0

*Data was unpublishable

Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor, 2021

Injury and Illness Case Types

Work-related injuries and illnesses are recorded as three individual case types by employers:

1. **Cases with Days Away From Work** commonly identified in this report as **DAFW**.
2. **Cases with Job Transfer or Restricted duty** commonly identified as **DJTR**.
3. **Other Recordable Cases** commonly identified as **ORC**.

For a case to be considered recordable by an employer, there are two criteria about the incident that must be met. First, the injury or illness must be determined to be work-related or caused by the work environment.

Second, the incident needs to involve loss of consciousness, require days away from work, job transfer or restricted duty, medical treatment beyond first aid (i.e., stitches, prescribed medication from a doctor, surgery, etc.), involve a significant work-related injury or illness diagnosed by a physical or licensed healthcare professional or meet other recordkeeping criteria as specified under the Occupational Safety and Health Administration's regulation 29 CFR 1904. If both criteria are met, the incident is recordable.

DAFW cases are considered the most serious type of case since the employee was not healthy enough to attend work (usually recommended by a medical professional) due to the severity of their injury or illness. DJTR cases are deemed as such when a work-related injury or illness prohibits an employee from performing one or more of the main functions of that employee's job duties. Cases that require more than first aid treatment or meet other recordkeeping criteria, but where there is no lost work time or job transfer, or restriction are considered ORCs.

In 2021, there were a total of 46,300 cases with DAFW and/or DJTR (also known as DART cases) reported by all industries including state and local government. There was a total of 37,700 DART cases in the private sector, and 8,700 DART cases in the public sector. Of the 46,300 total DART cases in Massachusetts, 41,100 were DAFW cases and 5,200 were DJTR cases. In addition to these cases, there were 27,300 ORCs that were classified as recordable under OSHA's recordkeeping requirements.

Table 3 below provides the breakdown of the DAFW cases, DJTR cases and ORCs by major private industry sector, state, and local government in 2021. The total count for DART cases can be calculated by adding the cases with DAFW and DJTR.

Table 3. Total number of cases by all industries including public sector and case type, MA, 2021 (total cases = 73,600)			
Industry	DAFW Cases (n=41,100)	DJTR Cases (n=5,200)	Other Recordable Cases (n=27,300)
Education and Health Services	12,300	1,300	7,500
Trade, Transportation, and Utilities	9,000	1,400	4,400
Manufacturing	2,800	600	1,700
Leisure and Hospitality	1,900	100	1,500
Construction	2,200	400	1,700
Professional and Business Services	2,700	600	2,100
State Government	1,300	*	1,800
Financial Activities	800	*	800
Information	*	*	*
Natural Resources and Mining	100	*	100
Other Services	800	*	400
Local Government	7,200	*	5,200

*Indicates data was unpublishable. Note: Because of rounding and data exclusion data may not sum to totals.

Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor, 2021

Incidence rates

Table 4 below shows the breakdown of incidence rates for the ORC, DAFW, DJTR, DART and TRC by each private industry sector and state government.

Table 4. Total recordable incidence rate per 100 FTE workers by case type, private industry sector and state government, MA, 2021					
Industry	ORC Rate	DAFW Rate	DJTR Rate	DART Rate (DAFW+DJTR)	TRC Rate (ORC+DART)
Education and health services	1.4	2.4	0.3	2.6	4.0
State government	1.2	1.4	*	1.4	3.3
Local government	2.6	3.6	0.1	3.7	6.3
Leisure and hospitality	1.0	1.3	*	1.3	2.3
Trade, transportation, and utilities	1.0	2.1	0.5	2.6	3.7
Natural resources and mining	0.6	1.4	0.6	1.9	2.5
Construction	1.1	1.5	0.2	1.7	2.8
Manufacturing	0.8	1.3	0.2	1.6	2.3
Other services (except public administration)	0.6	1.1	*	1.2	1.7
Professional and business services	1.1	0.5	0.1	0.6	0.4
Financial activities	0.4	0.4	*	0.4	0.8
Information	*	*	*	*	*

Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor, 2021

*Some data is unpublishable.

Table 5 shows selected industries with the highest total recordable rate incidence rates in Massachusetts.

Table 5. Industries with highest incidence rate per 100 FTE of total nonfatal occupational injuries and illnesses, all industries, MA, 2021	
Industry	TRC Rate
Local government Heavy and civil engineering construction	19.3
Local government Justice, public order, and safety activities	18.7
Private industry Truck transportation	10.2
Private industry Nursing and residential care facilities	7.7
Private industry Waste management and remediation services	6.3
Private industry Warehousing and storage	6.1
State government Hospitals	6.0
Private industry Textile product mills	5.7
Private industry Building material and garden equipment and supplies dealers	5.1

Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor, 2021

Table 6 below shows the total recordable incidence rates by the establishment employment size.

Table 6. Incidence rates of nonfatal occupational injuries and illnesses per 100 FTE workers, by industry sector and employment size, all industries, MA, 2021						
Industry sector	All Establishments	Establishment employment size (workers)				
		1 to 10	11 to 49	50 to 249	250 to 999	1000 or more
Private Industry	2.4	1.3	2.2	3.1	2.4	2.5
Natural resources and mining	2.5	--	--	3.2	--	--
Construction	2.8	--	3.4	2.7	3.3	--
Manufacturing	2.3	--	2.4	3.0	2.1	1.5
Trade, transportation, and utilities	3.7	2.3	3.1	4.3	4.5	4.9
Information	--	--	--	0.9	0.7	--
Financial activities	0.8	--	--	0.7	0.6	0.1
Professional and business services	1.0	--	1.6	1.0	0.4	0.3
Education and health services	4.0	--	2.4	5.3	5.1	4.8
Leisure and hospitality	2.3	--	2.1	3.4	3.9	--
Other services	1.7	--	1.4	--	3.5	--
State government	3.3	--	--	--	5.0	3.2
Local Government	6.3	1.3	7.5	10.5	3.2	4.0

Dashes indicate data that are not available.

Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor, 2021

Case and Demographic Findings

The following section details the cases in which the injured or ill employee endured at least one full lost workday due to their incident. In 2021, there were an estimated total of 41,100 cases reported with days away from work in the entire Massachusetts workforce. This is approximately 55.8% of the 73,600 total recordable cases, compared to 58.4% of the total in 2020. Workers in the private sector accounted for 32,600 DAFW cases, while public sector government workers accounted for 8,500 DAFW cases.

Some basic information is asked about the employee, such as job title, age, or date of birth, date of hire, or length of service, race, or ethnic background, work shift start time, and time of injury or illness. It is with this data that we compile and publish specific demographic information about the characteristics of the employee. In addition to demographic information, specific case information that describes the nature, event, source, secondary source (if applicable), and part of body affected, is also collected. Due to a low survey response in 2021, the case and demographic case details are limited.

Table 7 shows the incidence rates by case types for the Massachusetts private industry sector from 2011-2021.

Table 7. Incidence rates of DART, DAFW, and DJTR cases, private sector, MA, 2011-2021			
Year	DART Cases (cases with days away from work, job transfer, or restriction)	Cases with days away from work	Cases with job transfer, or restriction
2011	1.8	1.4	0.4
2012	1.7	1.4	0.3
2013	1.6	1.3	0.3
2014	1.5	1.2	0.3
2015	1.5	1.2	0.3
2016	1.5	1.3	0.3
2017	1.5	1.3	0.2
2018	1.5	1.2	0.3
2019	1.5	1.3	0.2
2020	1.7	1.5	0.2
2021	1.6	1.4	0.2

Source: U.S. Bureau of Labor Statistics, U.S. Department of Labor, 2021

Data Source for this Report

The data source for this report is the Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses (SOII), in cooperation with participating state agencies. Survey data for the SOII is derived from mandatory logs kept by private industry employers and participating public sector employers during the calendar year. All survey responses are confidential and are used for statistical purposes only. The SOII is a federal-state government partnership between the U.S. Department of Labor's Bureau of Labor Statistics (BLS) and the Massachusetts Department of Labor Standards (DLS). For more information about the data sources and methodology visit BLS' *Concepts* page: bls.gov/opub/hom/soii/data.htm.

About the Department of Labor Standards

The mission of the Massachusetts Department of Labor Standards (DLS) is to promote and protect workers' safety and health, wages and working conditions, and to support employers and workers in the utilization of apprenticeship as a workforce development tool. In collaboration with public and private entities, DLS protects workers by means of education and training, workplace safety and health consultation and assessment, occupational injury and illness data collection and analysis, and consistent and responsible administration and enforcement of its statutes and regulations. DLS carries out its objectives in a manner that supports employers and strengthens the Commonwealth's communities and economy.

DLS' Occupational Safety and Health Statistics Program administers the Survey of Occupational Injuries and Illnesses (SOII) for all Private Sector and public sector industries, trades, and occupations. The SOII remains the largest occupational injury and illness surveillance system in the country, providing injury and illness counts and rates for a variety of employer, employee, and case characteristics based on a sample of approximately 230,000 establishments. Employers record cases that result in days away from work due to injury or illness. SOII contains multiple case characteristics that capture invaluable information about the nature of the industry, the injury, and the demographics of the injured employee. The Program uses this data to produce an annual occupational injury and illness report, which summarizes overall and industry-specific data on occupational safety. Reports from prior years can be found on the DLS website at mass.gov/occupational-

[safety-and-health-statistics-program](#). The mission of the Occupational Safety and Health Statistics Program is to support continued improvement of workplace environments by compiling and presenting data to employers, employees, researchers, industry professionals, and policy-makers, so that these data can be used to devise strategies to reduce occupational injuries and illnesses.

DLS administers eight programs (including the Occupational Safety and Health Statistics Program) that interact with the public on a range of occupational health and safety issues. Visit mass.gov/orgs/department-of-labor-standards for more information about DLS.

Occupational Health and Safety Resources in Massachusetts

The On-Site Consultation Program

This program, administered by DLS, offers a free consultation service designed to help employers recognize and control potential safety and health hazards at their worksites, improve their safety and health program, assist in training employees, and possibly qualify for a one-year exemption from routine OSHA inspections. This service targets smaller businesses (less than 250 employees per establishment or 500 employees nationwide) in high hazard industries, such as manufacturing, healthcare, and construction. It is a confidential service in which your firm's name, and any other information you provide, and any unsafe or unhealthy working conditions found, will not be reported routinely to the OSHA inspection staff. Visit mass.gov/dols/consult for more information.

The Workplace Safety and Health Program

The Workplace Safety and Health Program within DLS, provides free technical assistance and training for public sector workers. They are responsible for the implementation of the Massachusetts State Plan and performs investigations of workplace health and safety hazards within public sector workplaces in Massachusetts. WSH program Visit mass.gov/lwd/labor-standards/massachusetts-workplace-safety-and-health-program/ for more information.

The Department of Public Health's Occupational Health Surveillance Program

The Occupational Health Surveillance Program within the Department of Public Health generates reports, fact sheets, and safety alerts regarding fatal occupational injuries. For more materials on this subject, please contact the Massachusetts Department of Public Health, Occupational Health Surveillance Program, 250 Washington Street, 4th Floor Boston, MA 02108. To speak with a representative directly, please call 1-800-338-5223. Reports are available on the program's website: mass.gov/orgs/occupational-health-surveillance-program.

Department of Industrial Accidents Safety Grant Program

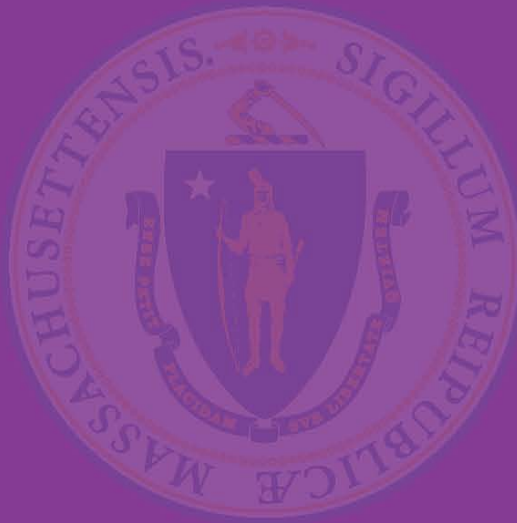
The Department of Industrial Accidents (DIA), through the Office of Safety, annually awards hundreds of thousands of dollars in safety training grants to various organizations. In each fiscal year, thousands of persons receive workplace training through programs funded by these DIA grants. This highly successful program provides monies for workplace safety training aimed at workers throughout the Commonwealth. For more information explore the following link: mass.gov/lwd/workers-compensation/safety/grant-program/safety-grant-program.html.

Material Request Information

For more information about the **2021** report or past year data, please contact the Massachusetts Department of Labor Standards, Occupational Safety and Health Statistics Program, 100 Cambridge Street, Suite 500 Boston, MA 02108; or call (617) 626-6945.

Information can also be found on our website at: mass.gov/occupational-safety-and-health-statistics-program.

Detailed statistical information can also be obtained from the Bureau of Labor Statistics at: bls.gov/bls/safety.htm .



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