Massachusetts Department of Public Health

Workplace Fatality Surveillance

December 11, 2024

OSHA's New England Roundtable

Jim Laing

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Occupational Health Surveillance Program

Social Determinants of Health (SDoH)

Employment and Health

- Employment is good for health, in general
  - Income, benefits (e.g., health insurance), psychosocial support
- Type and quality of work matter
  - Conditions/exposures: toxic chemicals, heat/cold, dangerous equipment, heavy lifting, violence
  - Organizational: shift work, long hours, high demand/low control
- Burden of occupational risks is not borne equally
  - Low wage workers, including many immigrant workers and workers of color, disproportionately employed in physically demanding, high-risk, high-stress jobs

Work-Related Injuries in Massachusetts

- Each *year,* approximately 70,000 workers suffer injuries as a result of workplace hazards
- Every *week*, 1-2 workers are fatally injured at work

We can track these injuries, learn from the patterns, and inform prevention efforts.

State Occupational Public Health Programs

The mission of the MA Occupational Health Surveillance Program is to promote the health, safety, and well-being of all working people in Massachusetts by using occupational health data for action.

1. Surveillance
   - Collection, summary, interpretation, dissemination of data
2. Public health investigations / referrals / case interviews
   - Includes interviews with injured workers
3. Partnerships
4. Impact policy, regulations, legislation
5. Integrate work as a social determinant of health with rest of public health

Uses of Occupational Health Surveillance

- Tailor intervention and prevention strategies
  - Worksites, high-risk industries, occupations, and populations, hazards, emerging problems
- Evaluate intervention efforts
- Identify potential risk factors and generate hypotheses for further research
- Raise public awareness and demonstrate need for prevention (influence policy makers)

OHSP Current Projects

- Work-related respiratory disease
- Health care workers
- Work-related prevention of overdose and suicide
- Fundamental occupational health surveillance (includes lead surveillance, burns, poisonings, occupational health indicators, young workers, emerging topics)
- Workplace fatalities

Workplace Fatality Surveillance in MA

Two projects at DPH focus on workplace fatalities

- Census of Fatal Occupational Injuries (CFOI)
  - Funded by U.S. Department of Labor, Bureau of Labor Statistics (BLS)
- Fatality Assessment and Control Evaluation (FACE)
  - Funded by CDC-NIOSH

- Key activities are to identify, document, and describe workplace trauma deaths … and learn from these events

Fatality Surveillance, History and the Future

- Fatalities were included in the BLS employer-based survey data going back to 1939.
- National Academy of Sciences (NAS) committee report in 1987 led to modern CFOI.
  - Systematic counting of fatalities by all states was implemented in 1992.

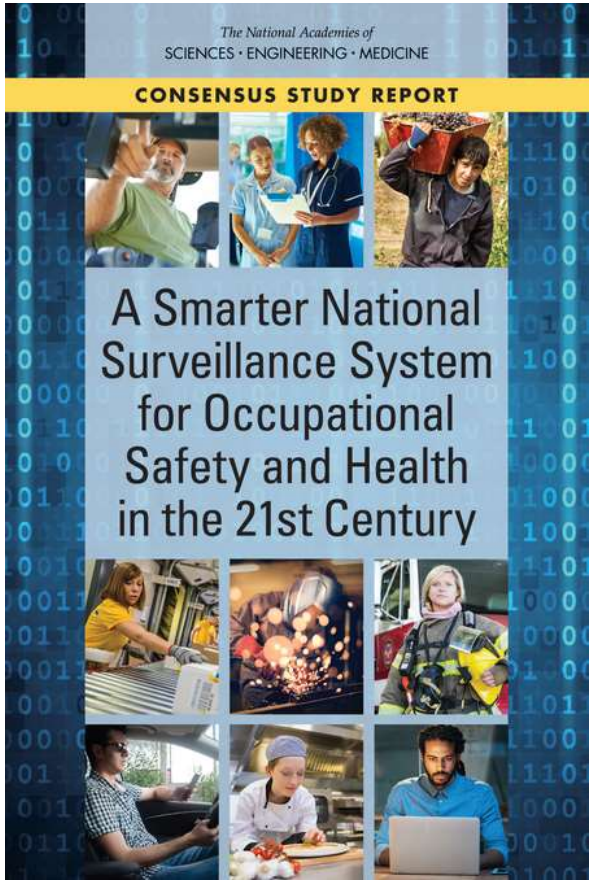
bls.gov/opub/hom/cfoi/history.htm

Fatality Surveillance, History and the Future

Most recent National Academies report in 2018

- A Smarter National Surveillance System for Occupational Safety and Health in the 21st Century
  - Systems of systems
  - Fatal illnesses

https://nap.nationalacademies.org/read/24835/chapter/1



Work-related Fatality Surveillance

How do we identify work-related fatalities?

- The original three sources
  - Death certificates
  - Workers' compensation claims
  - OSHA records

Work-related Fatality Surveillance

Expansive sources

- Medical examiner notification (to DPH, OSHA, DLS, WC agency)
- News, social media, obituaries, fundraising platforms
- Police and EMS/Fire Department
- U.S. Coast Guard, NTSB, MSHA, FRA
- Employer or family direct contact as needed

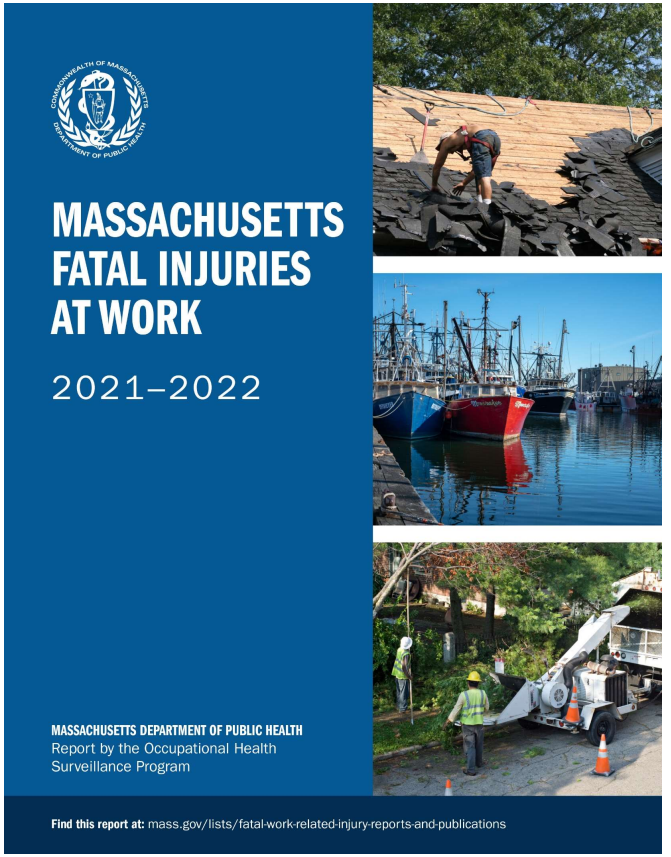
Recent Data Report

Massachusetts Fatal Injuries at Work 2021-2022

- Covers 178 deaths

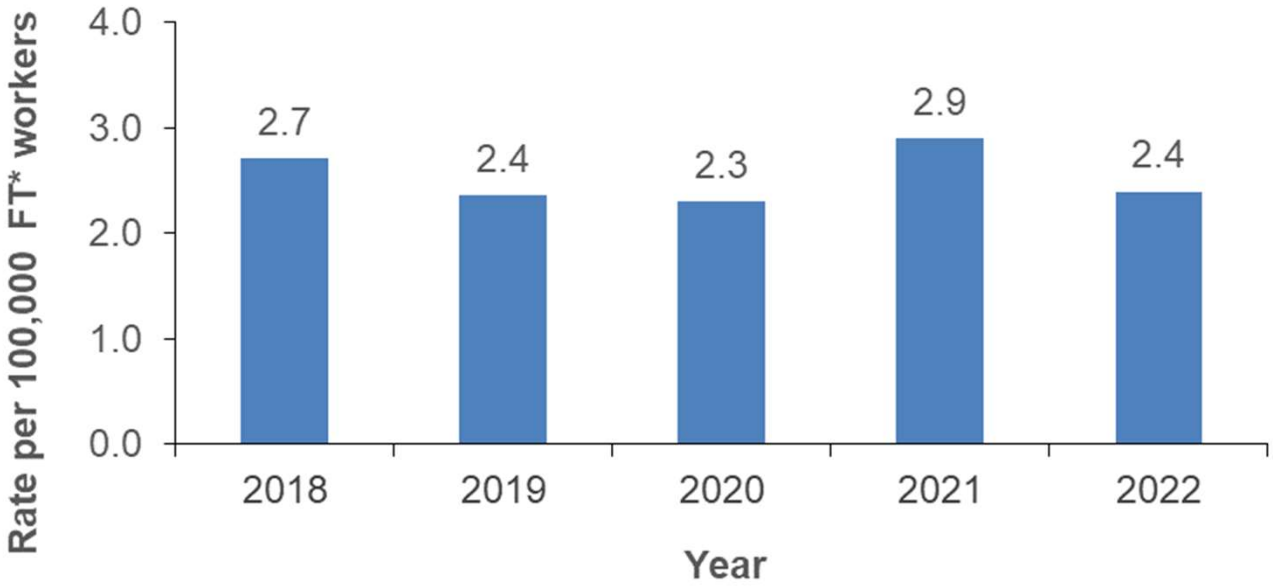
Report available at

mass.gov/info-details/massachusetts-fatal-injuries-at-work-2021-2022



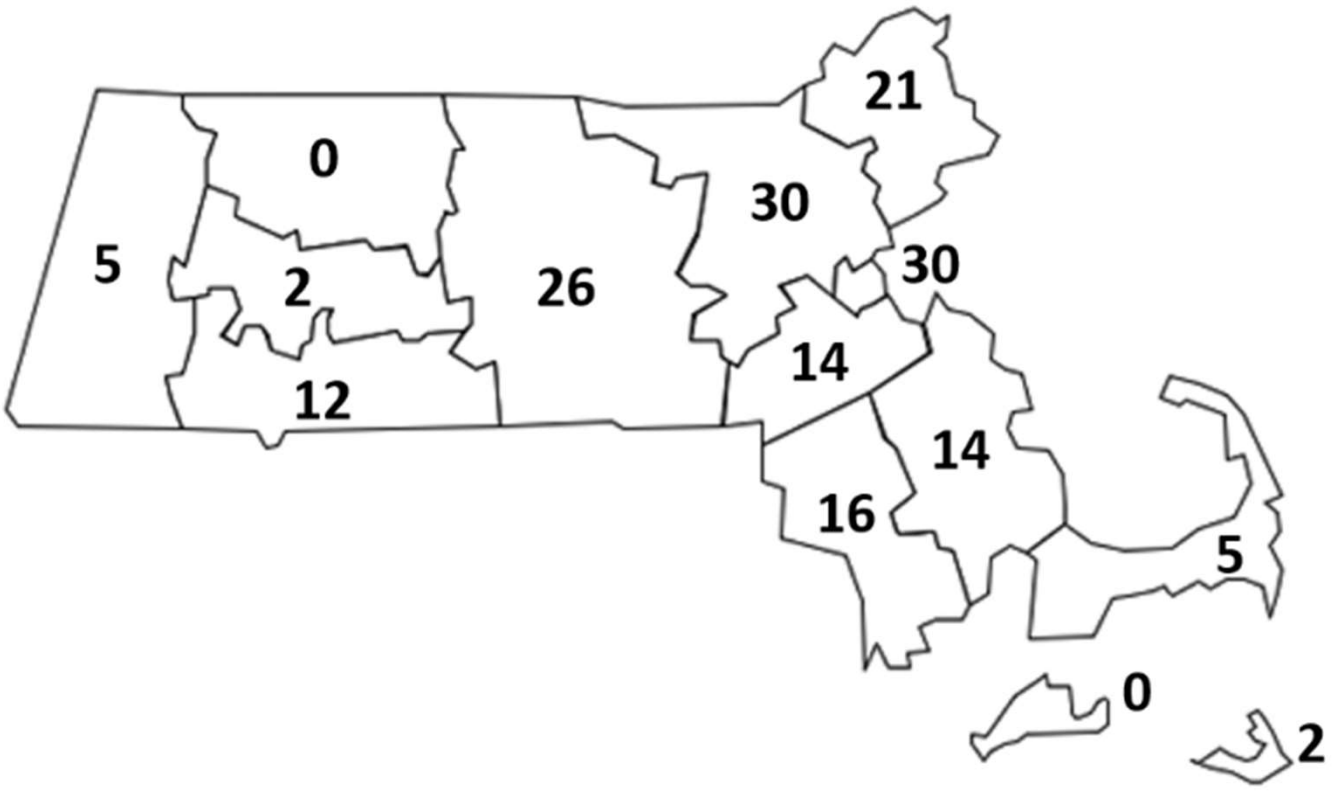
Fatal Injuries at Work in Massachusetts

- 2018 - 98 deaths
- 2019 - 86 deaths
- 2020 - 69 deaths
- 2021 - 97 deaths
- 2022 - 81 deaths



- Massachusetts historically has a lower work fatality rate than the national rate.
- This continued in 2022 with MA having a rate of 2.4 fatalities per 100,000 full-time equivalent workers compared to the national rate of 3.7.

Number of Fatal Occupational Injuries by County, Massachusetts, 2021–2022

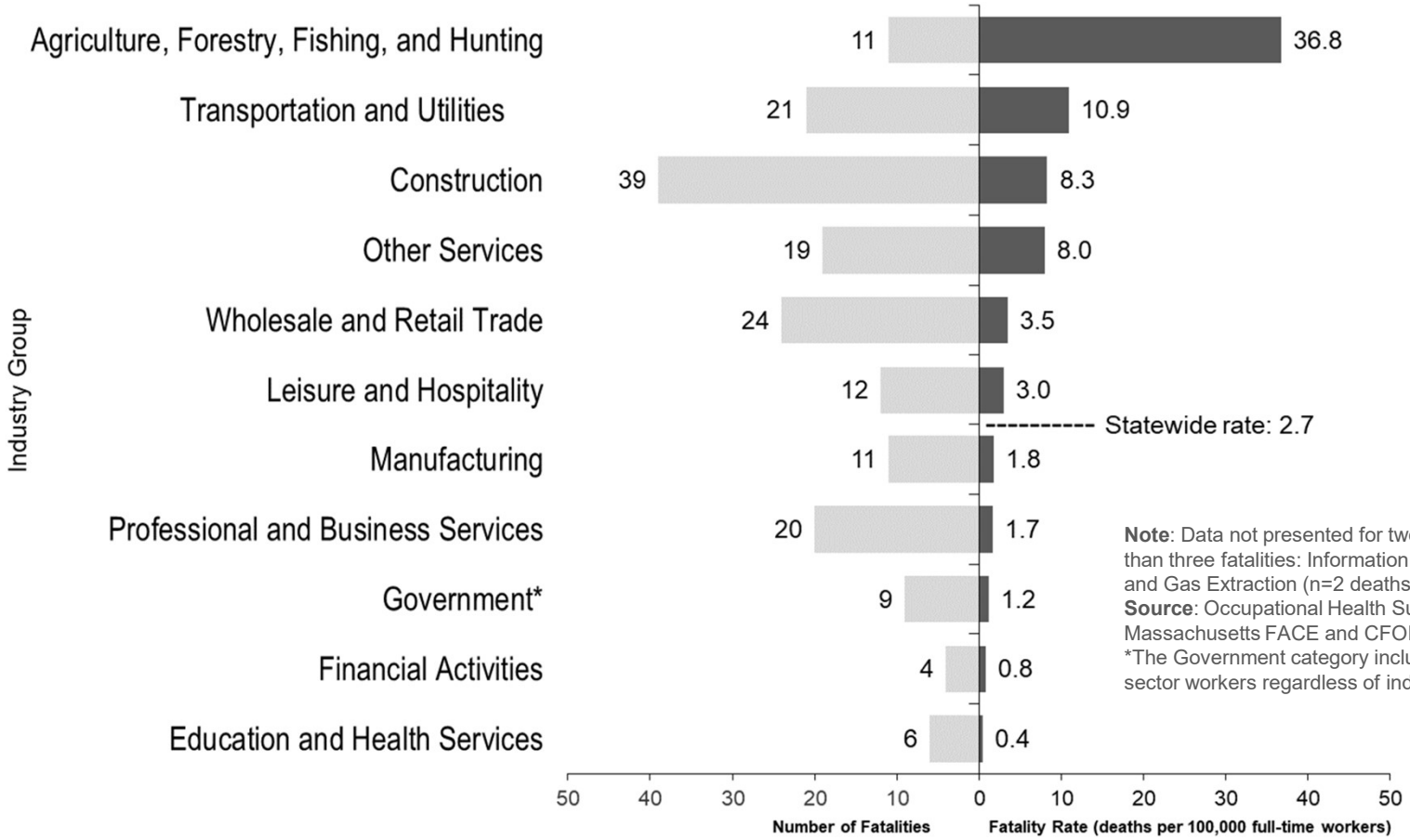


Type of Event

Leading causes

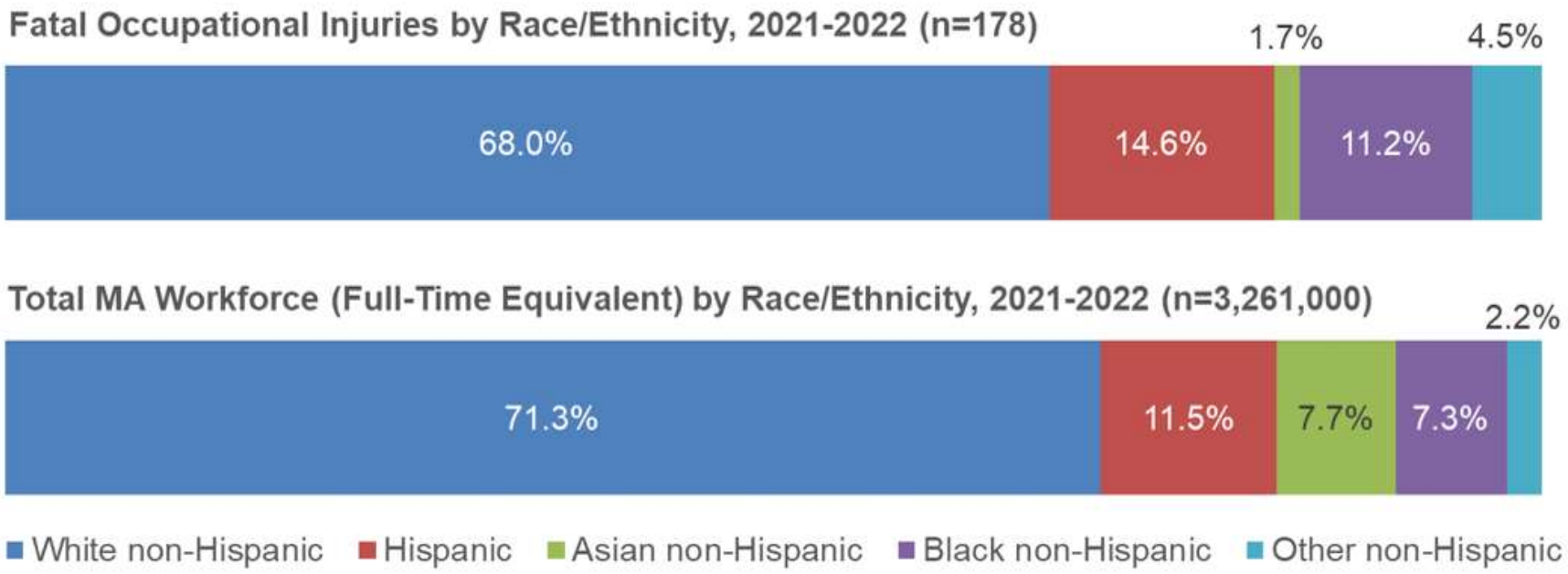
- Overdose (47)
- Suicide or self-inflicted injury (25)
- Roadway crash (21)
- Fall to a lower level (19)
- Worker on foot struck by vehicle (14)
- Struck by falling object or equipment (12)

Number and Rate of Fatal Injuries at Work by Industry Group, Massachusetts, 2021-2022



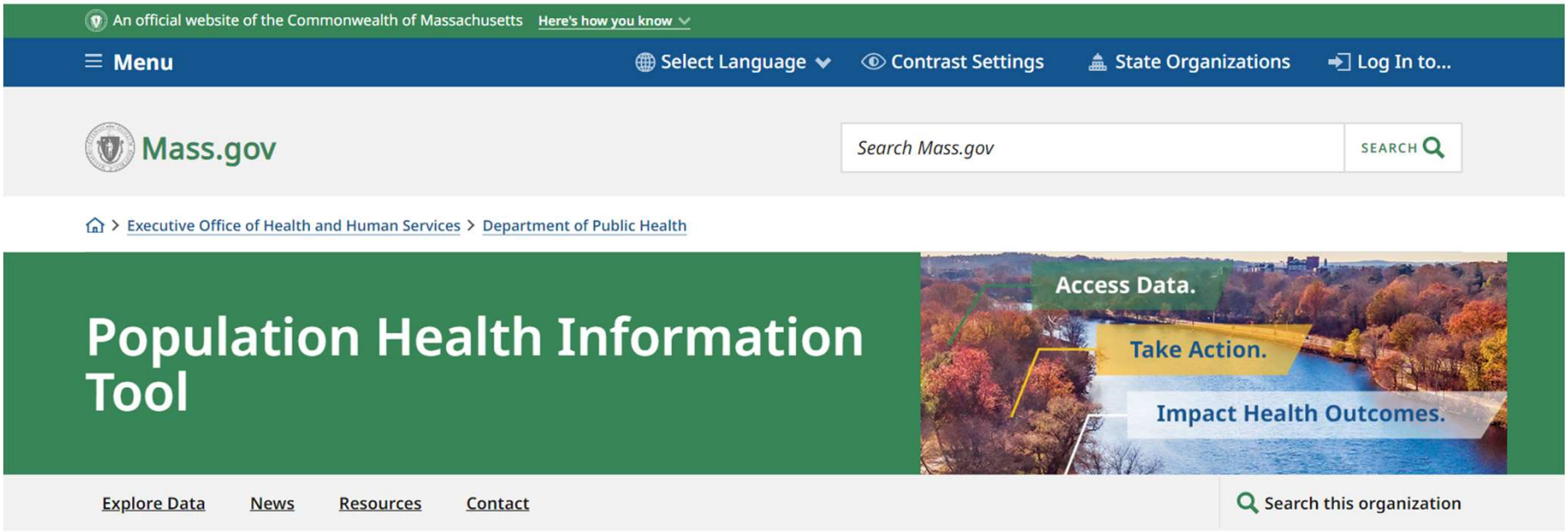
Note: Data not presented for two industry groups which had fewer than three fatalities: Information, and Mining, Quarrying, and Oil and Gas Extraction (n=2 deaths).
Source: Occupational Health Surveillance Program, Massachusetts FACE and CFOI, 2021–2022.
*The Government category includes fatalities sustained by public sector workers regardless of industry.

Fatal Occupational Injuries by Race/Ethnicity Compared to Total Workforce, Massachusetts, 2021–2022



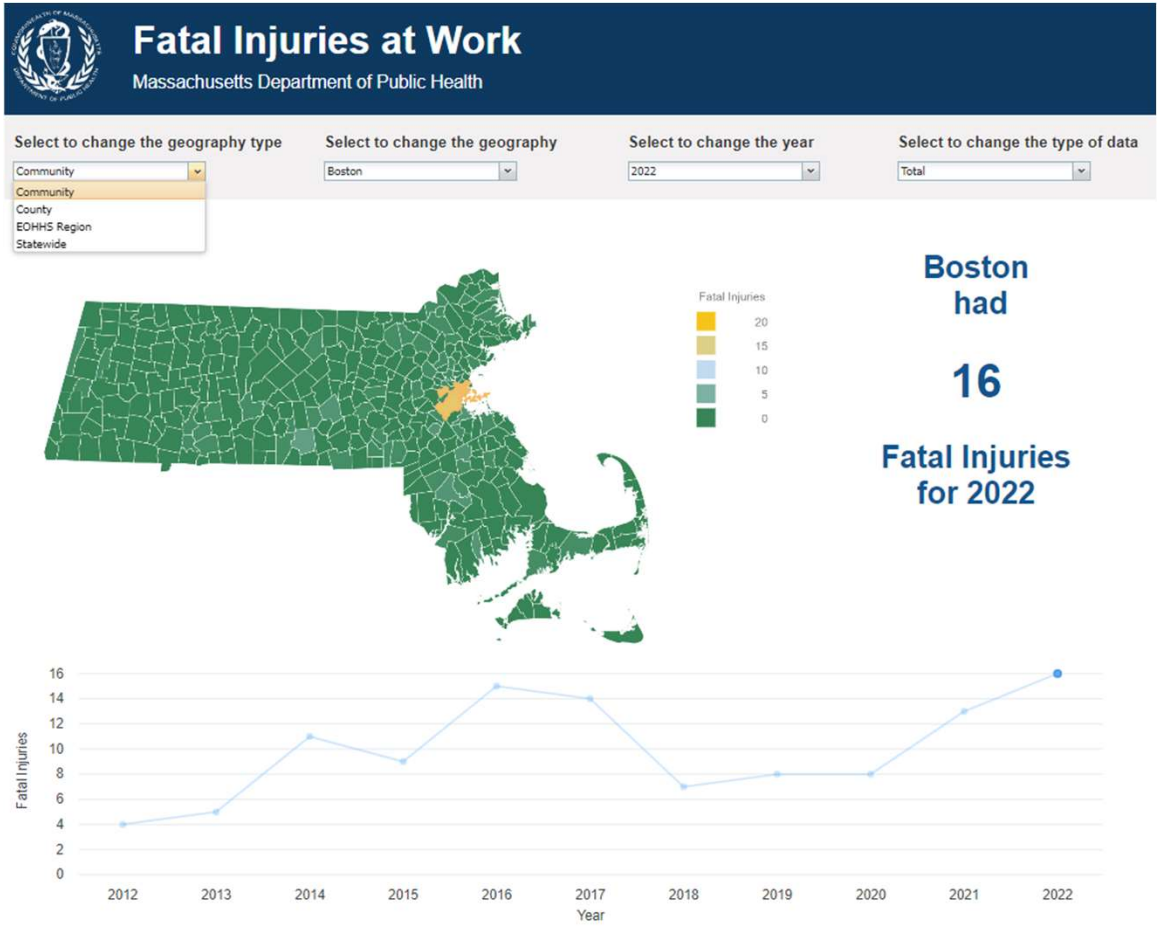
Source: Occupational Health Surveillance Program, Massachusetts FACE and CFOI, 2021–2022. Current Population Survey accessed through the NIOSH Employed Labor Force query system.

Data Portal



The Population Health Information Tool (PHIT) provides up-to-date, easy to understand public health data and racial equity data in Massachusetts.

Data Portal


Fatal Injuries at Work
Massachusetts Department of Public Health
Select to change the geography type
Community
Community
County
EOHHS Region
Statewide
Select to change the geography
Boston
Select to change the year
2022
Select to change the type of data
Total
Fatal Injuries
20
15
10
5
0
Boston had
16
Fatal Injuries for 2022
Fatal Injuries
16
14
12
10
8
6
4
2
0
2012
2013
2014
2015
2016
2017
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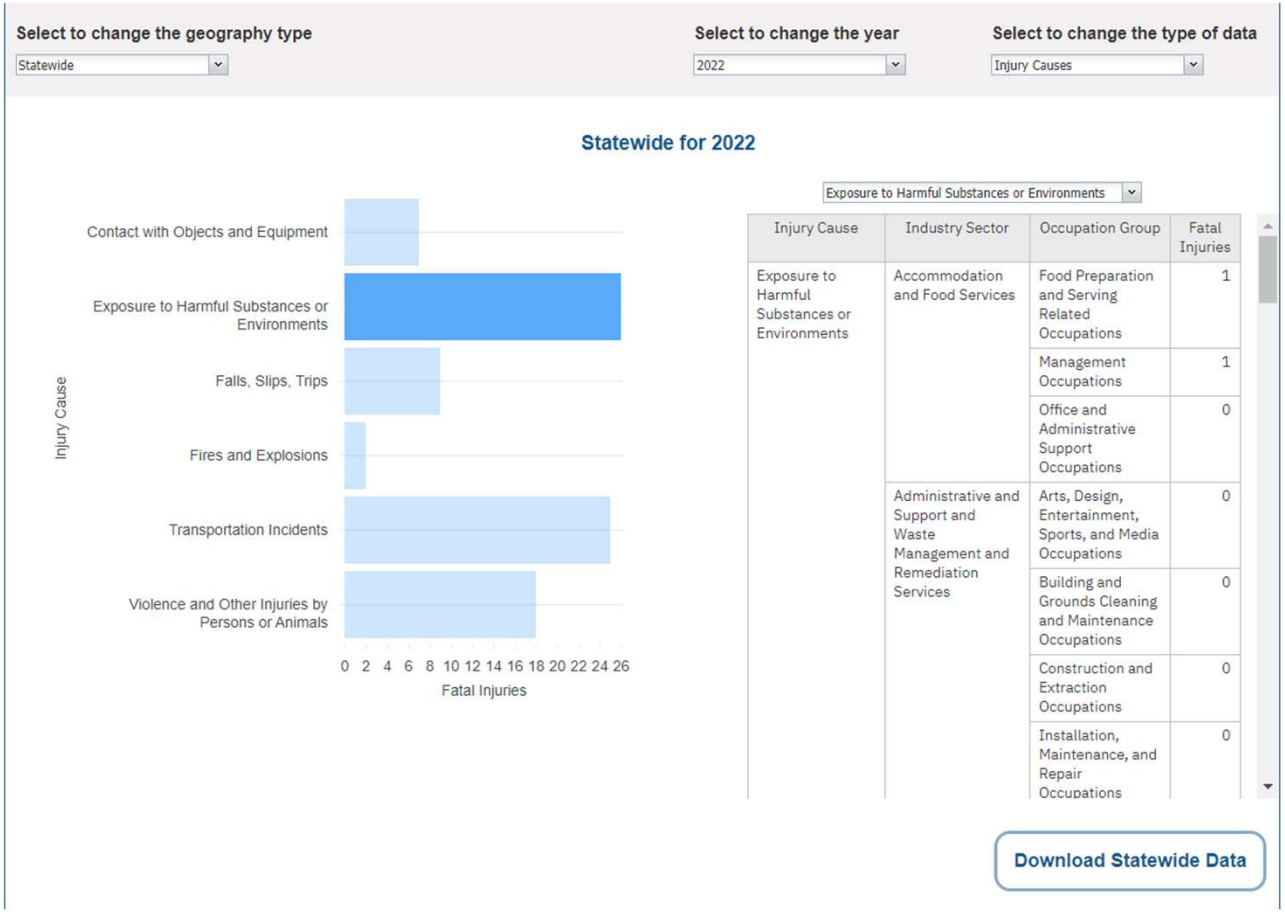
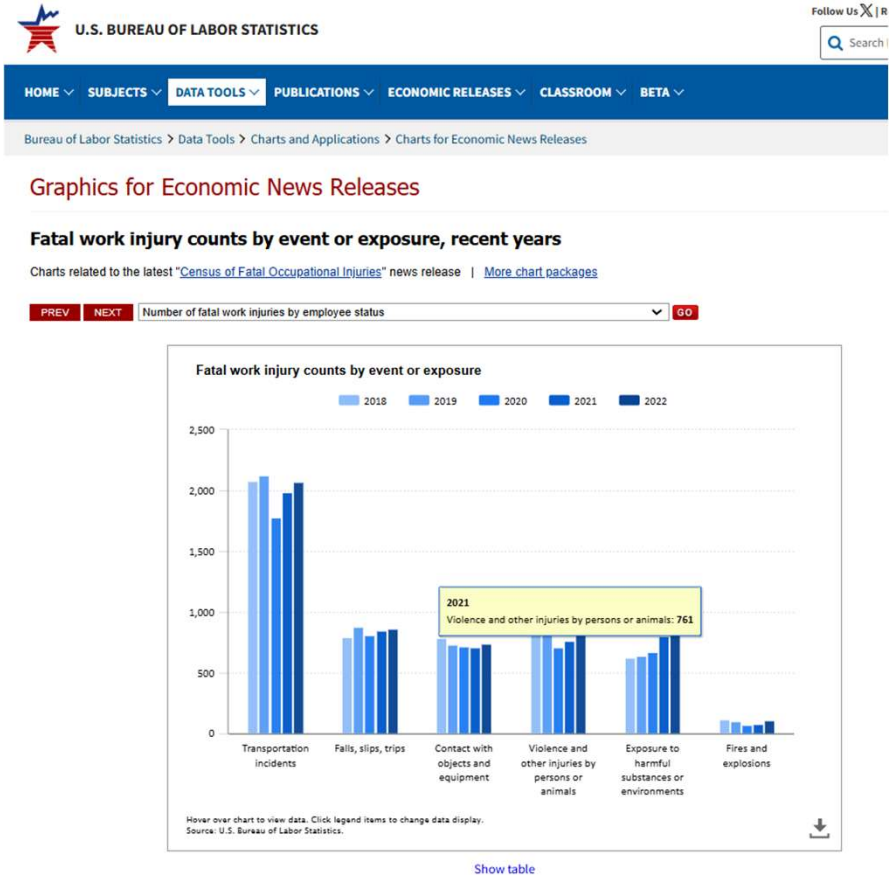
2020
2021
2022
Year

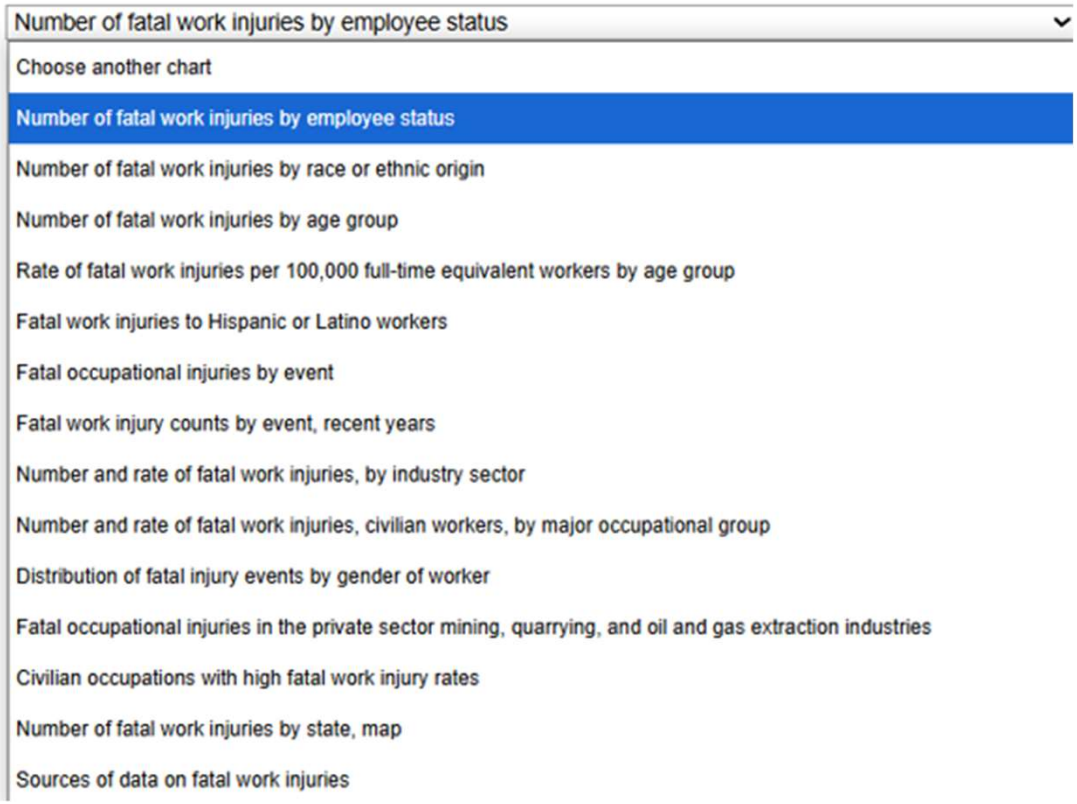
Data Portal



Injury Cause	Industry Sector	Occupation Group	Fatal Injuries
Exposure to Harmful Substances or Environments	Accommodation and Food Services	Food Preparation and Serving Related Occupations	1
		Management Occupations	1
		Office and Administrative Support Occupations	0
	Administrative and Support and Waste Management and Remediation Services	Arts, Design, Entertainment, Sports, and Media Occupations	0
		Building and Grounds Cleaning and Maintenance Occupations	0
		Construction and Extraction Occupations	0
		Installation, Maintenance, and Repair Occupations	0
		Farming, Fishing, and Forestry Occupations	2
	Arts, Entertainment, and Recreation	Building and Grounds Cleaning and Maintenance Occupations	0
		Food Preparation and Serving Related Occupations	1
		Personal Care and Service Occupations	0
		Protective Service Occupations	0
		Transportation and Material Moving Occupations	0
	Construction	Construction and Extraction Occupations	6
		Installation, Maintenance, and Repair	0

BLS Tables and Interactive Charts





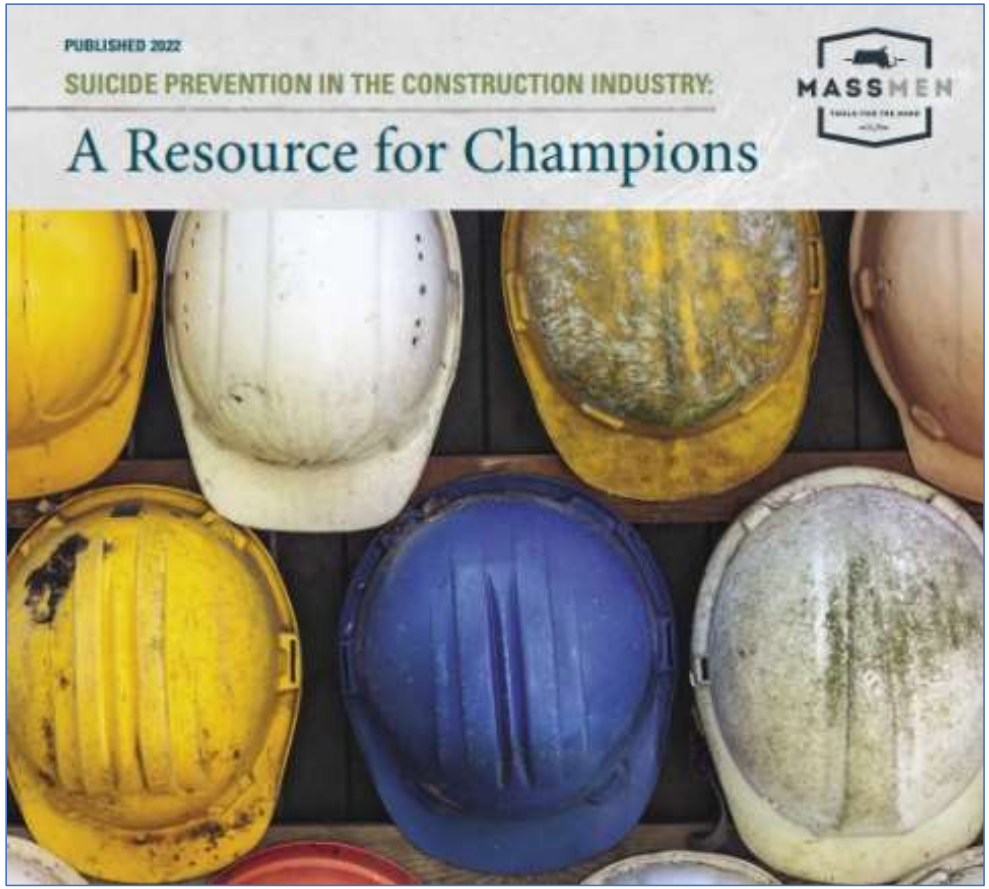
Data to Action

- These counts and rates help to prioritize intervention and outreach.

- Consider almost half of the fatalities in 2021-2022 were not events or workforces that OSHA traditionally covers:
  - Suicides
  - Overdoses
  - Motor vehicle collisions
  - Self-employed

Suicide Prevention

- OSHA Region 1 led the way
- Mass Men. Life Tools for Men. mass.gov/massmen



Workplace Overdose Prevention

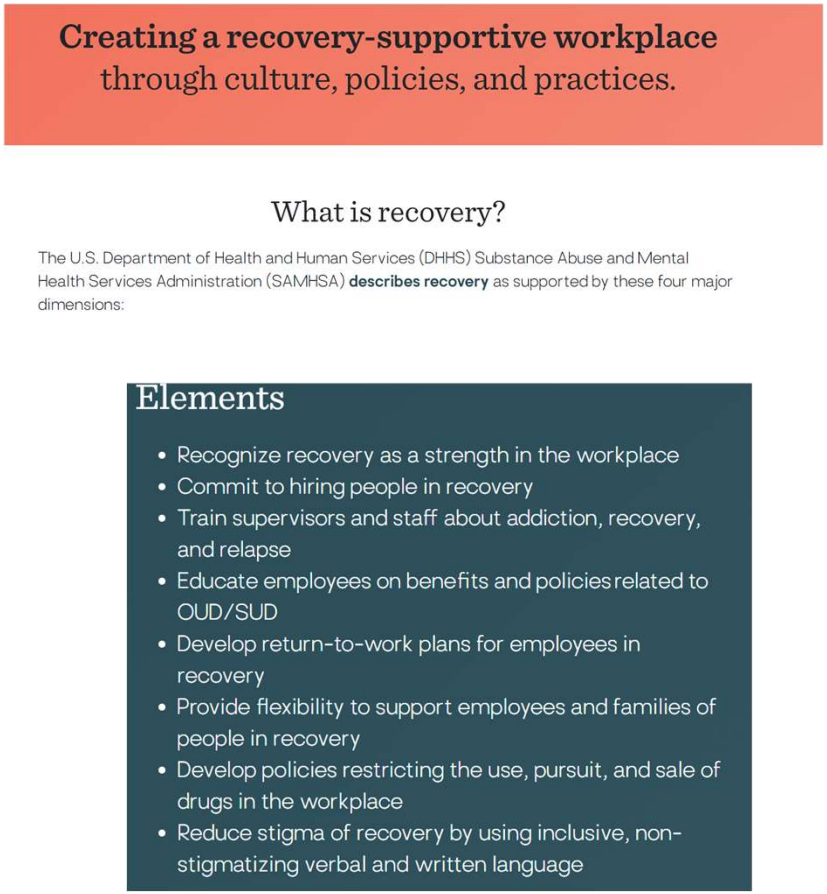
Be Here initiative

- Increase opioid awareness
- Resource for employers to implement policies and practices that build capacity for ‘upstream’ prevention efforts

behereinitiative.org/workplace/opioids-pain-and-the-workplace

Recovery Supportive Workplace Initiative

"A recovery-supportive workplace aims to **prevent exposure to workplace factors** that could cause or perpetuate a substance use disorder **while lowering barriers to seeking care, receiving care, and maintaining recovery**. A recovery-supportive workplace **educates its management team and workers** on issues surrounding substance use disorders to reduce the all-too-common stigma around this challenge."



behereinitiative.org/workplace/recovery-supportive-workplace

NIOSH FACE

NIOSH FACE Program: Fatality Assessment and Control Evaluation (since 1989)

- Research-oriented in-depth investigation of priority cases
- Root cause analysis: find out what and why
- Goal is prevention
- Share the results and prevention messaging with industry and other collaborators
- There are currently eight state FACE programs: CA, KY, LA, MI, NY, OR, WA

FACE Investigations

FACE uses a detailed investigation instrument to compile information from documents, interviews, and site visits.

Details collected with the tool include:

- Demographics of the worker
- The worker's job information, experience, training
- Employer/site information, history, safety and training programs
- Incident specifics, event, tasks, safety procedures, conditions
- Incident response, on-site medical treatment

Example FACE Report

MASSACHUSETTS State FACE Program
Fatality Assessment & Control Evaluation
Massachusetts Department of Public Health

REPORT#: 18MA001 REPORT DATE: May 7, 2020

Landscape Construction Laborer Compressed between Compact Excavator and Steel Beam at Residential Site—Massachusetts

INCIDENT HIGHLIGHTS

DATE: January 18, 2018

TIME: 8:30 a.m.

VICTIM: 27-year-old landscape construction laborer

INDUSTRY/NAICS CODE: Construction, Site Preparation Contractor/238910

EMPLOYER: Landscape construction contractor

SAFETY & TRAINING: Employer provided PPE and on-the-job training

SCENE: Residential construction site, basement excavation

LOCATION: Massachusetts

EVENT TYPE: Crushing

SUMMARY

On January 18, 2018, a 27-year-old laborer was killed while operating a compact excavator. He was using the compact backhoe type excavator underneath a home when he became pinned between the excavator and an overhead beam.

READ THE FULL REPORT> (p.3)

CONTRIBUTING FACTORS

Key contributing factors identified in this investigation include:

- *Operating the excavator near overhead obstructions;*
- *Absence of a protective cab on the excavator;*
- *Lack of a comprehensive safety and health program; and*
- *Working alone.* LEARN MORE> (p. 8)

RECOMMENDATIONS

The Massachusetts FACE Program concluded that, to help prevent similar occurrences, employers should:

- Ensure that only workers with required training and license are permitted to operate compact excavators and other regulated equipment.
- Ensure that ride-on equipment without a protective cab are not operated in the vicinity of overhead obstructions.
- Develop, implement, and enforce a policy that prevents employees from working alone in certain situations.
- Ensure that a job hazard analysis is performed prior to the start of each project and updated if there is a major change in the scope of the project.
- Develop and implement a comprehensive safety and health program that addresses hazard recognition, avoidance of unsafe conditions, and proper use of equipment.

In addition, equipment manufacturers should:

- Adopt and implement the concept of Prevention through Design (PtD) to identify potential hazards associated with equipment and then eliminate these hazards through design changes. LEARN MORE> (p.8)

MASSACHUSETTS State FACE Program
Fatality Assessment & Control Evaluation
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The base unit was designed to receive a number of different attachments such as a bucket loader, auger, ditch digger, stump grinder, and the backhoe involved in this incident. These attachments, except for the backhoe, were operated using the main control levers on the base unit while the operator was standing.

The backhoe attachment mounted on the front of the base unit and tapped into the hydraulic system. It had an operator's seat and a separate set of controls for operating the stabilizers and excavation boom, dipperstick, and bucket (Figure 4). When the backhoe attachment was installed, the unit was driven into position using the rear controls and then the user would set the engine speed, divert hydraulic flow to the accessory hoses, and install an interlocking cover over the drive controls. This would enable the second set of controls near the backhoe operator's seat. The backhoe attachment was designed without a protective cab for the operator.

With the backhoe attachment installed and in a retracted position, the unit was approximately 100" long and 40" wide. When the stabilizers were deployed to their farthest point the unit was 78" wide. The base unit was 49" high and the height of the adjustable seat pan was around 46" at the time of the incident. The backhoe boom could swing 180 degrees and had a maximum digging depth or reach of 82". When the backhoe attachment and the base unit are connected, they weigh about 2,200 pounds.

Figure 3 - Base power unit

Figure 4 - Excavator (backhoe) attachment involved in the incident

The excavator had four control levers mounted on a pillar in front of the operator's seat. Two smaller levers controlled the stabilizers and were activated by either pushing in a forward direction to deploy the stabilizer or pulling in a backward direction to stow the stabilizer. When the stabilizers were in use, the front wheels of the base unit would raise off the ground. Two larger levers controlled the three components of the backhoe attachment: the boom, dipperstick, and bucket. The left lever controlled the swing of the boom: by moving the lever to the left or right the boom would swing to the left or right. The left lever also controlled the extension of the boom. The boom was raised by pulling back on this lever, and was lowered by pushing on the lever. The right lever controlled the scooping motion of the bucket with a left/right push, and the extension and flexion of the dipperstick with a forward/backward push (Figure

MASSACHUSETTS State FACE Program
Fatality Assessment & Control Evaluation
Massachusetts Department of Public Health

This equipment, which is still being manufactured with the same features, serves as an example of the potential for eliminating or minimizing injury risks through a comprehensive PtD review of the equipment. If PtD was applied to this equipment, the potential for the worker and equipment interaction that led to the incident might have been identified and highlighted the need to redesign and/or incorporate additional engineering controls to the operator area. For example, a protective cab could have been added to the backhoe attachment and the controls could have been redesigned with a guard or shield that encompasses the entire area, which would better prevent an un-expectant engagement of the controls. PtD could also have led to a more advanced load sensing system that would detect when the equipment comes up against a stationary object while its controls are still engaged, and sound an alarm and automatically lower the equipment a few inches. This system could also incorporate additional features that detect if the equipment is stuck in a position while the controls are continuously activated for a period of time.

Recommendation #7: Equipment manufacturers should develop a pictograph of the overhead crushing hazard and set a minimum height clearance for operating the excavator.

Discussion: The manufacturer-provided operator's manual and safety decals included information on the possibility of encountering overhead electrical hazards, but it did not include information on other potential overhead hazards while operating this excavator. Standardized, simple pictographs are available that can be used in labels and training materials.[7] While there is an available pictograph for overhead crushing hazards, it shows a worker on foot (Figure 8). The manufacturer should develop an overhead hazard pictograph that includes a seated equipment operator, both with and without a protective cab. This would more clearly depict the hazard involved in this incident.

The manufacturer should also address the hazard of overhead obstructions and operating this excavator without a protective cab by making the equipment's safe operating height apparent on the safety decals and in the operating manuals. A calculation of the safe operating height would take into account the height of the adjustable seat, the height of the operator, and the range of motion of the outriggers and excavation arm as they could raise the machine or extend to above the operator. This calculation would establish a minimum overhead clearance for the equipment, and the equipment should not be operated in environments that do not meet that minimum clearance.

Figure 8 - Existing pictograph

ADDITIONAL RESOURCES

NIOSH. Workplace Solutions, Preventing Injuries When Working with Hydraulic Excavators and Backhoe Loaders (2004-107). www.cdc.gov/niosh/docs/wp-solutions/2004-107/pdfs/2004-107.pdf

CPWR. Hazard Alert, Operating Heavy Equipment. http://elcosh.org/record/document/1817/d000661.pdf

DISCLAIMER

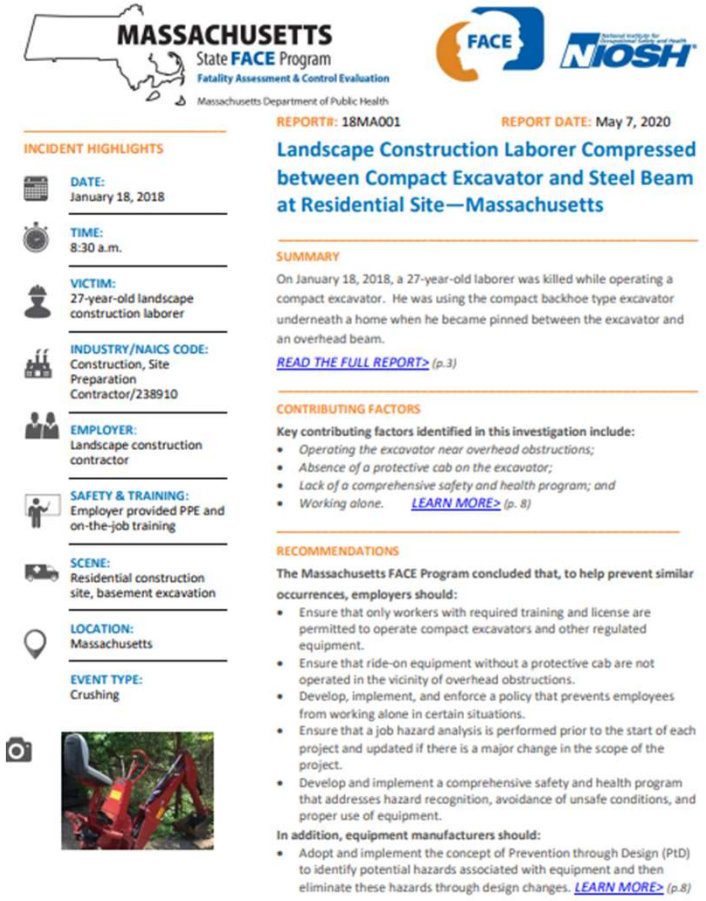
Mention of any company or product does not constitute endorsement by the National Institute for Occupational Safety and Health (NIOSH). In addition, citations to websites external to NIOSH do not constitute NIOSH endorsement of the

cdc.gov/niosh/face/stateface/ma/18ma001.html

Contents of a FACE Report

Front page

- Summary
- List of contributing factors
- Recommendations
- Incident Highlights



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Contents of a FACE Report

Report Section Headings

- Employer
  - History, industry/activity, size, operating schedule
- Written safety programs and training
  - What was in place at the time of the event
- Worker information
  - Occupation, tenure, past experience, schedule, regular tasks

Contents of a FACE Report

Report Section Headings

- Incident scene
- Weather
- Equipment
- Investigation
    - Work tasks, equipment, and events are described in a comprehensive narrative

Contents of a FACE Report

Report Section Headings

- Cause of Death
- Contributing Factors
- Recommendations/Discussion
- Resources and References

Recommendations

Recommendations can address a range of fixes and audiences

- Address and counteract the contributing factors
- Generally follow the hierarchy of controls
- Will describe a specific action that can be taken that will contribute to preventing a recurrence

Recommendations

Recommendations for the employer/site controller

- Hazard recognition and control
- Procedure changes and training
  - Ensuring compliance with existing procedures
  - Updating procedures
  - Retraining the exposed workers

Recommendations

Recommendations can extend to manufacturers of equipment

- Equipment design modifications
- Updates to operating procedures/manuals or decals

- Action by one equipment manufacturer has the potential to increase safety in every workplace where that equipment is in use
- Manufacturers of similar equipment can also take action

Recommendations

Recommendations about policy

- Can speak to enforcement agencies
- Can address consensus standards

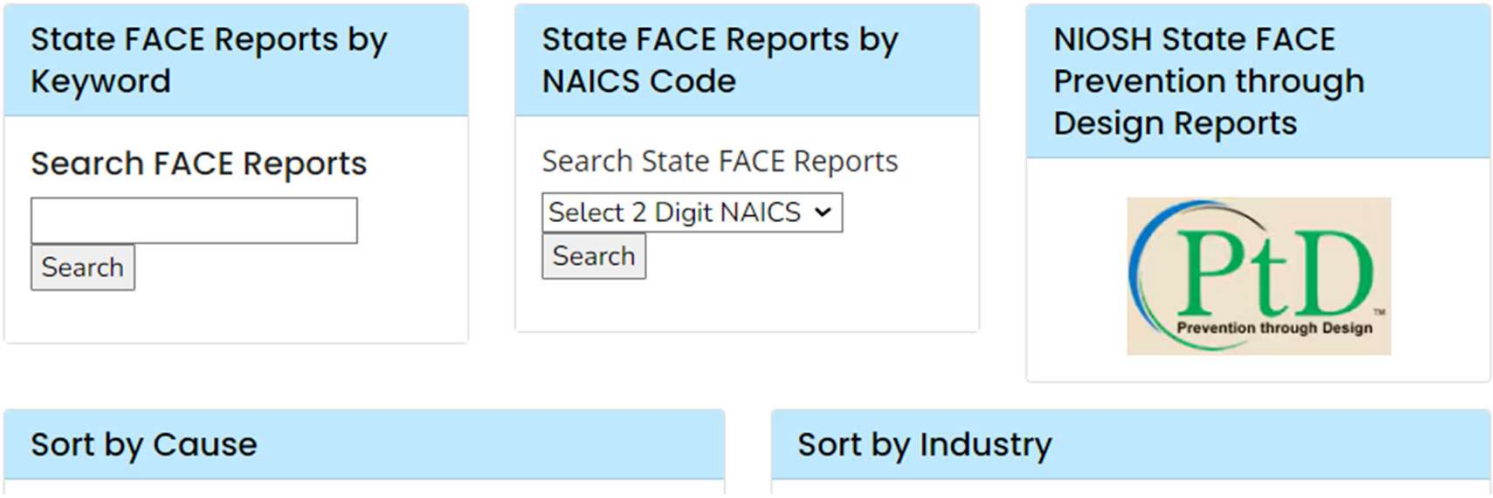
NIOSH FACE Resources

NIOSH FACE Resources

Nearly 3,000 FACE reports are available

cdc.gov/niosh/face/default.html

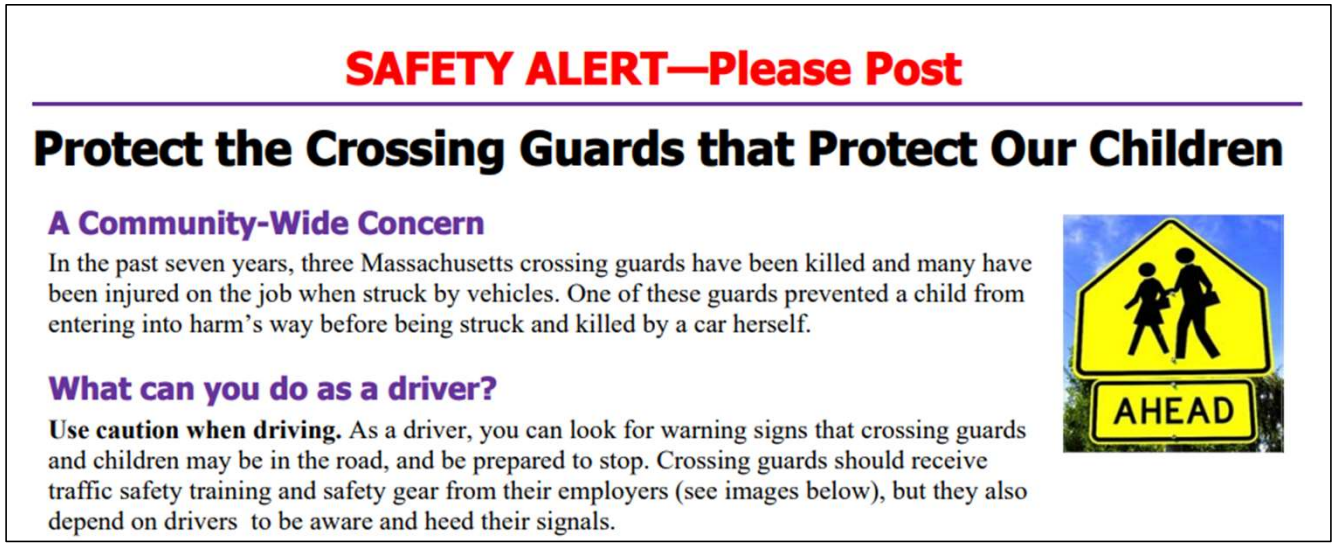
Search by industry sector, keyword, cause, or worker population



Other FACE products

Fact sheets/alerts

mass.gov/lists/fatality-assessment-and-control-evaluation-face-fact-sheets



SAFETY ALERT—Please Post

Protect the Crossing Guards that Protect Our Children

A Community-Wide Concern

In the past seven years, three Massachusetts crossing guards have been killed and many have been injured on the job when struck by vehicles. One of these guards prevented a child from entering into harm's way before being struck and killed by a car herself.

What can you do as a driver?

Use caution when driving. As a driver, you can look for warning signs that crossing guards and children may be in the road, and be prepared to stop. Crossing guards should receive traffic safety training and safety gear from their employers (see images below), but they also depend on drivers to be aware and heed their signals.

Example: Tree Care Alert Series

- Landscaping: 14.9 deaths per 100,000 full-time workers
  - OSHA Regional Emphasis Program- Tree and landscape operations (2021)
  - How can FACE support the REP?

SAFETY ALERT – PLEASE POST

Rollover protective structures and seat belts keep employees safe when operating zero-turn mowers

Why is worker safety at risk?

When manufacturers provide rollover protective structures (ROPS) and seat belts on zero-turn mowers, the safest way to operate the mower is with the ROPS in the upright position and the seatbelt fastened. Not using the manufacturer provided ROPS and seat belt when operating a zero-turn mower increases the potential of injury in the event the mower overturns.

Employers, it is your responsibility to provide training on how to properly use these commercial mowers, including the ROPS and seat belt. In addition to training, employers must ensure ROPS are always in the upright position and a seat belt is used every time a zero-turn mower is being operated by a worker.

What happened in Massachusetts?

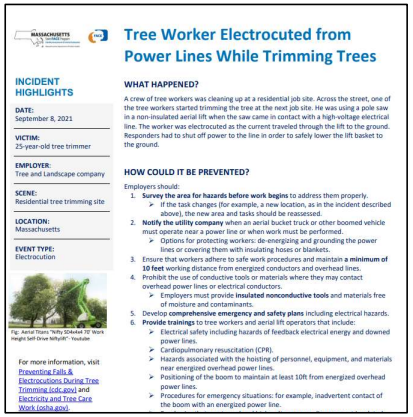
In June 2017, a 57-year-old equipment operator was killed while operating a zero-turn mower with the ROPS folded down. At the time of the incident, the equipment operator was working alone while mowing grass. As the operator turned the mower to the left, it struck a low-lying rock covered by vegetation. The mower overturned, pinning the operator against the ground. Eventually, a motorist passing by noticed the overturned mower, stopped, and placed a call for emergency medical services (EMS).

CORRECT ROPS PLACEMENT

ROPS ONLY PROVIDE PROTECTION WHEN USED UPRIGHT

Example: Tree Care Alert Series

- Short alerts and industry outreach
  - Tree Worker Electrocuted from Power Lines While Trimming Trees
  - Preventing Fatalities from Falling Limbs in the Tree Care Industry
  - Company Owner Crushed by Skid Steer While Performing Maintenance



Tree Worker Electrocuted from Power Lines While Trimming Trees

INCIDENT HIGHLIGHTS

DATE: September 8, 2021

VICTIM: 25-year-old tree trimmer

EMPLOYER: Tree and Landscape company

SCENE: Residential tree trimming site

LOCATION: Massachusetts

EVENT TYPE: Electrocution

WHAT HAPPENED?

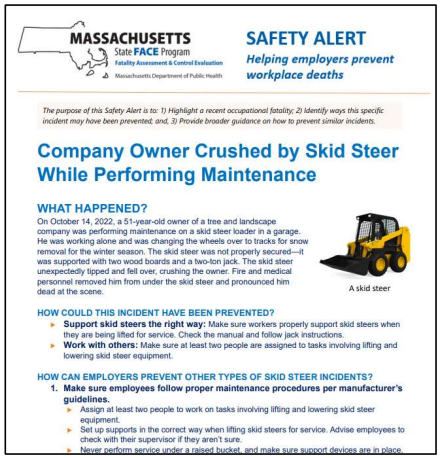
A crew of tree workers was cleaning up at a residential job site. Across the street, one of the tree workers started trimming the tree at the next job site. He was using a pole saw in a non-insulated aerial lift when the saw came in contact with a high-voltage electrical line. The worker was electrocuted as the current traveled through the lift to the ground. Responders had to shut off power to the line in order to safely lower the lift basket to the ground.

HOW COULD IT BE PREVENTED?

Employers should:

1. **Survey the area for hazards before work begins** to address them properly.
   - If the task changes (for example, a new location, as in the incident described above), the new area and tasks should be reassessed.
2. **Notify the utility company** when an aerial bucket truck or other boomed vehicle must operate near a power line or when work must be performed.
   - Options for protecting workers: de-energizing and grounding the power lines or covering them with insulating hoses or blankets.
3. Ensure that workers adhere to safe work procedures and maintain **a minimum of 10 feet** working distance from energized conductors and overhead lines.
4. Prohibit the use of conductive tools or materials where they may contact overhead power lines or electrical conductors.
   - Employers must provide **insulated nonconductive tools** and materials free of moisture and contaminants.
5. Develop **comprehensive emergency and safety plans** including electrical hazards.
6. **Provide trainings** to tree workers and aerial lift operators that include:
   - Electrical safety including hazards of feedback electrical energy and downed power lines.
   - Cardiopulmonary resuscitation (CPR).
   - Hazards associated with the hoisting of personnel, equipment, and materials near energized overhead power lines.
   - Positioning of the boom to maintain at least 10ft from energized overhead power lines.
   - Procedures for emergency situations: for example, inadvertent contact of the boom with an energized power line.

For more information, visit Preventing Falls & Electrocutions During Tree Trimming (cdc.gov) and Electricity and Tree Care Work (osha.gov).



MASSACHUSETTS State FACE Program Fatality Assessment & Control Evaluation
Massachusetts Department of Public Health

SAFETY ALERT
Helping employers prevent workplace deaths

The purpose of this Safety Alert is to: 1) Highlight a recent occupational fatality; 2) Identify ways this specific incident may have been prevented; and, 3) Provide broader guidance on how to prevent similar incidents.

Company Owner Crushed by Skid Steer While Performing Maintenance

WHAT HAPPENED?

On October 14, 2022, a 51-year-old owner of a tree and landscape company was performing maintenance on a skid steer loader in a garage. He was working alone and was changing the wheels over to tracks for snow removal for the winter season. The skid steer was not properly secured—it was supported with two wood boards and a two-ton jack. The skid steer unexpectedly tipped and fell over, crushing the owner. Fire and medical personnel removed him from under the skid steer and pronounced him dead at the scene.

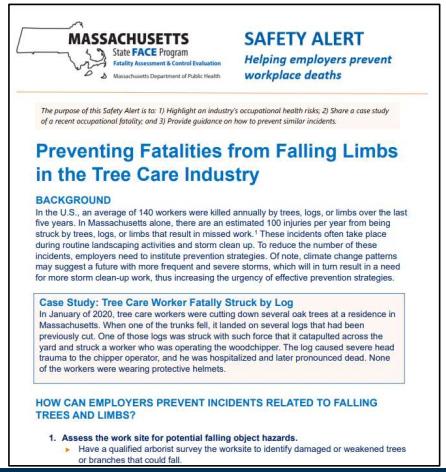
A skid steer

HOW COULD THIS INCIDENT HAVE BEEN PREVENTED?

- **Support skid steers the right way:** Make sure workers properly support skid steers when they are being lifted for service. Check the manual and follow jack instructions.
- **Work with others:** Make sure at least two people are assigned to tasks involving lifting and lowering skid steer equipment.

HOW CAN EMPLOYERS PREVENT OTHER TYPES OF SKID STEER INCIDENTS?

1. **Make sure employees follow proper maintenance procedures per manufacturer's guidelines.**
   - Assign at least two people to work on tasks involving lifting and lowering skid steer equipment.
   - Set up supports in the correct way when lifting skid steers for service. Advise employees to check with their supervisor if they aren't sure.
   - Never perform service under a raised bucket, and make sure support devices are in place.



MASSACHUSETTS State FACE Program Fatality Assessment & Control Evaluation
Massachusetts Department of Public Health

SAFETY ALERT
Helping employers prevent workplace deaths

The purpose of this Safety Alert is to: 1) Highlight an industry's occupational health risks; 2) Share a case study of a recent occupational fatality; and 3) Provide guidance on how to prevent similar incidents.

Preventing Fatalities from Falling Limbs in the Tree Care Industry

BACKGROUND

In the U.S., an average of 140 workers were killed annually by trees, logs, or limbs over the last five years. In Massachusetts alone, there are an estimated 100 injuries per year from being struck by trees, logs, or limbs that result in missed work.[1] These incidents often take place during routine landscaping activities and storm clean up. To reduce the number of these incidents, employers need to institute prevention strategies. Of note, climate change patterns may suggest a future with more frequent and severe storms, which will in turn result in a need for more storm clean-up work, thus increasing the urgency of effective prevention strategies.

Case Study: Tree Care Worker Fatally Struck by Log

In January of 2020, tree care workers were cutting down several oak trees at a residence in Massachusetts. When one of the trunks fell, it landed on several logs that had been previously cut. One of those logs was struck with such force that it catapulted across the yard and struck a worker who was operating the woodchipper. The log caused severe head trauma to the chipper operator, and he was hospitalized and later pronounced dead. None of the workers were wearing protective helmets.

HOW CAN EMPLOYERS PREVENT INCIDENTS RELATED TO FALLING TREES AND LIMBS?

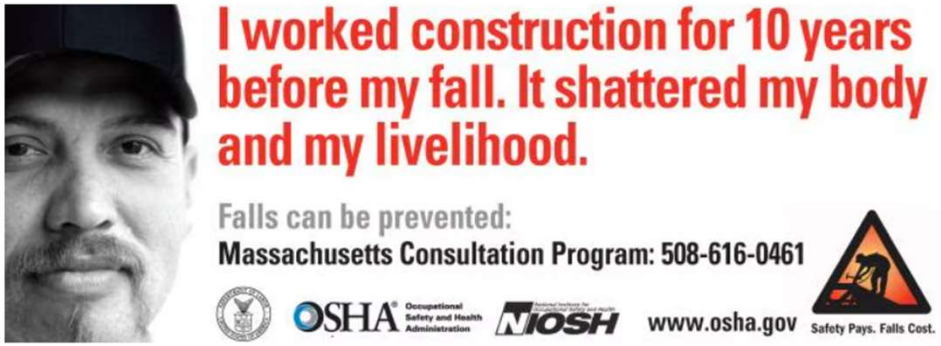
1. **Assess the work site for potential falling object hazards.**
   - Have a qualified arborist survey the worksite to identify damaged or weakened trees or branches that could fall.

Other FACE products

National activities we support:

- Falls campaign, Struck-by campaign

mass.gov/lists/fall-prevention-for-construction-workers



Closing

Tracking fatalities at the state and national level helps us all understand where we can put more effort into prevention.

CFOI data and FACE products are resources you can use:

- Hazard identification and control
- Training

Resources

CFOI Handbook of Methods, Data Sources
bls.gov/opub/hom/cfoi/data.htm

State data
bls.gov/iif/state-data.htm

FACE home page
cdc.gov/niosh/face/default.html

Resources

Data reports available at mass.gov/lists/fatal-work-related-injury-reports-and-publications

Our 2021-2022 data and activity report

https://www.mass.gov/info-details/massachusetts-fatal-injuries-at-work-2021-2022

Population Health Information Tool

mass.gov/info-details/work-related-fatal-injuries-data

Resources

NAS Panel Report: A Smarter National Surveillance System for Occupational Safety and Health in the 21st Century
https://nap.nationalacademies.org/read/24835/chapter/1

FACE fact sheets/alerts
https://www.mass.gov/lists/fatality-assessment-and-control-evaluation-face-fact-sheets

Fall prevention materials for construction
https://www.mass.gov/lists/fall-prevention-for-construction-workers

Resources

Suicide prevention site:

https://www.mass.gov/massmen

Be Here Initiative

https://behereinitiative.org/workplace/recovery-supportive-workplace/

Thank You

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